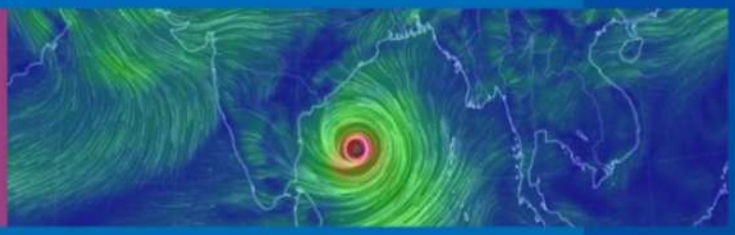
OSDMA

Vol - I

District Disaster Management Plan for the year 2025-26 Kalahandi District

Cyclone



Earthquake

Flood / Heavy Rain

Prepared By:
District Disaster Management Authority, Kalahandi

PREFACE

"Disaster" is a serious disruption of the functioning of society which poses a significant, widespread threat to human life, health, property or the environment, whether arising from accident, nature or human activity, whether developing suddenly or as the result of long term processes, but excluding armed conflict."

The District Disaster Management Plan is a key part of an Emergency Management. It will play a significant role to address the unexpected disasters that occur in the District. The information available in DDMP is valuable in terms of its use during disaster. Based on the history of various disasters that occur in the District, the plan has been so designed as an action plan rather than a resource book. During the time of Disaster there will be a delay before outside help arrives. At first, self help is essential and depends on a prepared community which is alert and informed. Efforts have been made to collect and develop this plan to make it more applicable and effective to handle any type of disaster.

The District Disaster Preparedness and Response Plan, includes the facts and figures that have been collected from various formal and informal sources with a view to meet the challenges during any Natural Disaster. Collection and classification of data are to be updated twice in May and November every year.

The plan has been prepared with the following viewpoints.

- Contingency Plan in a continuous process
- During relief measures social auditing ensures transparency
- Women and Panchayati Raj Institutions (PRIs) should involve in the entire process.

Preparation and Implementation of District Disaster Management Plan 2025-26 in Kalahandi District

- Procedure for preparation of DDMP,2025 as per the DM Act 2005 & Sendai Framework for Disaster Risk Reduction. (DRR)
- Roles of Collector, ADM, District Emergency Officer and all Line Department Officers with support from Line Departments
- Support of Line Departments (for providing information)
- Time lines for updating DDMP. (From January to February of every year)

Shri Pawar Sachin Prakash, IAS
Collector and Chairperson,
DDMA, Kalahandi

MESSAGE

I convey my immense pleasure to present the people of Kalahandi District that, the "District Disaster Management Plan, 2025-26 is brief and exhaustive covering all the aspects under the purview of Disaster Management. The DDMP should provide necessary information on Disaster Mitigation, Preparedness, Response and Re-construction measures helpful for a Disaster Manager.

A dedicated effort has been made by the District Disaster Management Authority, Kalahandi to prepare a comprehensive plan under the stewardship of Additional District Magistrate (Revenue), District Emergency Officer and District Project Officer, OSDMA, Kalahandi. We have prepared a complete plan for possible Disasters in the district keeping in view history of disasters, Standard Operating Procedures (SoPs) for each disasters, contact no. of all line depatment officers, list of shelters, medical facilities & a hazard specific crisis management plan with vulnerability analysis of the District.

I sincerely wish that this plan will assist the District Administration with an effective deal & subsequently reduce the loss of Life, Livelihood and Property due to disasters and to achieve the mission of **"Zero Casualties"** through successful disaster management.

Collector and Chairperson,
DDMA, Kalahandi

Shri Baitaru Deep, OAS(S)
Additional District Magistrate (Revenue),
Kalahandi

MESSAGE

I congratulate the District Disaster Management Authority of Kalahandi District for preparing a comprehensive plan integrating prevention, mitigation, preparedness & response measures for a successful Disaster Management. I am confident that the implementation of this plan will make this District for Disaster Resilient.

The Plan aim's to improve the Disaster Resiliency of the District by integrating Disaster Risk Reduction into development methodologies and by increasing the preparedness to respond to all kinds of disaster successfully. The implementation of the plan requires sincere co-operation of the line department as well as the active participation of the PRIs Member, Civil Society, Communities, Private Sector Players and other stakeholders in the district.

I wish all success to the team behind the preparation of DDMP 2025-26.

Additional District Magistrate,
Kalahandi

Miss Soudamini Majhi, ORS
District Emergency Officer
Collectorate, Kalahandi

MESSAGE

I am much hopeful that, the District Disaster Mangement Plan, 2025-26 of Kalahandi shall serve to the need of the people of the district during emergency situation. The DDMP is prepared by the DPO, OSDMA along with support from all line department officials and definitely it will be used to handle hazards within Kalahandi district with a mission that, **"Every Life is Precious".**

I wish all success to the officials behind the preparation of DDMP 2025-26.

District Emergency Officer
Collectorate, Kalahandi

CONTENTS

ABBREVIATION

AAY	India Awas Yojna
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWCs	Anganwadi centre
BEOC	Block Emergency Operation Centers
BNRGSK	Bharat Nirman Rajiv Gandhi Seva Kendra
BSF	Boarder Security Forces
CDVO	Chief District Veterinary Officer
CHCs	Community Health Centre
CIFS	Central Industrial Security Force
CPMF	Central Paramilitary Force
CWC	Central Warehouse Corporation
DDA	Deputy Director Agriculture
DDMA	District Disaster Management Authority
DDMP	District Disaster Management Plan
DDMT	District Disaster Management Teams
DEOC	District Emergency Operation Centre
DIP	District Irrigation Plan
DLCNC	District Level Committee on Natural Calamity
DMAct	Disaster Management Act 2005
DRR-CCA	Disaster Risk Reduction and Climate Change Adaptation
FIR	First Information Report
GPDP	Gram Panchayat Development Plan
HH	Households
IAY	Indira Awas Yojna
IEC	Information Education and Communication

IDRN	Indian Disaster Resource Network
IMR	Infant Mortality Rate
IPPE	Intensive participatory Planning Exercises
KMS	Kharif Marketing Season
MGNREGS	Mahatma Gandhi National RuralEmployment Guarantee Scheme
MHUs	Mobile Health Unit
MMR	Maternal Mortality Rate
NABARD	National Bank for Agriculture and Rural Development
NDMA	National Disaster Management Authority
NDRF	National Disaster Response Force
NDRFs	National Disaster Response Funds
NEC	National Executive Committee
NFSA	National Food Security Act
NGOs	Non-Government Organisation
NH	National Highways
NRLM	National Rural Livelihood Mission
ODF	Open Defecation Free
ODRAF	Odisha Disaster Rapid Action Force
OSDMA	Odisha State Disaster Management Authority
OSWC	Odisha State Ware house Corporation
PACS	Primary Agriculture Cooperative Society
PHCs	Public Health Centre
PWD	Person with Disability
RAT	Railway Affected Tank
RAW	Railway Affected Work
RMC	Regulated Market Committee

SDG	SustainableDevelopmentGoal
SDHs	Sub-DivisionalHospital
SDMA	State Disaster Management Authorities
SDRF	State Disaster Response Funds
SDVO	Sub-Divisional Veterinary Officer
SEC	State Executive Committee
SH	State Highways
SHGs	Self Help Group
SLCNC	State Level Committee on Natural Calamity
SoP	Standard Operating Procedure
UNDP	United Nation Development Programme
VDMC	Village Disaster Management Committee
NALSA	National Legal Service Authority
SALSA	State Legal Service Authority
DLSA	District Legal Service Authority
RTO	Regional Transport Officer
MVI	Motor Vehicle Inspector
CSO	Civil Supply Officer
ACSO	Assistance Civil Supply Officer

Chapter–1
Introduction

India has been traditionally vulnerable to Natural Disasters on account of its uniquegeo-climatic conditions. Floods, drought, cyclone, earthquakes and landslides have been a recurrent phenomenon. About 60% of the landmass is prone to earthquakes of various intensities, about 40 million hectares of land is prone to floods, about 8% of the total area is prone to cyclones which covers around 8000 k.m.stretch of Indian coastline 68% of the area is susceptible to drought. In the past decade, about 4344 people lost their lives and about 30 million people were affected by disasters every year. The loss in terms of private, community and public assets has been astronomical.

The super cyclone of Odisha in October 1999 and the Bhuj Earthquake in Gujarat in January 2001 underscored the need to adopt a multi disciplinary and multi-sectoral approach and incorporation of risk reduction in the development plans and strategies. Over the past couple of years, the Government of India has brought a paradigm shift in the approach to disaster management from relief and rehabilitation to prevention, mitigation and preparedness. The new approach proceeds from the conviction that development cannot be sustainable unless disaster mitigation has to be multidisciplinary spanning across all sectors of development. The new policy also emanates from the belier that investment in disaster mitigation is much more cost effective than expenditure on relief and rehabilitation.

Odisha is vulnerable to multiple natural hazards. Due to its sub-tropical littoral location, the state is prone to tropical cyclones, storm surges and tsunamis. It has a 480 km coastline. There are eleven major river systems in Odisha such as the Subarnarekha, the Budhabalanga&Jambhira, the Baitarani, the Brahmani, the Mahanadi, the Rushikulya, the Vansadhara, the Nagabali, the Indravati, the Kolab and the Bahuda. Its densely populated areas with heavy load of silt have very little carrying capacity, resulting infrequent floods, onlyto be compounded by breached embankments. About two-third of the total cultivated area beingrain-dependent, drought poses a serious threat at regular intervals in the event of failure of Monsoon. Though a large part of the state comes under Earthquake Risk Zone-II (Low Damage Risk) Zone-III (Moderate Damage Risk Zone) covering 44 out of the 106 urban local bodies of the state.

Apart from these, loss of life due to lightning has remained the highest of all-natural calamities over the last decade. Heat-wave conditions during summer months also lead to heat- stroke death and other suffering to the people. And its occurrence is not limited toany particular season or month although increased number of fire accidents occurs in the summer months.

The district of Kalahandi is located in south-west region of the state of Odisha. As regards geographical region, the district is situated between 19^0 3' N and 20^0 81' N latitude and $82^020'$ E and 83^0 47' E longitudes. The district headquarter town Bhawanipatna is situated at a distance of 481 kms. from State Capital Bhubaneswar. The district is bounded on the north by Nuapada and Bolangir districts, on the east by Kandhamal and Rayagada, on the south by Nabarangapur and Koraput districts, on the west by Raipur (Chhatisgarh) and Nabarangapur district.

A dangerous condition or events that threaten or have the potential for causing injury to life or damage to propertyorthe environment is called **Hazard**. Hazards can be categorized in many ways. But based on their origin, worldwide they are basically grouped in two broad categories.

1. **Natural Hazard:** Hazards with Meteorological, geological or even biological origin.

2. **Un-Natural Hazard:** Hazards with Human Caused or Technological origin.
   It is popularly known as Manmade Disasters.

It is also important to know that natural Phenomena are extreme Climatological, Hydrological or Geological processes that do not pose any threat to human or property. For example, a massive earthquake in an unpopulated area is a natural phenomenon but not a hazard. It is when these natural phenomena interact with human population or fragile areas which cases wide spread damage. The population which are prone to these natural phenomena are called **Vulnerable** to hazards. A disaster is the output of a hazard such as earthquake, flood, landslide or cyclone coinciding with a vulnerable situation, which may include communities, cities or villages. Without vulnerability or hazard there is no disaster. A disaster happens when vulnerability and hazard meet.

India is a vast country and is prone to many hazards. In the meantime, India has experienced the disaster like tsunami in 2008, great earthquakes like Assam-1950, Gujarat-1992, Sikkim-208, Super cyclones of Odisha 1999, Philin 2013, unexpected flash flood of Mumbai etc. Considering such situation, Government of India already has passed the Disaster Management Act on23rd December, 2005 in the Parliament. After this Act, disaster is no more confined to any particular department rather it is confined to all departments. This act enables the state government to form disaster management authority at the state level and make it more effective and specific.

The state of Odisha is highly prone to many hazards like Droughts, Flash Flood, Landslide, Heat wave and Cyclone. The State Disaster Management Authority has been trying to visualize measures to mitigate disaster imparting training and awareness programmes including media and printed documents for public and Govt. Officials, by preparing disaster management plan for any kind of disaster.

Administrative arrangement:

The Department of Revenue and Disaster Management is the administrative department for management of disasters. Special Relief Commissioner (SRC) is in charge of response phase of disasters, whereas, Odisha State Disaster Management Authority (OSDMA) deals with preparedness and mitigation aspects. OSDMA provides support to SRC during response phase. At the district level, Collector is the District Relief Officer and Disaster Manager. Block is the lowest unit of relief administration. Block Development Officer and Tahasildars jointly manage relief administration at the lowest level. A State Level Natural Calamity Committee functions under the chairmanship of the Chief Minister for overall supervision and monitoring at the state level. At the district level, District Natural Calamity Committee along with DDMA functions with representation from district level officers and peoples' representatives under the chairmanship of the district Collector for supervision and monitoring. Block Disaster Management Committees Committees (under the chairmanship of the Chairman, Panchayat Samiti) and Village Disaster Management Committee alongwith the Village level Task Force Committees have been constituted in the programmed areas (180Villagess) under Disaster Risk Reduction programme (1st Phase) for day-to-day management of disasters and risk reduction measures.

Coordination and Networking Mechanism

Disaster Management is a multi-agency function. It involves actions by different departments, organization and agencies. In short, it involves almost all departments ofthe State Government, Central Government, Armed Forces, Civil Society, Corporate Sector, Trader's Organizations, Faith Based Organizations, International Organizations working in the field of disaster response and UN Agencies etc. It is therefore, important that roles and responsibilities of each stakeholder are laid down during normal time and coordination mechanism worked out so that the same works during emergencies. Regular interaction with all the stakeholders is held at least once in a year. Key stakeholders are also associated with the mock drills to test their preparedness and clarity of roles and responsibility.

Coordination and Networking strengthens the disaster preparedness mechanism to deliver tangible results in a time bound manner. In disaster management, coordination could be on the basis of information, service, support and institutional framework. OSDMA works as the focal point for coordinates with different stakeholders for strengthening the disaster preparedness in the state.

Section 31 of Disaster Management Act 2005 (DM Act) makes it mandatory onthe part of District Disaster Management Authority (DDMA) to adopt a continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary and expedient for prevention as well as mitigation of disasters. DDMP shall include Hazard Vulnerability Capacity and Risk Assessment (HVCRA), prevention, mitigation, preparedness measures, response plan and procedures These processes are to be incorporated in the developmental plans of the different departments as a preparedness measure to meet the disaster and relief, rescue and rehabilitation thereafter, so as to minimize the loss to be suffered by the communities and are to be documented so that it is handy and accessible to the general public.

Aims and Objectives of the DDMP:

A. Aims of DDMP

This was an attempt towards evolving a systematic, comprehensive and holistic approach to all disasters, natural as well as man-made. It was felt that prevention is more cost- effective than post-disaster relief and rehabilitation.

The four pillars of this plan namely:

a. Culture of preparedness
b. Culture of Quick response
c. Culture of Strategic Thinking
d. Culture of prevention

B. Objectives of DDMP

- Sustainable reduction of impact of natural and man-made disasters through preparedness at District, Block, Gram Panchayat and Village level.
- To provide effective support and resources to all the concerned individuals, groups and departments in disaster.
- To assist the line departments,block administration,communities in developing compatible skills for disaster preparedness and management
- To identify the areas vulnerable to major types of the hazards in the district.
- To adopt proactive measures at district level by all the govt. departments to prevent disaster and mitigate its effects.
- To define and assign the different tasks and responsibilities to stakeholders during the pre-disaster and post-disaster phases of the disaster.
- To enhance disaster resilience of the people in the district by way of capacity building.
- To have response system in place to face any eventuality to affect or elicit the least possible disruption to the normal life process when dealing with individuals in disaster.
- To ensure active participation by the government administration, communities, NGOs, CBOs and volunteers at all levels making optimal utilization of human and material resources at the time of disaster.
- To develop the standardized mechanism to respond to disaster situation to manage the disaster efficiently.
- To prepare a response plan based upon the guidelines issued in the State Disaster Management Plan so as to provide prompt relief, rescue and search support in the disaster affected areas.
- To adopt disaster resilient construction mechanism in the district by way of using Information, Education and Communication for making the community aware of the need of disaster resilient future development.
- To make the use of media in disaster management.
- Rehabilitation plan of the affected people and reconstruction measures to be taken by different govt. departments at district level and local authority.
- To develop immediate awareness among the people about hazard occurrence and increase their participation in preparedness, prevention, development, relief, rehabilitation and reconstruction process.

The District Disaster Management Plan (DDMP) is the guide for achieving the objective i.e. mitigation, preparedness, response and recovery. This Plan has been prepared to respond to disasters with sense of urgency in a planned way to minimize human, property and environmental loss.

Authority for DDMP: Approval & Implementation

As per Notification No. IVF (OSDMA)-24/20-10- 46209 dt. 12th November, 2010 of Commissioner-cum-Secretary to Government, Revenue & Disaster Management, Government of Odisha, communicated by Joint Secretary to Government, R & D.M. Department, Odisha, Bhubaneswar, the District Disaster Management Authority of the district of Kalahandi has been constituted as per following.

(i) Collector &District Magistrate	Chairperson Ex-officio
(ii) Chairman, Zilla Parishad	Co-Chairperson, ex-officio
(iii) Superintendent of Police	Member, Ex-officio
(iv) CDM & PHO	Member, Ex-officio
(v) The SE(Irrigation/ Embankments)	Member,Ex-officio
(vi) ADM in-charge of Emergency.	ChiefExecutive Officer, Ex-officio
(vii) CDO – cum-EO, Zilla Parishad	Member
(viii) CDAO,	Member.

Allthe members have been communicated onthe above notification along with Powers and functions of the Chief Executive Officer of the District Authority communicated by Joint Secretary to Government, R& D.M. Department, Odisha vide Memo No.27167/R&DM dtd.12.7.2010.

Evolution of DDMP in brief: (Evolution, Methodology followed for preparation of DDMP)

Evolution of DDMP

Poor natural resource base, huge population pressure, inadequate infrastructure and less adaptive capacity of the community are increasing their exposure to these natural hazards. Due to the global climate change the occurrence of natural hazards will be more frequent, the poor community will become more vulnerable and the resultant impact will be more devastating. The disastrous effects of natural hazards cannot be eliminated completely but the miseries can be minimised to areasonable extent by adoption of appropriate management practices.

The present disaster management strategies basically focus on the **relief, rehabilitation, reconstruction and restoration** aspects i.e. **crisis management**. This approach has been ineffective because response is untimely, insufficient, poorly coordinated and poorly targeted to disaster affected groups or areas, hence often increasing the societal vulnerability to hazards.

Hence, there is an urgent need to adopt a Community Based Disaster Management strategy, where maximum emphasis should be given on **early warning, preparedness, and mitigation** i.e. **risk management** to develop a well informed, better organised and more prepared community resilient to all type of disasters. This approach must include the capacity building of all stake holders, education and awareness generation among the community, IEC campaign on Dos and Don'ts during disasters, development of multi hazardplans, strengthening the existing support system and institution building to ensure sustainability.

Identification of the socio-economic profile, natural resource base, opportunities, hazards and their potential impacts of the district and development of various preparedness, response and mitigation strategies to reduce the impact of disasters is the underlying principle for the preparation of District Disaster Management plan.The basic objective of this Action plan is to ensure safety of the lives, properties and livelihood of the people during the disasters. Therefore, proper development and effective implementation of an integrated plan addressing each and every aspects of disaster management in Kalahandi

context is highly essential. The DDMP should not contain some distinct sectorial activities rather it should essentially aims at the holistic approach of disaster mitigation emphasizing on a wide range of multi sectorial activities. Hence a concerted and a coordinated effort of all the departments during the planning, implementation of the plan is of utmost importance.

Since 2010 District Disaster Management Authority (DDMA) has been preparing the DDMP every year with the support of OSDMA under UNDP programme to tackle the various types of disaster in the district. District Emergency Operation Centre (DEOC), Kalahandi has been entrusted to prepare the DDMP. Moreover, recent development in Sendai Framework for Disaster Risk Reduction **(2015-2030)** and Sustainable Development Goal (SDG) focused in mainstreaming of DRR in development planning and programme. But the existing DDMP ofthe district is lacking ofsuch important aspects of Disaster Management. During 2019, OSDMA has taken special efforts to bridge the gap under straightening of DDMA and SDMA projects. OSDMA developed detailed methodology and temples to update the existing DDMP.

Preparation of Disaster Preparedness Plan involves the following steps:

Steps	What is to be done	Who are to be involved	Methodology
I	Review and Analysis	Collector, ADM, Emergency Officer, BDOs,Tahasildars Village community, NGOs/CBOs, Community/Village level workers	▪ Past history of disasters to be discussed and documented ▪ Extent of severity and damage to be recorded ▪ The nature of the Warning issued tobe analyzed The nature and extent of the rescue and restoration done, to be revisited
II	Situation Analysis	BDOs, Tahasildars Village community, NGOs/CBOs, Community/Village level workers	▪ Mapping the geography and topography of the risk prone areas, block-wise, GP- wise and village-wise ▪ Demographic details to be recorded ▪ Mapping of the habitation in the concerned areas ▪ The natural resources to be marked on the maps ▪ Listing all the livelihoods and properties ▪ The existing risk prone/ safe infrastructure to be marked on the map
III	Hazard Analysis	BDOs, Tahasildars Village community , NGOs/CBOs, Community/Village level workers	▪ Identification of all possible hazards inthe area based on past experience and available records ▪ Identification of the most vulnerable areas with relation to threat to life livelihoods and property

IV	Vulnerability Assessment	BDOs, Tahasildars Village community, NGOs/CBOs, Community/Village level workers	▪ Locations of the vulnerable areas are to be mapped separately ▪ Identification of the vulnerable people such as, the elderly, the disabled, children and pregnant women, families living in thatched houses, fishermen at sea (if any), ailing people, etc. ▪ Identification of property or assets which are likely to be affected, such as cattle and other livestock,kachcha houses weak structures, pump sets tubewells and other installations,crops horticulture and plantations, boats nets, etc. ▪ Identification of weak points or embankments (if any) ▪ Marking the drainage system in the concerned area
V	Opportunity Analysis	BDOs, Tahasildars Village community, NGOs/ CBOs, Community / Village level workers	▪ Identification of the existing resources which may help to reduce risks to life and property ▪ Identification of the safe houses and buildings for shelter and storage ▪ Listing the existing flood/ cyclone shelters, if any ▪ Identification of the elevated and up lands which can act as natural barriers to protect livestock ▪ Listing of the existing health and sanitation facilities ▪ Identification of safe routes for evacuation ▪ Identification of the sources of funds to carry out the preparedness activities.

Formation of Team under DDMA

For smooth implementation of the proposed Disaster Preparedness Response/Mitigation, the Plan for involving some institutional at the District level has been prepared. There are various Disaster Management Teams (DMTs) has been formedwith distinct roles and responsibilities. (Briefly described in Chapter-4 of this Volume-1)

District Disaster Management Authority (DDMA) is the nodal committee for the disaster management at the district level and it consistent of representatives of various stakeholders like PRIs (ZP President) Government officials (various departmentalheads) NGOs etc. The Collector & District Magistrate is the Chairman of the Committee andthe ADM in charge of Emergency; Kalahandi is the Chief Executive Officer of the Committee.

Review, Finalization and Approval

The information submitted to all concerned was compiled and report was drafted by DRR, Consultant, OSDMA, Kalahandi under the close supervision of Addl.District Magistrate. The draft plan was shared with the officers of the line department to review and seeks suggestions for improvisation of the plan. After necessary modification, the revised plan wasshared with themembersofDistrict Disaster Management Authority (DDMA), Kalahandi.

Stakeholders and their Responsibilities

At the District level, District Disaster Management Authority, with the District Collector designated as the Response Officer (RO), and other line departments at district HQ are responsible to deal with all phases of disaster management within district along with other technical institutions, community at large, local self-governments, NGOs etc.are also stakeholders of the District Disaster Management Plan.

Roles and Responsibilities of the Collector and District Magistrate

PHASE	ACTIVITIES
Pre- Disaster	Preparedness Before the Disaster: ▪ Reviewing and analyzing the calamity situation in the district over the next one-year through a meeting at the District level involving all the departments of the district as well as block levels and the locally active NGOs. ▪ Identifying and mapping of disaster-prone zones and strategies to stay • Prepared for the worst situation. ▪ Ensure proper extension of the disaster preparedness techniques for drought, heat wave, flash flood, epidemics by the concerned department. ▪ Ensure IEC through Emergency section/BDO's /Tahasildars/NGO's /AW centers /Street plays/ Workshops / Wallings. ▪ Reviewing the DCR and making it functional as per SOP fixed by him (SOP to be prepared earlier) ▪ Making the DCR well equipped and depute senior officers from time to time to review the receipt of information and dissemination. ▪ Calling a meeting for NGO co-ordination cell. And discuss issues such as Capacity assessment of different NGOs and ask them to adopt certain vulnerable areas to avoid overlapping and duplicity. ▪ Preparing a checklist (containing the dos and don'ts) and pass that on to the NGOs ▪ Ensuring/installing communication system to the inaccessible villages. ▪ Ensuring proper functioning of warning systems & communication systems. ▪ Checking stock of the Public distribution system/ICDS and arrangement Of the temporary Godowns. ▪ Checking the Resources with other department such as Police, Fire, Civil Defense and of NSS/NCC/NYK. ▪ Preparing a list Power Boats already deployed and/or to be deployed onhire during crisis. ▪ Assigning specific duties to different officers/Sr.Officers at Headquarters and staying in constant touch with them. ▪ Ensuring Mockdrill of the rescue and relief teams. ▪ Preparing a map showing the location of temporary shelter camp sat high elevation with accessibility

	▪ Ensuring formation of GP and village level Disaster Management Committee through Block Development officers.
Pre-Disaster	**Dissemination of Warning:** ▪ Receiving Warning from reliable sources and cross checking them for authenticity. ▪ Disseminating warning to District level officials /Revenue field functionaries /PRIs & coordination with the Revenue control room ▪ Keeping the Control Room active round the clock. ▪ Distributing duties to the District level officials, Sub-collectors, Tahasildars and BDOs. ▪ Arranging vehicles and public address systems for information dissemination. ▪ Establishing coordination with the NGOs and other CivilSociety Organisations and assigning them duties. ▪ Asking the people in the vulnerable areas to move to the shelters and to move their domesticated animals to safer places and to cooperate with the volunteers and other officials engaged in similar activities
During Disaster	**Flash Flood & Epidemics** ▪ To co-ordinate with Civil defense, NGOs/CBOs. Police/ Fire Brigade for support during Flash Flood ▪ Arrangement & Deployment of boats/vehicles etc. for evacuation of people from low lying and marooned areas and administer emergent relief. ▪ Deployment of police for maintaining discipline and peace keeping during evacuation, relief distribution etc. ▪ Keeping a record of the affected area and people so as to account for the relief materials needed. ▪ Procurement and transportation of relief materials to affected areas ▪ Arrangement of free kitchen in the shelter camps & affected areas and assigning the responsibilities to officials for proper distribution with coordination from NGOs/CBOs ▪ Distribution of basic medicines and disinfectants to prevent epidemic and ensuring Health care activities by the CDMO in the shelter camps & through mobile Units/Temporary Health in regular intervals ▪ CDVO through Mobile units/Temporary Health camps in the affected areas ▪ Ensuring that there is enough storage of food and pure water in the shelters. ▪ Monitoring all the activities in the affected areas. **Drought & Heat Wave:** • Organizing urgent meeting with key line departments to review the heat wave & drought like situation and the initiatives taken by the department to combat the situation • Instruct the Labour department to issue circulars to all the departments that are implementing labour intensive work for changing the working time and making provision of drinking water at the work site. • Coordinate with the RWSS department to prepare its contingency plan to reduce the drinking water crisis during heat wave and drought situation.

	• Monitor the activities of Blocks,GPs,NGOsetc • Meeting with the Irrigation, MIP, LI, Watershed department to assess the current water availability and the crop area likely to be saved. • Coordinate with the Agriculture/Horticulture department for timely supply of seeds/ seedlings of suitable variety. • Monitoring and Supervision of the different Food and Social security schemes of the Govt. to check whether it is reaching the target group or not. ▪ Providing employment opportunity to the most vulnerable group by initiating FFW/CFW work.
Post- Disaster	<u>Short-termMeasures:</u> ▪ Formation of special task force with required equipments. ▪ Assigning responsibilities for specific areas. ▪ Damage Assessment ▪ Temporary supply of food, drinking water and medicines to the shelters and affected areas ▪ Arrangement for safe shelter for animals. ▪ Providing temporary arrangements for income generation for the affected people ▪ Drought resistance short duration paddy seeds to be made available to farmers. ▪ Encouraging NGOs/INGOs from outside to carry out restoration and reconstruction works ▪ Ensuring crop insurance ▪ Supervising all the activities Long Term Measures ▪ Immediate restoration of Road communication, Irrigation system, Educational institutions, Govt. Institutions, Electrical installation, Drinking water supply, Construction of IAY houses for the BPL families ▪ Breach Closure and other Embankment Strengthening activities ▪ Planning for holistic approach of drought mitigation through Watershed and Watershed plus intervention ▪ Planning for increasing the irrigation potential of the district through the construction of more Medium and Minor Irrigation Project. ▪ Meeting with districtlevel officials /Officials at Head quarterand chalk out emergency plan with vulnerable areas and resource list • Co-ordination meeting of NGOs/PRIs.&Assignment of duties.

Roles and responsibilities of the Additional District Magistrate (ADM)

PHASE	ACTIVITIES
Pre – Disaster	• Playing a second fiddle to the Collector in all aspects • Ensuring proper dissemination of warning both downward and upward level improper interval of timing. • Ensuring proper functioning of Control Room • Deployment of Office in charges of Collectorate in control room round the clock basis.
During Disaster	▪ Arrangement of Vehicles ▪ Keeping the Police and Fire Personnel ready ▪ Keeping staffs at the DCR ready ▪ Deployment of additional staff if necessary ▪ Proper allocation of relief materials to the affected areas ▪ Allocation of officials for proper distribution of relief materials ▪ Supervision of relief distribution
Post-Disaster	▪ Keeping liaison with all line departments ▪ Restoration of roads,transport and communication systems ▪ Collection of progress report on restoration and reporting to the Govt/SRC/RDC ▪ Periodical visits to the affected areas to supervise the restoration works ▪ Procuring the list of the affected people and property from the BDOs/Tahasildars ▪ Preparing a comprehensive damage report ▪ Allotment of relief materials/financial assistance ▪ Monitoring to make sure that every thing is at its place ▪ Coordination with line departments and civil society organizations ▪ Supervision of restoration activities under taken by different voluntary agencies.

Roles and Responsibilities of the CDM&PHO

PHASE	ACTIVITIES
Pre-Disaster	Preparedness and Warning Dissemination: ▪ Stockpilling of Life saving drugs/ORS packets/Halogen tablets on receipt of warning from the Collector/DCR ▪ Transmission of messages to allPHCs to stock medicines and keep the medical staff ready ▪ Disease surveillance and transmission of reports to the higher authorities on a daily basis. ▪ Vaccination. ▪ To obtain and transmit information on natural calamities from the DCR ▪ Advance inoculation programme in the flood/Cyclone prone areas. ▪ Ensuring distribution of areas of operation among the mobile team. ▪ Pre-distribution of basic medicines to the people who are likely to be affected ▪ Shifting the patients who are in critical situation to the District Hospital ▪ Awareness messages to stop the outbreak of epidemics ▪ Conducting mock drills
During Disaster	▪ Constitute mobile teams and visit the worst affected areas. ▪ Dis-infection of Drinking water sources. ▪ Opening of site operation camps ▪ Regular Health Check up at Shelter camp/Cyclone shelter& affected areas ▪ Assigning responsibilities to the ADMOs/SDMOs for close monitoring of Health camps.
Post-Disaster	Restoration and Rehabilitation ▪ Organization of Health Camps, ▪ Deploying mobile fully equipped and manned Medical vans ▪ Close monitoring of Health camps. ▪ Ensuring adequate quantities of medicine/disinfectants ▪ Making sure that there is no out break of water borne diseases/ Malnutrition ▪ Co-ordination with the District Rehabilitation Committees, other line departments, NGOs /ICDS projects, village committee, PHD, RWSS, etc.

Roles and Responsibilities of the Superintendent of Police

PHASE	ACTIVITIES
Pre-Disaster	Preparedness and Dissemination of Warning ▪ Reception of Warning from the DCR ▪ Communication establishment with Districtand Block/Tahasil Control rooms and departmental offices within the division. ▪ Alerting the APR force for deployment at the time of calamity ▪ To issue directive to police field functionaries to co-operate with Revenue Personnel in management of Relief operation.
During Disaster	Rescue and Evacuation: ▪ Clearance of roads and other means of transportation ▪ Traffic management and patrolling of all highways and other access roads to disaster sites ▪ Making sure that discipline is maintained ▪ Assistance to district authorities for taking necessary action against hoarders,black marketers and those found manipulating relief material ▪ Co-ordination with fire personnel. ▪ Provision of security in transit camps/feeding centers/relief camps/cattle camps/ cooperative food stores and distribution centers ▪ Safeguarding of belongings of evacuees Distribution of Relief: ▪ Maintaining laws and order at the Shelters and the relief camps ▪ Coordination with military service personnel in the area ▪ Deploying officers/ police personnel to record death cases ▪ Assisting the community in organizing emergency transport ▪ Assisting the District officials/NGOs in distribution of relief materials. ▪ Providing escorts in transit of relief materials to the relief camps/ affected areas.
Post-Disaster	▪ FIRof the disasters, the damages and the death cases. ▪ Assisting in collection of damage statistics of private properties and distribution of assistance such as HB grant/ sand-cast subsidies. ▪ Maintaining law and order ▪ Close Coordination with district administration and local/external NGOs in reconstruction and rehabilitation process ▪ Assisting the Distric tauthority when ever the need arises ▪ Periodical visits to the affected areas to ensure lawand order

Roles and Responsibilities of the District Emergency Officer

PHASE	ACTIVITIES
Pre-Disaster	▪ Making sure that everything stays at place in the control room. ▪ Seeing to it that the DDMP and the contingency plan for flood/cyclone reach all the line departments. ▪ Receiving the Warning from SRC/OSDMA and cross checking them with IMD and in websites for authenticity ▪ Disseminating the warning tothe block/Tahasil offices and asking them to disseminate further to reach each and every household. ▪ Deploying the staff of the control room for round the clock alertness. ▪ Making sure that all the shelters receive enough water and food stocks in advance ▪ Establishing contact with all the line depts.Overphone,email, wireless, sat phone and VHF ▪ Procuring all the required resources from all the possible sources. ▪ Regularly updating the information received from the blocks
During-Disaster	▪ Coordinating with all the line departments for rescue and evacuation. ▪ Checking the stocks with the DCR and asking for more if needed. ▪ Distributing the relief materials to all the places. ▪ Checking every bit of receipt and dispatch of relief items ▪ Establishing round the clock contact with all the depts.,BDOs and Tahasildars and with the shelters.
Post-Disaster	▪ Receiving the list of beneficiaries from different blocks and GPs ▪ Cross checking the list of beneficiaries to avoid fabrication

Roles and Responsibilities of the BDOs and Tahasildars

PHASE	ACTIVITIES
PreDisaster	Preparedness: ▪ Providing authentic information required by the DCR ▪ Preparing a record of previous disasters in the locality and analyzing the effects ▪ Preparing hazard maps of the Block./Tahasil & the GPs in minute details ▪ Mapping the cut off areas with alternate route map. ▪ Identification of shelter places in the maps ▪ Keeping a List of storage Points&facilities available, dealers of food stuffs. ▪ Keeping a list of vulnerable people and area and weak points on embankments (if applicable) ▪ Creating a Control Room at the respective level and assignment of duties to the staff. ▪ Pre-positioning of stafff or site operation centers. ▪ Uninterrupted communication with the DCR ▪ Arrangement of alternative communication/generator sets, etc ▪ Formation of GP/village level disaster committees and task forces ▪ Arrangement of boats on hire available ocally. ▪ Deployment of Boat in the most vulnerable areas. ▪ Organizing awareness camps at GP/village levels
	Dissemination of Warning: ▪ Cross checking with the DCR for the authenticity of the warnings ▪ Arrangement or requisition of Jeeps/Trekkers/ Auto Rickshaw to disseminate received warning information's tothe population of vulnerable / weak places ▪ Dissemination of warning/ coordination with District control room. ▪ Warning the people about probable affected areas ▪ Mobilizing the people to leave for identified shelters with their domestic animals and personnel belongings.
During Disasters	Rescueand Evacuation: ▪ Deployment of Police/Fire Brigade for search and rescue. ▪ Co-ordination with civil defense/NCC/NSS/Rajya Sainik Board for rescue operation. ▪ Ensuring availability of rescue materials. ▪ Guiding the evacuees in the identified shelter places and arranging all common needs for them. ▪ Provision of rescue kits. ▪ Clearance of roads and water logging for restoring communication to affected GPs/Villages. ▪ Assisting the District Team in every possible ways ▪ Coordinating with the NGOs/CBOs for rescue work ▪ Mobilizing the local youth to help the rescue team **Distribution of Relief:** ▪ Keeping the record of everything at the shelters ▪ Arrangement of free kitchen in the shelter camps./worstaffected areas. ▪ Deploying staff for proper distribution of relief materials ▪ Arrangement of communication system in the worst cut of fareas.

	▪ Ensuring supply of safe drinking water& health facilities in the effected areas/shelter camps. ▪ Coordination with NGOs/Other voluntary organizations
Post-Disaster	Restoration and Reconstruction: ▪ Collection of damage statistics of PR department properties /ICDS/school buildings etc. ▪ Ensuring just distribution of HB grants and other financial assistance ▪ Provision of temporary income generation activities for the worst affected people ▪ Supervision of Relief operation and restoration work in the affected areas. ▪ Restoring the transportation and educational institutions on high priority ▪ Helping the local economic activities to comeback to normalcy ▪ Provision of grants/loans for the local traders and shop-keepers ▪ Keeping liaison with District administration and other line departments ▪ Ensuring coordination with the RI andG.P/Village committee. ▪ .Co-ordination with NGOs/ Civil society organization etc.

Responsibilities of other Line Departments:

Designation of the Officer	Duties to be performed in Normal Time
SE,TPWODL	• He should see that the field staff checks the electrical line and replace old materials used in the power supply. • He should see that all had wiring in service connections are rectified. • He should enumerate the diesel sale available and his jurisdiction and keep it available. • He should see that the report regarding cyclone warning should be reported to other subordinate offices. • He should see that trees, branches etc.fall on electrical lines are out and removed. • The field staff should see that electrical supply in the places where cyclone may be serve is cut off. • The field staff should be in touch with local Tahasildars and inform the situation at frequent intervals. • To provide Diesel generators to hospital water works.Control Room Collector's office in case of failure of powers.
Superintending Engineer Irrigation.	• The branches to canal drain bandha (embankment) to be closed. • The Embankments should be Strengthened. • It should be checked whether the passage bridge and channels arein good condition. • The obstruction in the canals if any should be got removed immediately to be enabling free flow of water. • The bocksand shutters of the canals are to be checked and satisfied that they are in good condition. • 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. • Navigation in the canal should be stopped. • Water supply into canals should be out off by closing the sluices. • The canals and drains should be free from constructing and they should be made available for free discharge of drain water.

District Fire Officers	• The Fire Engineers should alert and other vehicles should be kept in good working condition. • Materials required for use in emergency should be indented for and kept in reserve • Message received from public on disaster for help should be immediately attended. • Keep in touch with eachof the other fire stations in the district.
Executive Engineer roads and buildings	• Govt. buildings should be inspected and necessary repairsto begot executed to with standing hazards affected. • Script for slides, pamphlets, and cultural programmers should be got prepared immediately. • Arrangements should be made to obtain poster and films by addressing the Director through the Collectors. • Public addresses equipment should be obtain kept ready. • The community Radio sets available in the coastal villages should be ascertained • The names of Hamlets where they are not available to be reported. • Th public should be fully educated regarding the precautionary measures & after cyclone through available media. • Specific duties should be assigned to the field staff. • The field staff should proceed to the place of work allotted and be ready to attend to cyclone duty.
RTO & MVI C.S.O. D.M.(Tel)	• List of vehicles running condition to be requisitioned kept ready. • The MVI/Asst.MVI will report beforeA.D.M.(Relief) • The Asst.Engineer&Jr. Engineers will remain alert. • Based on the experience on the previous cyclone sufficient no. of trucks should be procured and kept in District head quarters. • To contact all Block Control Room and Collector'sOffice.

Local Authorities have the following duties:

i. To provide assistance to the District Collector in Disaster Management activities.
ii. To ensure training of its officers and employees and maintenance of resources so as to be readily available for use, in the event of a disaster.
iii. To undertake capacity building measures and awareness and sensitization of the community
iv. To ensure that all construction projects under it conform to the standards and specifications laid down.
v. Each department ofthe Government in a district shall prepare a disaster management plan for the district. The local authorities need to ensure that relief, rehabilitation and reconstruction activities in the affected area, within the district, are carried out.
vi. Trust/Organisations managing Places of Worships & Congregation
    a) Each establishment / organisation identified as ―critical infrastructure and key resource‖,
    b) Including places of congregation in a district shall prepare―on-site and―off-site
    c) Disaster management plan.Carry out mitigation,response,relief,rehabilitation and Reconstruction activities.

Private Sector:

- The private sector should be encouraged to ensure their active participation in the pre- disaster activities in alignment with the overall plan developed by the DDMA or the Collector.
- They should adhere to the relevant rules regarding prevention of disasters, as may be stipulated by relevant local authorities.
- As apart of CSR, undertake DRR projects in consultation with district collector for enhancing district's resilience.

Community Groups and Volunteer Agencies:

- Local community groups and voluntary agencies including NGOs normally help in prevention and mitigation activities under the overall direction and supervision of the DDMA or the Collector.
- They should be encouraged to participate in all training activities as may be organized and should familiarise themselves with their role in disaster management.

Citizens:

It is the duty of every citizen to assist the District Collector or such other person entrusted with or engaged in disaster management whenever demanded generally for the purpose of disaster management.

5. Plan for review and updating: Periodicity

The approved plan is to be implemented by the concerned line department. Each department needs to rain their personnel so that they have the knowledge, skills and abilities needed to perform the tasks identified in the plan. Activities identified for each department at various stages of disaster should be followed judiciously. At the same time the plan to be reviewed periodically to determine whether the goals, objectives, decisions, actions and timing outlined in the plan led to a successful response. DM Plan require regular improvement and updating at least once a year. The DDMP, 2020 prepared by the DEOC, Kalahandi will be upgraded every year and will continue to be done. The DDMA will sit at least twice a year to effect regular improvements or remove bottlenecks in the Disaster Management Plan.

The following aspects need to be considered while reviewing and updating the planafter the following events:

a) A major incident.
b) Achange in operational resources (e.g.,policy, personnel,organizational structures, Management processes, facilities, equipment).
c) A formal update of planning guidance or standards.
d) Major exercises.
e) Achange in the district's demographics or hazard or threat profile.
f) The enactment ofnew or amended laws or ordinances.

The DDMP will be printed and circulated every year by the DEOC, Kalahandi to the line departments. The same will also be uploaded on district website and website of OSDMA for different stakeholders. Awareness campaigns, capacity building and trainings are organized and such information on disaster preparedness is disseminated to all the stake holders. DEOC collect information on occurrence of disasters as well as render necessary advisory to the information seekers. The responsibility for the coordination of the development and revisionof the basic plan, annexes, appendices and implementing instructions is assigned to DEOC under the guidance of District Magistrate/Addl. District Magistrate of the district.

Chapter-2
District Profile

2.1.1 HISTORY & LOCATION OF THE DISTRICT

Kalahandi a district of Odisha,India, was known as **Mahakantara** (Great Forest) in ancient India. It is also known as **Karunda Mandal**, which means treasure of precious stones like karandam (Manik), Garnet (red stone), Beruz, Neelam (blue stone), and Alexandra etc. Kalahandi was a feudatory of erstwhile Kalinga-Utkala empire of Gajapati rulers of Odisha. Maharaja Pratap Keshari Deo, the Ex-Maharaja of Kalahandi, in one of his articles expressed his view that the historical significance of naming Kalahandi as Karunda Mandala is based on the availability of Karandum in this region.

MaaManikeswari (the goddess of Manikya), the clan deity of the Naga kings of Kalahandi may have also necessitated the adoption of the name.The present District of Kalahandi was a former princely state. After Indian Independence, Kalahandi joined with the Union ofIndia on January1, 1948, and was subsequently merged with Odisha on November 1,1949. The former capital of the State of Kalahandi, Junagarh, located 26 kilometers from Bhawanipatna has a well-built fort and a number of temples of Hindu pantheon, with sculptural evidence of the rite of sati. The language spoken by the people of Kalahandi is Sambalpuri-a dilect of Odiya language and with the tribal languages like Koyi, Laria, Kondha, Khaira, Munda, Ho, Mundari &Savara etc.

Caste plays an important role inthe socio-economic life ofthe district. The main castes onthe basis of occupation and traditional social divisions are Bairagi, Bangti, Bhulia, Brahmin, Dosi, Gaura, Karan, Kosta, Kshyatria, Kulta, Kurmi, Mali, Paik, Sampuas, Sunari, and Sundhi. The scheduled caste constitutes 17.67 % of the total population. Out of total 36 scheduled castes, the most numerous are Dom, Ganda, Chamar, Ghasi, Dhoba, Mehera, Beldar and Panika.

The population of the scheduled tribes in the district constitutes 28.65 percent of the total population. Of the 46 tribes found in this district, numerically important tribes are Banjara, Bhottada, Bhunjia, Binjhal, Dal, Gond, Kandha, Mirdha, Munda, Paroja and Shabar. These 12 tribes together constitute 96.96 % of the total tribal population in this district. Concentration of scheduled tribes was the highest in Bhawanipatna sub-division and the lowest in Dharamgarh subdivision.

Kalahandi has been in the news since middle of 1980s when India Today reported sale of a child by its parents due to financial crisis. That article led the then Prime Minister RajivGandhi to paya visit to the district and brought the district to the attention ofthe national stage for its acute poverty and famine. Subsequently similar reported cases of starvation deaths and sale of children have led to the announcement of a host of relief efforts and development projects. Prime Minister P. V. Narasimha Rao announced the famous KBKproject (Kalahandi- Bolangir-Koraput) in 1994. Nonetheless, Kalahandi has not been able to take off despite of hosts of programmes, largely because of lacuna at implementation stage. As the basic infrastructure is dismal state, the development progress is very slow.

But some development in the recent pasthas shown some sign of progress. The Indravati Water Project, second biggest in the state has changed the landscape of southern Kalahandi, leading to two-three crops in a year. Because of this, blocks like Bhawanipatna, Jayapatna, Dharamgarh and Junagarh are witnessing rapid agricultural growth. Sterlite Industries, Vedanta, major aluminium processor have made major investments in the Kalahandi-Koraput range. This project is now a big catalyst for industrial development in the region.

Recent Developments:

Kalahandi also is an example of disparity /contrasts that exist in many part of developing/ underdeveloped world. On the one side, this district is famous for famine and starvation deaths once upon a time, now it is one among the Highest Number of Rice Mills in Odisha. The number of rice mills in the district was around 150 in the year 2004-05.More than 70% have been built in the five years after commissioning of the Indravati project. The rice mill business is so lucrative that businessman from adjoining districts and states have invested directly or indirectly. Most of the rice mills purchase paddy from the government allotted villages through panchayat and sell the rice to Food Corporation of India. As many rice Mills are competing for paddy, the price paid the farmers has increased in the recent past.

Odisha government has also set up a medical college at Kamthana Bhawanipatana Block (near Jaring) of Kalahandi. This has the potential of changing the health infrastructure of the district.

However drought has become a perennial and recurring phenomenon in this region and the major cause of concern is that the frequency of drought is increasing rapidly in the current years so is the magnitude i.e. in every alternate yearone can expect a drought like situation with a greater enormity. Almost 80% area of the districtis prone todrought.More than 70 pc ofthe cultivable area is rain fed and as agriculture is the major sourceof livelihood, failure and erratic behavior of monsoon over consecutive years has had serious adverse impact on the socio-economic condition of the people living in these areas leading to drastic crop and livestock losses, large-scale migration, distress sale of household assets, starvation, malnutrition, acute drinking water shortage, school dropouts, child labour etc.These things have been highlighted in different medias drawing nationaland international attention. Meager irrigation facilities, sloppy and undulating terrain, severely eroded andunproductive agricultural land, skewed land distribution, subsistence agriculture, depleted ground water resource and less diversified livelihood system has further compounded the problem. The inter play of climatic and non-climatic factors in this region is becoming more and more complex, there by intensifying the impact of drought on the community.

2.2Administrative Setup:

The District Magistrate and Collector is the administrative head of the district. He executes plans, programmes and policies of the government. He is assisted by Additional District Magistrate, Deputy Collector, Sub-Collector, Block Development Officers and Tahasildar. There are also other District Level Officers under the control of their departments, but the Collector being the head of administration exercised supervision over them. Kalahandi District comprises of two sub-divisions viz. Bhawanipatna and Dharamgarh. The Sub-Collector are in charge of the Sub-division. For convenience of revenue administration, the district is divided into 13 Tahasils, namely, Dharamgarh, Kalahandi, Kesinga, Madanpur Rampur, Lanjigarh, ThuamulRampur, Jaipatna, Golamunda, Junagarh, Karlamunda, Narla, Koksara and Kalampur. Each tahasil is in charge of a Tahasildar.

In order to look after the developmental activities there are thirteen CD Blocks in the district. Each CD Block is in charge of a Block Development Officer. The numbers of Gram Panchayats and villages under each CD Block is given below.

Table 2.1 Administrative Setup

Sl. No.	Name of the SubDivision	Name of the CD Block	No. of Gram panchayat	No. of Villages	No.of RI Circle
1	Bhawanipatana	Bhawanipatna	36	289	12
2		Kesinga	26	112	9
3		Madanpur Rampur	19	248	7
4		Narla	26	173	10
5		Karlamunda	12	61	5
6		Lanjigarh	26	483	9
7		Thuamul Rampur	24	267	8
8	Dharamgarh	Junagarh	34	179	11
9		Dharamgarh	24	85	9
10		Golamunda	28	129	9
11		Jaipatna	22	94	7
12		Koksara	22	75	7
13		Kalampur	11	55	4
		Total	**310**	**2250**	**107**
Revenue Section: Collectorate, Kalahandi- 2025					

Table-2-2

No.of Sub-Divisions	**2**	**No.of Tehsils**	**13**
No.of Municipality	**1**	**No.of N.A.Cs**	**3**
No.of Blocks	**13**	**No.of Police Stations**	**17**
No.of Gram Panchayats	**310**	**No.ofVillages**	**2250**

Sources- Revenue Section, Collectorate, Kalahandi

Table-2-3 LOCATION OF BLOCKS:

Sl. No.	Name of the Block	HQ Latitude	HQ Longitude
1	BHAWANIPATNA	19°54'N	83°10'E
2	KARLAMUNDA	20°05'N	82°48'E
3	KESINGA	20°12´N	83°14´E
4	LANJIGARH	19°43´N	83°22´E
5	M.-RAMPUR	20°8'N	83°31'E
6	NARLA	20°03'N	83°23'E
7	THUAMUL-RAMPUR	19°32'N	82°56'E
8	DHARAMGARH	19°52´N	82°46´E
9	GOLAMUNDA	20°05´N	82°45´E
10	JAIPATNA	19°30´N	82°48´E
11	JUNAGARH	19°51'N	82°56'E
12	KALAMPUR	19°42´N	82°53´E
13	KOKSARA	19°41'N	82°43'E

Climate &Rainfall:

The south-west monsoon is the principal source rainfall in the district. Average annual rainfall of the district is 1378.2 mm. About 80to 85% of the total rainfall is received during the period from June-September.Block wise average annual rainfall varies from 88.8mm to 2712.9 mm. The climate of the district is sub-tropical with hot and dry summer and pleasant winter. The summer season extends from March to middle of June followed by the rainy season from June to September.

Over the years, indiscriminate tree felling and local climate change has resulted a serious negative impact on the normal rainfall of the district. In the last thirty and forty years, the distribution of rainfall has become more erratic and amount of rainfall is continuously declining. This erratic behaviour of monsoon both in terms of time and space has resulted a perennial drought like situation in the district.

a. Average & Actual Rainfall: Table-2-4

Sl.No	Month	Average Rainfall (in mm)	Actual Rainfall(in mm) in -2020(mm)	Actual Rainfall (in mm) in 2021	Actual Rainfall (inmm)in-2022	Actual Rainfall (in mm) in - 2023	Actual Rainfall (in mm) in - 2024
1	January	**10.3**	1.82	8.9	0	60.25	0
2	February	**14.4**	6.2	22.15	4.23	0	0
3	March	**23.7**	8.63	60.7	0	0	40.35
4	April	**25.7**	10.54	46.84	9.09	3.22	75.21
5	May	**41.8**	23.48	41.32	59.03	42.97	33.87
6	June	**240.43**	156.98	306.89	158.96	145.90	80.43
7	July	**327.4**	454.07	271.69	296.32	411.22	338.7
8	August	**355.4**	657.01	397.78	201.33	643.62	290.34
9	September	**204.6**	279.21	195.89	262.37	171.32	403.28
10	October	**74**	92	130.21	21.86	76.58	27.86
11	November	**10.9**	4.51	0	32.89	0	6.18
12	December	**1.6**	0	0	6.76	0	39.63
	TOTAL	**1330.23**	**1694.45**	**1482.37**	**1052.84**	**1558.08**	**1335.85**

b. Rain Recording Stations: Table-2-5

Sl.No.	Rain Recording	Location	Responsibility	ContactNo.
1	Bhawanipatna	Inside the Block Head Quarter Office premises	Head Clerk of the respective Block	06670-230691
2	Kesinga			06670-222003
3	Karlamunda			06676-251035
4	MadanpurRampur			06676-250301
5	Narla			06677-240145
6	Lanjigarh			06677-245022
7	Th.Rampur			06675-260002
8	Dharamagarh			06672-242212
9	Junagarh			06672-243259
10	Kalampur			06673-258301
11	Jaipatna			06673-250234
12	Koksara			06673-253004
13	Golamunda			06672-246505

GEOGRAPHICAL LOCATION:

Kalahandi district of Odisha encompasses an area 7920 Sq. Km, of which 32 % is covered by forests which is 2,538.01 Sq. Km. It is geographically located between 19° 3' North and 21° 5' North latitude and 82° 30 East and 83° 74' East longitude. Kalahandi occupies the southwestern portion of Odisha, bordered to the north by the Districts of Balangir and Nuapada, to the south by the District of Rayagada, to the west by the Districts of Nabarangpur and Raipur (Chhatisgarh) and tothe east bythe Districts of Rayagada and Boudh. It has an area of 7920 square kilometers and ranks 7th in area among the 30 districts of Odisha. The District Headquarters is at Bhawanipatna Town which stands almost to the eastern border.

The District is primarily agricultural, withover halfthe district area covered with dense jungle forest. Industry is very limited, but bauxite and graphite deposits have been commercially exploited.

Soil Type-Table-2-6

Sl No	Soil Type	App.Area in Hect.	Crops Grown
2	Red Soil	121371	Paddy, pulses,vegetables&OilSeeds
3	Red Yellow	8510	Paddy,pulses,vegetables,
4	Black Soil	5337	Paddy,cotton, Miilets,
5	Forest Soil	1978503	Paddy,Nizer,Millets,pulses,Plantgation vegetables&OilSeeds

Topography:

Topographically the entire district is divided into three parts i.e. plateau area, valley area, plain area and hilly areas. The majority of the plateau and valley areas are coming under the Karlapat Wildlife reserve forest. Further Thuamul Rampur Block comes under hilly areas category. The plain area of the district is somewhat undulating. Majority of the land mass belongs to high land which is prone to soil erosion and other degradation processes. Six main rivers are flowing across the district, namelyIndravati, Tel, Hati, Uttei, Udantiand Ret. During the months of heavy rainfall all the rivers are in spate and cause flash flood and flood like situation inthe adjoining areas, thoughthe districtis mostlydryandproneto recurrent drought.

River System:

The asymmetrical patterns of drainage system strongly reflect the character ofreliefand the climate differences. The Tel, Indravati and Jonk, which from tributaries of large rivers like the Mahanadi and Godavari, may be mentioned among the principal rivers of Kalahandi. Besides, the Tel receives a large number of effluents in the district. The scenery along the banks ofthese streams during their course through the hills speciallyon the Indravati and Raul, feeder of the Tel, is exceedingly fine and varies from wild raging torrents sweeping over bare rocks, to placid stretches of deep pools with the stream swirling in the eddies between rich meadow land, verdant withgrass and banks overhung with willows. Most ofthe hill streams of the district are perennial. The rivers in the open country seldom carry a large flow of water in the hot weather.

The Tel, Sagada, Hati, Ret, Sandul, and Utteiare mostly reduced to tiny streams in their lower reaches from Februaryto June. On the other hand, the Raulthroughout its whode length, most of which lies inside the forest, holds a fair flow of water even in the month of May. The Sagada, Ret, Indravati, Bada Nala and many others carry a strong stream of perennial water in the upper and middle reaches and only lose it in their sandy beds when they descend to the plains. Tel is the longest and most important river in the district, rising in the hills of Nabarangpur and entering Kalahandi district, a few kilometers west of Dharamgarh flowing through an alluvial tract. The important feeders on its right bank are the Motel, Hati, Sagada, Ret, Bulat and Raul. The Raul rising in the hills of Kandhamal district flows through the mountain tracts in the north-eastern part of Kalahandi district, enters Bolangir near Sikerkupa and joins the Tel a few kilometers from the borders of Kalahandi. It receives most of the drainage of Madanpur-Rampur area. The Uttei reses on the same hills andreceivesa few feeder in the fertile tract of M. Rampur area and joins the Tel on the border of Bolangir- Kalahandi district near Belkhandi. It drains the wide plain between M. Rampur and Narla.

The Hati, a large tributary of the Tel, rises in the high hill ranges of Jaipatna and joins the Telabout 12 kms. North of Junagarh. The Bulat raises at the southern end of Gundi Dangar about 12 kms.South of Bhawanipatna and flows past the town in a northwestern direction under the name of Pipal Nala before it turns northwards to join the Tel nearKarlapada. Indravati is the largest river system of this area, which supplies water to most partsofJaipatna, Junagarh, Koksara, Thuamul Rampur, Dharamgarh and Kalampur Blocks forirrigation purpose. Tanks are found in almost everyvillage. They are generally classified as Kata, Sagar, Bandh and Sara. The tanks are chiefly used for bathing, drinking, pisciculture and irrigation purposes. Phurlijharan, one of the most perennial waterfalls, about 15 kms. from the Bhawanipatna township area, is the most attractive place and picnic spot for the tourists.

Demography:

An official Census 2011 detail of Kalahandi (Kalahani), a district of Odisha has been released by Directorate of Census Operations in Odisha. Enumeration of key persons was also done by census officials in Kalahandi District of Odisha.In 208, Kalahandi had population of 1,576,869 of which male and female were 787,101 and 789,768 respectively. In 2001 census, Kalahandi had a population of 1,335,494 of which males were 667,526 and remaining 667,968 were females.There was change of 81.07 percent in the population compared to population as per 2001. In the previous census of India 2001, Kalahandi District recorded increase of 81.09 percent to its population compared to 1991.

Out of the total Kalahandi population for 2011 census, 7.74 percent lives in urban regions of district. In total 121,987 people lives in urban areas of which males are 62,455 and females are 59,532. Sex Ratio in urban region of Kalahandi district is 953 as per 208 census data. Similarly child sex ratio in Kalahandi district was 922 in 2011 census. Child population (0-6) in urban region was 13,807 ofwhich males and females were 7,813 and 6,624. This child population figure of Kalahandi district is 8.50 % of total urban population.

Average literacy rate in Kalahandi district as per census 2011 is 81.60 % of which malesand females are88.38%and74.52% literates respectively.In actual number 88,274 people are literate in urban region of which males and females are 48,847 and 39,427 respectively.

As per 2011census, 92.26% population of Kalahandi districts lives in rural areas of villages. The total Kalahandi district population living in rural areas is 1,454,882 of which Males and females are 724,646 and 730,236 respectively.In rural areas of Kalahandi district, sex ratio is 1008 females per 1000 males.

If child sex ratio data of Kalahandi district is considered, figure is 959 girls per 1000 boys.Child population in the age 0-6is 208,763 in rural areas of which males were 106,543 and females were 102,220. The child population comprises 14.70 %oftotalrural population of Kalahandi district.

The initial provisional data released by census India 2011, shows that density of Kalahandi district for 208 is 199 people per sq. km. In 2001, Kalahandi district density was at 169 people per sq. km. Kalahandi district administers 7,920 square kilometers of areas.

Literacy rate in rural areas of Kalahandi distri ct is 57.28 % as per census data 2011. Gender wise, male and female literacy stood at 70.43 and 44.34 percent respectively. In total, 713,762 people were literate of which males and females were 435,330 and 278,432 respectively.

Average literacy rate of Kalahandi in 2011 were 59.22 compared to 45.94 of 2001. If things are looked out at gender wise, male and female literacy were 71.90 and 46.68 respectively. For 2001 census, same figures stood at 62.66 and 29.28 in Kalahandi District. Total literate in Kalahandi District were 802,036 of which male and female were 484,177 and 317,859 respectively. In 2001, Kalahandi District had 513,383 in its district.

With regards to Sex Ratio in Kalahandi, it stood at 1003 per 1000 male compared to 2001 census figure of 1001. The average national sex ratioin India is 940 as per latest reports of Census 208 Directorate. In 2011 census, child sex ratio is 957 girls per 1000 boys comparedto figure of 984 girls per 1000 boys of 2001 census data.

In 2011, total 309 families live on footpath or without any roof cover in Kalahandi district of Odisha. Total Population of all who lived with out roof at the time of Census 2011 numbers to 1,137. This approx 0.07% of total population of Kalahandi district.

Geographical Area, House holds and Number of CensusVillages Indifferent Blocks and Urban areas of Kalahandi district (2011Census)

Table-2-*7*

Sl. No.	Year/ Block/ ULB	Geographical area in Sq.Km. 2011Census	Numberof House-holds	Number of villages		
				Inhabited	Un-inhabited	Total
1	2	3	4	5	6	7
	2011	7920	401251	286	137	2253
	1 Bhawanipatna	629.24	42207	271	12	283
	2 Dharamgarh	377.90	36048	78	1	79
	3 Golamunda	428.26	33998	129	1	130
	4 Jaipatna	405.12	32748	92	1	93
	5 Junagarh	509.20	43834	164	7	171
	6 Kalampur	155.95	15802	55	0	55
	7 Karlamunda	195.10	15906	60	2	62
	8 Kesinga	377.98	30681	101	5	106
	9 Koksara	357.15	31238	71	1	72
	10 Langigarh	660.59	22283	425	58	483
	11 M.Rampur	309.62	2808	228	20	248
	12 Narla	442.19	32277	167	6	173
	13 Th. Rampur	338.86	81773	275	23	298
	URBAN					
	1 Bhawanipatna(M)	15.40	15599	-	-	0
	2 Junagarh(NAC)	15.54	4541	-	-	0
	3 Kesinga(NAC)	14.50	4271	-	-	0

Households and its distribution: Table-2-8

Sl.No	Total Number of Families/HH	Category		Category			Category	
		Rural	Urban	SC	ST	Others	BPL	APL
	4,04,814	**373,304**	**27,947**	71391	82581	220905	**193,054**	28760

Population and its composition: Table-2-9

Sl.	Population			SC		ST		OTHERS	
No	T	M	F	M	F	M	F	M	F
	15,76,869	7,86,101	7,89,786	1,42,133	1,41,447	2,21,171	2,28,285	422797	474663

Table-2-10 Demograpgy Population(Census,2011)

Blocks	Total House Holds	Total Population	Male	Female	Total SC	SC Male	SC Female	Total ST	ST Male	ST Female
BHAWANIPATNA	57806	239572	120758	118814	47600	23817	23783	60580	29889	30691
DHARAMGARH	36048	139359	69994	69365	25407	12638	12769	24071	11948	12123
GOLAMUNDA	33998	129499	64917	64582	22480	11141	11339	32655	16212	16443
JAIPATNA	32748	130724	64673	66051	20921	10235	10686	50213	24590	25623
JUNAGARH	48375	193316	96441	96875	32420	16096	16324	30993	15292	15701
KALAMPUR	15802	60075	29531	30544	9778	4841	4937	15673	7538	8135
KARLAMUNDA	15906	57418	28975	28443	9686	4831	4855	8411	4203	4208
KESINGA	34889	135067	68089	66978	22740	11388	11352	34190	16974	17216
KOKSARA	31238	119304	58953	60351	19555	9665	9890	41119	20183	20936
LANJIGARH	22283	93179	45887	47292	22146	10802	11344	42703	20753	21950
MADANPUR-RAMPUR	21108	80524	40075	40449	11142	5522	5620	31535	15590	15945
NARLA	32277	120992	60695	60297	22963	11426	11537	32026	15923	16103
THUAMUL-RAMPUR	18773	77840	38113	39727	19742	9731	10011	45287	22076	23211
Total	**401251**	**1576869**	**787101**	**789768**	**286580**	**142133**	**144447**	**449456**	**221171**	**228285**

Population Density of the District and decadal growth of Population-

The initial provisional data released by census India 2011, shows that density of Kalahandi district for 2011 is 199 people per sq.km. In 2001, Kalahandi district density was at169 people per sq. km. Kalahandi district administers 7,920 square kilometer so far.The decadal growth of population is 81.1 as per 2011 census.

Religion wise distribution of Population :Table-2-11

Sl.No.	Total Population	Category				
		Hindu	Muslim	Christian	Sikh	Others
1	1576869	1555367	4975	8160	796	4571

Age Group-Table-2-12

Sl. No.	Total Population	0-6years	7-14years	15-59years	60yearsand above
	1576869	222570	325529	977129	51641

Sex Ratio:Table-2-13

1	Sex Ratio(Females per1000 males):	1003
2	Sex Ration(0-6Years):	957

Literacy Rate:Table-2-14

Literacy Rate	Total	Male	Female
	59.2	71.9	46.7

Socio-Economic Profile:

The recurrent famine, epidemic, perpetual migration and other forms of afflictions left the district with as low rate of population growth. The district had bad start during the First years of 1921-31, when death rate exceeds birth rate; still the growth rate in the district is very low (in 1981-91 the decadal growth rate was 81.88 percent and 1991-2001 it was 17.99 percent). As per 2011 census the decadal growth is 81.1.

Religion: in 1991 out ofthe total population of the district, which was1,600.385 the Hindus were in great majority, the total number being 1,586,846 (99.15%) followed by Muslim 5,919 (0.37%), and Christian 5,052 (0.32%).

Work force participation-

Labour force participation rate is defined as the section ofworking population in the age group of 16-64 in the economy currently employed or seeking employment. People whoare still undergoing studies, housewives and persons above the age of 64 are not reckoned inthe labour force.

Total Workers Table-2-**15**

	Total	Rural	Urban
Persons	620581	381460	239058
Males	589372	355578	233794
Females	3846	25882	5264

Table-2-**16**

3 Workforce participation rate-Male/Females (InNumber)

Sl. No.	Year/ Blocks/Urban	TotalWorkers.			Mainworkers.		
		Males	Females	Total	Males	Females	Total
1	2	3	4	5	6	7	8
		447290	304640	751930	299835	76922	376757
1	Bhawanipatna	48340	32697	81037	32152	858	40663
2	Dharamgarh	41256	29569	70825	27958	6934	34892
3	Golamunda	37417	26065	63482	21090	4690	25780
4	Jaypatna	3882	28258	66370	26572	7683	34255
5	Junagarh	49556	34085	83641	34435	9764	44199
6	Kalampur	17748	13725	31473	14029	5786	19815
7	Karlamunda	16831	10690	27521	9555	1421	10976
8	Kesinga	33170	81793	51963	22850	4289	27139
9	Koksara	34641	27036	61677	22832	5574	28406
10	Lanjigarh	24226	19965	44191	13356	4275	17631
11	M.Rampur	22191	15388	37579	14917	3053	17970
12	Narla	34553	22066	56619	24042	5745	29787
13	Th. Rampur	19621	17966	37587	9729	3582	1338
	URBAN						
1	Bhawanipatna(M)	81666	5039	23705	16468	3575	20043
2	Junagarh(NAC)	5573	8148	7421	4958	823	6081
3	Kesinga(NAC)	5389	1450	6839	4892	917	5809

%Total Workers Table-2-17

	Total	Rural	Urban
Persons	46.5	47.8	31.1
Males	57.2	57.8	49.8
Females	35.8	37.8	10.9

%Main Workers Table-2-18

	Total	Rural	Urban
Persons	28.6	28.7	27.5
Males	47.0	47.0	46.1
Females	10.2	10.4	7.5

%Marginal Workers Table-2-19

	Total	Rural	Urban
Persons	17.9	19.1	3.6
Males	10.2	10.8	3.7
Females	25.6	27.4	3.4

%Non-Workers Table-2-20

	Total	Rural	Urban
Persons	53.5	52.2	68.9
Males	42.8	42.2	50.2
Females	64.2	62.2	89.1

%Cultivators Table-2-21

	Total	Rural	Urban
Persons	29.7	31.0	3.9
Males	38.9	41.5	4.4
Females	14.9	15.2	1.5

Agricultural Labourers Table-2-22

	Total	Rural	Urban
Persons	50.3	52.5	8.8
Males	36.5	38.7	6.1
Females	72.4	73.5	21.9

HHI Workers Table-2-23

	Total	Rural	Urban
Persons	2.9	2.9	2.1
Males	2.5	2.5	1.8
Females	3.5	3.5	3.9

OtherWorkersTable-2-24

	Total	Rural	Urban
Persons	17.1	13.5	85.2
Males	22.1	17.3	87.7
Females	9.2	7.8	72.7

%Workers in agricultural sector Table-2-25

	Total	Rural	Urban
Persons	80.0	83.6	12.7
Males	75.4	80.2	10.6
Females	87.3	88.7	23.4

%Workers in Non-agricultural sector Table-2-26

	Total	Rural	Urban
Persons	20.0	16.4	87.3
Males	24.6	19.8	89.4
Females	12.7	8.3	76.6

Land Holding Pattern Table-2-27

Sl. No	Name of the Block	Grazing land	ForestLand (ha)	Misc. tree crops & Groves	Barren &uncultivable land	Cultivable wastes	Non Agricultural wastes
1	Bhawanipatna	3495	4617	269	1281	1489	5746
2	Dharamgarh	1424	4	59	1328	260	4602
3	Golamunda	2229	1731	101	1337	3085	3383
4	Jaipatna	2016	1682	80	991	1425	3724
5	Junagarh	3126	2557	146	247	3712	5088
6	Kalampur	376	66	23	145	62	2248
7	Karlamunda	659	371	21	546	663	2019
8	Kesinga	906	16	59	1002	561	3035
9	Koksara	1299	1228	137	1725	5301	328
10	Lanjigarh	1962	28170	146	12899	5376	2468
11	M.Rampur	1794	7817	95	12992	3090	2277
12	Narla	2597	882	957	1034	856	5203
13	Th.Rampur	1414	6061	40	46509	5376	3959
	URBAN	251	12	6	150	400	1487

Agriculture and Irrigation

Crops/Cropping Pattern:

Table-2-28

	Kharif	**Pre Rabi**	**Rabi**	**Summer**
Upland(Att)	Rice, Millets, Arhar, B. gram, G.gram, Ground	Horse gram, Niger, Black	Groundnut,Sun	
	nut, Sesamum	gram	Flower	-------
Medium land (Berna)	Rice	Lathyrus, Bengal gram	-------	Onion and Other vegetables
Low land (Bahal)	Rice	-------	Lathyrus, Jhain Mung, Bengal gram	Onion and Other vegetables

Uttei Irrigation Project,Table-2-29

Sl. No.	Block	Large and Medium Irrigation Projects		Minor Irrigation Project		Lift Irrigation Point (River)		LI points (Deep bore wells)		Others
		Units	Ayac ut Area inHa.	Units	Ayac ut Area in Ha.	No.	Ayac ut Area Ha.	No.	Ayac ut area	
1	M.Rampur	Ha	1039	-	-	-	-	-	-	-
2	Karlamunda	Ha	8267	-	-	-	-	-	-	-
			9306							

Table-2-30

LIfT IRRIGATION PROJECTS:

Sl. No.	Name of Block	No. of R.L. L.I. Projects in operable condition		No. of R.L. L.I. Projects Exist	
		No.	Areain Hect.	No.	Area in Hect.
1	2	3	4	5	6
1	Bhawanipatna	152	3558	183	4352
2	Kesinga	128	2934	158	3654
3	Lanjigarh	70	1564	94	2088
4	Th.Rampur	14	280	17	340
5	M.Rampur	157	3856	176	4344
6	Narla	156	3836	170	4176
7	Karlamunda	121	2980	129	3176
8	Dharamgarh	55	1404	69	1684
9	Golamunda	118	2764	138	3062
10	Koksara	90	2064	94	2164
11	Junagarh	156	3508	185	4128
12	Jaipatna	46	1188	54	1448
13	Kalampur	21	472	29	632
	TOTAL:	**1284**	**30438**	**1496**	**35248**

(Source : EE, OLIC, Bhawanipatana Division, Kalahandi Email Dt.31-05-2025)

Table-2-31

MINOR IRRIGATION PROJECTS

No of MIPs	Name of the Block	Designed Ayacut in Ha.		Canal length in Mtr.	
		Khariff	Rabi	Left Canal	Right Canal
1	2	3	4	**5**	**6**
26	BHAWANIPATNA	3586	720	30090	19240
10	DHARMAGARH	723	25	3101	-
19	GOLAMUNDA	2715	571	9285	60705
6	JAIPATNA	714	52	8860	1200
20	JUNAGARH	814	20	-	5655
1	KALAMPUR	202	-	-	500
3	KARLAMUNDA	161	-	1250	2940
17	KESINGA	4839	1443	90574	14290
21	KOKOSARA	4402	824	26213	33826
13	LANJIGARH	2824	409	43910	3806
10	M. RAMPUR	1322	206	24070	5850
16	NARLA	5022	517	105820	8860
8	TH. RAMPUR	876	40	3235	4305
173	**Total**	**28500**	**4827**	**349408**	**191477**

Table-2- 32 Consumption of Fertilizer wise consumption in MT

Sl. No.	Crop	Net Sown Areain hact.	Production (in Qtls.)	Consumption of Seeds (in Qtls.)	Consumption of Fertilizers (in Qtls.)	Consumption of Pesticides (in Qtls.)	Requirement of Loans (Rs. in Lakh)
1	Paddy(K)	204458	8752846.98	81783	Kharif-67689.770MT Rabi-23848.685MT		
2	Paddy(R)	62158	3459092.70	24863			
3	Wheat	21	299.25	21			
4	Maize	12947	692405.56	2589.4			
5	Bajra	55	412.50	2.75			
6	Ragi	2457	34250.58	245.7			
7	Milets	2606	17460.20	260.6			
8	Pulses	64522	525209.08	16130.5			
9	Oilseeds	16093	175252.77	319.05			
10	Vegetables	33998	5920071.74				
11	Other Cash crops Cotton	60988	981296.92	3049.4			

Table-2-33

Agriculture:					
Sl. No.	**Name of the Block**	**Total Area (in Hectares.)**	**Cultivable Area**	**NetSown Area**	**Irrigated Area**
1	Bhawanipatna	142959	49575	49000	14606
2	Kesinga	42120	31571	29530	15324
3	Th.Rampur	72400	17239	17047	3598
4	Narla	49088	38155	31620	12756
5	M.Rampur	65206	22873	22387	9239
6	Karlamunda	21669	14880	14830	1238
7	Lanigarh	121681	23756	22655	6626
8	Dharamgarh	48126	33868	33800	25593
9	Koksara	42323	37883	37670	9862
10	Golamunda	70226	41452	40800	17038
11	Junagarh	67245	41745	40560	39560
12	Jaipatna	38630	29749	29322	81310
13	Kalampur	16627	14554	14500	8859
	G.Total	792000	391000	383721	196682

Table-2-34-Agriculture and Flood Vulnerability

Sl. No.	**Name of the Block**	**Cultivable Area (Hectares)**		**Area susceptible to Flood (Hectares)**	
		Paddy	**Non-Paddy**	**Paddy**	**Non-Paddy**
1	Bhawanipatna	20959	28041	-	-
2	Kesinga	9950	19580	200	-
3	Th.Rampur	4012	13035	-	-
4	Narla	15716	15904	-	-
5	M.Rampur	9040	13347	-	-
6	Karlamunda	8540	6290	-	-
7	Lanjigarh	6220	16435	-	-
8	Dharamgarh	22120	8680	950	500
9	Koksara	21937	15733	-	-
10	Golamunda	24698	16102	750	70
11	Junagarh	29653	10907	4327	1535
12	Jaipatna	19663	9659	678	
13	Kalampur	8950	2550	892	81
TOTAL		**204458**	**179263**	**7797**	**2216**

Drought Vulnerability Table-2-35

Sl. No.	Name of the block	Average Annual rainfall (in mm) 2023	Ground Water Level	Cultivated Area (inhectares)			
				Paddy		Non-Paddy	
				Rainfed Area	Irrigated Area	Rainfed Area	Irrigated Area
1	Bhawanipatna	1335.85		7449	13510	25917	2124
2	Kesinga			1745	8205	16490	3090
3	Th.Rampur			3650	362	10199	2836
4	Narla			4436	8280	12757	3147
5	M.Rampur			2986	6054	12121	1226
6	Karlamunda			2416	6124	838	5152
7	Lanjigarh			1095	5125	14899	1536
8	Dharamgarh			2769	19351	8195	3485
9	Koksara			14912	7025	12431	3302
10	Golamunda			7108	17590	15876	226
11	Junagarh			2078	27575	1068	9839
12	Jaipatna			2838	16825	8258	1401
13	Kalampur			800	8150	1447	803
TOTAL				**54282**	**150176**	**140796**	**38467**

Table-2-**36**

Agricultural Crop Area lost (in Hectares) due to drought during last 4years

Sl. No.	Name of the Block	Year- 2011				Year–2019				Year-2020				Year-2021			
		No. of GPs experienc ed drought	No. of Villages	Agricultural CropArea lost (inHectares)		No. of GPs experienced drought	No. of Villages	Agricultural Crop Area lost (in Hectares)		No. of GPs experienced drought	No. of Villages	Agricultural Crop Area lost (in Hectares)		No. of GPs experienced drough t	No. of Villages	Agricultural Crop Area lost (in Hectares)	
				Paddy	Non Paddy			Paddy	Non Paddy			Paddy	Non Paddy			Paddy	Non Paddy
1	Dharmagarh	24	79	Paddy	-----				----	----	----	----	----	23	59	2587.00	0
2	Koksara	22	72	Paddy	----				----	----	----	----	----	0	0	0	0
3	Junagarh	22	82	Paddy	----				----	----	----	----	----	5	38	3937	0
4	Jaipatna	21	63	Paddy	----				----	----	----	----	----	3	4	108	0
5	**Kalampur**	4	5	Paddy	----				----	----	----	----	----	0	0	0	0
6	**Bhawanipatna**	29	810	Paddy	----				----	----	----	----	----	34	234	3530	0
7	Golamunda	28	127	Paddy	----				----	----	----	----	----	28	129	7457	0
8	Lanjigarh					----	-----	----		----	----	----	----	5	43	689.4	0
9	Karlamunda				----	----	-----	----		----	----	----	----	12	60	1538	0
10	Kesinga				----	----	-----	----		----	----	----	----	26	100	2824	0
11	Narla					----	-----	----		----	----	----	----	26	146	4812.74	0
12	ThRampur					----	-----	----	-----	----	-----	----	-----	0	0	0	0
13	M.Rampur				----	----	-----	----	-----	----	-----	----	-----	13	63	1767.24	0

(Area in hect.)

Sl. No.	Year/ Block/ ULB	Forest	Land put to Non-Agrl. use	Barren &Non-Cultivable land	Permanent Pastures & other grazing land	Land under misc.tree,crop &groves not included Net area sown
1	2	3	4	5	6	7
1.	Bhawanipatna	15463	5876	935	2579	491
2.	Dharamgarh	124	3902	639	2630	126
3.	Golamunda	2491	4151	200	8171	82
4.	Jayapatna	393	4254	1006	2287	50
5.	Junagarh	3832	3890	287	2795	482
6.	Kalampur	495	1754	20	835	22
7.	Karlamunda	637	1532	228	978	1
8.	Kesinga	543	5015	288	8148	95
9.	Kokasara	833	2793	190	1335	136
10.	Lanjigarh	30667	380	747	3227	810
11.	Madanpur-Rampur	4127	2984	15699	2405	167
12.	Narla	1537	2929	345	1264	126
13.	Thuamul-Rampur	40035	2452	12010	756	194
	URBAN	-	1725	85	252	2

Note: The estimate excludes Urban area, Reserve Forests, Protected forests area, Project area, Hill Blocks, Villages submerged under river and sea.

Table-2-38

Pisciculture

FISHERMEN COMMUNITY & FISH FARM						
Sl. No.	**Name of the Block**	**House holds**	**Population**	**No.of Fish farm**	**No. of Boats/ Dug out canoe etc.**	**Remarks**
1	Bhawanipatna	171	858	1	14	Country crafts
2	Kesinga	198	991	0	16	Country crafts
3	Narla	161	804	0	12	
4	MRampur	60	296	2	8	Country crafts
5	Karlamunda	102	657	0	4	Country crafts
6	Lanjigarh	150	740	1	20	Country crafts
7	ThRampur	451	887	0	80	Country crafts
8	Dharmagarh	142	710	1	81	Country crafts
9	Junagarh	209	1046	4	13	
10	Koksara	160	800	1	12	
11	Jaipatna	121	607	0	15	Country crafts
12	Golamunda	251	1255	1	8	Country crafts
13	Kalampur	84	572	0	15	Country crafts
	TOTAL	2290	10223	8	265	

Table-2-39 ***FISH FARMS***

Sl No.	Name of the Block	No.of Fish farms	Area in Ha.	No. of farmers
1	Bhawanipatna	154	65.28	154
2	Kesinga	243	107.26	243
3	Narla	260	206.40	260
4	MRampur	173	68.19	173
5	Karlamunda	82	44.35	82
6	Lanjigarh	154	37.21	154
7	ThRampur	21	5.12	21
8	Dharmagarh	324	292.26	324
9	Junagarh	129	109.86	129
10	Koksara	215	163.8	215
11	Jaipatna	239	147.54	239
12	Golamunda	172	80.03	172
13	Kalampur	138	139.57	138
	Total	**2334**	**1496.81**	**2334**

Table-2-40 Production of Fish in different Blocks of Kalahandi District

Sl. No.	Block	Production of Fish (inMT)			
		FreshWater	Brackish water	Marine	Total
1	Bhawanipatna	2130.74	0	0	2130.74
2	Kesinga	2232.37	0	0	2232.37
3	Narla	2232.12	0	0	2232.12
4	MRampur	1987.33	0	0	1987.33
5	Karlamunda	1998.46	0	0	1998.46
6	Lanjigarh	1968.81	0	0	1968.81
7	ThRampur	1319.80	0	0	1319.80
8	Dharmagarh	2432.74	0	0	2432.74
9	Junagarh	2547.86	0	0	2547.86
10	Koksara	2541.07	0	0	2541.07
11	Jaipatna	2831.68	0	0	2831.68
12	Golamunda	2148.17	0	0	2148.17
13	Kalampur	1975.98	0	0	1975.98
	TOTAL	28346.50	0	0	28346.50

Horticulture,Table-2-41

In the district, 2197 farmers have taken 2255 ha. Horticulture plantation for both household's consumption and business purposes.

Sl. No.	Block	Mango Plantation	Guava Plantation	Pomegranate Plantation	Cashew Plantation	Litichi Plantation	K. Lime Plant ation	No of Farmers
1	Bhawanipatn a	156.5	0	1.9	5	0	0	287
2	Kesinga	84.1	0	0	10.2	0	0	178
3	Narla	200.8	0	5	5	0	0	253
4	MRampur	242.9	0	0	0	0	0	312
5	Karlamunda	179.4	0	1	0	0	0	206
6	Lanjigarh	155.2	0	2	8.4	10.6	9	274
7	ThRampur	379.1	0	2	45.3	35.5	81.5	746
8	Dharmagarh	92.2	0	1.25	0	0	0	813
9	Junagarh	175.0	0	3	5	0	0	230
10	Koksara	158.8	0	5	5	0	0	227
11	Jaipatna	28.8	0	0.88	1.5	0	0	67
12	Golamunda	177.4	1	0	6	0	0	292
13	Kalampur	5.6	0	1	0	0	0	42
	TOTAL	**2065.8**	**1**	**21.03**	**94.4**	**45.8**	**27.5**	**3297**

SlNo	Name of the district	Type of plantation	Area inHa.	No of farmers involved
1	Kalahandi	Horticultural	2255	3297

Employment and Livelihood

Agriculture is the mainstay of livelihood of the district. People of the district adopt various economic activities to sustain their life and livelihood. In Kalahandi 155891 persons were engaged as cultivators, 536937 people as agricultural labourers and 227620 person as wage labourer besides, 81443 person engaged in HouseHold industry.

Industries and mining-Table-2-42

Sl.	Block	Major Industries		MSME		Handloom Handicraft and Cottage Industries		Mining	
		Units	Persons Engaged	Units	Persons Engaged	Units	Persons Engaged	Units	Persons Engaged
1	Kalahandi	3	2898	681	7190	2466	29650	1	8

Table-2-43

C-Promotion of cottage industries during the year

Category	No.Available	Employment generated	Appx. Investment in Lakh
WoodCrafts	50	100	25
Bamboocraft	48	96	24
Terraacotta	80	160	40
Stonecraft	10	20	10
Juteindustry	30	60	15
Leafplate	15	60	15
Bakery	10	30	40
Total	**243**	**526**	**169 lakh**

Education-Table-2-44

Sl. No.	Name of the Block	Total No. of Children Enrolled	No. of Children Dropped Out	No. of Children Never Enrolled
1	BHAWANIPATNA	43297	88	
2	DHARAMGARH	25316	4	
3	GOLAMUNDA	2408	6	
4	JAIPATNA	19908	5	
5	JUNAGARH	31493	88	
6	KALAMPUR	9954	5	
7	KARLAMUNDA	9165	0	
8	KESINGA	24597	29	
9	KOKSARA	19935	8	
10	LANJIGARH	19853	194	
11	M.RAMPUR	14427	8	
12	NARLA	20940	0	
13	TH.RAMPUR	14425	208	
		277321	**709**	

Health-Table-2-45

1.33-Major Health Indicators:

Sl. No.	Block	Child Mortality Rate	Maternal Mortality Rate	Institutional Delivery in percentage	Immunization status of Children below5 years inpercentage	AnyOther
1	Borda	Kalahandi District : 38	Kalahandi District: 106	98	96	
2	Dharmagarh			94	96	
3	Golamunda			79	100	
4	Jaipatna			82	94	
5	Junagarh			80	98	
6	Kalampur			95	97	
7	Karlamunda			98	100	
8	Kesinga (Pastikudi)			98	102	
9	Koksara			98	89	
10	Lanjigarh			67	94	
11	M.Rampur			78	88	
12	Narla			94	88	
13	Th.Rampur			55	92	
	District Average			**98**	**97**	

2.3-Human Resource Availability:Table-2-46

Sl. No.	Block	No.of Doctors	No. of Paramedical Staffs	No. ofANMs (Out of Other Para Medical Staff)	No.ASHAs	Others
1	Borda (Bhawanipatna)	40	817	56	Borda-197, Urban-74	
2	Dharmagarh	81	75	33	177	
3	Golamunda	6	64	30	144	
4	Jaipatna	5	58	32	140	
5	Junagarh	9	89	36	195	
6	Kalampur	5	27	37	68	
7	Karlamunda	6	39	31	55	
8	Kesinga (Pastikudi)	12	74	31	154	
9	Koksara	8	55	26	130	
10	Lanjigarh	7	74	41	168	
11	M.Rampur	7	56	27	99	
12	Narla	8	67	35	135	
13	Th.Rampur	3	55	32	815	
Total		**133**	**920**	**447**	**1921**	

Health In frastructure: Table -2-47

Sl. No.	Block	No.ofHealthSub Centers	No. of PHCs	No.of CHCs	No. of Homeopathic/AyurvedicHospitals	No.ofSubDivisional Hospitals	No. of District /Private Hospitals	No.of MHUs/MHT	No. of Ambulan ces	Blood Banks
1	Borda (Bhawanipatna)	26	5	1	0	0	1	MHU-1 MHT-2	Govt-4, 108-4, 102-2	1
2	Dharmagarh	20	4	1	0	1	0	MHU-1 MHT-2	Govt-2, 108-2, 102-2	1
3	Golamunda	20	4	1	0	0	0	MHU-1 MHT-2	Govt-1, 108-1, 102-1	
4	Jaipatna	22	4	1	0	0	0	MHU-1 MHT-2	Govt-1, 108-1, 102-1	
5	Junagarh	25	5	2	0	0	0	MHU-1 MHT-2	Govt-1, 108-1, 102-1	BloodStorage Unit-1
6	Kalampur	9	1	1	0	0	0	MHU-1 MHT-2	Govt-0, 108-1, 102-1	
7	Karlamunda	10	3	1	0	0	0	MHU-1 MHT-2	Govt-0, 108-1, 102-1	
8	Kesinga (Pastikudi)	17	3	2	0	0	0	MHU-1 MHT-2	Govt-1, 108-2, 102-2	BloodStorage Unit-1
9	Koksara	19	3	1	0	0	0	MHU-1 MHT-2	Govt-1, 108-2, 102-1	
10	Lanjigarh	24	3	2	0	0	0	MHU-2 MHT-2	Govt-0, 108-1, 102-2	
11	M.Rampur	12	4	1	0	0	0	MHU-1 MHT-2	Govt-1, 108-2, 102-1	

12	Narla	19	4	1	0	0	0	MHU-0 MHT-2	Govt-0, 108-2, 102-1	
13	Th.Rampur	81	2	1	0	0	0	MHU-1 MHT-3	Govt-1, 108-1, 102-1	
	Total	**241**	**45**	**16**	**0**	**1**	**1**	**MHU-13 MHT-27**	**Govt-13, 108-21, 102-17**	**Blood Bank-2, Storage Unit-2**

Incidence of Major Diseases during last 5 years: Table-2-48

Table-1.34-Incidence of Major Diseases during last 5 years

Year	Sl. No.	Name of the Disease	Incidents/ Cases Treated	No. of Deaths due to disease
2020	1	Malaria	6012	0
	2	Jaundice	0	0
	3	Pneumonia	132	
	4	Diarrhea	18	0
	5	TB	1669	119
2021	1	Malaria	10577	0
	2	Jaundice	0	0
	3	Pneumonia	212	
	4	Diarrhea	96	0
	5	TB	1486	105
2022	1	Malaria	5164	0
	2	Jaundice	6	0
	3	Pneumonia	630	
	4	Diarrhea	0	0
	5	TB	1635	113
2023	1	Malaria	3841	0
	2	Jaundice	72	0
	3	Pneumonia	117	
	4	Diarrhea	159	6
	5	TB	1810	114
2024	1	Malaria	7543	0
	2	Jaundice	5	0
	3	Pneumonia	138	
	4	Diarrhea	19	0
	5	TB	1874	91

Sources: (Integrated Disease Surveillance Programme (***IDSP), O/o CDM&PHO, Kalahandi information received on Dt.26-06-2025)***

2.9.8 Housing

The district has 383228 households as per Census, 2011. From the total household 203265 households have Kachha houses, 153859 households have Semi-Pacca houses, 22394 households have Pacca houses and 2542 householdwith semi kuchha household.

2.9.9 Electrification

VILLAGE Electrification status under KEED, Bhawanipatna

Table-2-49

SL No	Nameofthe Block	Village Electrification				Household Electrification		
		Total nosof villages	Nos of villages fully Electrified	Nos of villages partially Electrified	Nosof Un electrified villages	Totalnos of HHS	Nosof HHS Electrified	Nos of HHSUn Electrified
1	Bhawanipatna	264	204	56	4	39883	28576	8307
2	Karlamunda	60	56	4	0	13201	12647	554
3	Kesinga	102	99	3	0	23690	28179	881
4	Lanjigarh	420	309	85	26	20432	16357	4075
5	M.Rampur	227	197	16	14	25685	21770	3915
6	Narla	164	150	14	0	19433	17687	1746
7	Golamunada	14	13	1	0	2324	2206	88
8	Junagarh	4	3	1	0	92	58	34
	Total	**1255**	**1031**	**810**	**44**	**144740**	**12880**	**23560**

Electrification status of KWED, Bhawanipatna. Table-2-50

SL No	Nameofthe Block	Village Electrification				Household Electrifiaction		
		Total nos of villages	Nos of villages fully Electrified	Nos of villages partially Electrified	Nos of UN electrified villages	Total nosof HHS	Nos of HHS Electrified	Nos of HHSUn Electrified
1	Bhawanipatna	5	5	0	0	346	346	0
2	Dharamgarh	77	77	0	0	26899	26899	0
3	Golamunda	85	85	0	0	25068	25068	0
4	Jayapatna	93	93	0	0	26459	26459	0
5	Junagarh	160	160	0	0	35256	35256	0
6	Kalampur	55	55	0	0	12474	12474	0
7	Koksara	71	71	0	0	24933	24933	0
8	ThRampur	281	281	0	0	16703	16703	0
	Total	**857**	**857**	**0**	**0**	**168138**	**168138**	**0**

2. 10: Electrical Infrastructure in the Flood Prone Area under KEED, Bhpt.Table- 2-51

Sl. No.	Name of the Block/ ULB	No.of33/8KV Substations	No.of Distributing Transformers			Conduct or/ Electrical lines-8 KV or less (lengthinKms.)	No.of Poles	No. of High Tension Towers	High Tension lines above 8KV (length in Kms.)
			8 KV or Less	8KV <and <60 K V	6o K V and abov e				
1	Bhawanipatna	Naktiguda, Bhangabari & Borda	62	84	36	212	16960	NIL	22
2	Kesinga	Kesinga,Utkela	46	36	41	62	4960	NIL	26
3	Narla	Narla,RupraRoad	22	37	81	122	9760	NIL	81
	M.rampur	Madanpur,karlamunda	34	25	29	147	8760	NIL	26

TableNo.:**Electrical Infrastructure in the Flood Prone Area of KWED,Bhawanipatna**Table-2-52

Sl. No.	Nameofthe Block/ULB	No.of 33/8 KV Substations	No. of Distribution Transformers			Conductor / Electrical lines-8 KVorless (length in Kms.)	No. of Poles	No. of High Tension Towers	High Tensionlines above 8 KV (length in Kms.)
			8 KV or Less	8KV <and <60KV	6o KV and above				
1	Junagarh	Junagarh, Charbahal& Mahichala	630	81	0	985.65	28653	NIL	3
2	Kalampur	Kalampur&Badkutru	425	12	0	786.5	22563	NIL	81
3	ThRampur	ThRampur	465	2	0	986.3	8562	NIL	52
4	Golamunda	Golamunda& Keygaon	426	4	0	860.36	15623	NIL	40
5	Dharamgarh	Godbhanja& Behera	356	3	0	986.6	14808	NIL	25
6	Jayapatna	Mukhiguda& Jayapatna	236	4	0	865.3	13808	NIL	78
7	Koksara	Gadramal& Ladugaon	342	6	0	944.2	14320	NIL	16

Sanitation

Drinking water and sanitation

Table-2-53

Drinking Water & Sanitation							
Sl No	**Name of the Block**	**Total No of Functional Tube Wells**	**Total No of Sanitary Wells**	**PWS Schemes**			
				No of PWS	**No. of Villages Covered**	**No. of Households**	**Length in K.M**
1	2	3	4	**5**	**6**	**7**	**8**
1	Bhawanipatna	2501	70	89	99	31517	261
2	Dharamgarh	1559	0	34	43	17507	88
3	Golamunda	2157	22	26	35	33879	239
4	Jaipatna	1919	48	6	11	23636	1971
5	Junagarh	2351	16	43	59	39307	254
6	Kalampur	839	18	14	19	13283	43
7	Karlamunda	1080	0	29	36	14529	68
8	Kesinga	1709	9	40	58	27645	233
9	Koksara	1763	41	40	49	25359	134
10	Lanjigarh	1691	201	58	59	13758	162
11	M.Rampur	1509	112	65	77	12997	111
12	Narla	1917	31	57	68	21936	193
13	Th.Rampur	1220	286	67	67	13876	391
Total		**22215**	**854**	**568**	**680**	**289229**	

110 nos of GP and 798 nos village declared as ODF , status as on dt.03-07-2025.

Source:-Addl. Chief Engineer, Kalahandi RWS&S Division, Bhawanipatana. Dt.03-07-2025

Migration

Kalahandi is a migration prone district. Out of 13 blocks, people from 13blocks migrate to nearby districts or state and works in bricks knell to Telengana, Andhrapradesh, Tamilnadu, Karnataka from May to June.

Sl. No.	Block	Migrating Population			Children (0-6Years)		Children (7-14Years)	
		Male	Female	Total	Male	Female	Male	Female
1	Bhawanipatna	3467	915	4382	106	82	38	57
2	Dharamgarh	4364	2040	6404	256	235	260	266
3	Golamunda	5144	2054	7198	294	252	167	159
4	Jaipatna	2043	48	2454	50	44	27	20
5	Junagarh	3004	792	3796	91	75	87	63
6	Kalampur	779	204	983	17	17	4	8
7	Karlamunda	967	810	847	10	17	5	9
8	Kesinga	2046	629	2675	92	71	48	35
9	Koksara	2864	872	3736	96	76	104	82
10	Lanjigarh	1661	238	8199	19	22	8	8
11	M.Rampur	1333	274	1607	24	26	10	30
12	Narla	2724	627	3351	104	77	72	43
13	Th.Rampur	1213	83	1296	6	6	10	12
Total:		31609	9319	40928	865	1000	843	795

2.9.81Food Security

Under NFSA, 325043 familiesare identified asthe Priorityhouseholds. Besides, 54136 families were identified under AAY category and 2281 under Annapurna. To meet the food grain requirement of the beneficiaries covered under NFSA, the district had an allotment of 72246 Qntl of rice and 2999.93 Qntl of wheat. To ensure timely delivery of food grain, the district hasPDS retailoutlay. Besides, thedistrict has5 major storage points with 450000 Qntl. storage capacities. These storage points are being managed by CWC, OSWC and RMC.

Social Security

In Kalahandi 75361 persons have covered under various social security schemes. Among them, 51641 (28020 male and 23621 female) have covered under Old age Pensions, 21000 under Widows Pension and 2720 (1478 male and 1242 female) under Disability Pensions.

Critical infrastructures

Infrastructure includes a number of structures that improve living conditions and commerce, including schools, hospitals, roads, banking systems is essential in any emergency situation. These infrastructures work asupport services in the life of people in anarea.

Anganwadi Centers

2257AWC are operational in the district from which 1473 AWCs are having their own building which constitutes 56% of the total AWCs. In these AWCs, 881597pre-schoolchildren have enrolled. Besides, 436 children are found Severely Malnourished and referred. AWCs are also providing support to 34386 pregnant women and lactating mothers.

Schools and other Educational Institutions

Table-55-Educational Infrastructure and other Facilities

Sl. No	Nameofthe Block/ULB	No.of Primary Schools	No.ME Schools	No.of High Schools	No. of Teachers	Teacher Pupil Ratio	No. of Colleges(+2)	No. of ITI/ Polytechnic/ Vocational Training Institutes			
								POLYTECHNIC	ITI	VOCATIONAL (inHighSchools)	TOTAL
1	Bhawanipatna	166	88	40	1425	20.71	7	1	1	2	4
2	Bhawanipatna mpl	24	21	13	687	20.06	6		3	4	7
3	Dharamgarh	93	61	27	865	25.29	2			2	2
4	Dharamgarhnac	12	10	5	255	13.50	6		2	2	4
5	Golamunda	125	78	27	1021	23.52	9		1	4	5
6	Jaipatna	81	56	26	812	24.52	3			3	3
7	Junagarh	125	69	37	876	22.57	5			3	3
8	Junagarhnac	6	8	4	254	19.49	2		1		1
9	Kalampur	66	29	8	447	22.27	3			4	4
10	Karlamunda	57	32	13	463	19.79	6			4	4
11	Kesinga	90	43	31	98	22.32	4			3	3
12	Kesinganac	9	4	5	191	22.31	1		2	2	4
13	Koksara	82	69	24	807	24.70	2		1	4	5
14	Lanjigarh	149	46	26	810	28.93	4			3	3
15	M.Rampur	83	54	19	699	20.64	3			3	3
16	Narla	142	63	29	1002	20.90	4		1	4	5
17	Th.Rampur	81	52	19	574	25.13	2			3	3
	TOTAL	1481	789	356	12399	22.37	69	1	12	50	63

Critical Infrastructure

2.9.23 Veterinary Hospitals-Table-2-56

Sl. No	Block	Veterinary Hospital & Dispensary	No. of Doctors	Livestock aid centres	No, of livestock inspectors	No. of artificial insemination centres	Others (to be specified) (Baif, JKTrust& Go mitras)
1	Bhawanipatna	3	4	20	14	22	4
2	Kesinga	3	2	13	8	14	1
3	Narla	1	3	8	10	8	6
4	M.Rampur	1	2	8	7	10	1
5	Risida	1	2	6	6	7	4
6	Lanjigarh	2	3	8	6	7	5
7	Th.Rampur	1	2	8	8	4	0
8	Dharamgarh	2	3	9	6	10	5
9	Junagarh	2	3	16	8	15	2
10	Jaipatna	1	3	8	6	8	7
11	Kosara	2	2	12	8	12	2
12	Kalampur	1	2	4	2	5	1
13	Golamunda	1	3	9	5	8	1
	G.Total	**21**	**34**	**138**	**97**	**133**	**39**

Police Stations

Contact Numbers of IICs of Police Station for Rapid Response:

Sl. No.	Name of the IIC	Name of the PSs	Mobile No.
1.	Inspector Jasobanta Ku. Hial	IIC Town PS	94389-16787
2.	Inspector Naresh Kumar Pradhan	IIC Sadar	94389-16784
3.	Inspector Kaibalya Seth	IIC Th.Rampur	94389-16785
4.	OIC Srikanta Kolaka	Karlapat PS	94387-64130
5.	Inspector Mukunda Dev Nayak	IIC Kegaon	94389-16778
6.	Inspector Birabar Bhagat	IIC Cyber PS	94375-26318
7.	Inspector Pradyumna Kumar Mohapatra	IIC Kesinga	94389-16779
8.	Inspector Jitendra Kumar Biswal	IIC Lanjigarh	94389-16781
9.	Inspector BiswambarKanhar	IIC Bijepur PS	94389-16992
10.	Inspector Mamata Hemrom	IIC Biswanathpur	94389-16923
11.	Inspector Sudarsan Nayak	IIC M.Rampur	94389-16782
12.	Inspector SarbeswarSamantaray	IIC Narla	94389-16783
13.	OIC Santosh Ku. Sethi	IIC Dharamgarh	94389-16924
14.	OIC Tapan Ku. Kallo	IIC Junagarh	94389-16776
15.	Inspector BijayalaxmiHikoka	IIC Ampani	94389-16991
16.	Inspector Jyoti Prakash Tandi	IIC Golamunda	94389-16926
17.	Inspector Snigdharani Suna	IIC Koksara	94389-16780
18.	Inspector Sesadev Behera	IIC Jaipatna	94389-16775
19.	Inspector Nilambar Jani	IIC Kalampur	98278-25229

Details Fire Stations, Kalahandi District

Contact Numbers of Fire Services for Rapid Response:					
Sl No	**Name Of the FS**	**OICs Name**	**Office Telephone Number**	**OICs Mobile Number**	**E-Mail**
1	Bhawnipatna circle	Abani Kumar Swain,DFO	7655072118	9938382010	dfobpt-ofs@gov.in
2	Bhawanipatna	Ajit Gouda, AFO	7655072246	9439259905 8917453055	bhpatnafs@gmail.com
3	Kesinga	SO- J Lalaji	7657019115	9437161822	kesingafirestation@gmail.com
4	Karlamunda	LFM- Krutibas Das	7657029348	9938292040	
5	M Rampur	SO- Laba Nayak	7657029338	7978910856	mrampurfirestation@gmail.com
6	Narla	LFM- Trinath Bhue	7657029277	7894204204	
7	Junagarh	LFM- Baudev Sabar	7657029100	9668277048	junagarhfirestation@gmail.com
8	Dharamgarh	LFM – Keshav Behera	7657019089	6370573176	dharamgarhfirestation@gmail.com
9	Golamunda	SO – Nigamananda Patra	7657029373	8328815598	
10	Kalampur	SO – Anil Kumar Barik	7657092138	8018622488	stationofficerkalampur@gmail.com
11	Koksara	LFM – Prasant Bag	7655086978	8144503133	koksarafirestation@gmail.com
12	Jaipatna	LFM- Gulu Sahu	7657029171	7328074470	jaipatnafs@gmail.com
13	Th Rampur	LFM Banamali Pujhari	7657029284	9439457085	
14	Lanjigarh	SO- Sanat Pradhan	7657029096	7008864489	solinji.ofs@odisha.gov.in
15	Utkela Air Strip	SO- Sumanta Sai	7008895422	8763300738	sumantasai@gmail.com

Cooperative Societies-Table-2-59

Type	No.of Societies	Membership
Primary Agricultural Credit co-operative societies	77	205779
Non-Agricultural Co-op.Societies	33	13784
Regional Co-op.Marketing Societies(RCMS)	02	228
Bhawanipatna Central co-operative bank Ltd.BCC Bank Branches	13	245728

Table-2-60- Storage and Market Facility **Storage Godowns under TPDS information submitted by CSO, Kalahandi.**

Sl. No.	Block/ULB	Storage Godowns under TPDS		Cold Storage Units		No. of Permanent Mandis in the area
		Nos.	Storage Capacity (inQtls.)	Nos.	Storage Capacity	
1	Bhawanipatna	2	80,000	-	-	8
2	Dharamgarh	1	25,000	-	-	6
3	Golamunda	-	-	-	-	6
4	Jaipatna	1	15,000	-	-	5
5	Junagarh	1	90,000	-	-	13
6	Kalampur	-	-	-	-	3
7	Karlamunda	-	-	-	-	3
8	Kesinga	1	50,000	-	-	7
9	Koksara	1	34,000	-	-	6
10	Lanjigarh	-	-	-	-	3
11	M.Rampur	-	-	-	-	4
12	Narla	-	-	-	-	7
	Total	07	2,94,000	Nil	Nil	74

Table-2-61- Storage and Market Facility under information submitted by DRCS, Kalahandi.

Sl. No.	Block/ULB	StorageGodowns		ColdStorage Units		No. of Permanent Mandis in the area	Others
		Nos.	Storage Capacity (inQtls.)	Nos.	Storage Capacity		
1	Bhawanipatna	4	1200	-	-	12	
2	Dharamgarh	3	1600	-	-	8	
3	Golamunda	-	-	-	-	14	
4	Jaipatna	5	3100	-	-	22	
5	Junagarh	9	4900	-	-	32	
6	Kalampur	3	3000	-	-	12	
7	Karlamunda	5	1500	-	-	7	
8	Kesinga	5	1500	-	-	14	
9	Koksara	6	2500	-	-	9	
10	Lanjigarh	1	300	-	-	8	
11	M.Rampur	-	-	-	-	13	
12	Narla	7	2100	-	-	21	
13	Th.Rampur	0	0	-	-	0	
	Total	48	21700	Nil	Nil	175	

Table–2-62-Storage and Market Facility

Sl .No	Block/ULB	StorageGodowns		ColdStorageUnits		No.ofPermanent Mandisintheare a	Others
		Nos.	Storate Capacity (inQtls)	Nos.	Storage Capacity		
1	Bhawanipatna	4	1200	-	-	12	
2	Kesinga	5	1500	-	-	14	
3	Narla	7	2100	-	-	21	
4	M.Rampur	0	0	-	-	13	
5	Karlamunda	5	1500	-	-	7	
6	Lanjigarh	1	300	-	-	8	
7	Th.Rampur	0	0	-	-	0	
8	Dharamgarh	3	1600	-	-	8	
9	Junagarh	9	4900	-	-	32	
10	Golamunda	0	0	-	-	14	
11	Jaipatna	5	3100	-	-	22	
12	Koksara	6	2500	-	-	9	
13	Kalampur	3	3000	-	-	12	
	total	48	21700	0	0	175	

Table–2-63-Primary Agricultural CooperatieSocieties							
Sl. No	Block	No.of PACs	No. of Farmer Members	Totalamount of Seed distributed during last year (in Qtls)	TotalNo.of Fertilizer distribution during last year (inQtls.)	Totalamount of Loan distibuted (amount in Lakhs)	Totalamountof Paddy procurred during previous season(K+R) Amount in Qtls.
1	Bhawanipatna	8	26730	1337.00	17535.65	2615.6727	274675.37
2	Kesinga	7	81627	1321.00	8597.5	2585.81	337792.44
3	Narla	7	20217	1681.00	16837.95	1917.36	376868.52
4	M.Rampur	4	8412	253.60	2025.65	728.6006	302691.67
5	Karlamunda	3	8831	500.00	7244.8	888.7694	286284.6
6	Lanjigarh	3	9223	290.60	1075.35	206.14	68105.68
7	Th.Rampur	3	6972	0.00	0	46.9067	0
8	Dharamgarh	6	14712	692.00	9386.05	2855.59	484825.94
9	Junagarh	13	28816	627.10	14757.5	6870.79	1637508.2
10	Golamunda	6	16960	372.60	9884.25	2387.74	227349.74
11	Jaipatna	5	16106	173.20	2004.25	3175.2042	1285766.4
12	Koksara	6	81548	1006.90	13866	2709.36	425263.17
13	Kalampur	3	12255	85.00	2406.75	2500.1564	743684.81
TOTAL		**77**	**205779**	**8307.00**	**108621.7**	**29787.47**	**6444516.54**

Banks and Post Offices-Table-2-63

As on March 208, there were 43 nos.,42 nos. and88 nos.of Public Sector Bank, Regional Rural bank and Scheduled Commercial Banks in the district.

(InNumber)

Sl. No.	Year / Block/ Urban	No.of Post Offices				No.of Post Offices having	
		Head Post Office	Sub Post Office	Branch Post Office	Total	Speed Post Service	Instant Money order Service (IMO)
1	2	3	4	5	6	7	8
1.	Bhawanipatna	0	1	28	29	1	1
2.	Dharmagarh	0	2	27	29	2	2
3.	Golamunda	0	1	17	81	1	1
4.	Jayapatna	0	2	15	17	2	2
5.	Junagarh	0	2	39	41	2	2
6.	Kalampur	0	1	8	12	1	1
7.	Karlamunda	0	2	8	10	2	2
8.	Kesinga	0	1	31	32	1	1
9.	Koksara	0	2	27	29	2	2
10.	Lanjigarh	0	2	17	19	2	2
11.	M.Rampur	0	2	16	17	1	1
12.	Narla	0	3	23	26	3	3
13.	Th.Rampur.	0	1	15	16	1	1
	URBAN						
1	Bhawanipatna(M)	1	6	0	7	7	7
2	Junagarh(N.A.C.)	0	1	0	1	1	1
3	Kesinga(N.A.C.)	0	3	1	4	3	3

Road and Railway Network Table-2-64

Categories	Total KM
National Highway	206.86
State HighWay	215
Major Dist.Road	266
Other DistRoad	46
Forest Road	308
GP Roads	9955
Classified Village Road	--
P.S road	517
Village Road	1061

Railways: Total Length:38.476KM(Broadgauge)

Cyclone and Flood Shelters
The district has 4 nos.of Multi purpose flood shelters. Also, the districtis using schools and BNRGSK building as temporary flood shelters.

List of Multi purpose Flood Shelters.

Table-2.65

Sl. No	Name of the District	Name & Address of the Sarpanch-cum President of MFS	Name of the MCS/MFS	Name & Address ofthe CSMMC/FSMMC	Contact Details
1	Kalahandi	Name-SusantaBagpo- Belkhandi, Block-Kesinga	Belkhandi, MFS, Kesinga	Belkhandi,Kesinga	Mob-**7894767983**
2	Kalahandi	Jadumani Sahu, At- Bhejiguda, village- Umer, Ps- Jaipatna, Block-Jaipatna	Rasdumer,MFS, Jaipatna	Rasdumer,Jaipatna	Mob-**9668067986**
3	Kalahandi	TinkalPatra,Village- Balichhada, via-Kalampur, Post-Deypur, P.S.Kalampur Block- Kalampur	Balichhada, MFS, Kalampur	Balichhada,Kalampur	Mob-**7735461733**
4	Kalahandi	Dibyabharati Lahajal, Village-Banijara, G.P.BanijaraP.S. Junagarh,Block-Junagarh	Kutengaon, MFS,Junagarh	Kutengaon,Junagarh	Mob-**7991032436**

Temporary Flood Shelters

Table-2- 66

BDOs in consultation with Block Education Officers/DSWO/DWO have identified school buildings, GPs office buildings and AWCs to be used as temporary flood shelters. Blockwise figure is indicated below.

There are 62 nos of Temporary Flood Shelters in 40 nos of GP in the district.

Name of the Block	Name of the G.P	List of Temporary Shelters	Safety of the Building	Remarks
01	02	03	04	05
Golamunda	Leter	TriSakti High School, Leter	Safe	
Golamunda	Leter	UGME,SchoolLeter	Safe	
Jaipatna	Paikkendumundi	Nagupada PS	Safe	
Jaipatna	Mangalpur	Rajamunda PS	Safe	
Jaipatna	Sindhikaguda	Dhamanguda PS	Safe	
Junagarh	Kendupati	Primary School, Amathola	Safe	
Junagarh	Kendupati	Primary School, Makarshola	Safe	
Junagarh	Kendupati	G.P.Building,Kendupati	Safe	
Junagarh	Nandol	PrimarySchool,Nandol	Safe	
Junagarh	Atigaon	A.W.C.,Bagdungari	Safe	
Junagarh	Atigaon	Primary School, Kandulguda	Safe	
Junagarh	Talmala	G.P.BuildingTalmala	Safe	
Junagarh	Talmala	A.W.C,Sahajkana	Safe	
Junagarh	Matigaon	Primary School, Bhatraguda	Safe	
Junagarh	Bhainriguda	A.W.C,Panigaon	Safe	
Junagarh	Banijara	PrimarySchool, Banijara	Safe	
Bhawanipatna	Kalam	Chandopala PS	Safe	
Bhawanipatna	Kalam	Kalam PS	Safe	
Bhawanipatna	Kalam	Themra PS	Safe	
Bhawanipatna	Kalam	Bileikuni PS	Safe	
Bhawanipatna	Kalam	Tentulipada PS	Safe	
Bhawanipatna	Palna	Tepsa PS	Safe	
Bhawanipatna	Palna	Paikpada PS	Safe	
Bhawanipatna	Madiguda	Khairmal PS	Safe	
Bhawanipatna	Borbhata	Bargaon PS	Safe	
Bhawanipatna	Karlapada	Pandigaon PS	Safe	
Narla	Sarian	Arjungaon UPS	Safe	
Narla	Rakshi	BudhipadarUPS	Safe	
Narla	Rupraroad	Rupra Road UPS	Safe	
Narla	Santpur	SantpurUPS	Safe	
Narla	Ghodabandh	JodabandhUPS	Safe	
Narla	Kurmel	PangaUPS	Safe	
Karlamunda		Kundeipali PUPS	Safe	
Karlamunda		PutigaonUPS	Safe	

Karlamunda		UGHSMalpada	Safe	
Karlamunda		Deogaon PUPS	Safe	
M.Rampur	Madanpur	Madanpur UPS	Safe	
M.Rampur	Madanpur	Antarla School	Safe	
M.Rampur	Mohangiri	Tejipada School	Safe	
M.Rampur	Mohangiri	Mohangiri School	Safe	
M.Rampur	Mohangiri	Mohangiri GP building	Safe	
M.Rampur	Bamak	Bamak School	Safe	
M.Rampur	Bamak	Bankel School	Safe	
M.Rampur	Bamak	Bamak GP	Safe	
M.Rampur	Muding	Paiksadhel UPS	Safe	
M.Rampur	Muding	Ainlapali School	Safe	
M.Rampur	Alatara	Alatara School	Safe	
M.Rampur	Gochhadengen	Gochhadengen School	Safe	
Dharamgarh	Sandhikulihari	Sandhikulihari PS	Safe	
Dharamgarh	Chhilipa	Chhilipa PS	Safe	
Dharamgarh	Kankeri	Kankeri PS	Safe	
Dharamgarh	Kanagaon	Kanagaon PS	Safe	
Th.Rampur	Gopalpur	GramVikasSikshya Niketan	Safe	
Kesinga	Parthala Bahadurpadar	Parthala HS Building	Safe	
Kesinga	Tundla Rajapada	Tundla GP Building	Safe	
Kesinga	Boria Nagupala	Chicharla PS	Safe	
Kesinga	Sirjapali Digsira	Sirjapali PS	Safe	
Kesinga	Kundabandh Chhenagaon	KundabandhSikerpada ME School	Safe	
Kesinga	Kundabandh Limpada	Gurjimunda UPS	Safe	
Kesinga	Kundabandh Purnapada	Kundabandh UP School	Safe	

Chapter-3

Hazard, Vulnerability and Risk Assessment

- **3.1 Major Disasters/ Incidents during-2012-2025**

A brief profile of major disasters/ incident so ccurred in the district since 2012 to 2025 (uptoApril 25): Table No. : 3-1

Sl. No.	Disaster / Incident	No. of incidents during (2006-2022)	No.of Deaths	Affected Population	Livestock Loss	Houses Damaged	Damage to Infrastructure				Damage and loss of Crop Area (in Hectares)
							School/ AWC Buildings	Hospitals	Road in Km.	Other Critical Infrastructure	
Disastersas approved under SDRF/NDRF Guidelines.											
1	Flood	15	-	65780	-		-	-	-	-	
2	Drought	10	-	94454	-	-	-	-	-	-	
3	Fire	83	59	245	-		-	-	-	-	-
4	HailStorm	1	1	-	-		-	-	-	-	
5	Cyclone	3	2-	28819	-	-	-	-	-	-	-
6	Earth Quake	-	-	-	-	-	-	-	-	-	-
7	Tsunami	-	-	-	-	-	-	-	-	-	-
8	Landslide	-	-	-	-	-	-	-	-	-	-
9	Avalanche	-	-	-	-	-	-	-	-	-	-
10	Cloud Burst	-	-	-	-	-	-	-	-	-	-
11	PestAttack	2	-	-	-	-	-	-	-	-	7317.65 hact

		2018		25532							3206.138 hact.

12	Cold Wave/ Frost	-	-	-	-	-	-	-	-	-	-
State Specific Disasters as per NotificationNo.1936 Dt.01.06.2015											
13	Lightning	76	76	2016	-	-	-	-	-	-	-
14	Heatwave	12	8	-	-	-	-	-	-	-	-
15	Whirlwind	2020	-	889	1	9	-	-	-	-	242.76 hact.
16	Tornado	-	-	-	-	-	-	-	-	-	-
17	Heavy Rain	6	1	30597		1355					
		2018				48-fully 3317 - partial l y 72-Cattle shed 1-Hut					
		2019		601 farmer+1223 house damged beneficiaries		1223					98.98 hact.
		2020		90		89					.28 hact
81	Boat Accidents (Other than during Flood)	-	-	-	-	-	-	-	-	-	-
19	Drowning (Otherthan during Flood)	38	38	-	-	-	-	-	-	-	-
20	Snake Bite(Other thanduring Flood)	19	19	-	-	-	-	-	-	-	-
Other Disasters											

21	Animal Menace	-	-	-	-	-	-	-	-	-	-

22	Building Collapse	-	-	-	-	-	-	-	-	-	-
23	Stampede	-	-	-	-	-	-	-	-	-	-
24	Epidemics	7	685 +463 (covi d death as on 20th April-2022	173950	-	-	-	-	-	-	-
25	Industrial/ Chemical Accidents	-	-	-	-	-	-	-	-	-	-
26	Road Accidents	-	-	-	-	-	-	-	-	-	-
27	Railway Accidents	-	-	-	-	-	-	-	-	-	-
28	Hooch Incidents	-	-	-	-	-	-	-	-	-	-
29	Communal Riot	-	-	-	-	-	-	-	-	-	-
30	Dam Break/ Spill Way related flood.	-	-	-	-	-	-	-	-	-	-
31	Soil/ Coastal erosion	-	-	-	-	-	-	-	-	-	-

Lightning:

INFORMATION ON LIGHTNING FROM 2015-16 TO 2024-25						
Sl.No	**NameoftheBlock/ULB**	**Lightninghit in last 5 Years**		**No.of Lightning Events**	**No.Fatality / Death.**	**Injured Persons**
		No.of GPs	**No.of Villages Wards**			
1	Lanjigarh	1	1	1	1	0
2	Jaipatna	4	4	4	4	0
3	Narla	4	4	4	4	0
4	M.Rampur	3	3	3	3	0
5	Kesinga	10	10	10	9	1
6	Golamunda	4	4	4	4	0
7	Dharamgarh	3	3	3	3	0
8	Koksara	4	4	4	4	0
9	Kalahandi	3	3	3	3	0
10	Junagarh	3	3	3	3	0
8	Karlamunda	5	5	5	4	1
12	Kalampur	4	4	4	4	0
13	Th.Rampur	6	6	6	6	0
TOTAL		**49**	**49**	**49**	**47**	**2**

- **3.2 MajorDisasters / Incidents in the District during 2021-25:**

Table:3-2

Sl. No.	Disaster/ Incident	No.of incidents during 2021	No. of Deaths	Affected Population	Livestock Loss	Houses Damaged	DamagetoInfrastructure				Damageandlossof Crop Area (in Hectares)
							AWC/ School Buildings	Hospitals	Road in Km.	Other Critical Infrastructure	
1	Landslide	0	00	-	-	-	-	-	-	-	-
2	Lightening	7	7	-	-	-	-	-	-	-	-
3	Sunstroke	0	0	-	-	-	-	-	-	-	-
4	SnakeBite	14	14	-	-	-	-	-	-	-	-
5	Drowining	32	32								
6	Fire Accident	4	4								

Major Disasters/ Incidents occurred in the District

Sl. No.	Name of the Disaster	Type of Assistance	Area in Hec	Beneficiary	Assistance provided Amount (Rs)
1	Hailstorm	HBA to the people affected by Hailstorm during the month of March-2023		3	12000
2	Hailstorm	Crop Damage due to Hailstorm	32.56	55	412335
3	Hailstorm	House Damage due to Hailstorm during the month of April-2023		5	20000
4	Hailstorm	House Damage due to Hailstorm during the month of November-2023		3	14500
5	Hailstorm	Crop Damage due to Hailstorm during the month of November 2023	749.64	2872	6381680
6	Heavy Rain	House damage due to Heavy rain from 12.09.2023 to 15.09.2023		83	591000
7	Cyclone	Crop Damage " MICHAUNG"	660.32	2164	7193202
8	Fire	House building assistance due to Fire accident		2	270000
9	Lightning	Replacement of animal died due to Lightning		1	25000
10	Heavy Rain	House Building Assistance to the people affected by Heavy rain in August 2023		54	217500
11	Heavy Rain	De-silting of agriculture land due to Heavy rain in August 2023	11.89	95	232240

Vulnerability and Risk Assessment related to Disasters:

Understanding of current situation, needs and gaps to assess what already exists, avoiding duplication of efforts, and build on existing information and capacities, this is done through a systematic inventoryand evaluation ofexisting risk assessment studies, available data and information, and current institutional framework and capabilities.

- To identify possible hazards, vulnerabilities, exposure and capacity of communities. Hazard assessment to identify the nature, location, intensity and likelihood of major hazards prevailing in a community or society.Toanalyse these and to estimate and assess both the probability of occurrence and the possible potential damage by the present hazards.
- Exposure assessment to identify population and assets at risk and delineatedisasterprone areas to identify elements at risk and evaluate the extent of risk by judging their exposure level.
- Vulnerability analysis to determine the capacity (or lack of it) of elements at risk to withstand the given hazard scenarios to identify and studypossible weaknesses and gaps in existing protective and adaptive Strategies.
- Risk profiling and evaluation to identifycost-effective risk reduction options in terms of the socio-economic concerns ofa societyand its capacity for risk reductionto assess the available resources with the communityand their capacity to help reduce the risk.
- FormulationorrevisionofDRR strategiesand actionplansthat include setting priorities, allocating resources (financial or human) and initiating DRR programs to formulate realistic recommendations for measures to overcome weaknesses and reduce the identified and assessed disaster risks and to agree these with those affected.
- To ensure and enhance the feasibility, effect and efficiency of protective measures by working from the risk assessment to:
- Balance various interests in the groups in communities, Consider the reasonability, cost effectiveness and practicality of measuresMake possible social agreements on measures to reduce disaster risks.
- To develop disaster risk reduction and risk management plan by using the findings of hazards, risk, exposure and capacity assessments.
- To develop disaster risk reduction and risk management plan by using the finding.

DROUGHT:

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

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

TYPES OF DROUGHT:

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

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

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

There are three categories of agricultural drought like

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

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

c. Hydrological Drought: When there is a drastic reduction in the Surface, Sub surface and Ground water resources below a specific level for a given period of time. It may be the situation due to severe meteorological drought or over exploitation of groundwater resources or some geological disturbances.

CASUES OF DROUGHT

The major causes of drought are:

- Failure of monsoon/Inadequate rainfall
- Erratic behavior of monsoon
- Inadequate water conservation measures
- Over exploitation of Surface and Groundwater
- Poor water management practices at household and farm level
- Meager irrigation facility
- Shifting of agricultural practices (low water intensive crops/varieties to high water intensive crops/varieties
- Degradation of rich natural resource base
- Receding of indigenous know how

INDICATORS OF DROUGHT

Meteorological Drought

- Inadequate rainfall,decrease in total number of rainydays
- Long dry spell

Hydrological Drought

- Depletion of surface and sub surface water resources (Drying up of tanks, reservoirs, lakes, rivers etc.)
- Lowering of the ground watertable (Drying up of wells,tubewells)

Agricultural Drought

- Decrease in soil moisture (runoff, seepage, evaporation and transpiration) Wilting of crops.
- Poor growth/failure of crop and fodder

FACTORS AFFECTING THE SEVERITY OF DROUGHT

- Location/Topography of land
- Moisture retention capacity of soil
- Timelines/ distribution of rainfall
- State of Natural resource base
- Proportion of irrigated agriculture
- Adaptive behavior off armers
- Livelihood options of the locality

IMPACTS OF DROUGHT

a. Physical & Bio-Physical

- Scarcity of water for drinking, domestic and irrigation purpose
- Reduced flow/ complete drying up of perennial or seasonal watersource
- Depletion of groundwater level
- Decrease of water quality and incidence ofwaterbornediseases
- Land degradation
- Deforestation and reduced tree growth
- Decline of crop production and damage to cropquality
- Scarcity of fodder, Live stock disease anddeath
- Damage to ecological habitat
- Extinction often dangered species and loss of bio-diversity

b. Socio-economic

- Loss of livelihood and employment opportunity
- Increased price of food,fodder and other essential commodities
- Distress sale of house hold assets
- Large scale migration in search of altrenative livelihood
- Reduced food intake,intakeof less preferred and nonfood items and malnutrition
- Increased physical and mental stress and loss of human life
- Increased inequality among social groups
- Increased social conflicts
- Loss of education.

DROUGHT IN KALAHANDI:

Kalahandi's more than 100 years tryst with drought is also a chronicle of the destruction of a sustainable and participatory ecology. Deforestation and collapse of the traditional tank irrigation has increased the dryness of this area. Kalahandi receives a good amount of rainfall, but rainwater is not harvested properly as tanks are silted. A slight shortfall in rainfall triggers drought and causes large scale crop failure. So agriculture is a difficult prospect for survival of more than 50 percent population of the district. Kalahandi has witnessed a large number of droughts and other natural calamities over centuries. For example, droughts had occurred in Kalahandi in 1868, 1884 and 1897. Several droughts could be considered disasters. The district was severely affected by the famine of 1899, which is also described as *"Chhapan Sal ra Durbhikshya"* that is a famine of severity not witnessed during the preceding fifty-six years. The effects of the famine, according to the District Gazetteers, were of unprecedented nature and left a terrible human tragedy and brittle socioeconomic fabric in this area. The severity of this famine still haunts the memory of many people in the district. There was rain deficiency of 60 percent and crop losses were estimated to be 50 percent. It reportedly cost the district Rs 642.89 crore. In 1919-20, there occurred another drought that was followed by cholera, influenza and severe malnutrition due to lack of foodstuff. Thereafter, a series of droughts were witnessed during 1922-1923, 1925-1926, 1929-1930 1954-1955, 1955- 56, 1965-66, 1974-75 and 1985. The economic and social impacts of these droughts and floods on the people of Kalahandi have been very severe. The Kalahandi District Gazetteer has recorded the impact of the 1965-66 drought as follows ―The bulk of the population which constituted the landless agricultural labourers became unemployed due to suspension of all sorts of agricultural operations. The worst sufferers were landed families who because of the drought, neither could reap a harvest nor could they take up manual labour to which they were not accustomed. The pastures lost the greenery and the bovine population therefore was equally starved.

Everywhere there was an acute shortage of water.‖ After the severe droughts of 1955-56 and 1965- 66, a large number of cultivators suffered heavy economic losses. The Directorate of Economics and Statistics, Odisha has analyzed the rainfall of South Western Kalahandi and has reported that on an average there is a drought year in every 3-4 years. The impact of droughts in the district is of varied nature affecting either the entire district or few Blocks. For example, the drought of 1996-97 affected 85 percent Blocks, 63 percent gram panchayats and 46 percent villages of the district. In 2000- 01, drought affected 62 percent Blocks, 50 percent gram panchayats and 27 percent villages. Some areas, for example, a large portion of Bhawanipatna sub-division has been identified as a chronic drought prone zone. Severe droughts were faced by the farmers of the Block Koksara (2002), Junagarh (2002) and Kalampur (1998) and 40-80% crop area was affected and in Koksara 100% farm families were affected.

SUGGESTED MEASURES TO REDUCE THE IMPACT OF DROUGHT (DROUGHT RISK MANAGEMENT)

Due to the global climate change, the irregularities inrainfall, temperature, humidity etc. will be more frequent in the coming years resulting in wide spread and severe drought like situations. Poor natural resource base, huge population pressure and less adaptive capacity will make the community more and more vulnerable to the natural hazards.

The disastrous effects of drought cannot be eliminated but the miseries can be minimised to a reasonable extent by the adoption of appropriate management practices.The present drought management strategies basically focus on the relief and reconstruction measures i.e. crisis management. This approach has been ineffective because response is untimely, poorly coordinated and poorly targeted to drought affected groups or areas, hence often increasing the societal vulnerability to drought. But to make a region complete drought proof, there should be a paradigm shift from crisis management to risk management. The components of Drought Risk management are Drought Preparedness, Drought Response, Drought mitigation and Drought Prediction (Early Warning).

A) Drought Preparedness: The following sector wise drought preparedness measures may be adopted before any drought like situation to reduce its impact.

B) Drought Response: It is a set of activities to be undertaken by the community, CBOs and the Govt. departments during the drought situation to save the lives and livelihood of the vulnerable population.

C) Drought Mitigation: These are the activities to be adopted to reduce the long-term drought risks by using a wide range of tools. These tools include asset creation, planning, institution building, local capacity building and supportive policy framework.

D) Drought Prediction/Early warning: It is one of the most important components of risk management often neglected by the implementers and planners. It helps in the development of a well informed and better prepared community to face any disaster situation. Lot of research and effective extension is highly required to develop a people friendly and usable early warning system for reducing the impact of drought.

FlashFlood:

The Hati, a large tributary of the Tel, rises in the high hill ranges of Jaipatna and joins the Tel about 12kms. North of Junagarh. The District has faced s flash flood situation during Monsoon if heavy rain occurs and subjected to damage to the property, crop loss and casuality.

Flooding that begins within 6hours, and often within3 hours,of the heavy rainfall (or other cause).

A **flash flood** is a rapid **flooding** of geomorphic low-lying areas: washes, rivers, dry lakes and basins. It may be caused by heavy rain associated with a severe thunderstorm, hurricane, tropical storm, or meltwater from ice or snow flowing over ice sheets or snowfields. Flash Floods can be caused by a number of things, but is most often due to extremely heavy rainfall from thunderstorms. Flash Floods can occur due to Dam or Levee Breaks, and/or Mudslides (Debris Flow). The intensity of the rainfall, the location and distribution of the rainfall, the land use and topography, vegetation types and growth/density, soil type, and soil water-content all determine just how quickly the Flash Flooding may occur, and influence where it mayoccur. Urban Areas are also prone to flooding in short time-spans and, sometimes, rainfall (from the same storm) over an urban area will cause flooding faster and more -severe than inthe suburbs or countryside. The impervious surfaces in the urban areas do not allow water to infiltrate the ground, and the water runs offto the low spots veryquickly. Flash Flooding occurs so quickly that people are caught off-guard. Their situation may become dangerous if they encounter high, fast-moving water while traveling. If people are at their homes or businesses, the watermay rise quickly and trap them, or cause damage to the propertywithout them havinga chance to protect the property.

A **flash flood warning** (SAME code: FFW) is issued when a **flash flood** is imminent or occurring in the warned area. A **flash flood** is a sudden, violent **flood** after a heavy rain, or occasionallyafter a dambreak. Rainfallintensityand duration, topography, soilconditions, and ground cover contribute to **flash flooding**.

Causes:

Floods are caused by many things. One cause of a flood is when water exceeds the capacity ofthe area it is in; thus causing it to overflow outside the waters boundary. Another cause is the amount of rain that a certain area of land gets. When too much water has rained over a certain area, sewers start getting flooded, creating a backup and water starts to flow on streets. Onemore wayoffflooding iswhendams break. Massive damsthat hold water back prevent flooding. When the gate breaks, the water flows out of it and creates a flood.

Climates and environments have a lot to do with flooding also. A higher altitude might be exposed to more rain than a lower altitude. Also a damper, wetter climate creates it more susceptible for rain, which causes it to flood (flash flood) more frequently than a hot and dry climate. Hurricanes also effect floods to. When a hurricane reaches land, there is an enormous amount of water that is carried along with it. This waterdumped on land andas water levels rise, flooding is created.

Effects:

The effects of floods are devastating. Manytimes floods candestroyeverything. Houses can be torn off their foundation because the water has made its structure weaker, tar can be been pulled off road causing major pot holes, earth can be sunken in creating a different landscape, tons of trees have the possibility of being ripped out. To see the effects after a flood is not a pretty site. Water has to be pumped out of flooded civilian areas.

Another thing that floods effect is the environmental and economical situations.When floods occur, there is a large amount of water that runs over the ground. Loose soil, rocks, and landscape can be dramatically altered, leaving behind a rugged, changed terrain. Loose soil can create mud slides, whichcreatehazardoussituations for living things nearby. The economyafter the flood can be one of the greatest effected. Billions of dollars have been donatedbya countries government to rebuild and payback what was lost. Many times these things include houses, roads, buildings, cars, schools,etc. Another thing that people loose in the event of floods is their jobs; consequently, after water damaging buildings and such, businesses can be run down, bankrupt and even, in existent. This causes lots of people to be jobless, which in effect, creates no way of paying for daily needs.

During floods, humans can lose so much. One of the most dangerous things a person could lose would be their life. Ifa person gets caught in a flood and is swept away, they have the risk of drowning in the water. Many times people die not only from the flood itself; but the effects after the flood such as starvation, hazardous objects floating in the water, and much more. Because of the water, it is harder for medical services to help civilians. The people rely on the aid workers to bring refugees food; consequently, if the aid workers have a hard time getting through the water, many families starve to death.

Floods are part of everyday lives. They are caused by too much rain, hurricanes, breaking of dams, etc. Many times the effects are devastating. The environment and economy are destroyed, land is washed away, houses are destroyed, and peoples lives are changed forever.

Measures that must be taken to prevent more flooding in the future

Ingeneral, the flood management measures that are being used in India can be broadly classified into engineering or structural measures and administrative or non-structural measures. The engineering measures comprise the following:

- Reservoirs
- Drainage improvement
- Embankments
- Diversion of flood waters
- Channelization of rivers
- Watershed management
- Channel improvement

The administrative measures canbe broken up into flood plain zoning and flood proofing. The CWC also performs the responsibility of forecasting floods through the CWC National Flood Forecasting Network.

Name of the Division: Kalahandi Irrigation Division, Bhawanipatna

1. Embankments:

Table-3.3-Irrigation Division Wise Embankments in the District:Kalahandi

Sl. No.	Division	Nameofthe Embankment	Type (Capital Embankment/ Other Agricultural/Test Relief/ Saline)	Length (in Km.)
1	2	3	4	5
1	Kalahandi Irrigation Division, Bhawanipatna	Flood embankment at Pondkul to Kumari from RD 00 to 2.54Km.	OtherAgricultural	2.540
2		Floodembankment atUchhalaon TelleftBank	OtherAgricultural	1.210
3		do- at Gundri from RD 00 to 330MU/S & 00 to 1030M D/S	OtherAgricultural	1.360
4		Sand Screen at Farang to funds	OtherAgricultural	0.600
5		Sand Screen at Karmath	OtherAgricultural	0.210
6		Sand Screen at Madiguda	OtherAgricultural	0.100
7		Flood embankment at Taranja	OtherAgricultural	1.600
8		Flood embankment at Kandulguda	OtherAgricultural	1.295
9		Flood embankment at Atigaon	OtherAgricultural	0.915
10		Flood emabankment at Talamala	OtherAgricultural	0.480
11		Flood embankment from Kesinga to Kartesir extended upto Binerkela	OtherAgricultural	5.163
12		3Nos.Sandscreen at Turlakhaman	OtherAgricultural	0.720
13		Flood embankment at Turlakhaman	OtherAgricultural	0.470
14		Flood embankment at Rajapada to Digsira	OtherAgricultural	3.040
15	Kalahandi Irrigation Division, Bhawanipatna	Flood embankment at Amatholato Nandol RD 00 to 2.78Km.	OtherAgricultural	2.780
16		Flood embankment at Makarsola	OtherAgricultural	2.700
17		FE at MasaniMunda KesingaTown	OtherAgricultural	0.350
81		FE at KarmathonTel left	OtherAgricultural	0.750
19		Flood embankment at Kholapalato Gurujung on Udanti left	OtherAgricultural	1.013
20		Flood embankment at Mahalingon Udanti left.	OtherAgricultural	1.050

21		Flood embankment at Mahalingato Kuliapada on Udanti left.	OtherAgricultural	1.400
22		Floodembankment at Kuliapadaon Udanti left.	OtherAgricultural	1.161
23		Flood embankment at Kuliapada to Bhattpada on Udanti left.	OtherAgricultural	1.200
24		Lower height sand screened FE at Later on Udanti left.	OtherAgricultural	0.829
25		Flood embankment at Bordi on Udanti left.	OtherAgricultural	0.900
26		Flood embankment at Artal on Udanti right.	OtherAgricultural	1.135
27		Flood embankment at Mashigaon on Udanti Right.	OtherAgricultural	0.800
28		Flood embankment at Kegaonon Udanti Right.	OtherAgricultural	0.625
29	**Kalahandi Irrigation Division, Bhawanipatna**	Flood embankment at Chapuriyaon Udanti Right.	OtherAgricultural	3.572
30		Flood embankment at Kuhurato Kantamal	OtherAgricultural	0.660
31		Flood embankment at Barfa	OtherAgricultural	0.355
32		Flood embankment at Nuapada	OtherAgricultural	0.786
			Total	**41.769**

Table-3.30- Irrigation Division Wise Embankments in the District:Nuapada

33	**Kalahandi Irrigation Division, Bhawanipatna**	Flood embankment at Makapadar	OtherAgricultural	2.500
34		Flood embankment at Kopia	OtherAgricultural	0.420
35		Flood embankment at Jogibahal	OtherAgricultural	1.100
36		Flood embankment at Chaunra	OtherAgricultural	2.580
37		Flood embankment at Hatibandha	OtherAgricultural	1.100
38		Flood embankment at Sindursil	OtherAgricultural	0.85
39		Flood embamkment at Sinapali	OtherAgricultural	0.200
40		Flood embankment at Lanji	OtherAgricultural	0.160
41		LFB of Ahila Nalla near village Kusumakhunti from RD00to580mt	OtherAgricultural	0.580
42		Flood embankment at Nehena	OtherAgricultural	5.380
43		Flood embankment at Turli	OtherAgricultural	2.840
			Total	**16.975**
			GrandTotal	**58.744**

Table-3.3-1-Division wise list of Vulnerable Points:

Sl.No.	Name of the Division	Name of the Embankment/ River	Location of the Vulnerable Point	Affected Length (inMtr.)	Name of the Block	Name of the Villages to be affected
1	Kalahandi Irrigation Division, Bhawanipatna	Construction of flood embankment on Right bank of river Tel from Village Sukunabhata to Binekela in Kesinga Block	20 degree 14minutes 6.62 second N 83 degree 14Minute 37.39second E		**Kesinga Block**	
2		Construction of flood embankment on Right bank of river Udanti near Village Chhapria from RD 250m to 600m under Golamunda Block	20 degree 05minutes 59.80 second N 82 degree 51Minute 18.10 second E		**Golamunda Block**	

(Source:Letter No.2194 dt.01-07-2024 of SE, Kalahandi Irrigation Division, Bhawanipatana)

Identifiied old and depilated Building in the District (if any) Table-3-3-2- Details of depilated building

Sl No	Block/ULB	No.of Vulnerable Buildings	Pupulation at Risk (inhabitations and the neighbouring)	Remarks
1	Bhawanipatna	Lanjigarh High School at Udeypur(Old)	50	

Table-3.3-3 Roads exposed to Flood

Sl No	Road explosed To Flood (From…….To)	Road Type	Length in Km	Flood Causing Agent	Block Name
1	RD Road to Mundagaon	BT	2.60	Rain water	Lanjigarh
2	PWD Road to Dumerbahal	BT	2.00	Flood water	Bhawanipatna
3	PWD Road to Salebhata	BT	6.50	Local Nallha	Bhawanipatna

How to Minimize the Impact of Floods?

The civic bodies have a major role to play when it comes to minimizing the effect of floods, especially in areasthat are knownto be vulnerable to flooding. The first thing that needs to be done is to identify how often floods take place inthe area and based onthat floodrisks are either done awaywithor lessened to the highest extent possible. Infrastructure suchas retarding basins and stormwaterdrains need to be developed and updatedonaconsistent basis inorderto deal with the after effects of floods in a better way.

There should be proper models for assessing possibilities ofrise in water leveland good coastal development programmes. These need to be assessed on a regular basis as well. There should be river level and rainfall gauges that can help in predicting major floods.

Introduction of better flood warning systems

The"improve ourflood warning systems", giving people moretime to take action during flooding, potentially saving lives, the deputychief executive of the Environment Agency, David Rooke, said. Advance warning and pre-planning can significantly reduce the impact from flooding.

1. Modifyhomesandbusinessestohelp themwithstandfloods

The focus should be on “flood resilience” rather than defence schemes. The concreting floors and replacing materials such as MDF and plasterboard with more robust alternatives. Increases the havoc of flooding. Waterproofing homes and businesses and moving electric sockets higher up the walls to increase resilience.

2. Constructbuildingsabovefloodlevels

Construction of building in the flood prone area should be one metre from the ground to prevent flood damage; conventional defences had to be supplemented with more innovative methods to lower the risk of future disasters.

3. Tackle climate change.
4. Increases pending on flood defences
5. Protect wetland sand introduceplanttrees strategically

The creation of more wetlands – which can act as sponges, soaking up moisture – and wooded areas can slow down waters when rivers overflow. These areas are often destroyed to make room for agriculture and development.Halting deforestation and wetland drainage, reforesting upstream areas and restoring damaged wetlands could significantlyreducethe impact of climate change on flooding.

6. Restore rivers to their natural courses

Many river channels have been historically straightened to improve navigability. Remeandering straightened rivers by introducing their bends once more increases their length and can delay the flood flow and reduce the impact of the flooding downstream.

Inappropriate soil management, machineryand animal hooves can cause soilto become compacted so that instead of absorbing moisture, holding it and slowly letting it go, water runs off it immediately. Well drained soil can absorb huge quantities of rainwater, preventing it from running into rivers.

7. Putupmoreflood barriers

The Environment Agency uses a range of temporary or "demountable" defences in at- risk areas. These can be removed completely when waters recede. Temporarybarriers can also be added to permanent flood defences, such as raised embankments, increasing the level of protection."Asthethreat andfrequencyoffloodrisk increases,the use of passive flooddefence has to be the only realistic long term solution".

3.3-4 Flood Vulnerable Villages of the district in general

Sl. No	Name of the Block	No.of G.Ps	No of villages
1	Lanjigarh	0	0
2	Jaipatna	4	12
3	Narla	6	6
4	Dharamgarh	4	7
5	Karlamunda	4	7
6	Golamunda	8	13
7	Kesinga	8	8
8	Kalampur	6	15
9	Th.Rampur	11	22
10	Junagarh	7	12
11	M.Rampur	4	5
12	Koksara	0	0
13	Bhawanipatna	5	10
	Total	**67**	**117**

(Updated in DLCNC meeting May-2024)

Detail list of Villages in Volume II (Added with Riverbed villages and flood vulnerability villages in the district)

Name of the Block	GP		Village	Vulnerability Cause
Golamunda	Badchergaon	1	Karlagaon	Telriver
	Uchhala	2	Uchhala	Telriver
	Borguda	3	Bandhagaon	Telriver
		4	Putiachura	Telriver
	Rengsapali	5	Karmath	Telriver
		6	karli	Telriver
		7	Nuamunda	Telriver
		8	Karpa	Telriver
	Funda	9	chillgaon	Telriver
	Leter	10	Leter	Telriver
		11	Makraguda	Telriver
	Chapria	12	Turechada	Udantiriver
	Dashpur	13	Kumbhari	Udantiriver
Jaipatna	Sindhikaguda	14	Dhamanguda	Hati river
	Bhejiguda	15	Rasdumer	Kamalriver
	Mangalpur	16	Rajmunda	Hati river
	Paikkendumundi	17	Nagupada	Hati river
Junagarh	Kendupati	18	Amathola	Hati river
		19	Makarsola	Hati river
		20	Kendupati	Hati river
	Nandol	21	Nandol	Hati river
	Talmala	22	Talmala	Hati river
		23	Sahajkana	Hati river
	Matigon	24	Bhatraguda	Hati river
	Banijara	25	Banijara	Hati river
		26	Kotengaon	Hati river
	Atigaon	27	Bagdungari	Hati river
		28	Kandulguda	Hati river
	Chingudisar	29	Panigaon	Hati river
M.Rampur	Manikera	30	Mardajore	RahulRiver
	Muding	31	Ghodapokhari(Madedani)	Utei River
	Urladani	32	Urladani	RahulRiver
		33	Bidabaru	RahulRiver
	Gochhadengen	34	Sarabahali	RahulRiver
Karlamunda	S.Malpada	35	Bagburei	Utei River
		36	S.Malpada	Utei River
		37	Putigaon	Utei River
	Rinja	38	Deogaon	Utei River
	Pourkela	39	Kundeipali	Telriver
		40	Terekela	Telriver
	Teresinga	41	Teresinga	Telriver

Bhawanipatna	Madiguda	42	Khairmal	Flood
	Kalam	43	Chandapala	Flood
		44	Kalam	Flood
		45	Themera	Flood
		46	Tentulipada	Flood
		47	Bileikuni	
	Kendupati	48	Baragaon	Flood
	Karlapada	49	Pandigaon	Flood
		50	Tepsa	Flood
	Palna	51	Paikpada	Flood
Narla	Rakshi	52	Budhipadar	SandulRiver
	Rupraroad	53	Rupraroad	SandulRiver
	Santpur	54	Santpur	SandulRiver
	Ghodabandha	55	Jodabandh	SandulRiver
	Kurmel	56	Panga	SandulRiver
	Sarian	57	Arjungaon	SandulRiver
Kalampur		58	Matikhal	Hatiriver
		59	Jampada	Hatiriver
		60	Karmel	Hatiriver
		61	Derlapada	Hatiriver
	Mingur	62	Khamanpada	Hatiriver
		63	Temra	Hatiriver
	Bandhakana	64	Churagaon	Hatiriver
		65	Biripur	Hatiriver
	Kalampur	66	Kh.Dangriguda	Hatiriver
		67	Tentulikhunti	Hatiriver
	Haramal	68	Paruaguda	Hatiriver
		69	Balichada	Hatiriver
		70	Ichhapur	Hatiriver
	Deypur	71	Bankapala	Hatiriver
	Balagaon	72	Khandidangriguda	Hatiriver
Dharmagarh	Kankeri	73	Kankeri	Tel
		74	Bokrakata	Tel
	Tambachhada	75	Tambachhada	Tel
		76	Talipalash	Tel
		77	Taranja	Tel
	Br.Chehndia	78	Chilichila	Tel
	Chilipa	79	Rajmoter	MudraNalla
Kesinga	Patharla	80	PatharlaBahadurpadar	Tel
	TundlaRajapada	81	Rajapada	Tel
	Belkhandi	82	Belkhandi	Tel
	BoriaNagupala	83	Nagupala	Tel

		SirjapaliDigsira	84	Digsira	Tel
		Kundabandh Chhengagaon	85	Kkudabandh	Tel
		Kundaban dh Limpada	86	Kundabandh	Tel
		Kundaban dh Purnapad a	87	Kundabandh	Tel
		Talampadar	88	TIJMALI	Nala
			89	TUNDAMUHIN	Nala
		Nakrundi	90	Jhudingjore	NalaofNagabali
			91	Ambjhola	NalaofNagabali
			92	Kandhanikana	NalaofNagabali
			93	Kelua	NalaofNagabali
		Sindhipadar	94	Gambhariguda	Nala
		Gunpur	95	Pridismaska	NaladuetoRain
		Birikot	96	Ghumer	ChhanchanRiver
			97	Tumnikhol	ChhanchanRiver
		Silet	98	Jhanjigaon	Nagabali
			99	Marguma	Nagabali
			100	Maltipadar	Nagabali
			101	Durbelguda	Nagabali
		Maligaon	102	K.Cheptaghat	IndravatiDam
		Kerpai	103	Kachalekha	Nagabali
		Taljhapi	104	Maskaguda	IndravatiDam
			105	Ranipadar	IndravatiDam
			106	Jhapiguda	IndravatiDam
			107	Lanjiguda	IndravatiDam
		Kiapadar	108	Melghara	SagadaRiver
			109	Sapmundi	SagadaRiver
		Podapadar	110	Podapadar	IndravatiDam
			111	Talgunjmali	IndravatiDam
			112	Uparpanga	IndravatiDam
			113	Karbadi	IndravatiDam
			114	Sarapas	IndravatiDam
			115	Litimaska	IndravatiDam
			116	Jhirigaon	IndravatiDam
			117	Kalati	IndravatiDam

TableNo.3-3-5: Causing agent wise flood vulnerable areas of the district:

Sl. No.	Causing agent-Rivers/ Water bodies/Tidal Wave/Others	No.of Susceptible Blocks/ULB	No. of Susceptible GPs	No.of Susceptible Villages/ Wards	Vulnerable Population	Milch and Draught animals	Houses	Vulnerable Infrastructure		
								School/ AWC Buildings	Hospitals	Roads (in Km)
1	Tel	1	3	12	13452	5436	2621	21	1	13.8
3	Hati	4	5	21	6342	2379	885	14	0	7.47
4	Udanti	1	2	4	3052	1256	1384	8	0	13.82
5	Tel Right at Mankarsola	1	1	3	2	1752	567	13	0	8.8
6	Tel Right at Kandulguda	2	1	2	4	978	432	8	1	14.5
7	TelRight at Kesinga Town	1	2	3	4	658	534	7	0	16.9

Table:3-3-6 Water level at danger mark in respect of different stationsYear wise.

Sl No	Name ofthe River	Name of the Station	Zero Value of Gauge inMtr	Danger Level in Mtr	Highest floodlevel in Mtr	Highest flood Level of July,2006 in Mtr	Highest flood Level of July,2008 in Mtr	Highest flood Level of 208inMtr	Highest flood Levelo f 2013 inMtr	Highest flood Level of 2081inMtr
01	02	03	04	05	06	07	08	09	10	8
01	Tel	Mankarsola	198.75	208.00	208.65	207.65 On 04.07.2006	205.55 On 81.09.2008	202.65 On 23.09.208	205.45 On 25.06.2013	202.45 On 15.08. 2081
02	Tel	Kesinga RlyBridge	169.00	176.85	178.10 On 81.09.2008	178.49 On 04.07.2006	173.20 On 8.08.2008	170.40 On 23.09.2008	173.50 On 25.06.2013	169.00 On 16.08.20148
03	Hati	Junagarh	203.53	209.57	210.51	209.33 On 04.07.2006	207.93 On 81.09.2008	206.53 On 21.09.208	209.23 On 25.06.2013	202.23 On 15.08. 2081
04	Udanti	Later	206.96	28.10						206.90 On 16.08. 2081

(Source: SE, Kalahandi Irrigation Division, Bhawanipatana)

Sl No	Name of the River Embankments	Location	District	Block	Length
01	02	03	04	05	06
01	Tel Right at Mankarsola	Mankarsola	Kalahandi	Junagarh	2.650Km.
02	Tel Right at Kandulguda	Kandulguda	Kalahandi	Junagarh	0.120Km
03	TelRight at KesingaTown	Kesinga	Kalahandi	Kesinga	0.350Km
				Total=	3.120Km

(Source: SE, Kalahandi Irrigation Division, Bhawanipatana)

TableNo. 3.3.7:Agriculture and Flood Vulnerability

Agriculture and Flood Vulnerability

Sl. No.	Name of the Block	Cultivable Area(Hectares)		Area susceptible to Flood (Hectares)	
		Paddy	Non-Paddy	Paddy	Non-Paddy
1	Bhawanipatna	20959	28041	-	-
2	Kesinga	9950	19580	200	-
3	Th.Rampur	4012	13035	-	-
4	Narla	15716	15904	-	-
5	M.Rampur	9040	13347	-	-
6	Karlamunda	8540	6290	-	-
7	Lanjigarh	6220	16435	-	-
8	Dharamgarh	22120	8680	950	500
9	Koksara	21937	15733	-	-
10	Golamunda	24698	16102	750	70
11	Junagarh	29653	10907	4327	1535
12	Jaipatna	19663	9659	678	
13	Kalampur	8950	2550	892	81
TOTAL		**204458**	**179263**	**7797**	**2216**

TableNo.3.3.8: Electrical **Infrastructure in the Flood ProneArea**

Sl. No.	Nameofthe Block/ULB	No.of33/8KV Substations	No. ofDistributing Transformers			Conductor/ Electrical lines-8 KV or less (lengthin Kms.)	No. of Poles	No. of High Tension Towers	High Tension lines above 8 KV (length in Kms.)
			8 KV or Less	8KV <and <60KV	60 KV and above				
1	Bhawanipatna	Naktiguda, Bhangabari&Bor da	207	431	331	1586.57	26024	NIL	64.2
2	Kesinga	Kesinga,Utkela	46	814	210	944.2	13808	NIL	45

TableNo.3.3.9: Drinking **water and Flood Vulnerability:**

Drinking water and Flood Vulnerability									
Sl No	**Name of the Block**	**Total Noof Tube Well**	**Nos of Tube Wells with raised platforms**	**No. of Saniatry Wells**	**PWSSchemes**				**Other Drinking Water Sources if any**
					Total No	**Length in Mtrs.**	**No.of Over Head Tanks**	**No.of Stand Points**	
1	2	3	4	5	6	7	8	9	10
1	Bhawanipatna	10	5	1	1	8000	1	12	
2	Dharamgarh	0	12	0	0	0	0	0	
3	Golamunda	0	4	0	0	0	0	0	
4	Jaipatna	7	15	0	0	0	0	0	
5	Junagarh	4	4	1	0	0	0	0	
6	Kalampur	12	12	2					
7	Karlamunda	0	0	0	0	0	0	0	
8	Kesinga	13	4	0	1	3500	1	812	**FHTC**
9	Koksara	0	10	0	0	0	0	0	
10	Lanjigarh	0	0	0	0	0	0	0	
11	M.Rampur	0	0	0	0	0	0	0	
12	Narla	0	0	0	0	0	0	0	
13	Th.Rampur	0	0	0	0	0	0	0	
Total		46	66	4	2	8500	2	194	

Events/ Festivals/ Functions organized in the district where mass gathering occurs:

TableNo.12

Sl. No.	Nameof the District	Events indicating the name of the Festivals/FunctionsbeingOrganized by the District,where Mass Public Gatheringoccurs	Month	Strength of Populationof gathering (Approx.)	Remarks
1	2	3	4	5	6
01	Kalahandi	Kalahandi Utsav Ghumura at Bhawanipatna, Kalahandi (District Level-04days)	January	50,000 eachday	
02	Kalahandi	Kalahandi Utsav Ghumura At Dharamgarh,Kalahandi(Sub-Divisional Level-03days)	January	30,000eachday	
03	Kalahandi	Kalahandi Utsav Ghumura At Junagarh,Kalahandi(BlockLevel)	January	20,000	
04	Kalahandi	Makar Mela at Kusurla(3days)	January	25,000	
05	Kalahandi	Republic Day Celebration(January26)	January	5,000	
06	Kalahandi	PARJA- A Tribal Festival at Perumanji, Th.Rampur	February/ March	10,000	
07	Kalahandi	Budha Dongar Lok Mahotsav at Kesinga	February/ March	10,000	
08	Kalahandi	Mahasibaratra at Belkhandi (Kesinga Block)	February March	15,000	
09	Kalahandi	Mahasibaratra Mela at Dadpur (Bhawanipatna Block)	February/ March	15,000	
10	Kalahandi	Ramlila Mahotsav (ShreeRamNabami) at M.Rampur	April	15,000	
11	Kalahandi	Car Festival & Bhajan Samaroh (09days) at Bhawanipatna	June/July	10,000	
12	Kalahandi	Independence Day Celebration (August15)	August	10,000	
13	Kalahandi	Jhanji MadaYatra at Lanjigarh	September	15,000	
14	Kalahandi	ChhatarYatra (Dushahara)	October	1,00,000(Aprox.)	
15	Kalahandi	Dushahara at Talgud, Mukhiguda (Jaipatna Block)	October	20,000	
16	Kalahandi	Budharaja Dushera, Ampani (Koksara Block)	October	20,000	
17	Kalahandi	Khandabasa at Junagarh	September /October	10,000	
81	Kalahandi	Dushahara Festival at Th.Rampur	October	30,000	
19	Kalahandi	Phuta Dhol Lok Utsav at Bhangabari (Bhawanipatna Block)	December	5,000	
20	Kalahandi	Rendomajhi Jayanti at Urladani	December	5,000	

Cultural Heritage Sites and Precincts:

Table-3.36-Details of Cultural Heritage Site sand Precincts in the District

Sl. No	Cultural Heritage site/ Precincts	Address/ Location	Category (Centrally protected Monuments/ State Protected Monuments/ UNESCO World Heritage site/ Un protected Monuments)	Name & Contact details of Controlling/ Supervision authority in the district level.	Hazards& Vulnerability of thePlace	Remarks(if Any) (AverageFoot Falland Days/ Period During which the place receive s highest Foot Fall
1	Asurgarh (Archaeological Sites)	At/Po-Asurgarh Narla	State Protected Sites	-	Conservation required	10000-1Lakh annually
2	Belkhandi Temple (CulturalSite)	At/Po-Belkhandi Karlamunda	Unprotected sites	-	Conservation required	10000-1Lakh annually
3	Kusurla (Cultural Site)	At/Po- Kusurla, Karlamunda	Unprotected sites	-	Conservation required	10000-1Lakh annually (September to March)Highest footfall
4	Bhawanipatna Historical Town)	At/Po-Bhawanipatna Dist. Headquarter.	-	-	-	1 Lakh to 2.5 Lakhannually
5	Amatgarh (Historical Fort)	At-Amatgarh ,Kesinga	Unprotected sites	-	Conservation required	10000-1Lakh annually (September to March) Highest footfall
6	Dharmagarh (Historical Town)	At/Po-Dharmagarh	-	-	-	10000-1Lakh annually (September to

						March)Highest footfall
7	Junagarh (Historical Town)	At/Po-Junagarh	-	-	-	10000–1 Lakh annually (September to March)Highest footfall
8	Sapaganda (Culturalsite)	At-Sapaganda, Kalampur	Unprotected sites	-	Conservation required	10000-1Lakh annually (September to March)Highest footfall
9	Gudahandi(Archaeological sites)	Dokrichanchara, Koksara	Unprotected sites	-	Conservation required	10000-1Lakh annually (September to March) Highest footfall
10	Talgud (Culturalsites)	At-Talgud,Po-Mukhiguda, Jaipatna	Unprotected sites	-	Conservation required	10000-1Lakh annually (September to March)Highest footfall

Boat Operation Points: Table No. 13:

List of Private/Govt Boats.

5 nos. boats provided by ITDA at Th.Rampur, 2nos is handed over to above mentioned GP, and rest 3nos have been kept at Mahulpatana Out Post custody of Th. Rampur. 1 no of boat provided by SRC at Urladani, M. Rampur is no more in use.

As per report received till 30th May 2025.

ITEMS-2								
List of Private/ GovtBoat								
Sl No	**Name of the Block**	**Name&Address of the Boat with owner Contact No.**	**Number of Boatman**	**Typeof Boat**	**Capacity**	**Condition**	**If registered**	**If insurance covered**
1	Th.Rampur	Padepadar,Gram Panchayat	1	Motor Boat	20 Seated	Good	Yes	Yes
		Gopinathpur,Gram Panchayat	1	Motor Boat	20 Seated	Good	Yes	Yes

Major Industrial Establishments/Chemical & Other Hazardous Material Storage points:

TableNo.16-

Sl. No.	Name & location of the Industry/ Storage point	Department/ Ownership	Name of hazardous materials stored	Quantity	Totalno. of workers in the establish ment	No. of adjacent Villages / Habitations within2 Kms. Radius	Susceptible Population	House	Vulnerable Infrastructure		
									School Buildings&AWC	Hospitals	ther Critical Infra.
1	Lanjigarh	Private-Vedanta	Aluminium	-	2898	5	2020	-	-	1	-

Ground water level (Rain Fall Data) TableNo.-17

Sl. No.	Name of the Block	Average Annual Rain Fall (in MM)	Ground WaterLevel		Cultivated Area (InHectares)				
					Paddy		Non-Paddy		Total
			April	August	Rain fed Area	Irrigated area	Rain fed Area	Irrigated area	
1	Bh.Patna	1289.8	8.72	3.58	6749	5674	6497	813	20033
2	Kesinga	1338.6	6.83	4.45	9941	2457	9706	234	22338
3	Th.Rampur	1289.8	4.94	3.59	12306	5432	15178	595	3358
4	Narla	1327.5	4.35	4.30	6685	2354	9528	1077	19644
5	M.Rampur	1365.7	3.75	2.00	7382	5463	9538	1072	23455
6	Karlamunda	1291.0	5.55	2.82	3684	2796	5748	853	13081
7	Lanjigarh	1289.8	6.51	3.86	9380	3750	9254	786	23170
8	Dh.garh	1287.0	5.22	3.05	7750	2520	6574	864	17708
9	Koksara	1323.5	4.05	3.40	12765	8152	10843	204	25664
10	Golamunda	1289.8	5.50	3.00	81659	3055	6593	537	28844
11	Junagarh	883.2	3.51	2.37	14333	2444	6679	562	24081
12	Jaipatna	1204.2	4.50	2.35	8139	2976	9477	220	20812
13	Kalampur	1379.1	7.05	4.45	12415	3883	8445	267	25010

Drought Vulnerability

Sl.No.	Nameofthe Block	TotalArea (in Hectares.)	Cultivable Area	Net Sown Area	Irrigated Area	Natural Calamity
1	Bh.Patna	142959	49654	49000	14606	Drought
2	Kesinga	42120	38151	29530	15324	
3	Th.Rampur	72400	17266	17047	3598	
4	Narla	49088	38817	31620	12756	
5	M.Rampur	65206	22940	22387	9239	
6	Karlamunda	21669	14887	14830	1238	
7	Lanjigarh	121681	23907	22655	6626	
8	Dh.garh	48126	33877	33800	25593	
9	Koksara	42323	37912	37670	9862	
10	Golamunda	70226	41541	40800	17038	
11	Junagarh	67245	41908	40560	39560	
12	Jaipatna	38630	29808	29322	81310	
13	Kalampur	16627	14562	14500	8859	
	Total	792000	392000	383721	196682	

TableNo.3.11:**Drinking Water Crisis:**

DrinkingWater						
Sl No	**Nameofthe Block**	**No. of villages having accesst o safe drinking water**	**No. of Villages/ Hemlets affectedb y Fluoride**	**Affected Population**	**No.ofVillages/ hamletsaffected by Arsenic Contamination**	**Affected Population**
1	**2**	**3**	**4**	**5**	**6**	**7**
1	Bhawanipatna	266	0	0	0	0
2	Dharamgarh	68	2	30	0	0
3	Golamunda	121	5	56	0	0
4	Jaipatna	91	0	0	0	0
5	Junagarh	161	1	20	0	0
6	Kalampur	12	0	0	0	0
7	Karlamunda	13	1	1044	0	0
8	Kesinga	70	0	0	0	0
9	Koksara	69	3	22	0	0
10	Lanjigarh	410	0	0	0	0
11	M.Rampur	228	310	0	0	0
12	Narla	80	0	0	0	0
13	Th.Rampur	263	0	0	0	0
Total		**8152**	**322**	**872**	**0**	**0**

Road Accidents: (Black SpotName)

Sl. No.	Stretch of Road (From- to)	Black Spot Name	Length in Kms.	No. of Traffic Congestion Areas	No. of Accident Prone Areas	No. of villages/ habitations adjacent to accident prone areas
1	Jolko to Kesinga, NH26	Jolko	1	1	1	2
2	Jaring to Junagarh, NH26	Jaring	5	2	2	5
3	Boringpadar to Kesinga,NH26	Boringpadar	2	1	1	2
4	Utkela to Kesinga, NH 26	Utkela	3	2	2	1
5	Chancher toKesinga, NH26	Gaigaon	1	1	1	1
6	Chancher to Kesinga, NH26	Chancher	1	1	1	2
7	Pasticui Road Junction, NH26	PasticuiRoad Junction	2	1	2	1
8	Baldiamal Chowk near Junagarh, NH26	Baldiamal Chowk	3	3	3	3
9	Moter Chowk,NH26	MoterChowk	2	1	1	3
10	Kesinga to Amath,NH26	Amath	2	1	1	1
11	Badli to Kutrukhamar,NH26	Badlito Kutrukhamar,	5	3	3	3
12	NH9-Kendughati near M.Rampur	Kendughati	3	1	3	4
13	Banamalipur near Junagarh,NH26	Banmalipur	3	3	3	3
14	Bandopalachowk near Bhawanipatna,NH26	Bandopala	1	1	1	2
15	Kumbharguda to Salepada,NH26	Kumbharguda	2	1	2	2
16	Chatiguda to PWD Bonglow, SH	Chatiguda to PWD Bonglow	1	3	3	3
17	Banner to Joipatna	Khalibhata winedepot, SH	1	1	2	3
81	Kallopala chowk to Kallopala Dhaba point, NH 26	Kalopalla chowk	2	2	2	2
19	Junagarh to Mahichala, NH26	Mathura Dhaba	2	2	2	3
20	Kaudola to Ampani Ghati Board or (otmaraGhati),NH26	Otmara Ghati	7	2	7	5

Forest Fire:

Details of Forest Fire Incidents in the District :

2 nos of forest division In Kalahandi district named as South and North division. The area in sqk.m, Total Notified Forest Area in Sq.Km,High Risk Zone Area inSq.Km,No. of Villages/ Habitattions inside/adjacent to High Risk all details furnished in the prescribed format as below.

Forest North Division,Kalahandi

1. Forest Fire

Table-3.9.1-Details of Forest Fire Incidents in the District

Sl.No	Nameofthe Division	Range	No. of Fire incidents Reportedduringlast5 years		Area affectedinHa	Loss of life/Propertyifany
			Years	No.offire point		
1	2	3	4	5	6	7
1	Kalahandi North Division	Bhawanipatna	2017	328	52.62	-
	Kalahandi North Division	M.Rampur		631	125.45	-
	Kalahandi North Division	Narla		245	32.84	-
	Kalahandi North Division	Kesinga		49	7.55	-
	Kalahandi North Division	Kegaon		219	37.72	-
2	Kalahandi North Division	Bhawanipatna	2018	134	23.66	-
	Kalahandi North Division	M.Rampur		417	99.652	-
	KalahandiNorth	Narla		127	20.86	-
	Division					
	Kalahandi North Division	Kesinga		43	7.488	-
	Kalahandi North Division	Kegaon		130	25.92	-
3	Kalahandi North Division	Bhawanipatna	2019	310	21.05	-
	Kalahandi North Division	M.Rampur		244	19.93	-
	Kalahandi North Division	Narla		159	8.77	-
	Kalahandi North Division	Kesinga		9	0.71	-
	KalahandiNorth Division	Kegaon		99	6.88	-
	Kalahandi North Division	Bhawanipatna		261	603.55	-
	Kalahandi North Division	M.Rampur		239	147.52	-

4	KalahandiNorth Division	Narla	2020	173	1002.74	-
	Kalahandi North Division	Kesinga		33	15.75	-
	Kalahandi North Division	Kegaon		1	5.00	-
5	Kalahandi North Division	Bhawanipatna	2021	388	212.57	-
	Kalahandi North Division	M.Rampur		373	382.30	-
	Kalahandi North Division	Narla		198	273.75	-
	Kalahandi North Division	Kesinga		250	96.30	-
	Kalahandi North Division	Kegaon		81	51.00	-
		Total		**5171**	**3284.58**	

Sl . No	**Name of the Division**	**Range**	**No. of Fire incidents Reportedduringlast5 years**		**Area affecte dinHa**	**Loss of life/Prope rtyifany**
			Years	**No.of fire point**		
1	**2**	**3**	**4**	**5**	**6**	**7**
	Kalahandi North Division		**2022**	**1440**		
	Kalahandi North Division		**2023**	**785**		

Month	No. of Fire Points Reported (2023)
January	1
February	27
March	135
April	583
May	35
June	4
Total	**785**

Range	No. of Firepoints Received in last five years
MADANPUR RAMPUR	1849
BHAWANIPATNA	1489
KEGAON	689
NARLA	902
KESINGA	213
G. TOTAL	**5142**

Range	No. of Firepoints Received (2023)
MADANPUR RAMPUR	371
BHAWANIPATNA	184
KEGAON	115
NARLA	103
KESINGA	12
G. TOTAL	**785**

Source : DFO (north) Kalahandi

Table3.9.2 Forest FireVulnerability

Sl. No.	Name of the Division	Range	Area (in Sq. KM)	Total Notified Forest Area (in Sq.Km)	High Risk Zone (Area in Sq.Km)	No.of Villages/ Habitattions inside /adjacent to High Risk Zone	Medium Risk Zone (Area in Sq.Km)	No. of villages/ habitations inside/ adjacent to the Medium Risk zone	Low Risk Zone (Areain Sq.Km)	No. of Villages/ Habitattions inside/ adjacent to High Risk Zone
1	2	3	4	5	6	7	8	9	10	11
1	Kalahandi North Divisio n	Bhawanipatna	1002.45	224.294	53.909	10	0.657	29	169.728	40
2		M.Rampur	845.72	366.6235	9.997	5	2.572	8	354.0545	41
3		Narla	462.80	196.1044	7.53	4	2.325	6	816.2494	20
4		Kesinga	661.39	98.7392	52.331	4	1.955	8	44.4532	14
5		Kegaon	862.07	205.41	31.636	5	5.382	7	168.392	21
	Total		3834.43	1091.171	155.40	28	12.891	64	922.877	136

19.Human Animal Conflict:

3.9.3.Loss of HumanLives and Property due toAnimal Attack- Table.3.28

Sl. No	Vulnerable Place (village/Panchayat etc.)	Causing Agent/Animal (Elephant,Bear, Crocodileetc.)	Number of Human Lives lost duringlast5years		Damage toHouse and Property during last 5 years	Crops Damaged
			Year	Nos.		
1	Kuteijore,Ghunghuti, Baijalpur Dumeri,Phoiripani, Udesurung, Dudkel,Jamjore,Tumra, Nadkon Gangapenu,Sergarh, Raidhunipadar,Dungriguda, Dadpur,Bhawanipatna, Mednipur	Wild Bear, Elephant	2016-17	-	-	Paddy , Cotton & Sugar Cane
2			2017-81	-	-	
3			2081-19	3	-	
4			2019-20	1	-	
5			2020-21	-	-	
6			2021-22			

Forest South Division, Kalahandi

ForestFire

Table-3.9.4-Details of Forest Fire Incidents in the District

Sl. No	Name of the Division	Range	No. of Fire incidents Reported during last 5 years		Area affected in Ha	Loss of life/ Property if any
			Years	No.of fire point		
1	2	3	4	5	6	7
1	Kalahandi South Division	Karlapat (S) Range	2016	36	8.60	-
			2017	23	16.41	-
			2081	163	50.56	-
			2019	309	83.4	-
			2020	141	101.591	-
				672	**290.561**	
2		Biswanathpur	2016	25	5.90	-
			2017	17	35.4	-
			2081	136	106.1	-
			2019	388	206.145	-
			2020	178	238.36	-
				744	**591.905**	
3		Jaipatna	2016	19	4.10	-
			2017	81	16.00	-
			2081	92	53.00	-
			2019	136	63.40	-
			2020	41	29.60	-
				306	**166.1**	
4		Junagarh	2016	1	0.20	-
			2017	17	19.80	-
			2081	40	22.65	-
			2019	32	35.60	-
			2020	16	5.20	-
				106	**83.45**	
5		Dharamgarh	2016	2	0.60	-
			2017	96	88.80	-
			2081	63	147.20	-
			2019	76	85.95	-
			2020	22	8.69	-
			Total	**259**	**361.24**	
		Th.Rampur South	2016	5	1.4	-
			2017	31	27.15	-
			2081	149	57.1	-
			2019	208	21.24	-
			2020	168	99.7	-
				561	**206.59**	

			2016	24	6.00	-
			2017	7	3.60	-
		Th.Rampur North	2081	125	79.13	-
			2019	359	87.07	-
			2020	284	70.39	-
			Total	**799**	**246.19**	
GrandTotal:				**3447**	**1946.036**	

Table3..9.5Forest FireVulnerability

Sl. No.	Name ofthe Divisio n	Range	Area (in Sq.KM)	Total Notified Forest Area (in Sq. Km)	High Risk Zone (Area in Sq. Km)	No. of Villages / Habitations inside/ adjacent to High Risk Zone	Medium Risk Zone (Area in Sq. Km)	No. of villages/ habitations inside/ adjacent to the Medium Risk zone	Low Risk Zone (Area in Sq. Km)	No. of Villages / Habitations inside/ adjacent to High Risk Zone
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**8**
1	Kalah andi South Division	Junagarh	59.23	5.52	20	8Nos.	25	17Nos.	13.9	10 Nos.
2		Dharamgarh	81.63	13.81	45	5Nos.	40	13Nos.	44.89	Nos.
3		Biswanathpur	69.86	17.6	164.01	35Nos.	86.19	29Nos.	40.81	Nos.
4		Jaipatna	67.36	2.91	10	8Nos.	24.82	12Nos.	30	Nos.
5		Karlapat (S)Range	175.5	0.46	14.2	21Nos.	8	7Nos.	28	Nos.
6		Th.Rampur South	59.07	8.29	34	17Nos.	25	8Nos.	12.43	Nos.
7		Th.Rampur North	36.73	7.96	1.3	4Nos.	2.5	6Nos.	2.8	Nos.
	Total		**549.38**	**55.9**	**288.5**	**104**	**28.5**	**95Nos.**	**172.2**	**127**

Human Animal Conflict:

3.9.6 Loss of Human Lives and Property due to Animal Attack-Table.3.28

Sl. No	Vulnerable Place (village/Panchayat etc.)	Causing Agent/ Animal (Elephant, Bear, and Crocodile etc.)	Number of Human Lives lost duringlast5years		Damage to House and Property during last 5 years	Crops Damaged
			Year	Nos.		
1	Kuteijore, Ghunghuti, Baijalpur Dumeri, Phoiripani, Udesurung, Dudkel, Jamjore, Tumra, Nadkon Gangapenu, Sergarh, Raidhunipadar, Dungriguda, Dadpur,Bhawanipatna, Mednipur	Wild Bear, Elephant	2016-17	-	-	Paddy , Cotton & Sugar Cane
2			2017-81	-	-	
3			2081-19	3	-	
4			2019-20	1	-	
5			2020-21	-	-	
6			2021-22			

3.13 Population Requiring Special Care:

Sl. No.	Block	No. of Persons covered under Old Age Pension Schemes		No. of Persons Covered under Widow Pension	No.of Persons covered under Disability Pension	
		Male	Female	Female	Male	Female
1	Bhawanipatna	2842	2781	2203	83	82
2	Kesinga	2322	1651	1506	101	97
3	Karlamunda	873	847	771	45	37
4	M.Rampur	1940	955	1350	150	83
5	Narla	2429	8196	1778	154	148
6	Lanjigarh	1717	8150	1681	200	143
7	Th.Rampur	840	1784	1655	98	95
8	Junagarh	3423	2259	2251	139	108
9	Dharamgarh	2157	2336	1785	142	83
10	Kalampur	1636	675	730	26	22
11	Koksara	2624	8103	1750	82	70
12	Jaipatna	2073	2541	1734	122	109
13	Golamunda	2544	2243	8169	136	105
	Total	**28020**	**23621**	**21000**	**1478**	**1242**

Table-7.1-Information on PWD

Information on Population Requiring Special Care										
Sl. No.	Block	Gram Panchayat/Ward	Village	Total No. of HHs	Total Population	No. of HHS Having by PWD	No.of Persons with Physical Disability (PWD) per village		No of persons with Mental disability	
							M	F	M	F
1	Bhawanipat na	36	112	57806	239572	103	2525	2235	7	5
2	Kesinga	26	36	34889	135067	127	2079	8140	8	14
3	Karlamunda	12	18	15906	57481	52	846	749	22	7
4	M.Rampur	19	27	2808	80524	17	889	1053	4	17
5	Narla	26	22	32277	120992	28	1634	1446	28	14
6	Lanjigarh	26	12	22283	93179	17	1368	128	9	12
7	Th.rampur	24	26	81773	77840	24	855	1022	6	8

8	Dharmagarh	24	12	36048	139359	37	1559	1379	4	17
9	Junagarh	34	18	48375	193316	18	2681	2373	28	11
10	Kalampur	8	27	15802	60075	22	892	789	27	15
11	Jaipatna	22	13	32748	130724	36	1931	1709	9	14
12	Koksara	22	8	31238	89304	42	1725	1527	12	18
13	Golamunda	28	14	33998	129499	21	8817	1670	3	8
14	Bhawanipat na(M)	20	17	15000	69040	32	1025	907	9	4
15	Kesinga NAC	12	4	5315	20758	37	284	251	7	11
16	Junagarh NAC	12	6	4545	19656	24	164	145	17	5
17	Dharmagarh NAC	14	7	4214	16585	18	461	408	27	3

3.14 Women Self Help Group

Sl. No	Nameofthe Block/ULB	Women Self Help Groups			
		Total No.of WSHGs	TotalNo. of women members	Total No.of SHGs Bank Linked	NYK
1	BHAWANIPATNA(R)	2,602	27,394	1,683	1
2	BHAWANIPATNA(U)	671	6,943	282	1
3	DHARMAGARH	1,791	81,360	545	1
4	GOLAMUNDA	1,626	17,246	926	1
5	JAIPATNA	1,609	16,191	820	1
6	JUNAGARH	2,042	20,816	710	1
7	KALAMPUR	829	8,653	395	1
8	KARLAMUNDA	725	7,672	353	1
9	KESINGA	1,832	19,249	971	1
10	KOKASARA	1,588	16,019	567	1
11	LANJIGARH	1,371	14,193	567	1
12	M.RAMPUR	1,376	13,972	728	1
13	NARLA	1,607	16,174	580	1
14	TH.RAMPUR	872	9,273	406	1
	Total	**20,541**	**212,155**	**9,533**	14

3.14Community Institutions need to be aware on Disaster basic

Name Of The ICDS Project	No.Of GPLFs	No.Of SHGs
Bhawanipatna	36	2,602
Bhawanipatna	–	671
Dharamgarh	24	1,791
Golamunda	28	1,626
Jaipatna	22	1,609
Junagarh	34	2042
Kalampur	11	829
Karlamunda	12	725
Kesinga	26	1,832
Koksara	22	1,588
Lanjigarh	26	1,371
M.Rampur	19	1,376
Narla	26	1,607
Th. Rampur	24	872

Name Of The ICDS Project	Name Of The BLF	Leader
Bhawanipatna	Shaktimayee Block Mahasangha	Pre-Jenamani Bhoi Sec–Sumati Joshi
Bhawanipatna	Maa Basundhara Mahasangha	Pre–Sanjukta Behera Sec–Parbati Mishra
Dharamgarh	ShaktiRupa Block Level Federation	Pre–Gangotri Chalna Sec – Lata Manjari Pradhani
Golamunda	Indira Maha Sangha	Pre–Sushila Dash Sec–Sangita Putel
Jaipatna	GyanaPriya Darsini	Pre–JhuniDurga Sec – Pranati Mohanty
Junagarh	BlockLevel Federation, Junagarh	Pre–SitaSabar Sec–Tapaswini Chalan

Name Of The ICDS Project	Name Of The BLF	Leader
Kalampur	Sukanya Block Level Federation	Pre–Diptimayee Acharya Sec–Sukanti Nayak
Karlamunda	Block Level Mission Shakti Federation, Karlamunda	Pre–Jayanti Sahu Sec– RinaSahu
Kesinga	Singhabahini Block Level Federation	Pre–Bijayalaxmi Padhi Sec–Babita Majhi
Koksara	Sarbashakti Block Level Federation	Pre–Anjana Durga Sec–MithilaBhoi
Lanjigarh	BLF Mission Shakti, Lanjigarh	Pre–Sarojini Pradhan Sec–Kumari Behera
M.Rampur	Block Level Mission Shakti Federation	Pre–Basanti Sahu Sec–Koushalya Sahu
Narla	Shiva Shakti Block Level Federation	Pre–Sangita Bhoi Sec–Bidyulata Samal
Th.Rampur	Sailasuta Block Level Federation	Pre–Rasmita Naik Sec–Santasila Naik

Chapter–4

Institutional Arrangement

National Disaster Management Authority (NDMA)

The National Disaster Management Authority (NDMA)was constituted under the Sub-section (1) of Section (3) of National Disaster Management Act 2005. NDMA is the apex body for Disaster Management inthe countryheaded bythe Hon'ble Prime Minister ofIndia to laydown policies, plans and guidelines to manage disaster and coordinating their enforcement and implementation for ensuring timely and effective response to disaster.

The Chairperson of the NDMA is the Hon'ble Prime Minister of India *(ex- officio)* and others members not exceeding than nine may be nominated by him.The Chairperson may designate one of the members to be the Vice-Chairperson.

National Executive Committee (NEC)

The central government has constituted a National Executive Committee (NEC) under sub-section (1) of Section (8) of DMAct-2005 to assist the National Disaster Management Authority in the discharge of its function and also ensure compliance of the directions issued by the central government.

The Union Home Secretary is the Chairpersons *(ex-officio)* of NEC. The Secretaries to the Government of India in the ministries/departments having administrative control of the agriculture, defense, drinking water supply, environment and forests, finance (expenditure), health,power,rural development, science and technology, space, telecommunication,urban development, water resources and chief of the integrated defence staff of the chief of staffs are other members of NEC.

National Disaster Response Force (NDRF)

The Disaster Management Act 2005 has made the statutory provisions for the constitution of the National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters. The NDRF comprises of 12 units of Central Paramilitary Forces (CPMF) that includes 3 units each from Central Reserve Police Forces (CRPF) and Boarder Security Forces (BSF) and 2 Unit each from Central Industrial Security Forces (CISF), Indian Tibbet Boarder Police (ITBP) and Sahastra Seema Bal (SSB). Each battalion has 81 self-contained specialists Search and Rescue teams of 45 personnel. The NDRF team includes Chemical, Biological and Radiological Disaster (CBRN) emergency responders, S&A element, engineers, technicians, electricians, dog squads and paramedics. The NDRF battalions are strategically located at 8 different locations in the country based on the vulnerability profile to cut down response time for their deployment. During the threatening proactive deployment of NDRF is being carried out by NDMA in consultation with the State Governments.

Table 0-1Location of National Disaster Response Forces

Sl No.	Battalion, Location	State	Man power drawn from	ContactPerson	FaxNo.	Mobile No.	Unit Control Room No.	E-Mail
1	01 Bn, NDRF, Guwahati	Assam	BSF	Sh.S.K. Shastri	0361-2849080	9401307887	0361-2840284	assam01-ndrf@nic.in
2	02 Bn, NDRF, Kolkata	West Bengal	BSF	Sh.NitishUpadhyay	033-25875032	9434742836	033-25875032	wb02-ndrf@nic.in
3	03 Bn, NDRF, Munduli	Odisha	CISF	Sh. M.K.Yadav	0671-287978	9439103170	0671-287978	ori03-ndrf@nic.in
4	04 Bn, NDRF, Arakkonam	Tamil Nadu	CISF	Ms.RekhaNambiyar	04177-246594	9442105169	04177-246594	tn04-ndrf@nic.in
5	05 Bn, NDRF, Pune	Maharashtra	CRPF	Sh. AnupamSrivastava	0284-247008	9423506765	0284-247000	rb-5th@cisf.gov.in
6	06 Bn, NDRF, Gandhinagar	Gujrat	CRPF	Sh.R.SJoon	079-23201551	9428826445	079-23201551	guj06-ndrf@nic.in
7	07 Bn, NDRF, Ghaziabad	Uttar Pradesh	ITBP	--	0164-2246570		0164-2246193	pun07-ndrf@nic.in
8	08 Bn, NDRF, Bhatinda	Punjab	ITBP	Sh. P.K.Srivastava	0120-27666012	9968610014	0120-2766681	up08-ndrf@nic.in
9	09,Bn,NDRF, Patna	Bihar	BSF	ShriVijay Sinha	0685-253939	7762884444	0685-253939	patna-ndrf@nic.in
10	10 Bn, NDRF, Vijayawada	Andhra Pradesh	CRPF	Sh.Parshant Dar	0863-2293050	7382299621	0863-2293050	rb-10th@cisf.gov.in
11	8Bn,NDRF, Varanasi	Uttar Pradesh	SSB	Sh. A.K.Singh	0542-250801	9455581107	0542-250801	up-8ndrf@gov.in
12	12 Bn, NDRF, Itanagar	Arunachal Pradesh	SSB	Sh.AngomKiranChand Singh	03621-242940	9485236141	0360-2277106	bn12.ndrf@gov.in

State Disaster Management Authority (SDMA)

The State Disaster Management Authorities (SDMA) has t o be constituted by every state government under the sub-section (1) & (2)of section 14 of Disaster Management Act 2005. The Hon'ble Chie fMinisters of the state are the Chairpersons (ex-officio) of SDMA and other members not exceeding than eight may be nominated by the Chairpersons. The Chairman of the State Executive Committee (SEC), Chief Secretary of the State is a member and Chief Executive Officer (ex-officio) of SDMA.

The State Disaster Management Authority shall-:

a) Lays down policies and plans for disaster management in the State.
b) Approves the State Plan in accordance with the guidelines laiddown by the NDMA,
c) Coordinates the implementation of the State Plan, recommend provision of funds for mitigation and preparedness measures.
d) Review the developmental plans of different departments of the State to ensure the integration of prevention, preparedness and mitigation measures.
e) Laydown guidelines to be followed bythe departments of the State Government for the purpose of integration of measures for prevention of disasters and mitigation in their development plans and projects and provide necessary technical assistance there for.
f) Review the measures being taken for mitigation, capacity building and preparedness by the departments of the Government & issue such guidelines as may be necessary.
g) Lay down detailed guidelines for providing standards of relief (Not less than the minimum standard of relief in the guidelines of NDMA) to persons affected by disaster in the State.

State Executive Committee (SEC)

The State Executive Committee (SEC) has been constituted by the State Governments undersub-section (1) & (2)ofsection (20)to assist the StateDisaster Management Authority(SDMA) in the performance of its function and to coordinate action in accordance with the guidelines laid down by the SDMA and ensure the compliances of directions issued by the State Government under the DM act. The Chief Secretaries of the States are the Chairman of SEC(ex- officio). Four Secretaries of State Government are the other member's ex-officio. The Chairperson of SEC use powers delegated by SDMAs and state Governments.

The State Executive Committee shall-:

a) Coordinate and monitor the implementation of the National Policy, National Plan and State Plan.
b) Examine the vulnerability of different parts of the State to different forms of disaster and specify measures to be taken for their prevention and mitigation.
c) Lay down guidelines for preparation of disaster management plans by the departments of the Government of the State and the District authorities and monitor the implementation of the plans.
d) Evaluate preparedness at all government and non-government levels to respond to any threatening disaster situation or disaster and give all directions where necessary for enhancing such preparedness.

Odisha Disaster Rapid Action Force (ODRAF)

The Government of Odisha formed Odisha Disaster Rapid Action Force (ODRAF) vide Notification No.939/CDdated07.06.2001.ODRAF is a multi-disciplinary, multi-skilled, high-tech force for all types of disasters. ODRAF aims at reducing casualties, clearance of communication channels, quick deployment of personnel and equipments and minimize expenditure and time lag and support institutional arrangement. In 3 phases, tenunitsof ODRAF have been set up. The ODRAF units are strategically located throughout Odisha. Locations of these units are identified on the basis of vulnerability profile to cut down the response time for their deployment.

The ODRAF Units do not have any geographical /territorial restrictions in terms of area of operation.Besides, 10new units ofODRAF have been proposed to set up at different locations like Sambalur, Boudh, Kalahandi, Nawarangpur, Gajapati, Berhampur, Puri, Khorda, Kendrapadaand Jajpur.

Table0-2Location of Odisha Disaster Rapid Action Force

Sl.No.	ODRAF BN	Raised inthe Year	Location	No.of Personsi n each BN	ContactDetails
1	Cuttack (OSAP 6th Battalion)	2001-02	Cutttack	49	0671-2442148 (O) 0671-2442442(R) comdt6thbn.orpol@nic.in
2	Jharsuguda (OSAP 2nd Battalion)	2001-02	Jharsuguda	48	06645-270096, 270038,06654-220370 comdt2ndbn.orpol@nic.in
3	Koraput (OSAP3rd Battalion)	2001-02	Koraput	38	06852-251344 06852-151335 06852-251344 comdt3rdbn.orpol@nic.in
4	APRBalasore District	2003-04	Balasore	41	06782-262004(O) 06782-262005 26782-262584 spbls.orpol@nic.in
5	OSAP 8th Battalion , Chhatrapur	2003-04	Ganjam	40	06811-260375 06811-254011 comdt8thbn.orpol@nic.in
6	APR, Jagatsinghpur,	2008-09	Jagatsinghp ur	48	06724-220115 06724-220015 06724-220370

7	OSAP 7th Battalion, Bhubaneswar	2008-09	Khurdha	44	0674-2301055 0674-2303426 0674-2301055
8	OSAP5th Battalion, Baripada	2008-09	Mayurbhanj	40	06792-278232 06792-254402 06792-278232 comdt5thbn.orpol@nic.in
9	APR Bolangir District	2008-09	Balangir	43	06652-232020 06652-133063 06652-232375
10	Rourkela(OSAP 4thBattalion)	2008-09	Sundargarh	46	0661-2600980 0661-2600434 0661-2600980 comdt4thbn.orpol@nic.in
11	IR Battlion, Boudh	2015-16	Boudh	47	06841-222238
12	4thIR,Battlion, Deogarh	2015-16	Deogarh	52	0664-3242130
13	OSAP 1st Battalion, Dhenkanal	2015-16	Dhenkanal	46	06762-226229 06762-226291 06762-226291
14	OSAP 8th Battalion, Chatrapur	2015-16	Ganjam	48	06811-260375 06811-254011
15	3rdIR,Battalion, Kalinganagar	2015-16	Jajpur	49	0672-6244602 0672-6244610 0672-6244610
16	8thSpecial IR, Battlion, Kandhamal	2015-16	Kandhamal	43	06842-2533017
17	6thIRBattlion, Khurda	2015-16	Khurdha	50	
18	1stIR,Battalion, Uper Kolab, Koraput	2015-16	Koraput	43	06852-252167 06852-211320
19	7th Special IR, Battalion,Upper Kolab, Koraput	2015-16	Koraput	44	06852-251067 06852-229007
20	2ndIR Battalion, Rayagada, Gunupur	2015-16	Rayagada	48	0685-725110 0685-725110

Location of New Odisha Disaster Rapid Action Force with contact details

Unit	In Charge	Telephone/Mobile	Email
Dhenkenal (OSAP1st Bn)	Shri Bijaya Prakash Babu, OPS DeputyCommandant	9438509006(M) 06762-226229(O) 06762226291(CR) Fax:06762226291	comdt1stbn.orpol@nic.in
Koraput (1st IndiaReserveBn.)	Shri P.Manmoth Rao, OPS Commandant	9437463489(M) 06852-252167(O) 06852-28320(CR)	comdt1stirbn.orpol@nic.in
Gunupur (2nd IndiaReserveBn.)	ShriBibhutiPattnaik, OPS Commandant	9437090541(M) 0658-72580(O) 0685-72580(CR)	comdt2ndirbn.orpol@nic.in
Jajpur (3rd IndiaReserveBn.)	ShriS.N.Jemadar, OPS Commandant	9437355225(M) 0672-6244602(O) 0672-6244610(CR) Fax:0672-6244610	comdt3rdirbn.orpol@nic.in
Deogarh (4th IndiaReserveBn.)	Shri Baikuntha Bihari Rout, OPS Commandant	9438800008(M) 0664-3242130(O)	comdt4thirbn.orpol@nic.in
Boudh (5th IndiaReserveBn.)	Shri Jamesh Kumar Indrasingh, OPS Commandant	9437232275(M) 9437232275(M)	comdt5thirbn.orpol@nic.in
Khurda (6th IndiaReserveBn.)	Shri Naba Kishor Das, OPS Commandant	8895856633(M)	comdt6thirbn.orpol@nic.in
Koraput (7th Spl.IndiaReserveBn.)	ShriS.N.Bastia Commandant	8895066309(M) 06852-25982(CR) Fax:O6852-229007	comdt7thsplirbn.orpol@nic.in
Phulbani (8th Spl.IndiaReserveBn.)	Shri A.K.tripathy, OPS Commandant	9437200980(M) 0684-2253017(O)	comdt8thsplirbn.orpol@nic.in

Revenue and Disaster Management Department:

The Revenue and Disaster Management Department is responsible for providing immediate relief to the people affected by various calamities like floods, droughts, cyclones, hailstorms, earthquakes, fire accidents, etc. It also takes initiatives for relief, rescue, rehabilitation and restoration work. The Department is headed by the Principal Secretary/Addl. Chief Secretary, Revenue and Disaster Management Department who exercises all administrative and financial powers.

Special Relief Organization:

The Special Relief Organisation was established under the Board of Revenue in 1965-66 for carrying out relief and rescue operation during and after various disasters. Since its inception,the scope of Relief Organisation has been diversified.Now it deals with disaster management i.e. response, relief and rehabilitation. It coordinates with districts/departments for quick relief and rescue operation, reconstruction and rehabilitation work. It also promotes disaster preparedness at all levels in the State with the assistance of Odisha State Disaster Management Authority (OSDMA). Quick response in the natural calamities is the hall -mark of SpecialRelief Organisation.

Odisha State Disaster Management Authority (OSDMA):

Odisha State Disaster Mitigation Authority (OSDMA) was established by the Government of Odisha as an autonomous organization vides Finance Department Resolution No. IFC- 74/99- 51779/F dated the 28th December 1999 (in the intermediate aftermath of the Super-cyclone in 1999). It was registered under the Societies Registration Act, 1860 on29.12.1999 as a non-profit making & charitable institution for the interest of the people of Odisha, with its headquarters at Bhubaneswar and jurisdiction over the whole State.

The Authority has the mandate not only to take up the mitigation activities but also the relief, restoration, reconstruction and other measures. These activities cover the entire gamutofdisaster management including preparedness activities and also include:

- Coordination with the line departments involved in reconstruction,
- Coordination with bilateral and multi-lateral aid agencies,
- Coordination with UN Agencies,International,National and State-level NGOs,
- Networking with similar and relevant organizations for disaster management.

State Level Committee on Natural Calamity (SLCNC)

A State Level Committee on Natural Calamity (SLCNC) has been constituted under the Chairmanship of the Hon'ble Chief Minister to oversee disaster preparedness and response activities.

The Function of the SLCNC is-:

a) To advise the State Government regarding precautionary measures to be taken in respect of flood, drought and other natural calamities.
b) To assess the situations arising out of the calamities.
c) To recommend to Government the nature and quantum of relief; and
d) To recommend to Government thePolicy to be adopted in giving such relief in areas affected by such calamities.

4-10-14.17.1 Composition of the District Crisis Group

Table-4.10-Composition of District Crisis Group

Sl No.	Member	Designation
1	Collector&DM,Kalahandi	Chairman
2	Asst.Factories&Boilers,Kalahandi	MemberSecretary
3	CDM&PHO,Kalahandi	Member
4	DSP,Kalahandi	Member
5	RTO/MVI,Kalahandi	Member
6	DistrictLabourOfficer,Kalahandi	Member
7	DistrictEmergencyOfficer,Kalahandi	Member
8	ChiefDistrictAgricultureOfficer,Kalahandi	Member
9	RevenueOfficer,Kalahandi	Member
10	DistrictFireOfficer,Kalahandi	Member
11	RegionalOfficer,PollutionControlBoard,Rayagada	Member
12	DistrictInformationOfficer,Kalahandi	Member
13	M/SVedantaLtd,Lanjigarh,Kalahandi	Member

4.8 District Disaster Management Authority ( )

Under the sub-section (1) and (2) of section 25 of Disaster Management Act 2005 District Disaster Management Authority has been constituted by the State Government.
The District Disaster Management Authority (DDMA) consists of the Chairperson and such number of the other members, not exceeding seven, as may be prescribed by the State Government, and unless the rules otherwise provide, it shall consist of thefollowing namely:-

a) The Collector or District Magistrate or Deputy Commissioner of the District is the Chairperson *(ex-officio)* of DDMA.
b) The elected representative of local authority is the Co-chairperson *(ex-officio) of DDMA.*

Provided that in the Tribal Areas, as referred to in the Sixth Schedule to the Constitutions, the Chief Executive Member of the districtcouncil of autonomous district, shall be the co-Chairperson,*exofficio*

c) The Chief Executive of the District Authority,exofficio;
d) The Superintendent of Police,exofficio;
e) The Chief Medical Officer of the district,exofficio;
f) Not exceeding two other district level officers,to be appointed by the State Government

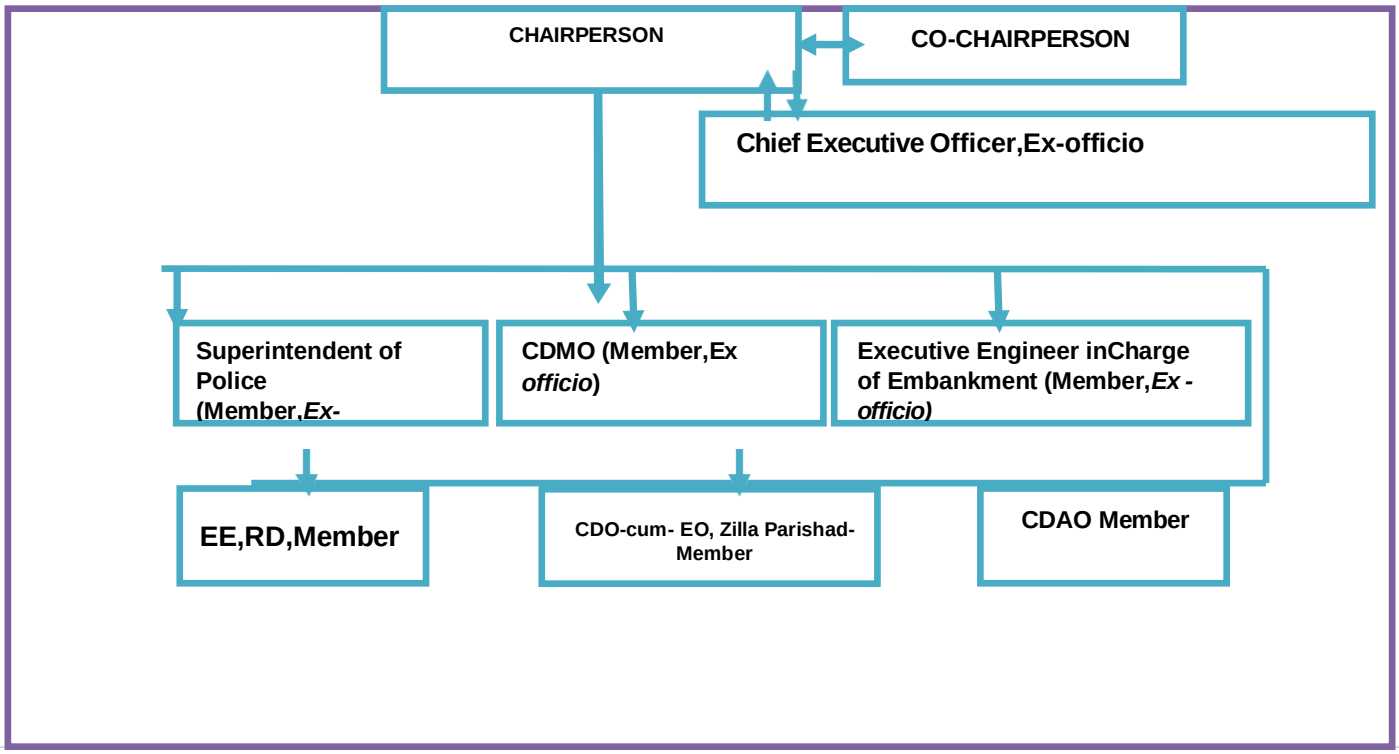
The State Government appoints an officer not below the rank of Additional Collector or Additional District Magistrate or Additional Deputy Commissioner, as the case may be of the District to be Chief Executive Officer of DDMA.

Accordingly through the Notification No.IVF-(OSDMA)24/10-46209/R&DM in pursuance of sub sections (1) and (2) of section 25 of the Disaster Management Act, 2005 (53 of 2005), the State Government do hereby establish the District Disaseter Management Authority for the district of Kalahandi in the State of Odisha which shall consist of the following:

District Disaster Management Authority, Kalahandi

Sl No.	NameoftheOfficer	Designation	PositioninDDMA	ContactNo.
1	Pawar Sachin Prakash, IAS	District Magistrate & Collector	Chairperson,Ex-officio	9668303456
2	Sri Puspendra Singh Deo	Chairman,Zilla Parishad	Co-Chairperson, Ex-officio	7008233381
3	Sri Nagraj Devarakonda, IPS	Superintendent of Police	Member,ex-officio	9818676554
4	Dr. Kishor Kumar Prusti	Chief District Medical Officer	Member,ex-officio	9439980000
5	Sri Baitaru Deep, OAS (S)	Addl. District Magistrate	Chief Executive Officer,ex-officio	9437193651
6	Sri Jishu Beriha	ExecutiveEngineer- in charge of Embankment (SE, Irrigation Division, Bhawanipatana)	Member,ex-officio	9556918388
7	Sri Dayamaya Padhi, OAS	CDO—cum-EO, ZP,Kalahandi (Project Director, DRDA)	Member	8249117584
8	Sri Malaya Kumar Parida	Chief District Agriculture Officer	Member	7008471663

Organogram of District Disaster Management Authority, Kalahandi



The DDMA acts as the district planning; coordinating and implementing body fo disaster management and take all measures for the purpose of disaster management in th district in accordance with the guidelines laid down by the NDMA and SDMA.

The District Disaster Management Authority (DDMA)

a) Prepare Disaster Management Plan including District Response Plan of the District.
b) Coordinate and Monitor the implementation of the National DM Policy, State DM Policy, State DM Plan and District DM Plan.
c) Ensure that vulnerable areas of the districts are identified and prevention and mitigation measures are being undertaken by the departments of the Government both at district leveland at local level.
d) Ensure that guidelines for Prevention and Mitigation measures, Preparedness and Response as lay down by NDMA and SDMA are being followed by all departments of Government both at district and local level.
e) Monitor the implementation of Disaster Management Plans prepared by the departments of the Government at the district levels.
f) Lay down guidelines to be followed by different Government departments bothatdistrict leveland local level for integrating disaster prevention and mitigation measures in their development plans and projects and provides necessary technical assistance therefor;
g) Review the state of capability for responding to any disaster or threatening disaster like situation in the district and give directions to the relevant departments or authorities at the district level for their up gradation.
h) Review the preparedness measures and give directions to the concerned departments at the district level for bringing the preparedness measures to the levels required for responding effectively to any disaster.
i) Organize, coordinate and facilitate specialized training programms and awareness programms for different levelofofficers, employees, voluntaryrescue workersand community members for prevention and mitigation of disaster with support of governmental and non- governmental organization and local authorities.
j) Set up, maintain, review and upgrade mechanism for early warning and dissemination of proper information to public.
k) Review development plans prepared bythe departments ofthe government at the district level, statutory authorities with a view to make necessary provisions therein for prevention of disaster or mitigation.
l) Examine construction in any area in the district an ensure standards for prevention of disaster or mitigation laid down for such construction to be followed by the concerned departments and authorities.
m) Identify buildings and places which could be used as relief centers or camps in the event of any disaster or disaster like situation and make arrangements for water supply and sanitation in such buildings and places.
n) Establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at short notice;
o) Encourage the involvement of Non Government Organization and Voluntary social – welfare institutions working at the grass root levelin the district for disaster management.
p) Ensure communication systems are in order and disaster management drills are carried out periodically.

q) Perform such other functions as the State Government or State Authority may assign to establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice;

r) Provide information to the State Authority relating to different aspects of disaster management;

s) Encourage the involvement of non-governmental organizations and voluntary social- welfare institutions working at the grassroots levelin the district for disaster management;

t) Ensure communication systems are in order and disaster management drills are carried out periodically;

u) Perform such other functions as the State Government or State Authority may assign to it or as it deems necessary for disaster management in the District.

District Level Committee onNatural Calamity (DLCNC)

The Codal provision of Odisha Relief Code envisages the constitutions of District Level Committee on Natural Calamity (DLCNC) which is the apex committee at the district to monitor preparedness and suggests improvement in the response mechanism and finalizes the district disaster management plans. The members of DLCNC are as follows:

Structure of District Level Committee on Natural Calamities

Sl No.	NameoftheMember	Designation	Positionin DLCNC	ContactNo.
1	Ms Pawar Sachin Prakash, IAS	Collector & District Magistrate	Chairperson	9668303456
2	Smt Malvika Devi	Hon'ble MP,Loksabha	Member	9013869313
3	Shri Dibya Shankar Mishra	Hon'ble MLA, Junagarh	Member	9937222771
4	Shri Sagar Charan Das	Hon'ble MLA, Bhawanipatna	Member	7702032868
5	Shri Pradeep Kumar Disari	Hon'ble MLA,Lanjigarh	Member	8249394166
6	Smt. Manorama Mohanty	Hon'ble MLA,Narla	Member	9776775588
7	Shri Sudhir Ranjan Pattajoshi	Hon'ble MLA,Dharmagarh	Member	7008785156
9	Shri Baitura Deep, OAS(SAG)	Addl.District Magistrate	Member	9437193651
10	Dr Kishor Kumar Prusty	Chief District Medical Officer	Member	9439980000
11	Shri Jisu Beriha	Superitendent Engineer-Irrigation Division, Bhawanipatana	Member	9556918388
12	Dr. Nirad Chandra Knhar	Chief District Veterinary Officer	Member	9437427620
13	Shri Prabhat Kumar Parida,OAS	Sub-Collector, Bhawanipatna	Member	9439197710
14	Ajaya Prakash Tirkey	Sub-Collector, Dharmagarh	Member	9078092109
15	Soudamini Majhi (ORS)	District Emergency Officer	Member Secretary	9348865561

Drought Monitoring Cell,Kalahandi

In pursuance of the letter no 778 Dt. 81.02.2019 of the Commisioner cum Secretary (DM) & Managing Director, OSDMA a District Cell is constituted for effective monitoring of drought like situation in the district.

The members are as Follows

1. Collector &DistrictMagistrate, Kalahandi-	Chairman
2. Chief District Agriculture Officer, Kalahandi-	Convener
3. District Emergency Officer, Kalahandi-	Coordinator
4. Deputy Director of Horticulture, Kalahandi–	Member
5. Project Director Watershed, Kalahandi-	Member
6. Chief District Veterinary Officer, Kalahandi–	Member
7. Senior Scientist &Head,KVK, Kalahandi–	Member
8. Executive Engineer, Irrigation Div. Bhawanipatana	Member
9. Executive Engineer,OLIC,Kalahandi–	Member

Team under DDMA

This is regarding the formation of District Disaster Management Team under the guidance of District Disaster Management Authority. Various sub teams are formed to perform some sectorial activities for disaster management. The roles and responsibility of each team are well defined to avoid any formofoverlapping orduplicityduring the time ofdisaster. Theywill perform their roles and responsibilities under the overall guidance of District Disaster Management Authority. The members of each team are mentioned hereunder:

Sl. No.	Nameofthe Team	TeamMembers
1	INFORMATION MANAGEMENT TEAM	DRRC,OSDMA
		DIPRO,Kalahandi
		DistrictTelecomOfficer, Link Officer.
		Dstrict Control Room, Nodal Officer
		Police Control Room
		CDO-cum-EO,ZP
		Sub Collector, Bhawanipatna/Dharamgarh
		D.S.W.O.

2	FOOD&SOCIALSECURITYTEAM	D.W.O.
		Civil Supplies Officer
		District Panchayat Officer
		District Labour officer.
3		
	WATERMANAGEMENTTEAM.	Superintending Engineer
		Executive Engineer
		Executive Engineer
		Executive Engineer
		Project Director
		DeputyDirector
4	LIVELIHOODTEAM	CDO cum EO, Zilla Parishad
		Chief District Agriculture Officer
		DAO, Bhawanipatna/Dharamgarh/Narla
		Deputy Director,Horticulture
		CDVO
		Asst. Director, Fishery
		D.F.O. (KL)
		ProjectDirector,Watershed
		GeneralManager,DIC
5	FOREST&ENVIRONMENTTEAM:	DFO, Terrtorial
		DFO,Wildlife
6	RESCUE&EVACUATIONTEAM:	District Emergency Officer
		Superintendent of Police,
		FireOfficer
		Coordinator NYK
		Special Land Acquisition Officer
		District Sports Officer
7	EMERGENCYHEALTH MANAGEMENTTEAM:	CDM & PHO, Klahandi
		Secretary,Red Cross

		Representative of Private Hospital
		NGO Co-ordination Cell
8	RELIEFMANAGEMENTTEAM	ADM,Emergency.
		Sub Collector, Bhawanipatna/Dharamgarh
		All Block Development Officers
		All Tahasildars
		Addl.S.P.
		APD,DRDA.
		ADM,Emergency.
9	INFRASTRUCTURE MANAGEMENT	District Emergency Officer
	TEAM	Executive Engineer
		Executive Engineer
		Executive Engineer
		APD

4.15LocationofNewOdisha DisasterRapidActionForcewithcontactdetails

Odisha Disaster Rapid Action Force (ODRAF)

The Government of Odisha formed Odisha DisasterRapidAction Force (ODRAF) vide notification no.939/CD dated 07.06.2001. ODRAF is a multi-disciplinary, multi-skilled, high- tech force for all types of disasters. ODRAF aims at reducing casualties, clearance of communication channels, quick deployment of personnel and equipments and minimize expenditure and time lag and support institutional arrangement. In 3 phases, ten units of ODRAF have been set up. The ODRAF units are strategically located throughout Odisha. Locations of these units are identified on the basis of vulnerability profile to cut down the response time for their deployment.The ODRAF Units do not have any geographical/territorial restrictions in terms of area of operation.

10 new units of ODRAF have been set up at different locations like Sambalur, Boudh, Kalahandi, Nawarangpur, Gajapati, Berhampur, Puri, Khorda, Kendrapada and Jajpur

Table-4.4-Location of Odisha Disaster Rapid Action Force with contact details

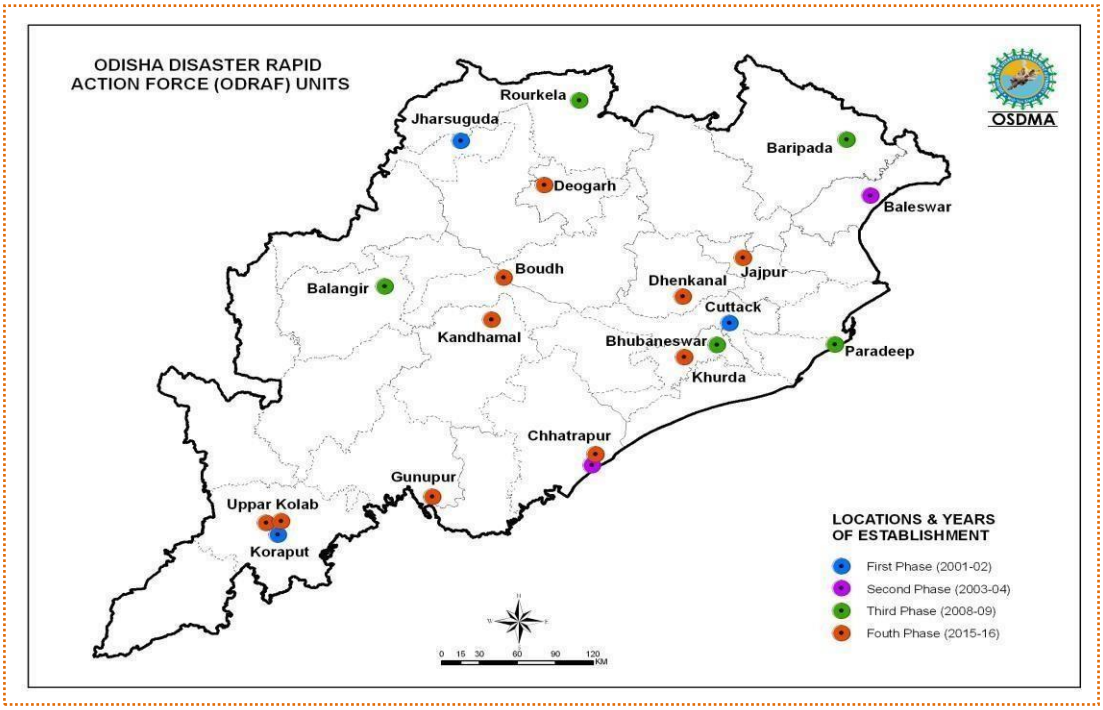
Sl. No.	ODRAFBn.	Raised in the Year	Location (District)	No. of Persons in each BN.	ContactDetails (Commandant)
1	OSAP6th Battalion, Cuttack	2001-2002	Cuttack	49	Phone:0671-2442148(O), 2442442(R) Fax:0671-2442148 comdt6thbn.odpol@nic.in
2	OSAP2nd Battalion, Jharsuguda	2001-2002	Jharsuguda	48	Phone:06645-270096(O),270038(R) Fax:06654-220370 comdt2ndbn.odpol@nic.in
3	OSAP3rd Bn. Koraput	2001-2002	Koraput	38	Phone:06852-251344 (O), 151335(R) Fax:06852-251344 comdt3rdbn.odpol@nic.in
4	APR Balasore District	2003-2004	Balasore	41	Phone:06782-262004(O),262005(R) Fax:06782-262584 spbls.odpol@nic.in
5	OSAP8th Battalion, Chhatrapur	2003-2004	Ganjam	40	Phone:0688-260375(O) Fax:0688-25408 comdt8thbn.odpol@nic.in

6	APR Jagatsinghpur District	2008-2009	Jagatsinghpur	48	Phone:06724-
					22085(O),220015
					(R),Fax:06724-
					220370,spjsp.odpol @nic.in
7	OSAP7th Battalion, Bhubaneswar	2008-2009	Khurdha	44	Phone:0674-
					2301055 (O),2303426 (R),Fax:0674-
					2301055
					comdt7thbn.odpol@ nic.in
8	OSAP5th Battalion, Baripada	2008-2009	Mayurbhanj	40	Phone:06792-
					278232(O),254402 (R)
					Fax:06792-278232
					comdt5thbn.odpol@ nic.in
9	APR Bolangir District	2008-2009	Balangir	43	Phone:06652-
					232020(O)-133063 (R)
					Fax:06652-
					232375
					spbgr.odpol@nic.in
10	OSAP4th Battalion, Rourkela	2008-	Sundergarh	46	Pho : 0661 - 2600980(O),-
		2009			2600434(R)
					Fax:0661-
					2600980
					comdt4thbn.odpol@ nic.in
11	IRBattalion, Boudh	2015-	Boudh	47	Phone:06841-
		2016			222238
					7684872156(M)
					9437232275(M)
					comdt5thirbn.odpol @nic.in
12	4th IR Battalion,	2015-	Deogarh	52	Phone:0664-
		2016			3242130

	Deogarh				(O),comdt4thirbn.odpol@nic.in
13	OSAP1st Battalion, Dhenkanal	2015-2016	Dhenkanal	46	Phone:06762-226229(O) 06762-226291 (CR) Fax:06762-226291 comdt1stbn.odpol@nic.in
14	OSAP8th Battalion, Chhatrapur	2015-2016	Ganjam	48	Phone:0688-260375(O) Fax:0688-25408 comdt8thbn.odpol@nic.in
15	3rd IR Battalion, Kalinganagar	2015-2016	Jajpur	49	Phone:0672-6244602(O)0672-6244610(CR) Fax:0672-6244610 comdt3rdirbn.odpol@nic.in
16	8th Special IRBattalion, Kandhamal	2015-2016	Kandhamal	43	Phone:06842-2533017 (O),8763616282 (M) comdt8thsplirbn.odpol@nic.in
17	6th IR Battalion, Khurda	2015-2016	Khurdha	50	8895856633(M) comdt6thirbn.odpol@nic.in
81	1st IR Battalion, UpperKolab, Koraput	2015-2016	Koraput	43	Phone:06852-252167(O) 06852-28320(CR) comdt1stirbn.odpol@nic.in

19	7th Special IR Battalion, UpperKolab, Koraput	2015-2016	Koraput	44	Phone:06852-251067(O): 06852-229007(CR) comdt7thsplirbn.odpol@nic.in
20	2nd IR Battalion, Rayagada, Gunupur	2015-2016	Rayagada	48	Phone:0658-72580(O),Fax: 0685-72580 (CR),comdt2ndirbn.odpol@nic.in

Map:Location of ODRAF Units



Sl. No.	Nameofthe Institutions	Name of the Chief Coordinator of the Organization	Designation	Contact Number	Alternate Contact Number	Number of Volunteers
1	Civil Defense	Shri Nagraj Devara konda, IPS	Commandant HomeGuard	06670-23381	94389-16770	
2	Home Guards					
3	National Service Scheme (NSS)		District Coordinator			
4	National CadetCrops (NCC)		Chief Commandant			
5	NehruYuva Kendra (NYK)	Prasanna Meher	District Coordinator	7978284964		
7	NGOs/VO		Coordinator, WONC			

POST WISE PRESENT STRENGTH OF OFFICERS AND MEN OF KALAHANDI DISTRICT POLICE WITH RANK

Sl.	NAMEOFTHE	INSPECTOR	SUB-	ASI	HAV/	CONSTABLE	OAPF	Home
No.	POSTs.		INSPR		HC			Guards
1.	**TownPS,Bpt.**	1	4	8	2	17	6	88
2.	SadarTOP				1	10		
3.	TrafficTownPS				2	5		
4.	**EnergyPS**			1	1	2		
5.	**SadarPS,Bpt**	1	5	6	1	12	6	55
6.	KarlapadaOP			1		4		
7.	**KegaonPS**		2	3	1	7	2	15
8.	BordaOP			1		6		
9.	**Th.RampurPS**		2	2	1	6	1	19
10.	KarlapatOP			1		3	3	
11.	MahulpatnaOP			1		2		
12.	**DharmagarhPS**	1	2	3	1	9	3	20
13.	Dh.garhTOP				1	5		
14.	**GolamundaPS**	1	1	2	1	5	3	15
15.	DaspurOP			1		4		
16.	**JunagarhPS**	1	3	2	1	10	3	49
17.	JMFCJunagarh			1		3		
18.	ChiligudaOP			1		2		
19.	**KoksaraPS**	1	1	2	1	8	3	15
20.	MoterOP			1		4		
21.	**AmpaniPS**	1	0	2	1	5	1	
22.	GotomundaOP			1		2		
23.	**JaipatnaPS**	1	3	4	1	7	2	20
24.	KutruOP		1			2		
25.	MukhigudaOP			1		4		
26.	KalampurOP			1		5		
27.	**KesingaPS**	2	3	5	1	17	3	49
28.	KesingaTOP				1	2		
29.	PalamOP			1		2		
30.	UtkelaOP			1		4		
31.	**NarlaPS**	1	2	2	1	8	3	81
32.	SikerkupaOP			1		2	2	
33.	ChhatigudaBH					2		
34.	**LanjigarhPS**	1	1	2	1	8	2	14
35.	**BijepurPS**		1	1	1	4	3	
36.	**BiswanathpurPS**	1		2		5		9
37.	**M.RampurPS**		3	4	1	5	9	20
38.	MohangiriOP		1			3	3	
39.	RisidaOP			1		3		
40.	KarlamundaOP		1			2		
41.	APR					177		
TOTAL		**13**	**36**	**66**	**22**	**393**	**58**	**406**

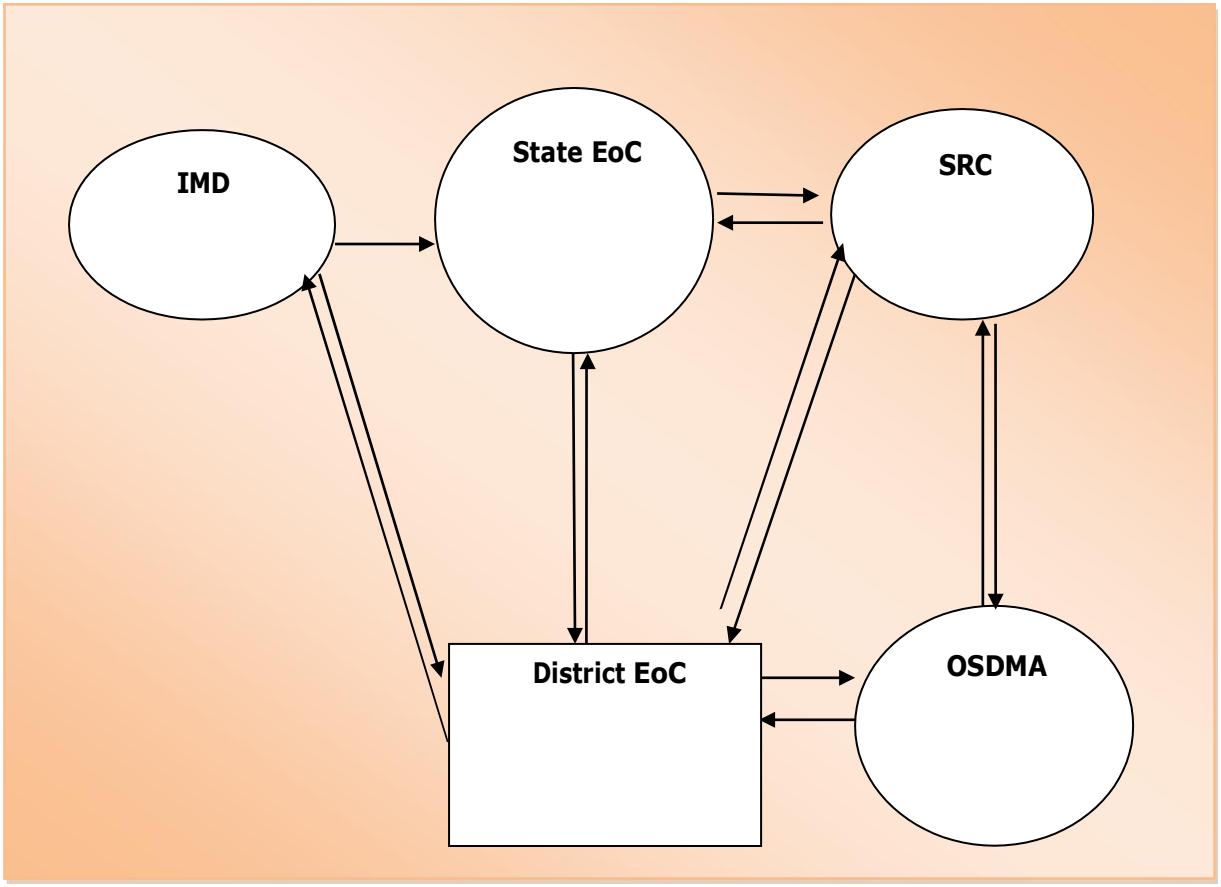
Emergency Communication System

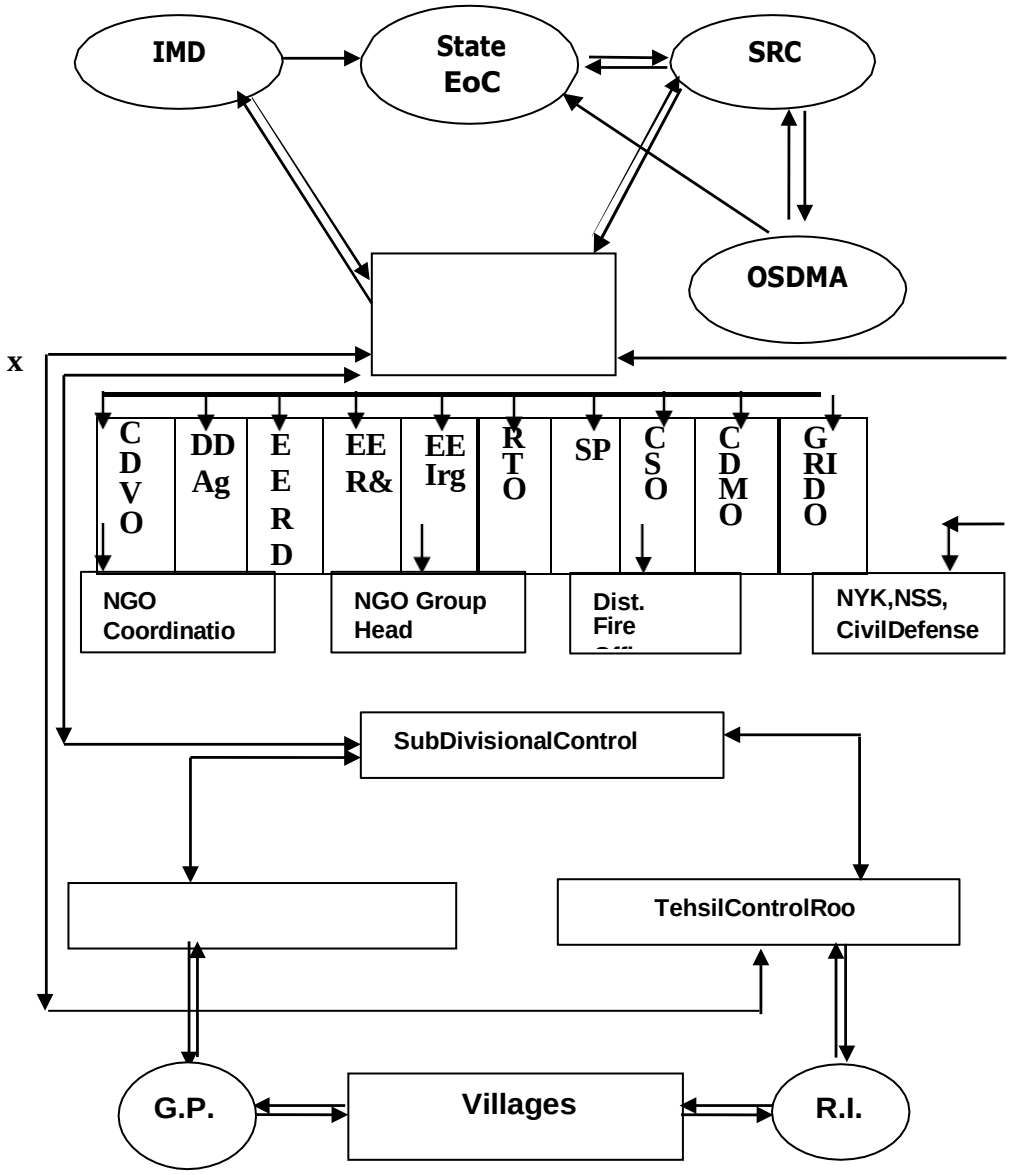
An Emergency communication system **(ECS)** is any type of system (often using computers) that lets people or groups communicate during emergencies. These systems often include many different types of technology (such as telephones and televisions), which all work together to help communicate important messages during emergencies. In Kalahandi district one Satellite Phone is their provided by OSDMA to be used during emergency situation.

State Emergency Operation Center(SEOC)

The State Emergency Operation Centre has been made operational at Rajiv Bhawan, Bhubaneswar with state of art communication net-work. The State EOC functions round the clock throughout the year. The Organisation is headed by the Special Relief Commissioner (SRC) who exercises all administrative and financial powers. He is assisted by a group of experienced officers and staff. During any natural disaster, the office functions round the clock in an emergency mode.

Figure___:Information flow chart from SEOC to Districts





Information flow chart from District Emergency Operation Center (DEoC) to Villages with early warning

4.17 Composition of the State Crisis Group

The State Crisis Group comprising of the following members in pursuanceof the Rule-6 of the chemical accident (Emergency Planning, Preparedness

andResponse)Rules,1996.

Table-4.9-Composition of State Crisis Group

Sl No.	Members	Designation
1.	Chief Secretary,Odisha	Chairman
2.	D,C-cum-A.C.S & Chairman, SPCB	Member
3..	Secretary to Government, Labour& ESI Department	Member Secretary
4.	Secretary to Government,Home Department	Member
5.	Secretary to Government,Forest & Environment Department	Member
6.	Secretary to Government,Health&FW Department	Member
7.	Secretary to Government,Industries Department	Member
8.	Secretary to Government, H&UD Department (PH Engineering)	Member
9.	Special Relief Commissioner,Odisha	Member
10.	Secretary to Government,Transport Department	Member
11.	Labour Commissioner	Member
12.	D.G.Police,Odisha	Member
13.	D.G.of Police,Fire Services	Member
14.	Director of Factories and Boilers	Member
15.	Head,NDRF,Odisha,Bhubaneswar	Member
16.	Head, Tata Steel Ltd. Kalinga Nagar	Member
17.	Head(safety),IOCL,Paradeep	Member
81.	Prof.G.K.Roy,Ex-Director and HOD (Chemical Engg.), NIT, Rourkela	Member
19.	Director,RLI,(Directorate General of Factory Advice, Kolkata,GoI	Member
20.	Regional Director, Mines Safety (DGMS, Bhubaneswar, GoI	Member

Functions of the State Crisis Group

The State Crisis Group is the apex body in the State to deal with major chemical accidents and to provide expert guidance for handling major chemical accidents. Without prejudice to the functions specified under sub- rule (1), the State Crisis Group shall,

1. Assist the State Government in managing chemical accidents at site;
2. Review all district off-site emergency plans in the State with a view to examine its adequacy in accordance with the Manufacture, Storage and Import of Hazardous Chemicals, Rules and forward a report to the Central Crisis Group once in three months;
3. Assist the State Government in the planning, preparedness and mitigation of major chemical accidents at a site in the State;
4. Continuously monitor the post-accident situation arising out of a major chemical accident inthe State and forward a report to the Central Crisis group
5. Review the progress report submitted by the District Crisis groups;
6. Respond to queries addressed to it by the District Crisis groups;
7. Publish a list of experts and officials in the State who are concerned with the management of chemical accidents.

Table-4.10-Composition of District Crisis Group

SlNo.	Member	Designation
1	Collector & DM, Kalahandi	Chairman
2	Asst.Factories & Boilers, Kalahandi	Member Secretary
3	CDM&PHO, Kalahandi	Member
4	DSP, Kalahandi	Member
5	RTO/MVI, Kalahandi	Member
6	District Labour Officer, Kalahandi	Member
7	District Emergency Officer, Kalahandi	Member
8	Chief District Agriculture Officer, Kalahandi	Member
9	Revenue Officer, Kalahandi	Member
10	District Fire Officer, Kalahandi	Member
11	Regional Officer, Pollution ControlBoard, Rayagada	Member
12	District Information Officer, Kalahandi	Member
13	M/SVedantaLtd,Lanjigarh, Kalahandi	Member

District Crisis Group

As prescribed in the Chemical Accidents (emergency planning, preparedness, and response) Rules, 1996, the District Crisis Group has to be constituted.

The District Crisis Group is the apex body in the district to deal with major chemical accidents and to provide expert guidance for handling chemical accidents. Without prejudice to the functions specified under sub-rule (1). the District Crisis Group shall, -

1. Assist in the preparation of the district off-site emergency plan;
2. Assist the district administration in the management of chemical; Continuously monitor every chemical accident;
3. Review all the on-site emergency plans prepared by the occupier of Major Accident Hazards installation for the preparation of the district off-site emergency plan;
4. Ensure continuous information flow from the district to the Central and State Crisis Group regarding accident situation and mitigation efforts;
5. Forward a report of the chemical accident within fifteen days to the State Crisis Group;
6. Conduct at least one full-scale mock-drill of a chemical accident at a site each year and forward a report of the strength and the weakness of the plan to the State Crisis Group.

4.17.3 Block Emergency Operation Center (BEOC)

Block Emergency Operation Centers operate at Block and Tahasil level work round the clock during summer and rainy season to tackle the heat waves and flood situation (June to October) at block/tehsil levelTheseemergencycentersareheaded bytheconcerned thehead of the office. BDOs are assisted by Extension Officers. Similarly Tahasildar are supported by Revenue Inspectors and other staff. Such Emergency Operation Centers follow the Standard Operating Procedure (SoP) prescribed by the Govt. from time to time

4.17.2 District EmergencyOperation Centers (DEOC)

The District Emergency Operation Centre (DEOC) is functioning at District Emergency Section Collectorate, Kalhandi. The DEOC is headed by the Collector and District Magistrate, Kalahandi. District Emergency Officer (DEO) functions as the officer - in-charge and looks after the day to day operation of DEOC under the guidance of Addl. District Magistrate, Kalahandi. DEO is assisted by a Disaster Risk Reduction Consultant (DRRC) and other ministerial staff. The helpline is under the supervision of DEO, Kalahandi. During any natural disaster it functions round the clock (24x7) for the purpose ofreceiving warnings and other information and in normal times it works in official hours from 10.00 am to 5 pm. It also receives all messages /instructions from the state control room and passes them on to the officerin -charge,who,if required, directs them further to sub-divisional control room and block control room. The control rooms at thesub divisional, block headquarters receive all information regarding any emergency situation in their respective areas fromthe DEOC and also convey any information pertaining to filed status to the DEOC and other officials /non official organizations as the case may be. All the information so collected is transmitted by the DEOC to SEOC daily through appropriate channel in the performa prescribed by the state government time to time.

Table:3 Equipments provided to DEoC and their operational status

Sl No.	Equipments	Unit	Status		Remarks
			Operational	Non-Operational	
1	Desktop Computer	04	03	1	-
2	LaserPrinter	0	0	0	-
3	UPS	04	03	1	
4	Scanner				
5	Fax				
6	InkJetPrinter	-	-	-	-
7	Multiutility Laser Printer (Printer,Scanner, copy)	04	02	02	-
8	Laptop	1	-	-	Given by OSDMA to Project officer for DRR project
10	LCD Projector	1	-	-	-
11	Photocopier	-	-	-	-
12	GPS Unit	-	-	-	-
13	Satellite Phone	01	-	01	-
14	VHFSets	-	-	-	-
15	VHFMobile Station	-	-	-	-
16	Walkie-Talkie(VHF hand Set)	-	-	-	-
17	Portable Diesel Generator	0	0	-	-
81	Inverter with Battery	01	01	-	Insufficient for power back up, need replacement
19	InflatableTower Light- ASKA	2	-	-	Need repair
20	Power Saw	1	-	-	damaged
21	Life Jacket	0	0	-	-
22	Life Buoy	4	4	-	-
23	Aluminum Ladder	-	-	-	-
24	Fire Extinguisher	-	-	-	-
25	Siren	-	-	-	-
26	Megaphone	-	-	-	-
27	Colour TV/Stand	0	0	-	-
28	Mobile Phone	-	-	-	-
29	Display Board	-	-	-	-
30	White Broad	01	01	-	-
31	Computer Table/Chair	04	04	-	-
32	Rack	01	01	-	-
33	BookCase	01	01	-	-
34	GITrunk	-	-	-	-
35	Commando Search Light	01	-	01	Out of order

Important Phone Numbers
CONTROL ROOM
District Emergency Operation Centre (DEOC)
Collectorate, Kalahandi
06670-230455 /06670-230457

Contact Details of Officials in respect of Kalahandi District

Sl. No	DESIGNATION	Name	Contact No.
1	Collector & District Magistrate, Kalahandi	Shri Pawar Sachin Prakash, IAS	9668303456
2	Superintendent of Police Kalahandi	Nagaraj Devarkonda, IPS	9818676554
3	Addl. District Magistrate Kalahandi,(Revenue)	Shri Baitura Deep, OAS(S)	9437193651
4	Addl. District Magistrate Kalahandi, (General)	Sri Tanmaya Kumar Darwan, OAS (S)	9777130279
5	Chief Development Officer-cum-Executive Officer, Zilla Parishad, Kalahandi	Shri Dayamaya Padhi, OAS (S)	8249117584
6	Project Director, DUDA, Kalahandi	Shri Munindra Honnaga	9438263721
7	Sub-Collector, Bhawanipatna	Shri Prabhat Kumar Parida,OAS	9439197710
8	Sub Collector, Dharamgarh	Shri Ajay Kumar Tirkey, OAS	9078092109
9	DFO South Division, Kalahandi	Sri Kalai Wanan, R. IFS	8778409013
10	DFO North Division, Kalahandi	Sri Ramesh Bishnoi, IFS	9769563229
11	PA ITDA, Bhawanipatna	Shri Pradyumna Kumar Dash OWS(I)	7653800356/ 8895727352
12	CDM & PHO,KALAHANDI	Dr. Kishore Kumar Prusty	9439980000
13	CCSO,KALAHANDI	Sri Pabitra Kumar Sahu	8249348940
14	CDAO,KALAHANDI	Shri Malaya Ku Parida	7008471663 9437252538(w)
15	CDVO,KALAHANDI	Shri Nirod Chandra Kanhar	9437427620
16	District Education Officer	Sri Radha Kanta Chhatri	8249279175
17	District Social Security Officer	Shri Birendra Kumar Kanhar	9439567486
18	District Culture Officer, Kalahandi	Shri Bibekanand Mahahand	9937557723
19	District Small Saving Officer,Kalahandi	Shri Bibekanand Mahahand	9937557723
20	RTO, Kalahandi	Sri Gatikrushna Samantaray	9438676974
21	Dist. Treasury Officer, Kalahandi	Smt Prajna Paramita Nayak	9777666431
22	District Panchayat Officer,Kalahandi	Sri Nrusingha Charan Pattnaik	8917228202
23	DI & PRO,KALAHANDI	Sri Haldhar Nial	9437427155
24	DIO,NIC,KALAHANDI	Sri Binaya Sutar	9950162090
25	District Sub-Registrar Kalahandi	Dipteemani Pradhan	7978418788
26	D.S.W.O,Kalahandi	Majibuu Nisha	7008902507
27	District Labour Officer,Kalahandi	Shri Jitam Majhi I/c	9348374139
28	GM DIC,KALAHANDI	D.Agrawal	7011589728
29	District Fisheries Officer	Droupadi Majhi	7008890234
30	SE RD Kalahandi	Shri Biswajit Raiguru	9437255331
31	Executive Engineer,(RD),Bhawanipatna	Shri Biswajit Raiguru	9437255331
32	Executive Engineer,(RD),Dharamgarh	Shri Kapileswar Singh	9437255329
33	Executive Engineer, (RD), Kesinga	Shri Ajit Kumar Singh	9437562291
34	SE TPWODL, Kalahandi	Sri Loknath Dash	8093086894

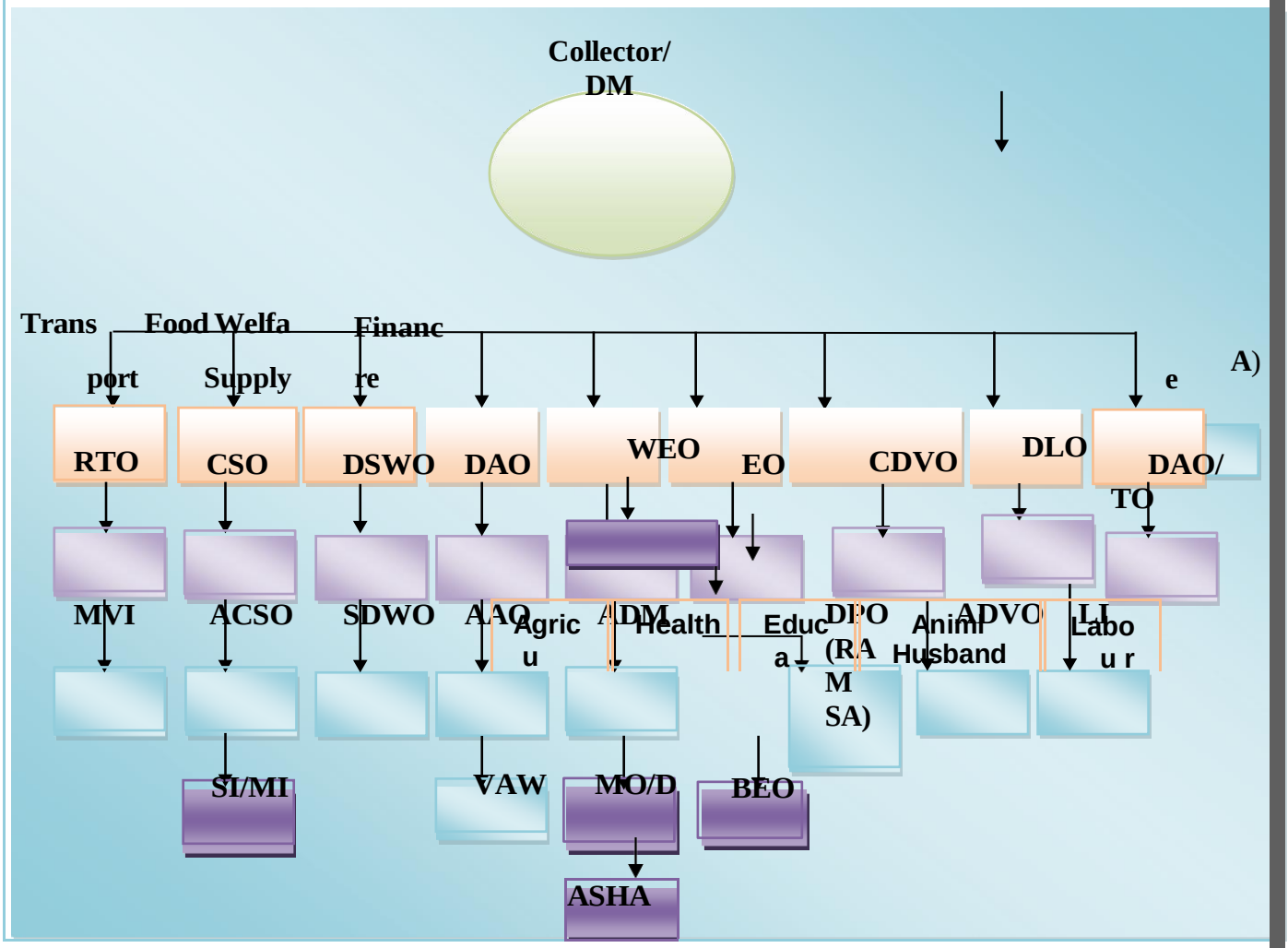
			8249984476
35	Executive Engineer, TPWODL,(KEED)	Shri Manash Ranjan Mati	9437058573
36	Executive Engineer, TPWODL, (KWED)	Sri Aryapan Siladitya Samal	9437058464
37	Superintending Engineer, Irrigation Division	Sri Harish Chandra Patel	9437076825
38	Superintending Engineer, Irrigation, SE KID	Shri Jisu Khrista Bariha	9556915388
39	Executive Engineer, R & B,Kalahandi	Sri Sibaji Pradhan	9437984316
40	Executive Engineer, MI, Division, Kalahandi	Shri Arun Shukla	9437293800
41	Superintending Engineer MI	Shri Saroj Sha	9438242425
42	SE OLIC Kalahandi	Sri G.P.S. Rao	9937181995
43	Executive Engineer, OLIC, (LI)	Mr B. Soren	9439075145
44	Superintending Engineer, RWS&S, Kalahandi	Sri Rajesh Kumar Gadanayak	7008496313
45	Executive Engineer, PHD, Bhawanipatna	Er. Biswajit Rayguru	9437232353
46	SE, PHD,Bhawanipatna	Shri Subrat Kumar Das	9439557726
47	Executive Engineer, Ret Division, Kalahandi	Elibasa Dungdung	7608932343
48	D.W.O. Kalahandi	Sri Antaryami Kanhar	8658747645
49	District Mining Officer,Kalahandi	Sri Biswanath Soren	8280737065
50	District Emergency Officer, Kalahandi	Miss Soudamini Majhi	9348865561
51	District Project Officer, OSDMA, Kalahandi	Shri Bikash Ranjan Kara	9437299746
52	NH Kesinga	Shri Tapun Mahalik	7008831620
53	ARCS, Dharamgarh	Shri A.K.Dash	7008377314
54	DRCS, Bhawanipatna	Shri Pramod Sahu	9438009394
55	PDWS,KALAHANDI	Shri Pravakar Nayak	8895297397
56	DPMU,Planning, Kalahandi	Sri Srikant Dalai	7788962635
57	Legal Metrology Bhawanipatna	Sri B.B.N Dash, Deputy Controller	8249098313 9437278141
58	Deputy Director Horticulture Kalahandi	Sri Bishnu Prasad Singh	9437229208
59	District Child Protection Unit,Kalahandi	Sri Sailendu Sekhar Mohapatra	9438090100
60	SE UILCD,Dharamgarh	Shri Akshya Kumar Bhoi	9938444778
61	Asst. Director Factory & Broiler, Kalahandi	Shri Pravin Swain	96680 59651
62	Executive Engineer, Irrigation Division	Sri Harish Chandra Patel	9438206103
63	Executive Engineer, PHD, Bhawanipatna	Sri Ananta Nayak	9437182410
64	District Development Manager Kld	Sri Maheswar Das	8009172281
65	AEE, RET CANAL DIVISON, NARLA	Sri Prasanta Kumar Parida	8249180156
66	AEE, MI SD, JAIPATNA	Shri Banti Bag	7751965573
67	Excise Superintendent , Kalahandi	Sri Ranjan Naik	9938720353
68	EO, Muncipality,Bhawanipatna	Shri Chinmaya Nayak,OAS	9668121050
69	EO,NAC,Kesinga	Shri Chinmaya Acharya,OMAS	9439394007
70	EO,NAC,Junagarh	Shri Pramod Kumar Khillo, OAS	9776050567
71	EO,NAC,Dharmagarh	Shri Chandrakanta Behera, OAS	6372726545

Contact Details of Block Development Officers and Tahasildars of Kalahandi District.

Name & Telephone Number of B.D.Os. of Kalahandi Dist.		Name & Telephone Number of Tahasildars of Kalahandi Dist.	
Bhawanipatna	Chandan Bhoi, OAS 9836533179	Kalahandi	Subhasmita Mishra, OAS 9437708345
Kesinga	Janmejaya Swain, OAS 8280167205 Sidhheswar Meher, ABDO I/c 9861755742	Kesinga	Prasanti Pradhan, OAS 7894045031
Narla	Bipin Bihari Deep, OAS 9078563058	Narla	Bibhu Prasad Singh 77519451801
Lanjigarh	Sasanka Patra, OAS 9437878480 / 8637235476	Lanjigarh	Abhisekh Bagarty, OAS 7978540291
M. Rampur	Sabyasachi Behera, OAS 7653865296	M. Rampur	Mimansa Sahoo, OAS 8260936737
Th. Rampur	Dhruba Charan Muduli, OAS 8826594068 / 9078973183	Th. Rampur	Niroj Bhatra, OAS 9437821574
Karlamunda	Debendra Kumar Samal, ABDO 7978390496	Karlamunda	Arun Barge, OAS 9668842522
Dharamgarh	Sadasiva Nayak, OAS 943772550	Dharamgarh	Kirti Chandra Pradhan, OAS 9437140626
Golamunda	Sridhar Panda ABDO I/c 8763655061	Golamunda	Chandan Nayak, OAS 7978481931
Jaipatna	Dharmaraj Majhi, OAS 9437951987 / 9078154287	Jaipatna	Raghunath Mundari, OAS 9668310803
Junagarh	Debasish Kara, OAS 9078984353	Junagarh	Surmi Soren, OAS 8763262825
Kalampur	Bijaya Ku. Madangi, OAS 9938858019	Kalampur	Smaranika Tulo, OAS 8328994402
Koksara	Dr. Himanchal Majhi, OAS 7609069939	Koksara	Kshirod Bihari Bharat Nag, OAS 8763421410

4.20 Coordination structure at the District level and down the line

Coordination structure at the District level and down the line



4.21 GO-NGO Coordination before and after disaster in the district

The National DM policy instruments detail the roles and responsibilities of stakeholders in disaster management. The institutional structure outlined inthe DM Act 2005 and the National DM policy 2009 promotes a holistic and proactive approach to disaster management, without disturbing the other mechanisms that exists inthe country. This policy has clearlyspeels out the role of NGOs, CBOs and other stakeholder as potential partners for disaster management. The reiterates the importance of contribution made by the NGOs in all phase of disaster management over the years.

Sections 30 (2) (xix) of the Act mandate the DDMA for collaboration with stakeholder agencies including NGOs for the purposeof improving the effectiveness of DM.As on date, role of NGOs/CBOs has not been explore in Kalahandi. Hence, a district level NGO Coordination Cell to be set up with the following points.

Figure 01Action Points in Go-NGO Coordination

Area	ActionPoints	Responsibility
Geographic spread of NGOs	Develop a database of NGOs at all levels working on disaster management focusing on geographic outreach and thematic capacities ofthe organisations.	DDMAs with the help of NGOs
Volume of support provided by NGOs	Compile statistics on quantum of support provided by NGOs at all levels, both international and national.	DDMA
Coordination	Establishing inter agency mechanisms for coordination and networking activities (information and knowledge management, training and capacity building, collaborative advocacy, quality and accountability) at all levels.	DDMA
Accessibility	Establish protocols for cooperation and ensure access to the affected areas with support from government agencies at respective levels like NDRF and SDRFthat have good logistics base to reach inaccessible areas.	DDMA, NGOs, CBOs
Hazard and vulnerability based planning	Conduct community centric hazard and vulnerability analysis at all levels, and Develop disaster management plans in accordingly.	DDMA, NGOs
Community participation	Ensure community participation in assessment,planning,implementation and monitoring of activities at all levels	DDMA,NGOs, CBOs

Mainstreaming of Disability Issues in DM	Support the most vulnerable groups through mitigation activities as well as disaster preparedness and response,with a particular focus on the special needs of the Persons with Disabilities (PWDs).	DDMA,NGOs)

Gender Mainstreaming	Make women's as well as men's concerns and experiences an integral dimension in the design, implementation, monitoring and evaluation of policies and programs such that inequalities between menand womenare not perpetuated through the routine operations of DM.	DDMA
onmostvulnerable ratherthanonlyon epicenter	Focus National level: Advocate with all actors to reach out to gap areas State level: Coordinate among actors to identify gap Areas District and Local level:Ensure targeting with equity and outreach to all excluded areas.	DistrictNGOTask Forces in DM)
Rural-urban diversity	Develop the capacities of NGOs or specialized civil society agencies at all levels To manage urban as well as rural disasters and accordingly make investments.	DDMAs
Adherenceto standards	National level: Develop minimum standards for India State level: Develop minimum standards for the state District and Local level: Develop capacities for adherence to minimum standards through collective and coordinated efforts of all stakeholders	DDMA,NGOs, CBOs
Transparency and accountability	Develop an agreed framework of accountability for all levels and mechanisms to bring in transparency.	DDMA
DoNoHarm	Advocacy at all levels on Do No Harm through disaster response and development interventions.	DistrictNGOTask Forces in DM
Exitstrategy	Ensure that the NGO programmes have an exit strategy to link with long term Recovery / rehab /development programs of other NGOs or the government	DistrictNGOTask Forces in DM

Role of Corporate Sector in the district relating to Disaster Management

Historically, the corporate sector has been supporting disaster relief and rehabilitation activities. However, the involvement of corporate entities in disaster risk reduction activities is not significant in Kalahandi district. PPP betweenthe Government and private sectorwould also be encouraged to leverage the strengths ofthe latter indisaster management. The DDMA would need to network with the corporate entities to strengthen and formalise their role in the DM process for ensuring safety of the communities. The role of corporate sector for awareness generation and local capacity building would is also important and efforts would be made to involve corporate sector in this effort. Besides, the media plays a critical role in information and knowledge dissemination in all phases ofDM. The versatile potential of both electronic and print media needs to be fullyutilised. Effective partnership withthe media willbe workedout in the field of community awareness, early warning and dissemination, and education regarding various disasters.The use of vernacular media would be harnessed for community education, awareness and preparedness at the local level. The DIPRO in consultation with the DDMA would take appropriate steps in this direction.

Public Private Partnership: Public & Private Emergency service facilities available in the district.

Private Ambulance Services are available in the district which operates in a Public Private Partnership mode. Five numbersofprivate firmsare operating ambulance services inthe district to provide emergence transportation services to the people at a price decided by the district administration from time to time. Details of Private Emergency Ambulance Service available in the districts are given below.

Multi Purpose Flood Shelters (MCFS) in the State

In the aftermath of the super cyclone of 1999 that ravaged the coastal Odisha OSDMA has constructed 97 Multipurpose Cyclone Shelters in 6 coastal districts. 37 havebeen constructed under World Bank assistance and 60 have been constructed out of Chief Minister's Relief Fund. 41 more are under construction out of Prime Minister's National Relief Fund.Indian Red Cross Society, Odisha Branch has also constructed 65 Multipurpose Cyclone Shelters. Thus 203 cyclone shelters are in place in various vulnerable locations in six coastal districts of the State.

Multi Purpose Flood Shelters(MFS) in Kalahandi District

Sl. No.	District	Block	GP	Village	Location	MCS/ MFS	Under Scheme
1	Kalahandi	Kalampur	Kalampur	Balichhada	Balilchhada UP School	**MFS**	CMRF(By RD dept-post Phailin)
2	Kalahandi	Jaipatna	Bandigaon	Rasdumer	100mtr away from Rasdumer Prathamika Vidyalaya	**MFS**	CMRF(By RD dept-post Phailin)
3	Kalahandi	Junagarh	Banijara	Kutengaon	School premise	**MFS**	CMRF(By RD dept-post Phailin)
4	Kalahandi	Kesinga	Belkhandi	Belkhandi	Belkhandi	**MFS**	CMRF(By RD dept-post Phailin)

Community Based Cyclone Shelter Management and Maintenance Committees (CSMMCs) have been formed under the Chairmanship of local BDO and a volunteer from the community as Secretaryand the buildings have been handed over to the concerned CSMMC for management and maintenance. LocalTahasildar, MedicalOfficer, Junior Engineer ofthe Block, RevenueInspector, Head MasteroftheSchool, ANMand AnganwadiSupervisor areEx-Officio Members of the Committee. Representatives from local NGO, from shelter and served villages, SHG and SC & ST communities are also members of the Committee. The CSMMC takes the charge of day-to-day management and maintenance of the building. Most of the buildings have been constructed in School premises so that the buildings will be used for School purposes during normal time. The CSMMC has also been authorized to put the building for economic / community uses like community house, Kalyan Mandap etc. and earn user fees. The amount so earned is kept in a joint account and as and when necessary spent for thepurposeof maintenance of the building.

COMPOSITION

The CSMMC will be constituted in a special Meeting convened by the local Sarpanch/Executive Officer in the shelter village including served villages. The CSMMC will have around 21-25 members as detailed bellow. The Sarpanch of the concerned Gram Panchayat/Executive Officer of concerned ULB will function as the **President** of the FSMMC. One representative of the vulnerable community, selected by General Body or incaseof urgency nominated bythe President, will function as the **Secretary** of the CSMMC.

Equipments provided to the Multi Pupose Shelters (MFS)

Multi Pupose Shelters have been provided with a number of shelter equipments like, First Aid Box, Free Kitchen Utensils, Inflatable Tower Lights, Aluminum Ladder, Power Saw, LifeBuoy, Life Jacket, Search Light, Stretcher, Siren, Flexi-Water Tank, Fire Extinguisher,Foldable Stretcher, Solar Lantern, Water Filter and Handheld Megaphone, etc. Most of the equipment will be used for Search & Rescue and shelter purposes. The CSMMC members and villagers have been trained on the use of equipment during disasters. A list of essential equipment status is given below:

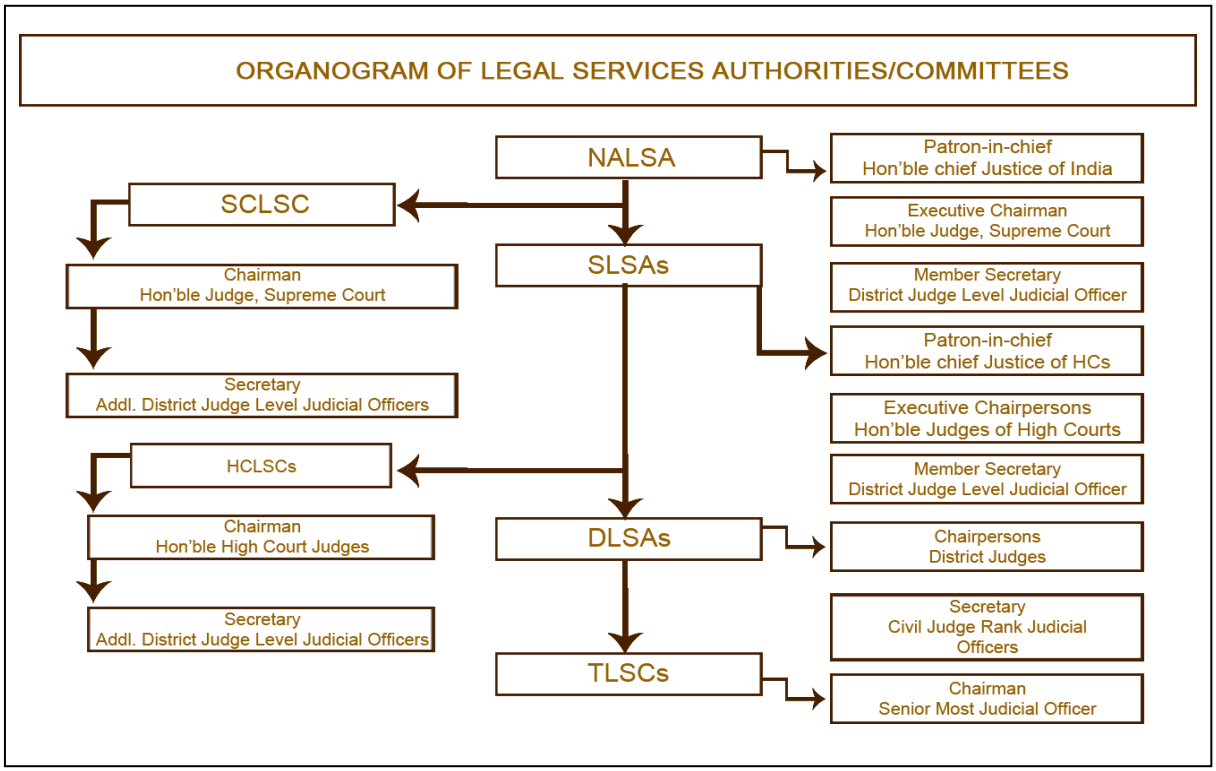
Sl. No.	Block	MFS Village	No. of Chain Saw Supplied	No of Chain Saw Defunct	No. of Inflatable tower light supplied	No. of Inflatable tower light defunct
1	Kalampur	Balichhada	2	1	2	1
2	Jaipatna	Rasdumer	2	2	2	0
3	Junagarh	Kotengaon	2	2	1	0
4	Kesinga	Belkhandi	2	2	2	1
	Total		8	7	7	2

National Legal Services Authority (NALSA):

The National LegalServices Authority (NALSA) has been constituted under the Legal Services Authorities Act, 1987 to provide free Legal Services to the weaker sections of the society. The Chief Justice of India is the Patron-in-Chiefand the Senior most Hon'ble Judge, Supreme Court of India is the Executive Chairman of the Authority.

Public awareness, equal opportunity and deliverable justice are the corner stones on which the edifice of NALSA is based. The principal objective ofNALSA is to provide free and competent legal services to the weaker sections of the society and to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities, and to organize Lok Adalats for amicable settlement of disputes. Apart from the above mentioned, functions of NALSA include spreading legal literacy and awareness, undertaking social justice litigations etc.

With the aim of reaching out to the diverse milieu of people belonging to different socio-economic, cultural and political backgrounds, NALSA identifies specific categories of the marginalized and excluded groups from the diverse populace of the country and formulates various schemes for the implementation ofpreventive and strategic legal service programmes to be undertaken and implemented by the Legal Services Authorities at the various levels. In carrying out all these responsibilities, NALSA works in close coordination with the various State Legal Services Authorities, District Legal Services Authorities and other agencies for a regular exchange of relevant information, monitoring and updating on the implementation and progress of the various schemes in vogue and fostering a strategic and coordinated approach to ensure smooth and streamlined functioning of the various agencies and stakeholders.



- **Objectives of Legal Services Authorities:**
  - Provide free legal aid and advice.
  - Spread legal awareness.
  - Organise lok adalats.
  - Promote settlements of disputes through Alternative Dispute Resolution (ADR) Mechanisms. Various kinds of ADR mechanisms are Arbitration, Conciliation, Judicial settlement including settlement through Lok Adalat, or Mediation.
  - Provide compensation to victims of crime.

Odisha State Legal Services Authority (SALSA):

Odisha State Legal Services Authority is a Statutory Body established under the Legal Services Authorities Act, 1987. Hon'ble Chief Justice of High Court of Odisha is the Patron-in-Chief of the Odisha Legal Services Authority and the Sr. Judge of the High Court of Odisha is the Executive Chairman of the Odisha Legal Services Authority.To look after the legal services pertaining tothe HighCourt,there is HighCourtLegalServices Committee, which is chaired by a sitting Judge of the High Court and the Registrar (Judicial), Odisha High Court is functioning as the Secretary of High Court Legal Services Committee. The State Legal Services Authority monitors and guides the District Legal Services Authorities and Taluk Legal Services Committees in achieving the aims and objectives of the Act. There are 30DistrictLegal Services Authorities inthe StateofOdisha and 81Taluk LegalServices Committees functioning under them. The District Legal Services Authorities are headed by District & Sessions Judges. An officer in the cadre of Senior Civil Judge functions as the Secretary of the District Legal Services Authority. The Taluk Legal Services Committees are headed by the senior most judicial officer posted at the station as the Chairman.

The generalpublic who need any legal help / legal aid can directly contact he concerned Taluk Legal Services Committee / District Legal Services Authority, the High Court Legal Services Committee and the State Legal Services Authority, as the case may be, for their legal needs.Added to it, Front Offices have also been established in the premises ofthe District Legal Services Authority and Taluk Legal Services Committee manned by advocate retainers to offer legal advice to the beneficiaries and the general public as well and also to assist them in different Legal Services Activities.

The State Legal Services Authority has 15 Members which include the Hon'ble Chairman of High Court Legal Services Committee, Principal Secretaries in the Depts. of Law and Finance, Director-General and Inspector-General of Police, Advocate General, District Judges of Cuttack and Khurda at Bhubaneswar. Apart from that the State Authority has 5 nominated Members namelyHon'ble Minister, Law, Odisha, a Senior AdvocateofOdisha High Court, an M.P., an M.L.A., and an eminent social worker who have experience in the field of Law, Finance, Social Service or Administration and who are engaged in the upliftment of the weaker sections of the society, including Schedule Castes, Schedule Tribes, Women, Children, rural and Urban Labour and who are interested in the implementation of the Legal Service Schemes.

- **District Level:** District Legal Services Authority. The District Judge of the District is its ex-officio Chairman.
- **Taluka/Sub-Division Level:** Taluka/ Sub-Divisional Legal Services Committee. It is headed by a senior Civil Judge.

Objective is to provide free legal services to :-

- Women and children
- Members of SC/ST
- Industrial workmen
- Victims of mass disaster, violence, flood, drought, earthquake, industrial disaster.
- Disabled persons
- Persons in custody
- Those persons who have annual income of less than the amount prescribed by the respective State Government, if the case is before any court other than the Supreme Court, and less than Rs. 5 Lakhs, if the case is before the Supreme Court.
- Victims of Trafficking in Human beings or begar.

Chapter–5

Prevention & Mitigation Measures

Ways & Means to prevent or reduce the impact of various disasters:

Structural solutions include engineered solutions such as redesigning buildings and designing physical barriers to disaster events to reduce damage. Non-structural solutions include social solutions such as early warning, evacuation planning and emergency response preparedness. It is the physical changes or act of protection from disasters orhazards. For example, structural mitigation would be when a family reinforces there home to make it more wind proof or earthquake proof. Earthquake-resistant structures are structures designed to with stand earthquakes. While no structure can be entirely immune to damage from earthquakes,the goal of earthquake-resistant construction is to erect structures that fare better during seismic activity than their conventional counterparts

Structural Measures for Drought Proofing

Uttei Irrigation Project, M.Rampur

Sl. No.	Block	Largeand Medium Irrigation Projects		MinorIrrigation Project		Lift Irrigation Point(River)		LI points (Deepbore wells)		Others	
		Units	Ayacut Area inHa.	Units	Ayacut Area in Ha.	No.	Ayacut Area Ha.	No.	Ayacut area		
1	M.Rampur	Ha	1039	-	-	-	-	-	-	-	-
2	Karlamunda	Ha	8267	-	-	-	-	-	-	-	-
			9306								

Lift Irrigation Department Kalahandi

Sl. No.	Name of Block	No.of Existing Operable L.I.Projects		Permanent Defunct L.I.Projects	
		No.	Areain Hect.	No.	Area inHect.
1	**2**	**3**	**4**	**9**	**10**
1	Bhawanipatna	152	3588	8	220
2	Kesinga	128	2934	7	140
3	Lanjigarh	70	1564	9	200
4	Th.Rampur	14	280	3	60
	TOTAL:	**364**	**8366**	**27**	**620**
5	M.Rampur	157	3856	4	100
6	Narla	156	3836	2	40
7	Karlamunda	121	2980	0	0
	TOTAL:	**434**	**10672**	**6**	**140**
8	Dharamgarh	55	1404	6	120
9	Golamunda	118	2764	4	80
10	Koksara	90	2064	0	0
11	Junagarh	156	3508	13	260
12	Jaipatna	46	1188	2	40
13	Kalampur	21	472	8	160
	TOTAL:	**486**	**11400**	**33**	**660**
	G.TOTAL:	**1284**	**30438**	**66**	**1420**

Source : EE, OLIC, Kalahandi Dt.30-06-2025

Non-Structural Measures for Drought Proofing

Its an inevitable fact that without the active participation of the community its not possible to achieve the holistic development of a society. Therefore, it is essential to encourage their participation by the continuous planning of their capacity building and awareness measures. The non-structural mitigation isbasically framed in such a way that the community will be sensitized on disaster management and their capacity will be developed to cope up with a hazardous situation. Specific plan for non-structural itigation measures for Kalahandi district has been planned.

1. **Sensitization/Awareness Campaigns:** The District administration will reach out to the local residents and different community of the district with various level sensitization programmes. Sensitizations programmes will be conducted for schools, hospitals, colleges, communitiesetc. Awareness on multi hazards and dosand don'ts to solve it are most import and basic for a human being to save him/herself. Disaster strikes every where everyone irrespective of any discremination. The basic information shall be given in forms of booklets reading materials, audio-visual material etc. The broad objectives of such programmes will be as follows:

a) To bring awareness about disasters among the inmatesofall institutions and residents of all communities.

b) To pave way for strict enforcement of building rules in construction departments and contractors.

c) Preparation of Building Evacuation Plans and training the general public on basics of self- defence thereby building capacities of school authorities and saving lives in the event of an Earthquake or Fire accidents or any other disaster.

d) To sensitize officers from the District Administration, ODRAF, Hospital, Fire Service and all other parallel agencies.

Different methods and techniques shall be utilized to spread awareness ondisaster inthe district. Some sample techniques and methods are listed below:

- Official awareness meeting
- Distribution of posters and other Information Education and Communication (IEC) materials people
- Doand Don't'do
- Street plays,documentaries and films on the subject
- Use of electronic media,especially cable channels
- Quiz, painting and debate competitions at school level

Non-structural Measures:

Sl. No.	Name of the Department/ Office	Activity/ Project	Starting Date	Date of Completion	Cost	Funding source
1	Health	Awareness on Heat waves and Endemic disease	15th April	30thApril	30,000	H&FW
2	Revenue	Awareness of officials on SDRF andNDRF norms	15th May	30thMay	Asper norms	DDMA
3	Education	Awareness of BEO son School Safety Measures	1st Sept	30thSept	30,000	DDMA
4	Agriculture	Awareness of famers on drought Preparedness and mitigation measures	1stSept	30th Sept	1,00,000	Agriculture Dept.
5	Veterinary	Awareness of officials andfarmers on Disaster Mitigation measuresin livestock sector	1stJune	15th June	2,00,000	ARD Dept.
6	Forest	Awareness onforestfire at sub-divisional level	1stJune	15thJune	150000	DDMA

Scope for integrating different schemes for Disaster Risk Reduction (DRR) Activities.

Sl.No.	Scheme	Possible activities for DRR
1	MGNREGS	Drought and Flood protection measures
2	IAY	Construction of fire proofand earth quake resistance house
3	GGY	Strengthen relief line sand drainage,restorationofpower distribution station,
4	Finance Commission Assistance	1. Building capacity in the administrative machinery for better handling of disaster risk response andfor preparation of District Disaster Management Plans(DMPs) as envisaged in the Disaster Management Act (2005). 2. Relief requirements of a severe calamity could not be met from state resources. 3. Special budgetary allocation on disaster preparedness and mitigation measures.
5	NRHM	Control of epidemics,immunization etc.
6	PMKSY	Protective irrigation to all agricultural farm andflood control measures,strength embankment of water bodies

Sl.No.	Scheme	Possible activities for DRR
7	JALNIDHI	Drought mitigation measures through creation of captive irrigation sources through shallow tube wells, bore wells, dug wells and river lift projects
8	NFSM(Rice)	1. Integration with the district plan and fixed targets for each identified pockets of the district. 2. Promotion and extension of improved technologies i.e., seed, Integrated Nutrient Management including micronutrients, soil amendments, Integrated Pest Management (IPM) and resource conservation technologies along with capacity building of farmers; 3. Supply of diesel pump sets during drought
9	RKVY	1. Preparation of agriculture plans for the districts and the States based on agro-climatic conditions, availability of technology and natural resources; 2. Development of structures for to mitigate various disaster related to agricultural, horticultural and veterinary
10	BijuKBK	Building rural infrastructure on Bijli, SadakPani (e.g., critical roads and bridges, village electrification, minor irrigation projects, tanks, watershed and afforestation.

11	MPLAD/MLALAD	Construction og Guardwall to check soil erosion
12	Western Odisha DevelopmentCouncil (WODC)	Construction critical road & communication, minor irrigation, construction of check dams, installation of LIPs, water supply schemes etc.
13	National Afforestation Programme through FDA,s	Afforestation, control & preventionofforestfireandtrench and structural measures to control soil erosion.
14	Mini kit Programme, Enrichment ofCrop residue and Departmental Fodderfarms	Promotion of perennial roots & slips forfodder development during drought.
15	Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY):/BijuGram Jyoti Yojana (BGJY)	To provide access to un-electrified villages
16	Odisha Power Sector Improvement Projects	Projects like Disaster Response Centre, Disaster Resilient Power System , District Headquarter Projects for reliable and un-interrupted power supply to the consumers during natural shocks

Activities/ Projects

- Construction of multipurpose cyclone and flood shelters.
- Removal of hoardings before specified cyclone period
- Trimming of trees and shrubs and removal of damaged and decayed parts of trees close to localities and critical infrastructure
- Public safety norms and construction sinplaces of worship and mass gathering
- Soil erosion control and river bank stabilization
- Road and High way Stabilization
- Bridge abutment stabilization
- Protection of Roads,Culverts and Bridges against flood-grass plantation
- Repair and Maintenance of Embankments against flooding and erosion. Retrofitting of vulnerable spots to prevent embankment breaches
- Cross Drainage Works:- Construction of causeways and culverts sufficient for carrying water more than historical records to prevent flash floods in down stream villages
- DrinkingWater:
    - Habitations to be covered under pipe water supply scheme
    - Water supply in scarcity are as in during summer season
    - Raising of hand pumps in flood prone areas
    - Repair/Replacement of non-functional hand pumps
- Sanitation:
    - Community Mobilization
    - Construction of Toilets
    - Municipal Waste Management

    - Sewerage System in ULBs
- Plantation: River bank plantation, AR, ANR, Hill Slope Plantation,Fodder Plantation, Agro forestry etc.
- Soil conservation works.
- Water harvesting
- Prevention of Road Accidents:
    - Putting up of signage in accident prone zones
    - Light reflectors
    - Diversion boards for roads and bridges
    - Repairof pot holes & construction of Speed breakers
- Immunization
- Preventive measures against vector borne diseases
- RiskTransfer:Crop insurance/live stock insurance
- Measures against animal depredation-Trenching/Fencing
- Awareness generation programme s on disaster prevention and mitigation
- Main streaming Disaster Risk Reduction (DRR) in development activities

Chapter–6

Climate Change Adaptation & Mitigation

Weather and climate are the results of complex interactions between anthropogenic and natural factors. Evidence of global climate change include higher average temperatures, changes in precipitation, oceanwarming, ocean acidification, sea level rise, decreasing sea ice, and changes in physical and biological systems. Observed climate change can be linked with the increase of green house gas concentrations in the atmosphere since the industrial revolution.Global surface temperature change for theend of the 21stcentury is likely to reach 4°C if no drastic mitigation actions are taken.Various sources of climate data existthat can support planning for climate change.

Greenhouse gases (GHGs) are trace gases in the atmosphere that absorb and emit long wave radiation. They naturally blanket the earth and keep it at about 33° C warmer than it would be without these gases in the atmosphere. The table features the seven most important greenhouse gases as regulated under the Kyoto Protocol. The seven gases each have a different capacity to trap heat in the atmosphere, or a so-called "*global warming potential*" (GWP). They all belong to the group of long-lived greenhouse gases (LLGHGs), because they arechemically stable and persist in the atmosphere over time scales of a decade to centuries or longer, so that their emission has a long-term influence on climate. Some of the GHGs occur naturally (e.g. CO_2, CH_4 and N_2O) but increases in their atmospheric concentrations over the last 250 years are due largely to human activities. Other greenhouse gases are entirely the resultof human activities (e.g. HFCs, PFCs, $SF_6$and NF_3).

Table:6.1

GreenhouseGas	GlobalWarmingPotential (GWP) (over 100 years)	%ofTotalAnthropogenic GHG Emissions (2010)
Carbondioxide(CO_2)	1	76%
Methane(CH_4)	25	16%
Nitrousoxide(N_2O)	298	6%
Hydrofluorocarbons(HFCs)	124-14,800	<2%
Perfluorocarbons(PFCs)	7,390-12,200	<2%
Sulphurhexafluoride(SF_6)	22,800	<2%
Nitrogentrifluoride(NF_3)	17,200	<2%

Important Green House Gases: Carbon Dioxide (Co_2)

Most important green house gas (contributes ~64% to total radiative forcing by long-lived GHGs). Half of CO_2 emitted by human activities is being absorbed in the biosphere and in the oceans. Rest remains in the atmosphere for hundreds to thousands of years

The most important anthropogenic GHG is carbon dioxide (CO_2). It accounts for around 64% of total radiative forcing due to LLGHGs. Carbon dioxide does not have a specific lifetime because it is continuously cycled between the atmosphere, oceansand land biosphere and its net removal from the atmosphere involves a range ofprocesses with different times cales.$CO_2$is primarily emitted as a result of burning of fossil fuels, deforestation and forest degradation and iron and steel production.Oceansand forestsare the main sequesters of carbon i.e. sinks that can absorb CO_2 from the atmosphere. Carbon dioxide is the gas to which all other gases are compared when speaking of Global Warming Potential. Emissions of other greenhouse gases can be converted into *CO_2 equivalent emissions.*

Table:6.2

Sl No	Name of the Industry/Plant/Firm	Location	Quantity of Co2 emission (PPM)	Ranking as per CO2 Emission (in the district)	Other major polluants emited (PPM)	Action taken for cutting down émission
1	GAYATRI AGRO OIL & FOOD PRODUCTS	PODK HAMB	NIL	NIL	NIL	NIL
2	OMFED , BHAWANIPATNA DAIRY	BHAN GABARI	NIL	NIL	NIL	NIL
3	Vedanta	Lanjigarh	NA	NA	NA	NA

Important Green House Gases: Methane (CH4)

Second most significant greenhouse gas (contributes ~81% to totalradiative forcing by long-lived GHGs). Approximately 40% of methane is emitted into the atmosphere by natural sources. About 60% comes from human activities&Stays in the atmosphere for approximately 12 years.

The second most significant anthropogenic GHG is methane (CH4)whichcontributes to approximately 81%of total radiative forcing due to LLGHGs. Approximately 40% of methane is emitted into the atmosphere by natural sources (e.g. wetlands and termites). About 60% comes from human activities (e.g. cattle breeding, rice agriculture, fossil fuel exploitation, landfills and biomass burning).Methane is mostly removed from the atmosphere by chemical reactions, persisting for about 12 years. Thus although methane is an important greenhouse gas, its effect is relatively short-lived.

Table:6.3

Sl No	Name of the Industry/ Firm/Plant	Location	Annual emission (In PPM)	Ranking as per flourinated gas Emission(PPM)
1	GAYATRI AGRO OIL &FOOD PRODUCTS	PODKHAMB	------	--------
2	OMFED, BHAWANIPATNA DAIRY	BHANGABA RI	------	--------
3	Vedanta	Lanjigarh	------	--------

Important Green house Gases: Nitrous Oxide (N2O)

The third most significant greenhouse gas (contributes ~6% to total radiative forcing by long-lived GHGs). Stays in the atmosphere for approximately 84 years. Nitrous oxide is emitted into the atmosphere from both natural (about 60%) and anthropogenic sources (approximately 40%).

Nitrous oxide is the third most significant GHG, contributing to about 6% of radiative forcing due to LLGHGs. The primary human sources of N_20 are fertilizer production anduse in agriculture and various industrial processes. It is estimated that N_20 stays in the atmosphere for anestimated 84 years. Its impacton climate, over a100-year period,is298 times greater than equal emissions of carbon dioxide. It also plays an important role in the destructionof the stratosphericozonelayer which protectsus from the harmfulultraviolet rays of the sun.

Important Greenhouse Gases: Fluorinated Gases

Global warming effect up to 23,000 times greater than carbon dioxide. Stay in the atmosphere up to 50,000 years. Three main groups: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Mainly developed as substitutes for ozone-depleting substances

Fluorinated gases are a family of man-made gases used in a range of industrial applications. Sources include refrigerants, air-conditioning, solvents, aluminium and magnesium production, etc. Many fluorinated gases have very high global warming potentials (GWPs) relative to other greenhouse gases. That means small atmospheric concentrations can have large effects on global temperatures. They can also have long atmospheric lifetimes, in some cases, lasting thousands of years. Fluorinated gases are removed from the atmosphere only when they are destroyed by sunlight in the far upper atmosphere. In general, fluorinated gases are the most potent and longest lasting type of greenhouse gases emitted by human activities. There are three main categories of fluorinated gases: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

- Hydro fluoro carbons (HFCs) are the most common group of *F-gases*. They are used in various sectors and applications, such as refrigerants in refrigeration, air-conditioning and heat pump equipment; as blowing agents for foams; as solvents; and in fire extinguishers and aerosol sprays.
- Per fluoro carbons (PFCs) are typically used in the electronics sector (for example for plasma cleaning of silicon wafers) as well as in the cosmetic and pharmaceutical industry. In the past PFCs were also used in fire extinguishers and can still be found in older fire protection systems.
- Sulphur hexa fluoride (SF6) is used mainly as an insulating gas, in high voltage switchgear and in the production of magnesium and aluminium.

Important Green House Gases: Chloro Fluoro Carbons (CFCs)

Chlorofluoro carbons (CFCs) an important Green House Gas contribute about 12% to radiative forcing by long-lived GHGs has not been included in the Kyoto Protocol because they are already regulated under the Montreal Protocol on Substances that Deplete the Ozone Layer which entered into force in 1989. The Montreal Protocol includes, for example, chlorofluorocarbons (CFCs) which contribute about 12% to total radiative forcing by LLGHGs. CFCs can stay in the atmosphere for more than 1,000 years. CFCs have a global warming potential (GWP) that ranges between 4,750 and 14,400 (over 100 years time span). CFCs are used in the manufacture of aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants.

Green House Gas Sequestration

In order to prevent dangerous anthropogenic interference with the climate system, actions need to be taken to stabilize greenhouse gas concentrations in the atmosphere. Such actions are referred to as "climate change mitigation". More specifically, climate Change mitigation involves:

- Reducing GHG emissions,e.g.by making older equipment more energy efficient;
- preventing new GHG emissions to be released in the atmosphere, e.g. by avoiding the construction of new emission-intensive factories;
- preserving and enhancing sinks and reservoirs of GHGs, e.g. by protecting natural carbon sinks like forests and oceans, or creating new sinks ("carbon sequestration").

Source:UNFCCC(2009).Fact Sheet:The Need for Mitigation

Major Green house Gases Contributors (Anthrpogenic) to Climate Change(*Table:6.7)*

Green house Gas	Human Source (Examples)	% of Total Global GHG Emissions (2010)
Carbon dioxide(CO_2)	Fossil fuel combustion, land use changes, cement production, etc	76%
Methane(CH_4)	Fossil fuel mining/distribution,livestock, rice agriculture, landfills, etc	16%
Nitrousoxide(N_2O)	Agriculture(fertilisers)and associated land use change, etc	6%
Hydro fluoro carbons (e.g. HFCs)	Liquidcoolants,etc	<2%
Perfluoro carbons (e.g.PFCs)	Refrigerant, electronics industry and aluminiumindustry,etc	<2%
Sulphurhexa fluoride (SF_6)	Insulatorinelectronicsandmagnesium industry, etc	<2%
Nitrogentri fluoride (NF_3)	Electronicsandphotovoltaicindustries,etc	<2%

Source: Reproduced from IPCC 2007,UNEP2012,and FERN

The global community has committed itself to hold warming below 2°C (compared to pre-industrial temperatures) to prevent dangerous climate change. The 2013 IPCC report on the physical science basis of climate change provides a"budget approach"to this goal, looking at total allowable CO_2emissions level to meet the 2°C target. The report states that in order to have a greater than two in three chance of keeping *global warming* below 2°C, cumulative emissions of CO_2cannot exceed 1,000 Gigatonnes of carbon (GtC). As of 208, more than half this amount, or over 500 GtC, has already been emitted since 8161-8810. When the effects of other greenhouse gases are included, even less CO_2 could be emitted to keep below a 2°C warming.

Current annual emission levels are at 9.5 GtC and are likely to grow every year due to population growth and economic development patterns. If annual emissions continue to grow as in past years("business as usual" scenario) the carbon budget will be exhausted in the next three decades.

Source: IPCC (2013).ClimateChange2013– The Physical Science Basis,Summary for Policymakers

Details of forest as a major Carbon sink (District)(*Table:6.8)*

Division	Reserved Forest / Protected Forest(inSq. KM)	Revenue / VillageForest (in Sq. KM)	Private owned Forests (inSq.KM)	Others(If any) (in Sq.KM)	Total (in Sq.KM)
North	82614.00 hact.	119.65Hact	436.00 hact.	PRF notified u/s 4 – 26364.62hact. PRF Not notifiedu/s4– 18607.60hact.	128221.87
South	45256.00 hact 17.483hact	100.00hact	414.03 hact	PRF notified u/s 4 – 22182.90hact. PRF Not notifiedu/s4– 6039.51 hact.	74009.92

Sectors with High Mitigation Potential (Table:6.9)

Sl No	Sectors	Mitigation Options
1	Energy	• Use of renewable heat and power (hydropower,solar,wind, geo thermal and bio-energy) • Improved supply and distribution efficiency • Carbon capture storage(CCS) • Combined heat and power
2	Transport	• More fuel efficient vehicles • Use of alternative energy sources (biofuels, cleaner diesel,etc.) • Betterland-use and transport planning • Shift from individual transport to public transport systems • More efficient driving practices • Non-motorized transport(cycling,walking)

3	Industry	• Process-specific technologies that improve efficiency and reduce emissions • Material recycling and substitution • Heat and power recovery/cogeneration • Control of green house gas emissions
4	Agriculture	• Manure and livestock management to reduce CH_4 emissions • Improved fertilizer application techniques to reduce N_2O emissions • Improved crop and grazing land management to increase soil carbon storage • Restoration of cultivated peaty soils and degraded lands • Agro-forestry practices
5	Forestry	• Reduced deforestation • Afforestation/ reforestation • Forest management • Tree species improvement to increase biomass productivity and carbon sequestration
6	Waste	• Land fill methane recovery • Waste incineration with energy recovery • Composting of organic waste • Controlled waste water treatment • Recycling and waste minimization • Biocovers and bio filters to optimize CH_4 oxidation

Chapater-7

Inclusive Disaster Risk Reduction

Background: A need to include Persons with Disabilities

Different populations may face similar risks of exposure to the negative effects of environmental and man-made disasters, but their actual vulnerability is dependent on their socio- economic conditions, civic and social empowerment, and access to mitigation and relief resources. Individuals with disabilities are disproportionately affected in disaster, emergency, and conflict situations due to inaccessible evacuation, response (including shelters, camps, and food distribution), and recovery efforts.

Besides psychological impact of disasters, this population does not have adequate access to food, water, shelter and health services. There has been inadequate access to their specific needs including assistive devices, rehabilitation and interpreters. Disabled populations face discrimination and exclusion and therefore are confronted with considerable challenges in accessing the same opportunities as the rest of the population in disaster situations.

Common experience reveals that persons with disabilities are more likely to be left behind or abandoned during evacuation in disasters and conflicts due to a lack of preparation and planning, as well as in accessible facilities and services and transportation systems. Most shelters and refugee camps are not accessible and people with disabilities are many times even turned away from shelters and refugees camps due to a perception that they need “complex medical” services.

Furthermore, the needs of persons with disabilities continue to be excluded over the more long-term recovery and reconstruction efforts, thus missing another opportunity to ensure that cities are accessible and inclusively resilient to future disasters. Thus it is important that the Indian Disaster management system includes the needs ofpersons with disability faced indisaster risk management.

Legal framework to support the inclusion of persons with disabilities

The United Nations Convention on the Rights of Persons with Disabilities was adopted in December 2006. The Convention marks a “paradigm shift” in attitudes and approaches to persons with disabilities. Article8 on Situations of risk and humanitarian emergencies, pays particular attention to the obligation of States parties to undertake“all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies and the occurrence of natural disasters.”Furthermore, Article 4.1, states that “States Parties undertake to ensure and promote the full realization of all human rights and fundamental freedoms for all persons with disabilities without discrimination of any kind on the basis of disability” and Article 32, recognizes the importance of international cooperation to address the limited capacities of some States to respond to situations of risk and humanitarian crises.

The Millennium Development Goals have the potential to make life better for billions of people in the world’s poorest countries. However, disability is currently not included in indicators and targets to help evaluate and monitor the achievement of the MDGs. Furthermore, persons with disabilities are often excluded from international and national poverty reduction strategies. Environmental dangers and natural disasters can lead

to the onset of many types of disabilities, and inaccessible environments prevent persons with disabilities from taking part in economic and social activities. Human and environmental recovery is vital for the achievement of MDG Goal7, "Ensure Environmental Sustainability". The MDGs cannot be achieved without the inclusion of all persons in society, including persons with disabilities.

The Rights of persons with Disabilities act (RPWDA) 2016of India and UNCPRD form the overarching legal framework which identify and protect disability rights in India. The RPWDA mandates the participation of persons with disabilities in the disaster risk management process. Inthe Act DRM is articulated in the article 8 which stipulates that persons with disabilities shall have equal protection and safety in situations of risk, armed conflict, humanitarian emergencies and natural disasters. The Act refers to the Disaster Management Act 2005 Clause (e) Section 2 for the safety and prevention of persons with disabilities

The District Disaster Management Authorities (DDMA) under Section 25 are specially mentioned to maintain the record of details of persons with disabilities in the district andinformsuch persons of any such situationsof risk so as to enhance disasterpreparedness. The authorities are to consult the state Commissioners in accordance with the accessibility requirements of Persons with Disabilities. The rights of Persons with Disabilities Act 2017 elaborate an implementable strategy specifically in accessibility of infrastructure, transport & communication technology which are important aspects in the context of disaster risk reduction

The Government of India approach to disaster management is that development cannot be sustainable unless disaster mitigation is built in to the development process. Built on this approach, the National Disaster Framework covering institutional mechanisms at the national, state & district exist where the disability related structures are also available which could be used to implement inclusive policies

Responding to the needs of persons with disabilities

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

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

Actors involved in Disability inclusive Disaster Risk Reduction (DiDRR) include Government at the different levels, national to local including cities and communities at local level, the UN System, Academic Institutions,DisabledPeople's Organizations Privateactors,ArmedForces,CivilSociety, Media, local community's Local emergency response organisations.

Data Collection

Data is essential to understanding the risks that people face during disasters and climate change situations. It is important to give effect to policies and establish norms. The Census in 208 identifies 2.68 Crore persons with disabilities constituting 2.21% of the country's population.

Policy, Institutional Mechanisms and Inclusive Standards

Policies and their implementation need to be inclusive. Odisha State Disaster Management Plans has already laid the foundation of an inclusive strategy. OSDMA has set up a cell for persons with disabilities headed by a person with disability. The cell will look into inclusion in EWS, SER, rehabilitation and resettlement. Impart training for response forces ODRAF, Red Cross, Civil Defense and community level task force volunteers. Monitoring accessibility in shelters will also be work of the cell.

The Odisha State Disaster Management Plan 2017 takes note of the vulnerability of disabled persons and the specific provision provided is related to inclusive education of children with disabilities during disasters. It also makes special mention of children with disabilities and specifically‘mentally retarded’ (Intellectual Disability).

Chapter–8

Safety of Schools and Child Care Institutions

Implementation of School Safety Policy Guidelines 2016 *(SSP-2016Guidelines)*

Order onWP(C)483/2004ofHon'ble Supreme Court

TheHon'ble Supreme Court vide orders of dated14.08.2017inWP(C)483/2004,directs vide letter no 2437/2004/SC/PIL/(WRIT) dt. 23.08.2017 that the School Safety Policy (SSP)2016 guidelines issued by NDMAare statutory in nature and shall be implemented in letter and spirit by all concerned authorities for all schools. The direction of the Supreme Court in Implementation of the School Safety Policy Guidelines Inter-alia postulates as follow:

- Time bound implementation of the Guidelines
- District Disaster Management Authority to ensure and monitor compliance of the said Guidelines
- District Education Officer of each District to be a"Nodal officer"with responsibility, liability and obligation as well as powers and functions to ensure strict compliance with the Guidelines within the district of his jurisdiction.
- Joint Monitoring Committee consisting of representations of both Department of School Education & Literacy, Ministry of HRD and NDMA
- Quarterlycompliance reports from the Chief Secretary to MHRD and NDMA on the actions taken.

Hon'ble Supreme Court has also defined few actions at different levels to ensure school safety

State&DistrictLevel	**SchoolLevel:**
• Policy for safety audits in all schools • 'Stability certificate' by Government- certified engineer. • Manual for fire safety procedures andother safety precautions • The National Building Code of India,2005,to construct fire-safe buildings. (Revised 2016)	• Schools must take appropriate safety measures and an emergency response plan that delineates staff responsibilities, communication modes, and training and updating procedures for all members of the faculty, staff and students. • Fire insurance coverage should be made mandatory for all schools. • Ensuring that the kitchen in the precincts of the school has adequate safety mechanisms.

Ref. : Fire Safety Measures in School s(Section 3.1 p-23) / Training of School Teachers & Other Staff (Section 3.1 p-25) /School Building Specifications (Section 3.1 p-27) Clearance &Certificates(Section3.1p-29)SC.***JudgementonWP(C)483/2004***

Guidelines on School Safety Policy, 2016-NDMA

The School Safety encompasses" the creation ofsafe environments for children starting from their homes to their schoolsand back." This as well includes safety from large-scale natural hazards, human made risks, pandemics, violence as well as more frequent and smaller-scale fires, transportation and other related emergencies and environmental threats that can adversely affect the lives of children.

Vision:

- The Guidelines stand for a vision of India where all children and their teachers, and other stakeholders in the school community are safe from any kind of preventable risks that may threaten their well beingduring the pursuit of education.
- Educational continuity is maintained/ resumed even in the immediate aftermath of a disaster so that Children are physically, mentally and emotionally secure within their schools.

Approach and Objectives

- All hazard approach.
- All schools; all stakeholders 2. Strengthening existing policy provisions to make schools safer
- School Safety as an indicat or of quality for continued planning, execution and monitoring
- Primary objective is to ensure the creation of safe learning environment for children.
- Alsoseek to highlight specific actions towards school safety that can be undertaken by different stake holders withinthe existingframework of delivery of education.

Applicability

- The National School SafetyPolicy Guidelines apply to all schools in the country whether government, aided or private, respective of their location in rural or urban are.as
- They apply to all stakeholders involved in delivery of education to Children in India

Allhazard approach

- School Safety efforts needs to take cognizance of all kinds of hazards that may affect the wellbeing of children.
- Hazards include structural and non-structural factors.
- Structural factors include dilapidated buildings, poorly designed structures, faulty construction, poorly maintained infrastructure, loose building elements, etc.
- Non Structural factors include loosely placed heavy objects such as almirahs, infestation of the campus by snakes and any other pests, broken or no boundary walls, uneven flooring, blocked evacuation routes, poorly designed and placed furniture that may cause accidents and injury, inadequate sanitationfacilities, etc.

Right to Education Act 2009

- The Act sets minimum norms and standards with regard to location and quality of schools and in Clause 19, lays down that no school shall be established, or recognized unless it fulfills the norms and standards specified in the schedule.
- One of the key standards is in relation to access to"all weather buildings";in"areas with difficult terrain, risk of landslides, floods, lack of roads and in general, danger for young children in the approach…the State Government/LocalAuthority shall locate the school in such a manner as "To avoid such dangers".
- The Act lays down the formation of the School Management Committee for planning of infrastructure and other requirements withrespect to operational functioning of schools.

- The School Development Plan, as laid out by the Act, spells out the physical requirements of additional infrastructure and equipments to meet the norms spelt out in the schedule (in relation to all weather buildings).

KeyActionAreas

1. **Institutional strengthening at the State & District levels**
   - Co-optingseniorofficialsoftheDepartmentofEducationinSDMAandDDMA.
   - Nomination of School Safety Focal Point Teacher& Sensitization of School Management Committee on DM.
2. **Planning for Safety**
   - Structural Measures(ncludingsiting,designanddetailingforstructuralsafety).
   - NonstructuralMeasures.
   - Preparation&implementationofSchoolDisasterManagementPlan.
   - Leveragingexistingflagshipprogrammestomakeschoolcampussafer.
3. **Capacity building for safe schools**
   - Trainingforstudentsandschoolstaff
   - Specialized training and skill building of Educationofficers, representatives of SCERT and DIET, SDMA, DDMA, etc on school safety
   - MockDrills
4. **Disaster Management in Core Curriculum**
5. **Regular monitoring of risk and revision of School Safety Plans (including Safety Audits & Availability of Emergency Equipment).**

Category & type of Schools

NameoftheBlock	GovernmentSchools				Government AidedSchools		PrivateSchools	
	Elementary		Secondary		Elementary	Secondary	Elementary	Secondary
	Rural	Urban	Rural	Urban				
BHAWANIPATNA	231		23		2	15	21	2
BHAWANIPATNA MPL		25		6	1	1	19	5
DHARAMGARH	141		9		4	8	9	5
DHARAMGARHNAC		13		2		1	9	1
GOLAMUNDA	178		8		7	12	81	4
JAIPATNA	157		14		1	9	9	3
JUNAGARH	170		22		5	8	19	4
JUNAGARHNAC		7		3		0	10	1

KALAMPUR	80		7			5	9	0
KARLAMUNDA	76		8		1	5	12	0
KESINGA	85		16		3	13	15	1
KESINGANAC		7		2		0	6	2
KOKSARA	136		12		7	8	8	1
LANJIGARH	193		20			4	2	2
M.RAMPUR	158		13		1	3	8	3
NARLA	190		14		3	15	12	0
TH.RAMPUR	160		81		0	0	3	0
DISTICT	**1985**	**52**	**817**	**13**	**35**	**86**	**819**	**34**

School Safety Advisory Committee (District) (Table8.2)

1. Date of Formation
2. Institutional Architecture

Sl No	Name& Designation	DESIGNATION IN THE COMMITTEE	Office Contact	EmailID	Mobile NO.
1	COLLECTOR AND DISTRICT MAGISTRATE,KALAHANDI	CHAIRPERSON	06670 230201	dm-Kalahandi@nic.in	9668303456
2	SUPERINTENDENT OF POLICE KALAHANDI	,CO-CHAIRPERSON	06670 23381	spkld.orpol@nic.in	9818676554 9437827618
3	Asst FIREOFFICER, KALAHANDI	MEMBER	06670 230666	bhpatnafs@gmail.com	943916368
4	DISTRICT WELFAREOFFICER , KALAHANDI	MEMBER		dwo.Kalahandi@gmail.com	9337233298
5	DISTRICTSOCIALWELFARE OFFICER,KALAHANDI	MEMBER	06670 230537	dswoKalahandi@ori.nic.in	9938197805
6	CDMO,KALAHANDI	MEMBER	06670 233761		9439980000
7	EXECUTIVEENGINEER,RWSS, KALAHANDI	MEMBER	06670 230784	eerwss-kld@nicmail.in	9437391920
8	DISTRICTEMERGENCY OFFICER,KALAHANDI	MEMBER	06670 230455	emgkld@gmail.com	9+
9	PANCHAYAT RAJ OFFICER	MEMBER	06670 233543	dpo.od-kal@nic.in	9438237123
10	PRINCIPAL,DIET,KALAHANDI	MEMBER	06670-230280		
8	B.E.O.,BHAWANIPATNA	MEMBER			9437015056
12	SRI ASHOK KUMAR PATTNAIK,KARTABYA NGO	MEMBER			9437154375
13	DISTRICT PROJECT C Ɵ ORDINATOR, SAMAGRA SHIKSHA,KALAHANDI	MEMBER	06670 232083	dpckalassa.opepa@nic.in	

14	DISTRICTEDUCATION OFFICER	NODALOFFICER ANDMEMBER CONVENOR		deoKalahandi15@gmail.com	9438335081

Details of School Safety in the district Tabl-8.3

Sl. No.	Activity	Total School	Achieved													
			BHAWANIPAT	DHARAMGAR	GOLAMUND	JAIPATNA	JUNAGARH	KALAMPUR	KARLAMUN	KESINGA	KOKSARA	LANJIGARH	M.RAMPUR	NARLA	TH.RAMPUR	TOTAL	%AGE OF Achievement
1	Schools havingSchool Safety Advisory Committee **(Number)**	2623	334	192	231	178	250	101	92	143	0	221	172	222	145	2281	86.96
2	Schools havingSchool Disaster management Plan(Number)	2623	334	192	231	178	239	101	92	143	154	221	172	222	151	2430	92.64
3	Schools having conducted Safety Audits (Structural)(Nu mber)	2623	0	192	231	178	198	101	0	50	154	221	172	105	0	1602	61.08
B.	SafetyAudits (Non-Structural) **(Number)**																
4	Schools conducted AnnualMock Drills(Number)	2623	0	192	231	0	103	0	0	0	0	0	0	0	141	667	25.43
5	Schools HavingFire Extinguisher (Number)	2623	334	192	231	105	230	89	92	169	158	145	172	222	151	2290	87.3
6	Schools Adheringto safetynorms instoring inflammable& ToxicMaterial (Number)	2623	334	192	231	178	229	101	92	169	0	221	172	222	0	2141	81.62

7	Schools confirming safety standardsas perlocal buildingbye-laws(Latest) (Number)	2623	0	192	231	178	174	101	92	169	154	221	172	222	24	1930	73.58
8	Schools havingissued Recognition certificate	2623	0	192	231	0	29	0	0	0	0	0	0	8	10	473	81.03
	undersub-Rule(4)-Rule 15 of RTE rules 2010 (onlyto schoolsthat complywith Structural safetynorms) (Number)																
9	Schoolswhere students &teachers undergo regulartraining on School Safety &Disaster Preparedness (numbers)	2623	0	0	0	0	36	0	0	0	0	0	0	0	10	46	1.75
10	Schoolswhere disaster management isbeingtaught aspartofthe curriculum (Number)	2623	334	0	0	0	231	0	0	813	88	0	0	222	145	1233	47.01

Details of ChildCare Institutions Table-8.5

Dist- Kalahandi

Ason31st March2021

Sl. No	Block /ULB	Name and Address of the Organization	Boys	Girls	Total No of Children	Name and Contactno.of the Shift-in- Charge		Fire Safety Equipment (Fire Extinguisher, Alarm)	Staff Trainingon Fire Safety Equipment	Nearby open space for evacuation	Alternative Shelter/s Identified
1	BHAWANIPATNA	Banabasi Seva Samiti, At-Dongrigud a, Po- Deypur, Ps-Bhawanip atna,Dist-Kalahandi	40	0	40	Prashant a Sahu	9776903773	Available	Yes	Yes	Yes
3	DHARAMGARH	Jasoda Anatha Ashram, At-Gambhari guda, Po-Dharmagarh, Dist-Kalahandi.	17	30	47	Ranjan Tandi	8637271048	Available	Yes	Yes	Yes
4	BHAWANIPATNA	Bal Gopal Seva Niketan, At-Kantabanji(Kesinga Road), Po/Ps-Bhawanip atna,Dist-	51	0	51	Pintu Gouda	8984673660	Available	Yes	Yes	Yes
6	BHAWANIPATNA	Nehru Seva Sangha, At-Parmanandpur, Po/Ps-Bhawanip atna,Dist-Kalahandi.	23	62	85	Ashalata Sahu	8338945540	Available	Yes	Yes	Yes

7	DHARAMGARH	Emmanuel Ministries of India At/Po/Ps-Dharmagarh, Dist-Kalahandi.	19	28	47	DhaniramTandi	9437140627	Available	Yes	Yes	Yes
8	BHAWANIPATNA	Open Shelter, managed by Nehru Seva Sangh, Bhawanipatna, At-Sambhunagarpada, Po/PsBhawanipatna, Dist-Kalahandi	6	16	22	Kailash Subudhi	8249132022	Available	Yes	Yes	Yes
9	BHAWANIPATNA	SpecializedAdoption Agency (SAA), managed by Nehru Seva Sangh, Bhawanipatna, At-Parmanandpur, Po/Ps-Bhawanipatna,Dist-Kalahandi.	2	8	10	Amaresh Jally	9778729694	Available	Yes	Yes	Yes
10	DHARAMGARH	SpecializedAdoption Agency (SAA), managed by Jasoda Anatha Ashram, At-Gambhariguda, Po-Dharmagarh, Dist-Kalahandi.	3	2	5	TumeswarBarik	9776263916	Available	Yes	Yes	Yes

Chapter-9
Chemical (Industrial) Disaster

Chemical (Industrial) Disaster:

The growth of chemical industries has led to an increase in the risk of occurrenceof incidents associated with hazardous chemicals (HAZCHEM). A chemical industry that incorporates the best principles of safety can largely prevent such incidents. Common causes for chemical accidents are deficiencies in safety management systems and human errors, or they may occur as a consequence of natural calamities or sabotage activities. Chemical accidents result in fire, explosion and/or toxic release. The nature of chemical agents and their concentration during exposure ultimately decides the toxicity and damaging effects on living organisms in the form of symptoms and signs like irreversible pain, suffering, and death. Meteorological conditions such as wind speed, wind direction, height of inversion layer, stabilityclass, etc., alsoplayan important role byaffecting the dispersion pattern of toxic gas clouds. The Bhopal Gas tragedy of 1984—the worst chemical disaster in history, where over 2000 people died due tothe accidental release of the toxic gas Methyl Isocyanate, is still fresh in our memories. Such accidents are significant in terms of injuries, pain, suffering, loss of lives, damage to property and environment. A small accident occurring at the local level may be a prior warning signal for an impending disaster. Chemical disasters, though low in frequency, have the potential to cause significant immediate or long-term damage.

A critical analysis of the lessons learnt from major chemical accidents exhibited various deficiencies. Laxity towards safety measures, no conformation to techno-legal regimes and a low level of public consultation are a few such shortcomings. The scenario called for concerted and sustained efforts for effective risk reduction strategies and capacity development under a national authority to decrease the occurrence of such incidents and lessen their impact. Although tremendous efforts have been made to minimise such accidents and to improve emergency preparedness at all levels, substantial efforts are still required to predict the occurrence of disasters, assess the damage potential, issue warnings, and totake other precautionarymeasures tomitigate their effects. Another pressing need is to properly assess the potential of chemical emergencies and develop tools for emergency planning and response to minimise the damage in case of any eventuality.

Status of Chemical Disaster Risk in India

India has witnessed the world's worst chemical (industrial) disaster "Bhopal Gas Tragedy" in the year 1984. The Bhopal Gas tragedy was most devastating chemical accident in history, where over thousands of people died due to accidental release of toxic gas Methyl Iso Cyanate (MIC).

Such accidents are significant in terms of injuries, pain, suffering, loss of lives, damage to property and environment. India continued to witness a series of chemical accidents even after Bhopal had demonstrated the vulnerability of the country. Only in last decade, 130 significant chemical accidents reported in India, which resulted into 259 deaths and 563 number of major injured.

There are about 8161 Major Accident Hazard (MAH) units, spread across 301 districts and 25 states & 3 Union Territories, in all zones of country. Besides, there are thousands of registered and hazardous factories (below MAH criteria) and un-organized sectors dealing with numerous range ofhazardous material posing serious and complex levels of disaster risks.

Safety initiatives taken in India to address chemical risk.

The comprehensive legal/ institutional framework exists in our country. A number of regulations covering the safety in transportation, liability, insurance and compensations have been enacted.

Following are the relevant provisions on chemical disaster management,prevailing in country:-

- ExplosivesAct 1814 -PetroleumAct1934
- FactoriesAct1948 -InsecticidesAct1968
- EnvironmentProtectionAct 1986 -MotorVehiclesAct1988
- PublicLiabilityInsuranceAct1991 -DisasterManagement Act 2005

Government of India has further reinforced the legal framework on chemical safety and management of chemical accidents by enacting new rules such as MSIHC Rules, EPPR Rules, SMPV Rules, CMV Rules, Gas Cylinder Rules, Hazardous Waste Rules, Dock Workers Rules and by way of amendments to them.

The NationalDisaster Management Authority (NDMA) ofIndia had come out with very specific guidelines on Chemical Disaster Management. The guidelines have been prepared to provide the directions to ministries, departments and state authorities for the preparation oftheir detailed disaster management plans. These guidelines call for a proactive, participatory, multi- disciplinary and multi-sectoral approach at various levels for chemical disaster preparedness and response. Further, NDMA has provided specific inputs to the GOM for avoidance of future chemicaldisasters in the country, along with suggested amendments onthe existing framework. NDMA is also working on revamping of CIFs (Chief Inspectorate of Factories) to strengthen chemical safety in India. In addition, the National Action Plan on Chemical Industrial Disaster Management (NAP-CIDM), has been finalized which will act as the roadmap for chemical disaster management in India.

Chemical: Do's &Dont's

Precautions to be taken during and after the Chemical (Industrial) Accidents

- Do not panic,evacuate calmly and quickly perpendicular to wind direction through the designated escape route
- Keep a wet handkerchief or piece of cloth/sari on face during evacuation
- Keep the sick,e lderly, weak, handicapped and other people who are unable to evacuate inside house and close all the doors and windows tightly.
- Donot consume the uncovered food/water etc open to theair,drinkonlyfrombottle
- Changein to fresh clothing after reaching safe place/shelter, and wish ands properly
- Inform Fire & Emergency Services, Police and medical services from safe location by calling 101, 100 and 108 respectively.
- Listen to PA (Public Addressal) System of the plant/ factory, local radio/ TV channels for advice from district administration/fire/health/police and other concerned authorities
- Provide correct and accurate information to government official.

- Inform others on occurrence of event at public gathering places (likeschool,shopping centre, theatre etc.).
- Don't pay attention to the rumours and don't spread rumours.

General Precautions During Normal Time

- Donot smoke,litfireor spark in the identified hazardous area
- Sensitize the community living near the industrial units and they should be more vigilant about the nature of industrial units and associated risks.
- Keep the contact numbers of nearest hazardous industry, fire station, police station, control room, health services and district controlroom, for emergency use.
- Avoid housing near the industries producing or processing the hazardous chemicals, if possible.
- Participate in all the capacity building programmes organized by the government/voluntary organizations / industrial units.
- Take part in preparing disaster management plan for the community and identify safe shelter along with safe and easy access routes.
- Prepare a family disaster management plan and explain it to all the family members.
- Makethe family/ neighbours aware of the basic characteristics of various poisonous/ hazardous chemicals and the first aid required to treat them.
- Adequate number of personal protective equipments needs to be made available,to deal with emergency situation.
- Prepare anemergency kit of items and essentials in the house, including medicines, documents and valuables.

Odisha is also an Industrial State and many Large, Medium and Small-Scale Industries are operating in the state. Many large industries are operating in the districts like Jagatsinghpur, Angul, Jhasrsuguda, Sambalpur and Rayagada and many medium and small industries are operating inother districts of the State. The Directorate of Factories & Boilers, Odisha works under the administrative control of Labour& ESIDepartment,Govt. of Odisha enforce the Central Acts as well as State Rules and other Rules and Regulations as mentioned below relatingto Safety and Health of the industrial workers and protection of plant, process, machineries and equipments from accidental damage. It is vested with responsibility primarily to enforce provisions under the Factories Act, 1948; the Boilers Act,1923 and certain other Acts, Rules and Regulations.

Enforcement of CentralActs/ Regulations

1. TheFactoriesAct,1948
2. TheBoilersAct,1923
3. TheIndianBoilerRegulations,1950

Enforcement of Rules under the Acts State Rules

1. The Orissa Factories Rules, 1950
2. The Orissa Factories (Control of Major Accident Hazard) Rules, 2001
3. The OrissaBoilerRules, 1971

<u>CentralRules</u>

1. The Boiler Attendants'Rules,2011
2. TheBoiler Operation Engineers'Rules,2011

The Directorate is bestowed with the added responsibility of developing Disaster Management system in Major Accident Hazard aswellas Accident-prone factories of the State . The District administration ofthe industrial district must be prepared to face any kind of Chemical (Industrial) disasters and always be prepared with the Off-site Emergency Plan of the District. The Off-site emergency plan needs to be updated on regular frequency.

Thus, it is highly essentials to take all the preparedness measures and minimize the risk of any Chemical (Industrial) disasters in the industrial districts of the State.

Hazardious Unit/ Chemical unit of Kalahandi district

Organisation Name	Type (Large/ Medium / Small/ Micro)	Manufacturing Process& Capacity	Address	Lat / Long	Site Operator Head Name	Site Operator Head Designation	SiteOperator HeadEmail	Site Operator Head Mobile Number
OMFED,BHAWANIPATNA DAIRY	SMALL	MILK&MILK PRODUCTS 30KL	AT-BHANGABARI PO-BHAWANIPATNA DIST-KALAHANDI	19.954683.15070	Dr.Saroj Kumar Sahu	Plant Manager	omfedbpatnadairy@yahoo.com	7008628365
GAYATRI AGROOIL& FOOD PRODUCTS	MEDIUM	200M.T SOLVENT 50M.T REFINERY	A/t-PODKHAMB P/o – SIROL KESINGA KALAHANDI		BRIJ KUMAR TRIPATHY	PRODUCTION INCHARGE	gayatriagrooil@gmail.com	9340752402
Vedanta, Lanjigarh	Large	2MMTPA ALLUMINAPRODUCTION WITH75MW CGPP	At-Biswanathpur, Lanjigarh, Kalahandi		MU Khan	(Head HSE)	MisbahUddin.Khan@vedanta.co.in	9662539451

Table 9.2 Hazardous Chemical Storage Details.

Organ is ation Name	Hazar dous Chem cals/ Subst ances Name	Haza rdou sChe mica ls Type (Fla mma ble/ Reac tive/ Expl osive / Toxi c)	Hazardous ChemicalsQuantity (Volumetric Capacity/ MaxQtycanbe Stored/ Inventory)	Typeof Storage (Under Ground/ Submer ed/ Onthe Ground/ Above Ground)	Type of Conta iner (Sphe rical /Box Type/ Cyli ndric al)	Typ e of Alig nme nt (Hor izont al/ Vert ical)	Hazar d Antici pated (Fire/ Explo sion/ Toxic release)	MSD S (Mate rial Safety Data Sheet) of the Chem icals	Vulne rable Zone in caseof Emer gency (Radi us in Km/ Meter)	Do wn wi nd Dis tan ce	Tota l Num be r of Peo p le in the Vuln er abili t y Zon e
OMFED, BHAWA NIPATN A DAIRY	AMM ONIA	Reacti ve	1500.00KG 300.00KG	Above Groun d	Cyli ndrical	Horizo ntal	------	YES	100 MET ER		12 NOS
GAYAT RI AGRO OIL &FOOD PRODU CTS	HEX ANE	FLAM MABL E	81KL	UNDER GROUN D	M.S CYLIN DERIC AL	------	--------	YES	------		3
Vedanta Lanjigar h	Bauxi te, Coal/ Causti csoda, Lime, Fuel oil LDO, HSD, Sulpu ric acid, Nitric Acid	FLAM MABL E/ Reactiv e	150MT,75000MT/ 10061KL/1500MT/8 00KL/90KL/85KL/1 3.55KL/10KL.	Open Yard/ Yard/ Storage Tank/ Undergr ound storage tank/ overhea d storage tank/ plastic cans	overhea d storage tank	---------- -----	Yes	Yes	500 mtr		1250

Important Capacity Building initiatives on CBRN Emergencies by NDMA

A. Equipping and training of police personnel on management of radiological emergency:

Mobile Radiation Detection System:

NDMA has carried out a project, "Mobile Radiation Detection System" under which police personnel have been equipped and trained on management of radiological emergency in public domain. Under the project, police personnel in select cities have been provided, PPEs, radiation detectors,including,vehicle mounted Go-NoGoradiation meters. A proportionate number of police personnel from all the cities, covered in the project, have been trained in batches under training of trainers programme. SoP for handling of the MRDS during routine surveillance and emergency management, hasbeen prepared and included in the training of trainers programme.

The project is expected to significantly enhance the CBRN safety status in public areas against mishandling, malicious use of radio isotopes, RDD, transport accident, orphan sources etc. It will also act as adeterrent against trafficking of any radioactive material.

B. **Basic training on CBRN Emergency Management for Airports and Sea ports:**

Staffs of major airports and sea ports have been trained on management of CBRN incidents. The initiative was taken subsequent to a few incidents in public area. NDMA conducted gap analysis of the safety practices in the ports and based on the findings training ofstaffwas initiated. The programme has been successfully completed in major airports and seaports. The initiative is being extended to additionalports.

C. Revision of DDMPs of the districts withNPPs:

The DDMPs of the seven districts, where nuclear power plants (NPP) are located are being reviewed and strengthened. A document preparation profile (DPP), giving guidelines on preparation of DDMPs of the districts with NPPs has been prepared and shared with the concerned districts.The effort will bring adequate details and uniformity in the documents.

Publication of manual on medical management of radiological emergency:

A book on medical management of nuclear and radiological emergencies was published in 2019 by NDMA, New Delhi. The manual, which has been prepared with the support of domain experts, aims to serve as a practical resource guide for management of any nuclear or radiological emergency. It also explains the roles and responsibilities of the members of the emergency medical response organizations which includes the response initiation team, the emergency medical personnel on the scene and the hospital radiological response team.

Chapter-10

Biological Disaster and Public Health in Emergencies

Biological Disaster Management & Medical Preparedness

Biological disasters, be they natural or man-made, can be prevented or mitigated by proper planning and preparedness. The primary responsibility of managing biological disasters vests with the state government. The central government would support the state in terms ofguidance, technical expertise, and with human and material logistic support to develop the policies, plans and guidelines for managing biological disasters in accordance with the national guidelines andthose laid down by SDMAs.

The H&FW would be the nodal Department for managing biological disasters in the State. Further, Home department will be the nodal for Bio-terrorism, Bio War,F&ARD Department will be the nodal department for animal health and Agriculture & Farmers Empowerment Department willbe the nodal department for agro-terrorism. Besides, the community, medicalcare, public health and veterinary professionals, etc., must also remain in complete preparedness for such eventualities.

Nodal Departments for Managing Biological Disaster

Sl No.	Bio Disaster	Nodal Department	Contactperson	Contactdetails (Office/Mobile)
1	BiologicalDisaster	H&FWDepartment	CDMO(District)	9439980000
2	BioTerrorism/War	HomeDepartment	SP	06670-233111
3	AnimalHealthDisaster	F&ARDDepartment	CDVO(District)	9437359028
4	Agro-Terrorism	A&FEDepartment	CDAO	9861061610

Legal Frame work

Stringent Legal frameworks must be drawn & enforced in order to:

- Prevention, mitigation and control of the spread of biological disaster at all level.
- Managing the prevailing and foreseeable public health concerns, threat of biologicalweapons by adversaries and cross-border issues.
- Notify the affected area,restrict movements or quarantine the affected area,enter any premises to take samples of suspected materials and seal them.
- Establish controls over biological sample transfer, biosecurity and bio safety of materials / laboratories.

Institutional & Operational Framework

SDMA will coordinate all the disasters including those of biological origin in the state. A multi- sectoral approach must be adopted involving H&FW, Home Department, PR&DW,SSEPD, F&ARD and A&FE.

- The intelligence and deterrence required& the management structure must be identified and strengthened so as to act as one crisis management structure, committees, task forces and technical expert groups preferably within the Nodal department

Crisis Management Committee

SL	Member	Dept./Instt.	ContactDetails
1	CDM&PHO, Kalahandi, Chairperson	H&FW	9439980000
2	DPHO, Kalahandi	H&FW	9439980007
3	DMO(MS), DHH,Kalahandi	H&FW	9439980001
4	CDVO, Kalahandi	Veterinary	9437427620
5	DSWO, Kalahandi	WCD	7008902507
6	DEO,Kalahandi	Education	8249279175
7	District Emergency Officer, Kalahandi	Revenue &Disaster Managemen t	9348865561
8	PA,ITDA	SC&ST	9438646593

Chapter – 11
Capacity Building Measures

10. Approach

Developing a DDMP without building capacity or raising awareness amongst stake- holders can be detrimental to the development of a successful and sustainable plan. Stakeholders and communities are critical components to a successful, long-term, sustainable disaster management plan. Capacity Building develops and strengthens skills, competencies and abilities of both Government and non–government officials and communities to achieve their desired results during and after disasters, as well as preventing hazardous events from becoming disasters.

Developing institutional capacity is very important. At the same time, by making the local community part of the process and solution would help in ensuring that disaster mitigation measures are more likely to be implemented and maintained over time.

Capacity Building of Govt. Officials, PRI Members etc.:

Sl. No.	Name of the Course/ Training Programme	Participants	Duration ofthe Training Programme	Monthof Organization	To be Organizedby	Remarks ifany
1.	Orientation training programmeon "Disaster management"	ADM,Sub-Collector,All BDOs, Tahasildars, Headofline departments, Police&Fire Dept. etc.	1day	March	DDMA/ Collector	
2	Orientation trainingon DDMP preparation.	ADM,Sub-CollectorAll BDOs, Tahasildars, Headofline departments, Police&Fire Dept.etc.	1day	March	DDMA/ Collector	
3	Orientation Programmeon Shelter management	President, Secretary & members of MFSs	1Days	March	DDMA/ Collector	In 4 batches

4	Training programmeon heatwave preparedness	AllBDOs/EE RWS &S, CDMO, CDVO, NGOs,etc.	1day	April	DDMA/ Collector	
5	Hospital Preparedness and masscausality management Including hospital Management plan	Doctors and Hospital Administrator s	1Day	April	DDMA/ Collector	
6	Orientation programmeon "FAMEX"	Principal/ Head Masters Of all Govt.& Private Institutions	1days	April	DDMA/ Collector	In10to 15 Batches
7	Sensitisation workshopon "HeatWave ActionPlan"	All DLOs/ BDOS/ Tahasildars	1day	May	DDMA/ Collector	In 2 Batches
8	Training Progamme on Treating heat Wave related Health issues	Doctors and Paramedical Staff/ ANMs/ AWWs	1day	May	DDMA/ Collector	In4to5 Batches
9	Sensitisation workshopon "HeatWave"	SHGs/AW \Ws/ASHAs/ NGOs/PRI Members	1day	May	DDMA/ Collector	Block wise/ Gram Panchaya twise
10	Training of Teachers on School safety including DM Planand conduct ofMock Drills	Principal/ Head Masters Of all Govt.& Private Institutions	1day	June	DDMA/ Collector	
11	SDRF/NDRF norms&Odisha Relief code	ADM, Sub-Collector All BDOs, Tahasildars	1day	June	DDMA/ Collector	
12	Post disaster damage assessment	DDA, DAOs, AEsof all Blocks and line dept.	1day	June	DDMA/ Collector	
13	GIS mapping of Utilities	Block Computer Programmers, Line Department MIS officials	1day	July	DDMA/ Collector	

14	Public health in emergencies- Safe drinking water and sanitation	AllBDOs, Blockand districtlevel officials of PHED/RWS &SDept.	1Day	July	DDMA/ Collector	
15	Role of PRIs and ULBs in disaster management.	Membersof ZPand ULBs, Chairman& Vice Chairmanof PS.	1day	July	DDMA/ Collector	
16	Training Programmes on Role of PRIs in disaster management	Sarapanch/PS members/War dmember	1Day	August	DDMA/ Collector	In4to5 batches
17	Search & rescue and safe evacuation.	Civil Defence Volunteers, Red cross, NSS,NYK Volunteers, NCC	1days	August	DDMA/ Collector	In4to5 Batches
18	Role of NGOs/ VOs/ CBOs in disaster management.	District and Block level NGOs/VOs Involved with district admn. indisaster management	1Day	September	DDMA/ Collector	
19	Training of ZKSS and BKSS members on basics of disaster management and creating community level awareness for dos and don'ts Related to common disasters.	ZKSS and BKS members	1day	September	DDMA/ Collector	

20	Role of Media in Disaster Management	Media Personal	1day	September	DDMA/ Collector	
21	Rain gauge Management & reading	All point person in the Block office	1Day	October	DDMA/ Collector	
22	Sensitisation workshopon“ Lightning”	SHGs/ AWWs/ ASHAs/ NGOs/PRI Members	1day	October	DDMA/ Collector	Block wise/ Gram Panchaya t wise
23	Training programmeon “Lightning Disaster management”	Civil Defence Volunteers, Red cross, NSS, NYK Volunteers, NCC,VNV	1days	November-December-January	DDMA/ Collector	In10to 15 Batches
24	Sensitization workshop on “Drought Management”	All point person in the District level &Blocklevel	1day	November	DDMA/ Collector	
25	Orientation training programmeon “Disaster management”	Civil Defence Volunteers, Red cross, NSS, NYK Volunteers, NCC,VNV	1days	February-March	DDMA/ Collector	In10to 15 Batches
26	Another round of Aapada Mitra (Volunteer) training on different aspect of disaster Management and FirstAid and Rescue for task force volunteer of shelter	Village level community level volunteer	12days	November to March	DDMA	12 batches

Disaster Management Education

(School Safety and School Disaster Preparedness)

Sl. No.	Nameofthe Programme	No. of Schools, Colleges and OtherEducationalinstitutionsto be covered during the year	TimeLine	Remarks
1	Awareness generation and mock drills for fire/ earth quake etc.	1. GovtHSJunagarh 2. Lankeswari HS Junagarh 3.DurgamadhabaHS Kalampur 4.KesingaVidyapitha, Kesinga 5.JanataHSKashrupada 6.TundlaHSTundla 7.KarlapadaHS Karlapada 8.KhageswarHS Baldiamal	From November to March	
2	Preparation of School disaster management plan	-do-	Throughout the year	Ongoing by the respective department

Community Capacity Building and Community Based Disaster Management:

Sl. No.	Block Name	No. of vulnerable villages to be Covered during 2023-24	No.of VDMC and task force member to be oriented	No. NGOs to be involved in the process	Timeline	Remarks
1	Bhawanipatna	10	150	2	July-Dec	
2	Kesinga	4	45	1	July-Dec	
3	Golamunda	4	45	3	July-Dec	
4	Kalampur	8	120	1	July-Dec	
5	Junagarh	10	150	1	July-Dec	
6	Dharmagarh	2	20	1	July-Dec	
7	Jaipatna	10	150	1	July-Dec	
8	Th.Rampur	8	100	1	July-Dec	

Capacity building of Flood Shelter Maintenance & Management Committee and Task Force members:

Sl. No.	Name of theTraining Programme	Total No. of Persons to be trained	No.of Training Programmes to Be organized	Time Line	Remarks if any
1	Orientation of CSMMC and FSMMC (Cyclone/ Flood Shelter Management & Maintenance Committee (CSMMC/FSMMC)	100	4	By Dec 2024	Completed
2	Training of task force members on Search & Rescue and First Aid	200	4	By September 2024	Completed

MFS Level Mock Drills:

Sl. No.	Type	No.ofCyclone/Flood Shelters to be covered	No.of villages to be covered.	Month/ Date
1	Flood Mock drill	4	12	19th June,2025

Chapter–12
Preparedness

Relief Lines: District to Blocks

12.Preparedness at District level:

Task	Activity
District Emergency operation Centre (DEOC)	• Test Check up of all communication Interfaces in regular interval • Proper manning of the Control Room as per Para-10 of the Odisha Relief Code • A dedicated vehicle must be earmarked for Control Room
Upward & Downward Communication	• Have a list of Nodal person with contact details • Establish regular linkages with all important stakeholders • Contact SEOC regularly
Meeting of DDMA (Heads of the department & stakeholder)	• DDMA must meet twice every year & before any disaster • Fixtime & venue for regular Preparedness meeting to Assess preparedness of District /Department /Civil Society /Block Community /Family /Individual level regularly • Circulate the minutes of the meeting with clear-cut role & responsibility
Capacity Building	• Identifying & designating Nodal Officer for different Dept. • Capacity building & skill upgradation of ODRAF/ Fire services/ Police/ Home Guard • Identify Volunteer like Civil Defense /Cyclone shelter Task Force/ NCC/ NSS/ Scout &Guide & train them on Search &Rescue, First aid, evacuation etc. • Take stake of required materials for search & rescue, first aid, casualty management, evacuation, relief etc & update IDRN portal regularly • Assess preparedness through Mock drill at District, Block& Community level
Shelter Management	• Take necessary steps for operation & maintenance of shelters • Test Check of various Equipment at shelter level&repair of the defective ones • Ensure regular meeting of Shelter committee • Assess Shelter level preparedness through Mock drilll
Planning &Reportin g	• Collect & transmit Rainfall data regularly • Collect & transmit weather report regularly • Ensure preparation of Disaster Management Plans & Safety plans at all levels • Capacity building of all Stakeholders • Integrate the District plan with block &Village disaster management Plans • Develop healthy media partnership

Preparedness at Community Level

Task	Activity
Early Warning Dissemination	• Build regular linkages with BEOC & DEOC • Test Check of various Equipment at shelter level & repair of the defective ones • Keep updates from BEOC/DEOC • Monitor&Transmit updates to BEOC • Supply required information to BEOC&DEOC
Ensuring Preparedness	• Havea list of Nodal person deployed in the village with contact details • Identification of safer routes &shelters • Identify possible ways to reach persons like Farmers/ Fisherman/ NTFP collectors etc.who ventures into fields, sea & forest respectively • Build teams from among the task force on Search & Rescue, First aid, Damage & loss assessment • Assess preparedness at Family/Individual level • Test Check-up of equipment's
Ensuring Preparedness	• Understand Local dynamics exposed &vulnerable to different disaster • Local Social Economic &weather conditions • DevelopVillage DM plan • List of emergency contactNos.& display it in Centre places. • Participate in the activities of Preparing village Disaster Management, developing Safety plans,Capacity building Programmes & Mock Drills

Preparedness at FamilyLevel

Task	Activity
Warning Communicatio n	• List the minimum Important requirements Keep all the important documents in a water proof polythene • RecordtheSafe&alternativeroutestoshelter • Keep NewsupdateinRadio/TV
Preparedness	• Always keep in readiness a "Ready to go Emergency Kit" containing Dry food (for 72hours X Family member), Drinking water (2ltr/per person per day), Hand wash/soap, Important Documents/Valuables, Whistle/match box/lighter/ torch/battery/umbrella, Mobile & charger / radio • Family must have a"Ready to go First Aid Kit"containing Iodine/ Band aids/ Cotton/ Medicines/ ORS/ ointments/ scissor/halogens etc. • Assess preparedness on a regular basis by checking Radio/ Mobile/ Emergency Kit/ First Aid Kit/ Fuels& Kerosene(as per need) • Replace the damaged outdated or expired materials with new ones.

Capacity Building	• Participate & involve in the activities of village disaster Management plan,preparation of Safety plans,participate in Capacity building Programmes & involve in Mock Drills

Preparedness at Individual Level

Task	Activity
Early Warning Dissemination	• List & keep aready to go minimum Important requirements • Record the Safe & alternative routes to shelter • Keep News update in Radio/TV
Ensuring Preparedness	• Every individual/children must have a Personal Identity information like a copy of Aadhar card/ Voter ID / School Identity Card & Contact numbers of Preferably two who can be contacted in time of emergency • Family members especially kids must be sensitized about family gathering point during disaster & crowded places • Assess preparedness on a regular basis by checking Radio/Mobile/EmergencyKit/FirstAidKit/Fuels&Kerosene (asperneed)
Capacitydevelopment	• Participate & involve in the activities of • Disaster Management • Safety plans • Capacity building Programmes • Mock Drills & FAMEX

Preparedness of Departments

Name of the Department	Normal Time
Collector/ ADM /Emergency Officer	➢ Ensure regular meetings of District Disaster Management Authority ➢ Develop & update Disaster Management Plan,carry out Hazard analysis in the district ➢ Identify safe alternate routes to cyclone shelters. ➢ Keep a list of Contacts of EoCs,Nodal officer of different departments,Important stakeholders,Village leaders,shelters ➢ List of Relief lines &storage places ➢ List & maintenance of SAR equipment ➢ Capacity building of stakeholders & volunteers ➢ Asses preparedness through Mock Drills for different disasters at district department, block & community level ➢ Adopt sustainable mitigation measures ➢ Integrate DM & DRR features in development programmes
CDMO	➢ Disaster Management Plans & Safety plans for Hospitals ➢ Capacity building of Medical & Para Medical Staffs ➢ Assess preparedness through Mock Drills & familiar exercises ➢ Integrate department plans with plans with Village & BlockPlans and development programmes ➢ Develop media partnership ➢ Develop capacity of hospitals with advance equipment, proper manning & disaster resilient infrastructures ➢ Stock piling of Life saving drugs/ ORS packets/ Halogen tablets on receipt of warning from the Collector/DCR ➢ Transmission of messages to all PHCs to stock medicines and keep the medical staff ready ➢ Disease surveillance and transmission of reports to the higher authorities on a daily basis. ➢ Vaccination. ➢ To obtainand transmit information on natural calamities from the DCR ➢ Advance inoculation programme in the flood /Cyclone prone areas. ➢ Ensuring distribution of areas of operation among the mobile team. ➢ Pre-distribution of basic medicines to the people who are likely to be affected ➢ Shifting the patients who are incritical situation to the District Hospital
Superintendent of Police (SP)	➢ Reception of Warning from the DCR ➢ Communication establishment with District and Block/ Tahasil Controlrooms and departmental offices within the division. ➢ Alertingthe APR force for deployment at the time of calamity ➢ To issue directive to police field functionaries to co-operate with Revenue Personnel in management of Relief operation.

SE-RWSS	➢ Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment. ➢ Within the affected block, all available personnel will be made available to the District Magistrate. If more personnel are required then out of station official or those on leave may be recalled. ➢ Prepare plans for water distribution to all transit and relief camps, affected villages and cattle camps and ensure proper execution of these plans. ➢ Inform people to store an emergency supply of drinking water ➢ Investigation of alternate of water and its supply. ➢ Stand by diesel pumps or generators should be installed in damage- proof buildings. ➢ A standby water supply should be available in the event of damage, saline intrusion or other pollution of the regular supply. ➢ Establish procedures for the emergency distribution of water if existing supply is disrupted. ➢ Make provisions to acquire tankers and establish other temporary means of distributing water on an emergency basis. ➢ Make provision to acquire containers and storage tanks, required for storing water on an emergency basis. ➢ Protect pump stations from waterlogging. ➢ Repair sewage lines where damage is detected. ➢ Repair water pipelines wherever damaged.
SE-Irrigation	➢ Check the wireless network and ensure that all the flood stations are connected. ➢ Establish mechanisms for exchange of information with irrigation divisions ➢ Inspect all the Bundhs, and check their height and slope. ➢ Check the top of the Bundhs, and if they have been cleared of encumbrances / encroachments and if they are motorable

	➢ Check the drainage system of the Bundhs and ensure that the seepage and rat holes, etc. have been closed. ➢ Check that all the materials required for protecting Bundhs have been stored at different places, and a list of these places has been furnished to the district administration ➢ Check that the Junior engineers and other staff have been assigned their beats, and all the ➢ Arrangements for continuous vigilance over these Bundhs have been made. ➢ Check that all raingauge stations are functional, and arrangements have been made to report the readings. ➢ Check the regulators and siphons.Check that they have been repaired and cleaned, increasing the flow of water. ➢ Check all the anti-erosion works, necessary to maintain the Bundhs.
CDAO	➢ Review and update precautionary measures and procedures. ➢ Check available stocks of equipments and materials which are likely to be most needed during and after flood/ disaster. ➢ Stock agricultural equipments which may be required during and after flood. ➢ Determine what damage,pests or disease may be expected,and what drugs and other ➢ Insecticide items will be required,in addition to requirements of setting up extension teams for crop protection, and accordingly ensure that extra supplies and materials, be obtained quickly. ➢ All valuable equipments and instruments should be packed in protective coverings and stored in room the most damage- proof. ➢ Ensure that certified seeds of required varieties are available in adequate quantities. ➢ Develop a pest and disease monitoring system so that timely steps can be taken to reduce damage to corps. ➢ A pests and disease monitoring system should be developed to ensure that a full picture or risks is maintained. ➢ Plan for emergency accommodations for agriculture staff from outside the area. ➢ Extension Officers should be unplugged when flood/disaster warning is received.
SE-RuralWorks	➢ Govt.buildings should be inspected and necessary repairs to be got executed to with standing hazards affected. ➢ Script for slides, pamphlets and cultural programmers should be got prepared immediately. ➢ Arrangements should be made to obtain poster and films by addressing the Director through the Collectors. ➢ Public addresses equipment should be obtain kept ready. ➢ The community Radio sets available in the coastal villages should be ascertained ➢ The namesof Hamlets where they are not available to be reported. ➢ The public should be fully educated regarding the precautionary measures & after cyclone through available

	➢ The field staff should proceed to the place of work allotted and be ready to attend to cyclone duty
SE-PublicWorks	➢ All personnel required for disaster management should work under the overall supervision and guidance of DM. ➢ Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment. ➢ Vehicles should be inspected, fuel tanks filled and batteries and electrical wiring covered as necessary. ➢ Extra transport vehicles should be dispatched from head quarters and stationed at safe strategic spots along routes likely to be affected. ➢ Heavy equipments such as front-end loaders should be moved to areas likelyto be damaged and secured in a safeplace. ➢ Clean the area beneath bridges regularly for smooth flow of water excess. ➢ Maintain all the high ways and access roads, which are critical from the point of view of supplying relief. ➢ Inspect all buildings and structures of the state government (including hospital buildings.) by a senior engineer and identify structures which are endangered by the impending disaster. ➢ The designation of routes strategic to evacuation and relief should be identified and marked, in close coordination with police and District Control Room ➢ Establish a priority listing of roads which will be opened first. Among the most important are the roads to hospitals and main trunk routes ➢ Work under construction should be secured with ropes, sand bags and covered with tarpaulins if necessary. ➢ Construct/ reinforce the connecting roads from villages to roads, canals and Bundhs and raise their level so that people can access the high ground. ➢ Inspection of old buildings and suggesting retrofitting of weak buildings/ demolition of dangerous structures and evacuation of population. ➢ Carry out route opening by removing debris on the road. ➢ Begin clearing roads. Assemble casual labourers to work with experienced staff and divide them into work gangs.
DTO-Telecom	➢ Assess the different disaster scenarios and match the communications needs with the available resources. ➢ Ensure that TSPs (private and public) invest in preventive measures that will ensure maximum robustness and preparedness of the telecom networks during emergencies. ➢ Ensure that TSPs (private and public) develop detailed emergency plans for management of resources under their responsibility.
	media. ➢ Specific duties should be assigned to the field staff.

	➢ Conduct annual reviews of the ETP/SOP-Organize annual symposium on tele communications availability during emergency. – ➢ Update the communications plan according to development and innovations in emergency telecommunications systems. ➢ Disseminate information among the Public and the district administration on the availability of telecom services and equipment's for use during emergencies.
CDVO	➢ Call for emergency meeting to take stock of the situation. Develop a strategy and objectives. Review and update precautionary measures and procedure and review with staff the precautions that have been taken to protect equipments. ➢ Prepare a list of water borne diseases that are preventable by vaccination. ➢ Publicize the information about common diseases afflicting livestock and the precautions that need to be taken. ➢ Assist the Revenue Department in preparing plans for cattle campus and cattle feeding centers. ➢ Stock emergency medical equipments which may be required during and post disaster surgical packs should be assembled and sterilized. ➢ Enough stock of surgical packs should be sterilized to last for four to five days. ➢ The sterilized surgical packs must be stored in protective cabinets to ensure that they do not get wet.Covering thestockwithpolythene is recommended as an added safety measure. ➢ All valuable equipments and instruments should be packed in protective coverings and stored in room the most damage- proof. ➢ All electrical equipments should be unplugged when disaster warning is received. ➢ Organize vaccination campaigns in disaster prone villages before, during and after the disaster. ➢ Prepare kitsfor veterinary diseases, which could be provided to veterinary doctors at the block level and extension officers at the village level. Kits can also be provided to the private veterinary doctors. ➢ Arrange for emergency supplies of anesthetic drugs. ➢ Check stocks of equipments and drugs which are likelyto be most needed during and after disaster. ➢ Fill department vehicles with fuel and park them in a protected area. ➢ Fill hospital water storage tanks and encourage water savings.If no storage thanks exists water for drinking should be drawn in clean containers and protected. ➢ Prepare an area of the hospital for receiving large number of live stock. ➢ Develop emergency admission procedures (with adequate record keeping). ➢ Establish cattle camps and additional veterinary aid centre sat affected sites and designate an Officer In-charge for the camp. ➢ Estimate the requirement of water, fodder and animal feed, for cattle camps and organize the same. ➢ Ensure that adequate sanitary conditions through cleaning operations are maintained in order to avoid outbreak of any epidemic. ➢ An injury and disease monitoring system should be developed,to ensure that a full picture of risk is maintained. ➢ Plan for emergency accommodations for veterinary staff from outside the area.

RTO/MVI	➢ Prepare a list of vehicles- trucks, buses, jeeps, tractors, etc of government and private agencies in the district and provide the list to the District control room. ➢ Provide requires vans and ambulances for mobile health and animal husbandry teams. ➢ Provide trucks,buses, jeeps,tractors,etc for evacuation and supply chain management ➢ Issue standing instructions to the State transport department for providing buses for evacuation and relief. ➢ Recall important functionaries from leave; communicate to the staff to man their places of duties like the ward and divisional offices and respective departments. ➢ Call for emergency meeting to take stock of the situation. Develop a strategy and objectives.
DFO	➢ Develop and quarterly update the disaster management plan that includes the ContingencyAction Plan for the Department based on HVRC analysis with the active involvement of all concerned line departments and local bodies in the district ➢ Make personnel available to the District Magistrate, within the affected block, If more personnel are required, recall those on leave. ➢ Identify areas that could be opened or made available for grazing or fodder collection in case of disaster ➢ Ensure that adequate supply of small poles or bamboo is available for reconstruction of houses of the affected people, as well as wood for cremation of dead. ➢ Ensure plantation to the maximum possible extent.
Railway	➢ Identification of flood prone areas, RAT, RAW and information prone to erosion/ breaches and marking them on railways system map. ➢ Development of Flood Shelters for staff and passenger at suitable locations in the areas prone to repeated floods ➢ Study of changed water catchment area due to construction of highways, Dams. ➢ Study of changed rainy season month on a particular region. ➢ ActionPlan for Alignment, Location,Design and Provision of Water way on Railways Embankments
	➢ Inspections of Railway Affecting Works – to best reamlined and timely ensured. ➢ Review of water ways for adequacy and alignment and measures to modify, if needed. ➢ Status Note on the lessons learnt from the previous flood situations in the past 5 years. ➢ Bye-laws for buildings in flood plains. ➢ Making existing and new buildings and infrastructure capable of withstanding fury of floods.

SE-TPWODL	➢ Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment. ➢ Ensure that the Power Supply department to make alternate arrangements of emergency supply for the major offices from time of receipt of districts ➢ Check emergency tool kits, assembling any additional equipment needed. ➢ After receiving alert warning, immediately undertake following inspection of High tension lines,Towers,Sub-stations,Transformers, Insulators, Poles and other equipments ➢ Instruct district staff to disconnect the main electricity supply for the affected area. ➢ Protect Power Stations from disaster. Raise the height of compound walls. Arrange gunny bags.Install pump sets for draining water in case of Flood/ Cyclone/ Tsunami, etc. ➢ Provide information to the people about the state of power supply.It is one of the most important sources of information. Establish temporary electric supplies to other key public facilities, public water systemetc.to support emergency relief. ➢ Establish temporary electric supplies to transit camps feeding centres, relief camps and Site Operation Centre, District EOC and on access roads to the same. ➢ Establish temporary electric supplies for staging area. ➢ Compile an itemized assessment of damage, from reports made by various electrical receiving centres and sub-centres.
EE–PHED	➢ FormationofDisasterManagement Celland manningwithsenior personnel drawn from key sections of the dept. ➢ Formulation of Public Health Engineering related programme and activities by intonating them with hazard specificpreventive and mitigation measures. ➢ Creationofstocksofinstallationmaterialsatthedistrict levelforuse in emergencies. ➢ Orientationandtrainingofateamoftechnicianstodo installationas quickly as possible. ➢ Strategizingtheinstallationofhand-pumpsetc.withhazardprofileof the area in mind. ➢ Inconsultationwith theDepartmentof EducationandDMD, provisionof additional sanitationanddrinkingwater

	Facilities in schools and relief shelters where people take shelter during flood. ➢ In consultation with the Department of Disaster Management making special arrangements for the supply of drinking water in drought prone areas. ➢ Planning for repair and maintenance of the facilities created as a part of the programme and activities. ➢ Keeping a track of ground water level and having a fresh look at the facilities created accordingly. ➢ Organizing interaction with Gram Panchayats for having proper sanitation facilities, and providing them support and guidance in planning, implementation and maintenance of the same. ➢ Procurement, upkeep and maintenance of sanitation equipment for use in emergencies.
DPS,SSA-School &Mass Education/ DEO - Higher Secondary Education	➢ Formation of Disaster Management Cell and manning the same by senior personnel drawn from key Directorates. ➢ Incorporating costs for preventive and mitigation measures for earthquake, flood, fire and cyclonic storm prone areas to construct disaster resistant school buildings. ➢ In association with Fire Dept. getting fire extinguishers installed in schools and teachers identified and trained in operating them. ➢ Awareness Generation Programmes about Hazard, the kind of preparedness required and how to act at the time of disaster shall be organized in schools on monthly basis. ➢ Disaster Management shall be made a part of the school curriculum. ➢ The Department shall get quality films made on hazard wise disaster preparedness and organize their viewing by children and their parents. ➢ The Department shall in association with NehruYuva Kendra organize locality based youth clubs and get them groomed in escort services, relief work and taking care of children, women, old and sick. ➢ Making adequate arrangements for getting hand pumps installed, storage facilities created, toilet and bathrooms built in those schools where communities do take shelter during flood. Concerned departments shall either make the arrangements or make funds available for the same.
BDO/Tahasildar	➢ Providing authentic information required by the DCR ➢ Preparing a record of previous disasters in the locality and analyzing the effects ➢ Preparing hazard maps of the Block./Tahasil & the GPs inminute details ➢ Mapping the cut off areas with alternate route map. ➢ Identification of shelter places in the maps ➢ Keeping a List of storage Points & facilities available, dealers of food stuffs. ➢ Keepinga list ofvulnerable people and area and weak points on embankments (if applicable)

	➢ Creating a Control Room at the respective level and assignment of duties to the staff. ➢ Pre-positioning of staff for site operation centers. ➢ Uninterrupted communication with the DCR ➢ Arrangement of alternative communication/generator sets,etc ➢ Formation of GP/village level disaster committees and task forces ➢ Arrangement of boats on hire available locally. ➢ Deployment of Boat in the most vulnerable areas. ➢ Organizing awareness camps at GP/village levels ➢ Dissemination of Warning: ➢ Crosscheckingwiththe DCRfortheauthenticityofthe warnings ➢ Arrangement or requisition of Jeeps/Trekkers/AutoRickshaw to disseminate received warning information's to the population of vulnerable /weak places ➢ Dissemination of warning/coordination with District control room. ➢ Warning the people about probable affected areas ➢ Mobilizing the people to leave for identified shelters with their domestic animals and personnel belongings.

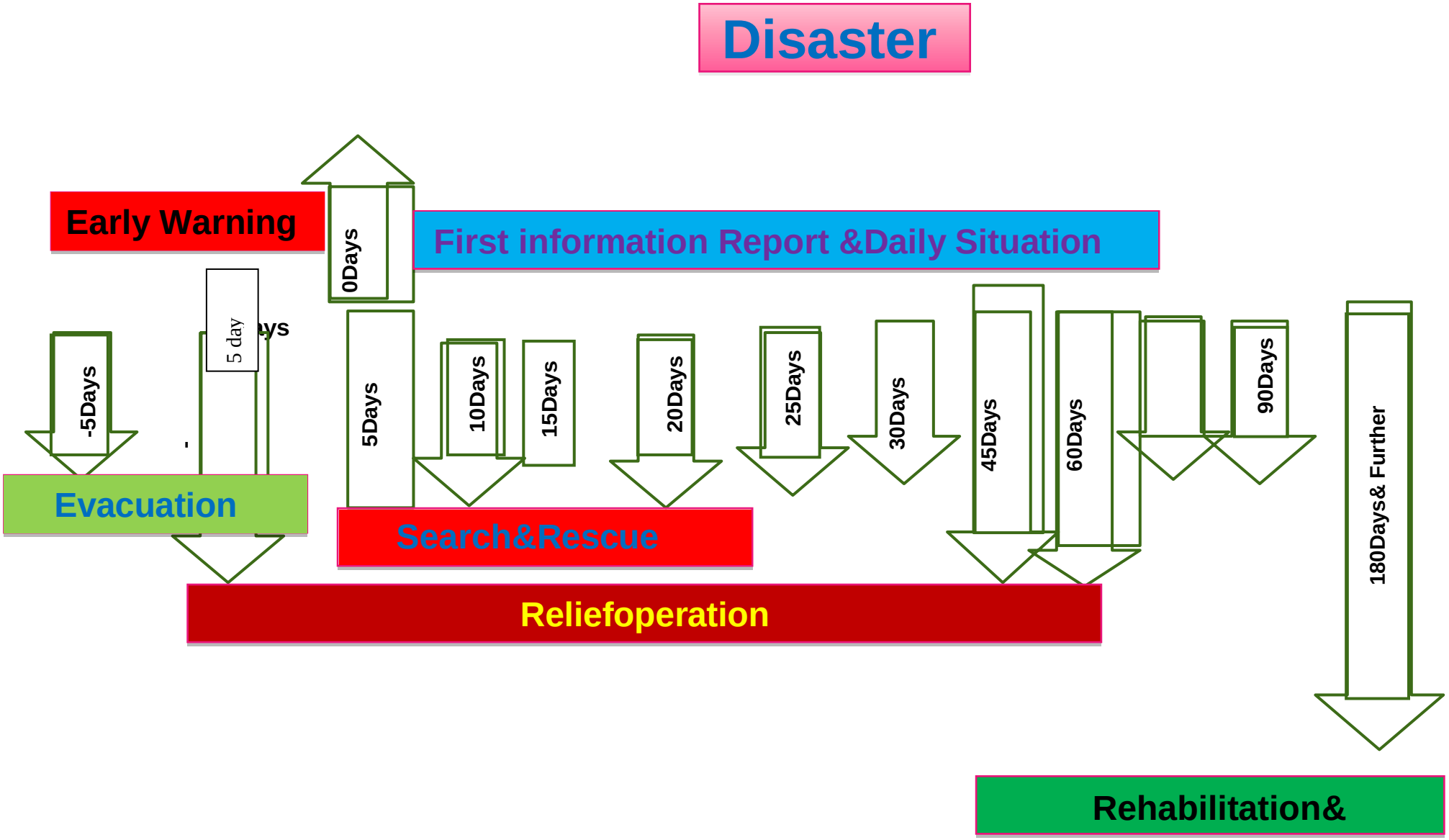
Chapter-13

Response

Response refers to activities done for handling disaster to bring the situation to normalcy not exceeding fifteen days from the abatement of disaster. The on set of an emergency creates the need for time sensitive actions to save life and property, reduce hardships and suffiering and rest or eessential life Support and community systems, to mitigate further damage or loss and provide the foundation for subsequent recovery. Effective response planningrequires realistic identification of likely response functions, assignment of specific tasks to individual response agencies, identification of equipment, supplies and personnel required by the response agencies for performing the assigned tasks. A response plan essentially outlines the strategy and resources needed for search and resrcue, evacuation, etc.

Phases of Response: Timeline

Timeline of various phases of response is presented in the following diagram.


Disaster
Early Warning
0Days
First information Report &Daily Situation
5 day
-5Days
5Days
10Days
15Days
20Days
25Days
30Days
45Days
60Days
90Days
180Days& Further
Evacuation
Search&Rescue
Reliefoperation
Rehabilitation&

Relief Management:Timeline

The relief management along with the time frame allotted is diagrammatically reflected below.

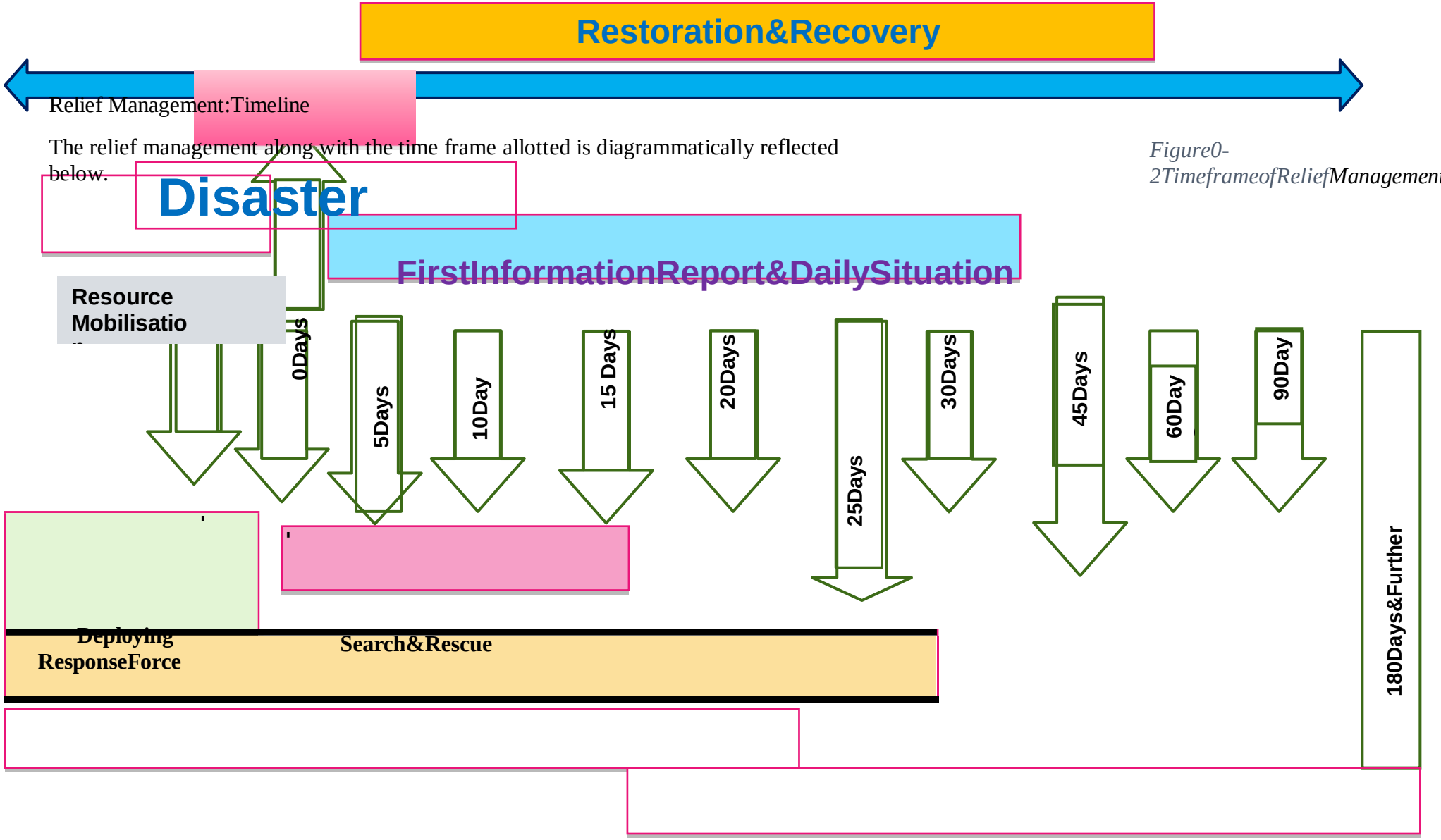


Figure0-2TimeframeofReliefManagement

Response: District

Task	Activity
Warning Communication	• Warning dissemination to the list of Nodal person & concerned BDOs • Recording the receipt of information & regular Status update • Transmitting updates to SEOC in regular interval as instructed
Meeting of DDMA (Heads of the department & stakeholder)	• Collector to take up a department coordination meeting & distribute works among all the Departments • Collector issues circular/ order to keep Govt.offices open cancelling all holidays. • A fixed time to be finalized everyday for reporting at all level. • A nodal officer is identified for media management • Circulate the minutes of the meeting with clear-cut role & responsibility
Pre-positioningof staff, resources &Evacuation	• Identifying & designating Nodal Officer for different stages of disaster & affected areas. • Positioning of ODRAF/ NDRF/ Fire services/ Police/ Home Guard in the affected areas • PoolingVolunteer services (Civil Defense/ Task Force/ NCC /NSS/ Scout & Guide) • Take stake of required materials for search & rescue,first aid, casualty management, evacuation, relief etc. • Make necessary arrangements of shelters for evacuation • Constitute a special team for special care to vulnerable section like Specially abled,Sr.Citizen,Pregnant & lactating women, Infants & children etc.
Response	• EOCs to Ensure backup (Power/Fuel/ internet/ Communication) at Dist/Dept. & Block levels • Response force under guidance of Nodal officers ensure complete Evacuation (Human/Animal), carry out Search & Rescue, clear relief lines, • Collector to submit requisition of vehicle/boat/ helicopters & list of support from state & Centre to all concerned authorities • CSO to store required relief materials (Chhuda.Gur,DryFoods) in the nearby storage points • CDVOto store,transport &distribute required fodders for animals to the affected areas
	• Cyclone shelter committee & Village Disaster management committee to organize free kitchen in the shelters with help of revenue dept. • EE-RWSS & CDM&PHO to ensure supply of drinking water, disinfectionof water & maintain Health & hygiene in the shelters • CDM&PHO to carry out Firstaid & casualty management • Collector to collect & transmit First Information Report(FIR) & Daily Situation Report as per requirement

Response: At Community Level (The list is Indicative &can be extended further as per need & requirement)

Activity

- DEOC to disseminate warning communication to BEOC & Community
- Response force to ensure Power / Fuel/ internet/ Communication at Shelters backup
- Supply Inspectors & Marketing Inspectors to distribute relief materials with response force, Task force & volunteers
- Response force to carry out Search & Rescue measures, Emergent relief operation, Relief line clearance, distribution of relief
- Doctors to carry out First aid & casualty management, Carcass disposal & sufficient mortuary facility in the affected areas

Response: Family & Individual Level

Task	Activity
Response	• Listen to the instruction of the response force & warnings • Economic use of "Ready to go Emergency Kit" Ready to go First Aid Kit • Cooperate the response force / officers &Render volunteer service if asked for • Maintain cleanliness & hygiene at shelter

Response:

Nameofthe Department	On ReceivingWarning	Responsetime	Post Disaster
Collector/ ADM /District Emergency Officer	➢ Review the situation in DDMC ➢ ActivateEOC& Early Warning ➢ Work distribution for operation ➢ Circular to keep offices open ➢ Arrange vehicle & activate Evacuation (Normal/Forceful)	➢ Activate Search & Rescue ➢ Arrange temporary shelters ➢ Arrange logistics in shelters ➢ Workout financial estimates (evacuation/ relief /recovery)	➢ Activate relief line clearance ➢ Proper relief Distribution ➢ Start damage assesment ➢ Facilitate Ex-gratia & Compensation ➢ Start primary damage estimate ➢ Pool resources for SAR/shifting of Critical patients

CDM &PHO	➢ Disseminate the alert to all concerned (Staff list) ➢ Arrangement of medicine,Firstaid kits & teams ➢ Mobile Health units for inaccessible pockets ➢ Identifying & shifting patients requiring intensive care to safer places ➢ Supply of medicines &pre-positioning of medical teams to vulnerable areas ➢ Vaccination for prevention of communicable diseases ➢ Measures to dis – infect drinking water ➢ Availability of Blood Banks/Ambulance	➢ Mass Casualty Management units & Triage ➢ FirstAid Centers ➢ Medical surgical teams ➢ Adequate mortuary facility ➢ Measures to shift patients requiring intensive care ➢ Pool of Blood donors(Preferably each group) ➢ Additional laboratories ➢ Carcass disposal team & units	➢ Psycho-Social Counseling ➢ Post Disaster Disease surveillance system ➢ Special attention to vulnerable section ➢ Networkingwith& promote treatment inPrivate Hospitals ➢ Carcass Management &Issuance of Death Certificate
Superintendent of Police (SP)	➢ Identify Disaster Prone area in the district ➢ Prepare a Deployment Plan for the Police force, based on the needs of the most vulnerable areas. Ensure that a sufficient number of police force is available for responding to the disaster situation. ➢ Establish coordination with the State Armed Police and Defense and Home Guards. ➢ Check the wireless communication network, and secure additional wireless sets for deployment during a disaster.	➢ Dispatch Police to systematically identity and assist people and communities in life threatening situation. Designate an area, within Police Station to be used as help Line centre for public. ➢ With the assistance of health professional, help injured people and assist the community in organizing emergency transport of seriously injured to medical treatment centers. Ensure that the police stations with staff are functioning in disaster situation.	➢ Provide guards wherever needed particularly for staging area of cooperative food etc stores and distribution centers. ➢ Provide convoys for relief materials. Evacuation will be ordered by Deputy Commissioner, Addl.Commissioner and Superintendent of Police. ➢ Assist and encourage the community in road-cleaning operation. ➢ Assess and Identify road for following conditions/facilities one Way, Blocked, Alternate route, Overall Traffic Management.

	➢ Installation of radio communications at • District Control Room, Control room at affected site, Departmental Offices within the District &Division. ➢ Keep the police vehicles and other modest transportin readiness for deployment of the police. ➢ Call for emergency Meeting to take stock of the situation.	➢ Assist and encourage the community in road-cleaning operation.	➢ Provide security arrangements for visitingVVIPsand VIPs. ➢ Assist district authorities to take necessary action against Hoarders, Black Marketers and those found manipulating relief material.
SE-RWSS	➢ When early signs of distress appear in any part of the district, EE RWSS will submit a special situation update to DM indicating the position Inrespect of Water and Sanitation Preparedness in the district. Will inform all Concerned RWSS-JE / AE of blocks and Panchayat store view essential emergency stocks and contingency plans to be able to respond in a timely manner.	➢ Will ensure supply Of clean drinking water to affected areas.Will ensure transportation of Water with minimum wastage. Will ensure Supply of water purification installations, mobile systems, halogen tablets etc. for Providing clean drinking water Will ensure that special care is taken of women with infants and pregnant women. Will ensure that sewer pipes and Drainage are kept separate from drinking water facilities.	➢ Must launch necessary awareness campaigns on safe Water handling practices, environmental sanitation and Individual hygiene along with hardware provision. ➢ Will visit as many areas as possible to have first-hand information of the situation.Will keep District Collector and E-in-C / Chief Engineer, RWSS informed daily about the action taken by him in his area.

	➢ Upon receipt of early warning signals from State,he must start the monitoring of all water and sanitation infrastructure in the affected parts of the District. ➢ Will be in constant touch with the local IMD and other agencies in the district for information on impending disaster.	➢ Will ensure availability of adequate number of toilets to prevent further contamination of water sources.	➢ Local MLA,MP and other community leaders must be informed on measures taken by RWSS / PHED for an effective disaster response.

SE-Irrigation	➢ When early signs of distress appear in any part of the district, SE Irigation will submit a special situation update to DM indicating the position in respect of Irrigation preparedness in the district. ➢ Prepare and update the disaster risk map of the district. The map should show the vulnerability and risks of the critical infrastructure related to irrigation and also whether alternate source of H2O within the district. ➢ Prepare a contingency plan for the maintenance and repairs of Bundhs and embankments. ➢ Identify Bundhs, which are critical for disaster protection and control. ➢ Review and update precautionary measures and procedures.	➢ Will ensure availability of adequate number of tool kits to prevent any damage during disaster. ➢ Provide special attention to those places where the Bundhs were breached and repaired during the last floods/disaster lastyear.These are the Bundhs, which will be threatened first during the disaster. ➢ Deployed adequate team in the most vulnerable areas.	➢ Undertake channel improvement for rivers and nalas to the extent possible. Undertake de-silting / cleaning of Nalas and canals to improve the flow of water. ➢ Supply the essential tool kits and protection material at critical places for emergency repair and construction. ➢ Or ganize round the clockinspectionand repair of equipments.

CDAO	➢ Prepare HRV Analysis of the district. ➢ Develop Contingency Action Plan based on HRV analysis. ➢ Review and update precautionary measures and procedures. ➢ Check available stocks of equipments and materials which are likely to be most needed during and after disaster ➢ 6. Provision of agricultural services should be coordinated with irrigation department, DRDO, District EOC, SITE OPERATIONS CENTREs.	➢ Supply of agricultural Equipments which May be required during Disaster. ➢ All valuable equipments and instruments should be packed in protective coverings and stored in room the most damage-proof during disaster ➢ All electrical equipments should be unplugged during disaster period.	➢ Suggest variety of seeds and cropping pattern, which can reduce losses and reduce the risks to farmers ➢ Plan for emergency accommodations for agriculture staff from outside the area. ➢ A pests and disease monitoring system should be developed to ensure that a full picture or risks is maintained. ➢ Call for emergency meeting to take stock of the situation. Develop a strategy and objectives. ➢ Establish contact with soil and water testing laboratories.

SE-Rural Works	➢ When early signs of distress appear in any part of the district, EE Rural works will submit a special situation update to DM indicating the position in respect of rural works preparedness in the district. ➢ Prepare and update the disaster risk map of the district. The map should show the vulnerability and risks of the critical infrastructure related to rural areas. ➢ Ensure community involvement in disaster preparedness on: Risk assessment (to point to which measures to implement); Early warning systems; Life safeguarding equipment; Resources and emergency kits in anticipation of need; ➢ Maintaining emergency rosters and evacuation plans; Emergency information and communication systems; Capacity building to ensure adequate emergency response.	➢ Will ensure availability of adequate number of tool kits to prevent any damage during disaster. ➢ Provide special attention to those places which were most vulnerable areas during disaster last year. ➢ Deployed adequate team in the most vulnerable areas. ➢ Provide for preventive medication for entire livestock to check the spread of any disease among the surviving cattle. ➢ Ensure the rural communication system and shelter management process during disaster.	➢ Provide for agricultural rehabilitation of disaster affected area by necessary assistance,with the help of state government, to affected farmers in activities such as sowing/ harvesting. ➢ Make available requisite seeds and fertilizers free of cost to the farmers of course, with the help of concerned government departments. ➢ Provide agricultural equipment/tools through Banks and other funding agencies. ➢ Help in Rehabilitation of artisans and marginal businessmen affected due to the disaster. ➢ Make efforts to re-start schools as soon as possible and encourage children to attend school regularly. ➢ Rehabilitation of livestock affected due to the disaster; Ensure replacement Of mulch cattle to The affected farmers; Free Cattle feed for about 2 to 3 months.

SE-Public Works	➢ Conduct HRV Analysis of PWD of The district. ➢ Based on HRV analysis, prepared Contingency Action Plan for the Department. ➢ All personnel required for disaster Management should Work under the overall supervision and guidance of Deputy Commissioner. All officers (technical officers) should be notified and should meet the staff to review emergency procedures. ➢ Review and update precautionary Measures and procedures, and review with staff the Precautions that have been taken to protect equipment. ➢ Maintain all the Highways and access roads,which are critical from the point of view of supplying relief.	➢ Carry out route opening by Removing debris on the road. Provide a work team carrying emergency Tool kits,depending On the nature and extent of the disaster,essential Equipments to the disaster spot. ➢ If people are evacuating an area, the evacuation routes should be Checked and people assisted. ➢ Construct/ reinforce the connecting roads From villages to roads,canals and Bundhs and raise their level so that people can access the high ground during disaster.	➢ Undertake repair of All paved and unpaved road surfaces including edge metalling, pot hole patching And any failure of surface,foundations In the affected areas by maintenance engineer'sstaffand keep monitoring their conditions. Undertake construction of temporary roads to Serve as access to temporary transit And relief camps, and medical Facilities for flood victims. ➢ As per the decisions Of the District Control Room, undertake construction of temporary structures required, for organizing relief work and construction of relief camps, feeding centres, medical facilities, cattle camps and SITE OPERATIONS CENTREs. ➢ An up-to-date report Of all damage and repairs should be kept in the district office report book and communicate the same to the District Control Room.

DTO-Telecom	➢ Communication establishment with District and Block/ Tahasil control room and departmental officers within the division. ➢ An officer to be Appointed as nodal officer. Standby arrangements for temporary electric supply or generators. ➢ Inspection and repair Of poles etc. ➢ Identificationof Materials required for response operations. ➢ All staff informed about the disasters, Likely damages and effect	➢ Where Disaster strikes with/without early warning signals,TSPs shall immediately assess damage to their network and deploy Rapid Damage AssessmentTeam& Disaster Response TaskForceTeams (DRTF) with Required inventory to provide emergency communication to priority callers like police, Fire, Medical, civil defense,RedCross, Army, financial institutions,NGOs, all officers and staffs engaged in restoration of telecommunication services,etc ➢ A control room will besetupatthestate HQ / nearest to affected area,as the case may be, and made operational under controlof TERM cell of affected area.	➢ If required portable/ vehicle mounted / air -transportable BTSs/BSCswith backhaulonsatellite media may be Installed by TSPs. ➢ Nodal officer of TSPs of affected telecom circle level shall report to concerned DDG (TERM), DoT (Chairman of STDCC) in that circle,for sharing information and coordination related matters. ➢ TERM units of DOT shall be the single nodal point in The disaster region where representatives of TSP shall alsobe present to coordinate and oversee communication restoration efforts ➢ All the affected areasand infrastructure will maintained immediately to make sure the effective communication after disaster for quick response.

CDVO	➢ Prepare HRV Analysis of Animal Husbandry Department of the District. ➢ Based on HRV Analysis, prepare ContingencyAction Plan of the District. ➢ Allpersonnelrequired for Disaster/Flood Management should work under supervision and guidelines of District Magistrate. ➢ Call for emergency meeting to take stock of the situation. Develop a strategy and objectives. ➢ Review and update precautionary measures and procedure and review with staff the precautions that have been taken to protect equipments. ➢ Stock emergency medical equipments which may be Required during and post disaster	➢ Supply stocks of equipments and drugs which are likely to be most needed during the disaster. ➢ Fill department vehicles with fuel andparkthemina protected area. ➢ Prepare an area of the hospital for receiving large numberoflivestock during disaster. ➢ Distribute the requirement of water, fodder and animal feed, for cattle camps and organizethesame. ➢ Ensure that adequate sanitary conditions through cleaning operations are maintained in order to avoid outbreak of any epidemic during disaster.	➢ Post Disaster Disease surveillance system ➢ Special attention to vulnerable section ➢ Assist the Revenue Department in preparing plans for cattle campus and cattle feeding centers. ➢ Organize vaccination campaigns in disaster prone villages after the disaster.

RTO/MVI	➢ Disseminate the alert to all concerned staff. ➢ Prepare a list of vehicles- trucks, buses, jeeps, tractors, etc of government and private agencies in the district and provide the list to the District control room. ➢ Issue standing Instructions to the State transport department for providing buses for evacuation and relief. ➢ Recall important functionaries from leave; communicate to the staff to man their places of duties like the ward and divisional offices and respective departments. ➢ Call for emergency meeting to take stock of the situation. Develop a strategy and objectives.	➢ Provide requires vans and ambulances for mobile health and animal husbandry teamsforimmediate response during disaster. ➢ Provide trucks, buses, jeeps, tractors,etc for Evacuation and supply chain management. ➢ Fill department vehicles with fuel and park them in a protected area.	➢ Providing vehicles for communication and relief. ➢ Provide ambulances to rural areas for bringing affected people to hospitals after disaster.

DFO-	➢ Conduct HRV analysis of Forest of the district. ➢ Based on HRV analysis, prepared ContingencyAction Plan for the Department. ➢ All personnel required for disaster management should work under the overall supervision and guidance of Deputy Commissioner. ➢ All district level officials of the department would be asked to report to the Deputy Commissioner when disaster occurs ➢ Emergency tools kits should be assembled foreachdivision,and should include: Crosscutsaws,Axes, rope.	➢ Allow the transportation of fodder from forest areas, when the fodderisnotfreely available. ➢ Evacuatethepeople and animal under the forest areasto a safest place. ➢ Cut down the most vulnerable trees near the residential areas. ➢ Provide wooden poles and bamboo for temporary shelter.	➢ Ensure Plantation to maximum possible extent. ➢ Ensure supply of wood for disposal of dead bodies. ➢ Recallimportant functionaries from leave; communicate to the staff to man theirplacesofduties like the ward and divisional offices and respective departments. ➢ Call for emergencymeeting to take stock of the situation.Developa strategy and objectives.
Railway	➢ Overall coordination with the district administration for disaster response. ➢ Disseminate the alert	➢ ActivateSearch& Rescue ➢ Arrangetemporary shelters ➢ Mass Casualty	➢ Providingnecessary information to public. ➢ Clearingtherailway line blockages and
	To allconcerned staff. ➢ Call for emergency meeting to take stock of the situation. Develop a strategy and objectives. ➢ Prepare and update the disaster risk map of the district. The map should show the vulnerability and risks of the critical infrastructure related to railway lines.	Management units & Triage ➢ First Aid Centers ➢ Medical surgical teams ➢ A control room will be setup at the district HQ /nearest to affected area, as the case may be,and made operational under control of TERM cell of affected area.	Restoration of the communication system. ➢ Providingreliefline to the vulnerable areas after disaster. ➢ Specialattentionto vulnerable section.

SE-TPWODL	➢ Conduct HRV analysis for the department of the district. ➢ Based on HRV analysis, prepare Contingency Action Plan of department of Power Supply. ➢ All personnel required for disaster management with work under the overall supervision and guidance of responsible officer. ➢ Establish radio communications with State Emergency Operation Centre, Divisional Commissioner, District Control Room and your departmental offices within District/Division. ➢ After receiving alert warning,immediately undertake following inspection: High tension lines ,Towers ,Sub-stations ,Transformers ,Insulators, Poles and Other equipments.	➢ Instruct district staff to disconnect the main electricity supply for the affected area. ➢ Dispatch emergency repair groups equipped with food, bedding, tents, and tools. ➢ Protect Power Stations from disaster. Raise the height of compound walls. Arrange gunny bags. ➢ Install pumpsets for draining water in case of Flood/ Cyclone/ Tsunami, etc. Provide information to the people about the state of power supply. It is one of the most important sources of information.	➢ Ensure that the Power Supply department to make alternate arrangements of emergency supply for the following offices from time of receipt of districts: Hospitals ,Public Health Departments , Deputy Commissioner Office , District EOC, Sub-Divisional EOC, site Operation Centres. , Police Stations , Telecommunications buildings , Meteorological stations. Irrigation Office. ➢ Hire casual labourers on an emergency basis for clearing of damaged poles and salvage of conductors and insulators. ➢ Begin repair/ reconstruction .

EE–PHED	➢ When early signs of distress appear in any part of the district, EE PHED will submit a special situation update to DM indicating the position in respect of water supply preparedness in the district. ➢ Prepare and update the disaster risk map of the district. The map should show the vulnerability and risks of the critical infrastructure related to water supply and public health. ➢ Prepare a contingency plan for the maintenance and repairs water pipe systems. ➢ Identify vulnerable areas, which are critical for disaster protection and control. ➢ Review and update precautionary Measures and procedures.	➢ Will ensure availability of adequate number of tool kits to prevent any damage during disaster. ➢ Provide special attention to those places where the water supply were breached and repairedduringthe last disaster last year. ➢ Deployed adequate team in the most vulnerable areas. ➢ Opening the blockage of sewerage and sewage system during disaster to control the disease and epidemics.	➢ Supply the safe drinking water at the affected areas immediately after the disaster. ➢ Maintaince of Water works immediately after the disaster. ➢ Cleaning the sewerage system with adequate disinfection to prevent disease and epidemics.
DEO-School & Mass Education	➢ Conduct HRV Analysis of schools of the district. ➢ Based on HRV analysis, prepared ContingencyAction Plan for the Department. ➢ All personnel required for disaster management should work under the overall supervision and guidance of the DEO. ➢ All officers (technical officers) should be notified and should meet the staff to review emergency classes and also staffs and teachers. ➢ Assists in organizations of the Evacuations drills for various hazards.	➢ Duckc over and hold first sign of earthquake move away from buildings. ➢ Assist the evacuation teams in evacuation of the school buildings. ➢ For a chemical hazard assist the warning team in disseminating the required safety tips totheentireschool. ➢ Ensuring the schools becomes the shelter houses with adequate nos of Equipments during the disaster.	➢ Dissemination of information on do's and don'ts so that the situation doesn't worsen.This can be done in the coordination with the warning and information dissemination teams. ➢ The damaged building and infrastructure should repair immediately after the disaster.

DEO-Higher Secondary Education	➢ Conduct HRV analysis of Higher Secondary schools of the district. ➢ Based on HRV analysis, prepared Contingency Action Plan for the Department. ➢ All personnel required for disaster management should work under the overall supervision and guidance of the DEO. ➢ Organized demonstration of fire safety, first aid and search and rescue through linkages with the fire brigade, health officials and civil defense and home guards. ➢ Obtain IEC materials posters, Pamphlets, simple tips on do's and don'ts in different disasters. ➢ Conduct awareness generation activities systemically in the whole school targeting different	➢ Duckc over and hold first sign of earthquake move away from buildings. ➢ Assist the evacuation teams in evacuation of the school buildings. ➢ For a chemical hazard assist the warning team in disseminating the required safety tips to the entire school. ➢ Ensuring the schools becomes the shelter houses with adequate nos of equipments during the disaster.	➢ Dissemination of information on do's and don'ts so that the situation doesn't worsen.This can be done in the coordination with the warning and information dissemination teams. ➢ The damaged building and infrastructure should repair immediately after the disaster. ➢ The relief lines should be measured from the school building after the disaster.

Chapter-14

Rehabilitation & Restoration

Rehabilitation and restoration comes under recovery phase immediately after relief and rescue operation of the disaster. This post disaster phase continues until the life of the affected people comes to normal. Disaster recovery is a very significant stage in the disaster management cycle, as this is when the support of governmental and non-governmental agencies in the disaster aftermath usually starts receding and the affected community has to fend for itself. At this stage, the role of the community and self-help groups becomes paramount since they can make or mar the crucial link between disaster response and disaster recovery.

Rehabilitation involves restoring local services related to the provision of immediate needs. It implies a systematic returnto predisaster status (Bounce back Better). It refers to actions taken in the aftermath of a disaster to enable basic services to resume functioning, assist victims' self-help effortsto repair physical damage, restore community facilities, reviveeconomicactivitiesand providesupport for the psychologicaland socialwell -being ofthe survivors. It focuseson enabling the affected populationto resume more or less normal patterns of life. It may be considered as a transitional phase between immediate relief and major long-term development. Restoration, on the other hand, represents long-term development assistance, which could help people inthe affected areas to rebuild their lives and meet their present and future needs. It takes into account reduction of future disaster risks. Rehabilitation may not necessarilyrestorethe damaged structures and resources intheir previous formor location. It may include the replacement of temporary arrangements established as part of emergency response or the upgradation of infrastructure and systems from pre-disaster status.

Types of Rehabilittion:

Since social, cultural, economic and politicalfactors provide the contours of a thorough recovery plan, we could deduce that there arethree major types of rehabilitation, namely, physical, social and psychological. Let us discuss them briefly:

Physical Rehabilitation

Physical rehabilitation is a very important facet of rehabilitation. It includes restoration of physical infrastructure, such as, houses, buildings, railways, roads, communication network, water supply, electricity etc. It also comprises short-term and long-term strategies towards watershed management, canal irrigation, social forestry, crop stabilisation, and alternative cropping techniques, job creation, employment generation and environmental protection. It involves policies for agricultural rehabilitation, rehabilitation of artisans and small businessmen as well as rehabilitation of animal husbandry. The short-term and long-term physical rehabilitation measures should take into view, provision for subsidies, farm implements, fertilizers etc., establishment of seed banks, grain banks and fodder banks, scope of employment generation, availability of livelihood generation and alternative technologies, along withdevelopment ofhouses and infrastructure. This type of rehabilitation is economic in nature and is broadly geared towards an alternative livelihood approach that cans enable the communities to withstand the disaster aftermath. Developmental measures involve expenditure. These relate to collection of information, hiring of specialist staff, implementation and evaluationof development programmes. However, these developmental costs should try to

reduce the economic, social and political costs that are likely to be incurred in the event of a disaster. For a systematic physical rehabilitation plan, the economic environment of a disaster-affected area needs to be kept in view. Attention needs to be given to disaster-resistant house construction. Earthquake resistant buildings must be planned on site so hard bedrock. The sites chosen should not be steep, narrowand clayey. Theyshould not be anywhere near loose sands and heavy faulting areas. Cyclone shelters should not be planned at low elevation land, which lacks natural outlet to discharge water. Land at the foot of slopes should also be avoided for cyclone resistant housing. To guard against landslides, recovery plan should include planning for houses that arestable and awayfromareas near quarrying activity. Flood resistant restorationplanning must focus on areas that are not low lying. Wetlands, lagoon mouths, edges of island, lake, flood plains, downstream banks, and narrow gorges should be avoided. Rehabilitation andrestoration package must also incorporate acquisition of land for relocation sites, adherence of land use planning, flood plain zoning, retrofitting or strengthening of undamaged houses, and construction of model houses. Thus, disaster resistant housing will have to be systematically included in physical rehabilitation plan. It should comprise identification of hazard prone areas, vulnerability and risk assessment of buildings, outlining of disaster scenarios, technical guidelines for hazard resistant construction and adoption of technical-legal regime.

Socical Rehabilitation

Social rehabilitation is an important part of disaster recovery, but this dimension isoftenassumed to be a community function and neglected in most post-disaster programmes. As we are all aware, disasters can render vulnerable people such as the elderly, orphans, single parents with young children, etc., much more vulnerable to disaster aftermath due to lack of adequate support. In the post- disaster phase, family support systems can break down due to physical and mental trauma resulting from losses of life and property, physical dislocation, and migration of some members of disaster affected communities. These vulnerable groups would need special social support to survive the impact of disaster. Thus, construction of infrastructure such as community centres, day care centres, anganwadis, balwadis, old age homes, etc., is a vital part of social rehabilitation. There has to be an adequate provision for building this infrastructure wherever it is non-existent or has been destroyed by the disaster. A realistic recovery plan has to take note of this social dimension of the disaster-affected area.

Psychological Rehabilitation

The psychological trauma of losing relatives and friends, and the scars of overall shock of the disaster event can take much longer to heal than the stakeholders in disaster management often assume. It is, therefore, essential, that socialwelfareandpsychologicalsupport programmes beconsidered immediately after a disaster event so that they could be made a vital part of recovery programmes. No recoveryplan can be successful if it does not take cognisance ofthe psycho-cultural milieu ofthe affected site. This means that it must give due respect to the tradition, values, norms, beliefs and practices of the disaster-affected people. The cultural dimension of recovery plan is most wanting in the area of housing and shelter. As we will read later in this Unit, the recovery plan is often drafted and executed with utter disregard to basic issues such as availability of water, access to toilets, health and hygiene, privacy of women folk, etc. Housing designs are imposed on the victims without taking into consideration their lifestyles, cultural mores and preferences. A good recovery plan must make a note of these factors. For a proper rehabilitation of persons suffering from ill-health, there is a need for a systematic Epidemiological Surveillance and Nutrition Centred Health Assessment to monitor the spread ofdisease. Acomprehensive health recoveryplan should be in place to dealwith the problems of psychological rehabilitation. Physical discomfort and illness could have multiple psychological

repercussions. Besides, the chances of post- traumatic stress disorder are high in disaster aftermath. Efforts should be made to arrange for crisis intervention, psychological debriefing (semi-structured crisis intervention), trauma counselling and panic management.

The victims' response to a disaster passes through various stages,for example, 'impact'(disaster event phase);'inventory' that follows immediately after the disaster event,'response'and 'recovery'. Each stage evokes a different response. The disaster managers and rehabilitation workers must understand the psychology of victims at the recovery stage and respond accordingly. Priority needsto be accorded to utilisinghuman resources from the affected area itself and only the experthelp shouldbe sought from external sources.

Standard Operating Procedure: Restoration & Rehabilitation

Name of the Department	**NormalTime**
Collector/ADM / EmergencyOfficer	• Restoration of Critical Infrastructures to bring situation to normalcy • Ensure Restoration of roads & channels, Communication network,Electricity &Energy • Ensure health in the affected areas • Adopt sustainable mitigation measures in the restoration activities
CDMO	• Carry out Disease surveillance measures to check epidemic prone diseases • Dis-infection of drinking water &measures for health & hygiene • Rehabilitation of deprived & destitute • Carryout Trauma &Psycho-social counseling
Superintendentof Police (SP)	• Security arrangements for relief materials intransit and in campsetc. • Senior police officers to be deployed in control rooms at State & district levels during L 1 level deployment onwards. • Deploy personnel to guard vulnerable embankments and at other risk points. • Arrangement for the safety. • Coordinate search,rescue and evacuation operations in coordination with the administration • Emergency traffic management. • Maintenance of law and order in the affected areas. • Assist administration in taking necessary action against hoarders,black marketers etc.
EE-RWSS	• Provision of tube wells at the squares,market places,bus stops,public buildings like schools, hospitals etc. to face the heat wave situation. • Alternate drinking water sources for the fluoride-affected areas like Roof top water harvesting, rainwater conservation and recycling. • Construction of drains in the villages for easy discharge of the flood water, wastewater and sewage • IEC campaign for safe drinking water and sanitation to prevent anyhealth hazard in normal time in general and during disaster in particular.

EE-Irrigation	• Planning for new medium irrigation project and completion of the ongoing project in the rivers to increase the irrigational potential of the district. • Strengthening the weak points of the river embankments, • Provision of spurs, stone packing, launchings at the turning point and guide bank along the course of the rivers and big Nallas to prevent the damage during flash flood. • Constructions of culverts, cause ways and other cross drainage work for quick discharge of flood water and to prevent prolonged submergence causing damage to the important infrastructure. • Planning and Construction of Minor Irrigation Projects at suitable location. • Construction of masonry check dams on some seasonal and perennial Nallas
DAO-Agriculture	• Encouragetheformationofsocialinstitutionto increasetheiraccessto credit, market, insurance etc.like Producers/Growers association, • Cooperatives, Societies, Farmers club, Farmers producers group etc. • Capacity building of farmers and grass root extension workers on the modern agriculture practices,dynamic contingency cropplanning,IPM,INM,alternate land use etc on • Popularization of SeedVillage scheme and promotion of Community managed Seed Bank. • Increase the access of farmers to appropriate agro information, market,credit etc. • Promotion of the cultivation of vegetables,spices, tuber crops,mushroom etc through on field demonstration and minikit distribution program. • Construction of low cost storage structures for the perishable agro/hort. Products. • Training of the SHGs, vegetable growers etc.on the package of practice,proper storage, processing and value addition of the hort. Products. • Treatment of arable and non-arable lands through various mechanical and vegetative measures to prevent further their degradation and increase productivity
EE-RuralWorks	• Strengthening and restoration of infrastructure with an objective to eliminate the factor(s) which caused the damage.
EE-PublicWorks	• Construct/reinforce the connecting roads from villages to roads, canals andbunds and raise their level so that people can access the high ground. • Install adequate road signs to guide and assist the drivers. • Institute repair of all paved and unpaved road surfaces, including edge metaling, pothole patching and any failure ofsurface, foundations inthe affected areas by maintenance engineer's staff and keep monitoring their conditions. • Take on construction of temporary roads to serve as access to temporary transit and relief camps and medical facilities for disaster victims.
DTO-Telecom	• Assessment of damage and restoration of communication network. • Ensure all communication equipment installed at DEOC.

CDVO	• Popularization of the livestock farming as one of the viable alternative livelihood option in the normal year in particular and indrought year ingeneral through awareness generation, attractive schemes etc. • Improvement of the quality and productivity of local livestock through Artificial Insemination and other breeding process. • Strengthening of the dispensaries/Livestock Aid centers with staffs, medicines, and equipment toproper health careof the animal. • Capacity building of the grassroot extension workers/Para worker/farmerson animal health care and hygiene, AI/breeding, birth care etc. • Popularization of the cultivation of nutritious fodder grasses or trees in the home stead/field bunds of farmers/village pasture lands etc. through demonstration unit, mini kit distribution etc. • Storage,Processing, Market linkage,Price fixatation of the livestock products • Promotion of the development of Institutions like Milk Cooperatives,Goat grower association etc.for better access to market, credit etc. • Introduction of Pisciculture in all the Dams, • Reservoirs/MIP/GP tanks and other bodies. • Supply of quality and productive fingerling so fast growing/improved fish species. • Capacity building of fish farmers/grassroot extn.Workers/SHG members on commercial pisciculture, fish seed and feed production etc.
RTO/MVI	• Emergency repairs of roads if affected must be carried out. • Asystem for priority transport of relief goods and personnel must be developed. • Relief goods may be considered for exemption from freight charges,if any. • All bus depots should be equipped with emergency communication equipments. • Every work gang should have tools which will be needed in an emergency. • This should include cross cut saws,axes and ropes. • Raincoats,caps and gum boots should be made available to work gangs in an emergency
DFO	• Improvement oftheVegetation coverage and Biomass production to meet the multiple community need like food, fuel wood, fodder etc. through three-tier plantation. • Regeneration of degraded village Common Property Resources like village forest, wasteland through the gapfilling and block plantation of multipurpose tree species. • Prevention of indiscriminate forest felling through strict introduction of rules and regulation and massive awareness generation. • Strengthening of the community based organizations like VSS through various training, exposure, orientation, and sensitization and ensures the involvement ofthe local community in forest management (regeneration, protection etc.) • Fair Collection and marketing of the NTFP products

	• Restricted grazing of the cattle herd in the forest area is to be ensured to protect the natural regeneration of the forest ecosystem.
Railway	• Rapid access to the site ofthe accident. • Effective site management by making best use of on-board and locally available resources. • Quick extrication of victims. Speedy transportation of victims to hospital. • Proper communication system both for assisting the stranded passengers as well as giving out timely information to the media.
SE-TPWODL	• Disconnect electricity after receipt of warning. • Attend sites of electric alaccidents and assist in undertaking damage assessment. • Stand-by arrangements to ensure temporary electricity supply. • Inspection and repair of high tension lines/substations/transformers/polesetc. • Ensure the public and other agencies are safeguarded from any hazards,which may have occurred because of damage to electricity distribution systems. • Restore electricity to the affected areas quickly as possible. • Replace/ restore of damaged poles/ salvaging of conductors and insulators.
EE–PHED	• Provision of tube wells at the squares,market places,busstops,public buildings like schools, hospitals etc. • Alternate drinking water sources to affected area • Construction of drains for easy discharge of the flood water, waste water and sewage • IEC campaign for safe drinking water and sanitation to prevent any health hazard in normal time in general and during disaster in particular.
DPC,SSA-School &MassEducation/ DEO - Higher Secondary Education	• Department and the field level institution will prepare a contingent Action Plan for their reconstruction. • Damaged buildings (including classroom building, department building, and breaking of window) should be assessed and the report is to be sent to SRC for adequate funding needed for repair and constructions of building, boundary wall, Hostels etc. for quick recovery and restoration of Education.

Chapter15.

Recovery

An insight series of long term activities framed to improve upon the repaired activities in the Reconstruction & rehabilitation phase are covered under Recoveryphase. Recovery includesallaspects of mitigation and also incorporates the continuation of the enabling process, which assists the affected persons and their families not only to overcome their losses, but also to achieve a proper and effective wayto continue various functionsoftheir lives. The Recovery process is the refered a long-terms process in which everyone has a role – the Government including the PRI members, NGOs and especially the affected people, their families and the community.

- Preparation of Recovery plan for displaced population, vulnerable groups,environment, livelihoods
- Organise initial and subsequent technical assessments of disaster affected areas and determine the extent of recovery works necessitated in addition to reconstruction & rehabilitation works.
- Evaluate the extent of works under SDRF/NDRF&other sources(damaged infrastructures)
- Explore opportunities for external aids like(InternationalAgencies/CivilSociety/Corporate Sector)
- Allocate funds for the stabilisation of the repaired & reconstructed infrastructure.
- Integrate Climate change &Disaster Risk Reduction features in the recovery programmes

The DM &Collector will be the co-ordinator of all Recovery activities in the District. The role of the DM & Collector will be to:

- Generally monitor the management of the recovery process;
- Ensure implementation of the recovery plan by line departments,blocks
- Effective service delivery minimising overlap and duplication;

APPROACHES TO BE ADOPTED

1. **Cash Approach:** Unconditional financial assistance is given without technical support. Financial assistance such as input subsidy, material assistance fire victim, ex-gratia to be deceases family etc. fall under this approach.
2. **Owner-Driven Approach:** Conditional financial assistance is given, accompanied by regulations and technical support. These are external supports to the victim areas where local government executes the projects with the financial and technical support of an external agency.
3. **Community-Driven Approach:** Financial and/or material assistance is channelled through communityorganizations that are actively involved indecision making and in managing the same. Recovery work such as livelihood and employment must be taken throughthis approach.
4. **Agency-Driven Approach:** Refers to an approach in which a governmental or nongovernmental agency hires an external agency to be engaged in post disaster management. All Infrastructure development projects to be taken under this approach.

   A recovery plan has to prioritise the different requirements and set its objectives accordingly. Striking a Balance between Economic, Social and Psychological Needs Just as the needs and requirements of the affected community are largely dependent on whatits various groups desire, the economic, socialand psychological needs also vary fromone groupto the other within the affected community. These needs have to

be carefully scrutinised. Satisfaction of one needor requirement does not automatically lead to the satisfaction of other needs. For instance, the loss of agricultural land due to a disaster, even though compensated inmonetary terms and in terms of new occupational opportunities under rehabilitation, cannot fulfill the psychological loss of being a landowner in the victims. The nostalgia of the ancestral place also cannot be overcome easily. This reality is a part of the social status characteristic of traditional culture and people derive gratification from it. Established livelihood, social relations, social status, kinship etc., are sources of satisfaction. Any change or blockage, even though temporary, towards fulfillment of these needs results in varying degrees of tensions and stress in different people. A good recovery plan must not lose sight ofthis aspect. Recovery actions can be therapeutic in assisting the victims to rebuild their lives and livelihoods if they are contextual and rooted in local values. Likewise, they also need to strike a neat balance between the different types of requirements of victims. Focusing on Key Issues Minimising the adverse effects of disasters forms the key focus for achieving the efficacy of various objectives of rehabilitation projects. The success ofthese projects depends upon the way a disaster is managed and the way the affected population perceives the various rehabilitation programmes as appropriate means of meeting their requirements.This makes it imperative to plan, design and implement rehabilitation programmes to cope withspecific aspects of a disaster at appropriate stages to meet the key issues. These key issues pertain to assessment of damage, fixation of responsibility, prioritization of requirements, executionof major mitigation strategies, monitoring of development process as well as evaluation and review of projects. It has to be seen that no affected group is left out ofthe rehabilitation operations in order to avoid social tensions. Disaster management should be addressed in a political, economic and socialcontext, otherwise, the groups who cannot voice themselves may be left out of provisions of disaster recovery. The focus on key issues makes for an effective rehabilitation and restoration plan. In orderto realise these issues, attempt has to be made to institutionalise all recovery efforts. Rehabilitation measures cannot be sustainable if they are not institutionalised. Efforts have to be made to establish and sustain the local institutions that are involved in disaster recovery such as grain banks, fodder banks, day-care centres, ‘anganwadis’, ‘bal mandals’, ‘mahila mandals’, ‘pani panchayats’, etc.

A recovery plan has to beadaptive in nature so that it canchange as per the demands of a new situation. Flexibility norms in terms of structure, processes and finances need tobe ingrained in the plan. Disaster management needs a strong political commitment for erecting an effective planning and coordination process at the governmental and societal levels.A processwith a clearly defined authority as well as an appropriate budget to maintain an effective disaster plan is needed. Disaster recoveryplans should be comprehensive in scale and operational in style, as disaster management planning is a sequential and continuous process. Effective planning requires systematic diagnosis, resource evaluation, and continuous feedback towards fulfillment of the goals of disaster reduction. Since the scope of disaster management is quite wide and theactors involved in the process fairly numerous, it is essential that a legal and formal framework for coordination is accepted and provided for. Managementis needed at all stages of adisaster viz., the disaster preparedness and mitigation phase, the disaster event phase, the response phase,and the recovery phase comprising rehabilitation and restoration processes. Only a flexible and adaptive disaster management plan can achieve it. The recovery plan has to imbibesimilar features.

The recovery plan must be clear, structured, objective, accessible, accountable and responsive. This is possible if transparency is maintained at each level of recoveryplan. Continuous monitoring and evaluation (M&E) could ensure transparent, efficient and effective plans. The basic objective of an M&E exercise is to ensure whether the project is proceeding as originally intended. This is done using indicators. In case ofa post-disaster exercise, M & E could strive to check if all the rehabilitation needs of the affected victims are being met. It could follow theSMART (Specific, Measurable, Attainable, Relevant and Time-bound) tool of indicators,which have to be set at the planning for recovery stage itself. However, the constraints in the processthat range fromreluctance ofproject teamsto exposethemselvesto evaluation, inabilityin understanding the process and impact indicators underlying the M & E, difficulties in collecting data, managing the complexity and extent of the M & E process, and most importantly, keeping objectivity in the process need to be addressed. Viability of a disaster recovery policy depends on responsible monitoring and review. A good recovery plan should strive towards this guiding principle.

Ensuring Financial Recovery One of the most important components of rehabilitation and restoration is that of infrastructure development, which largely depends on financial support. Governments at the Central as well as state levels have specific schemes and strategies for providing funds for disaster management activities, be it relief, rehabilitation or restoration. The NDRF &SDRF is meant to supplement relief funds, a sizeable portion is earmarked for allphases of disaster management pertaining to twenty notified natural calamities . Other financial arrangements include National Calamity Contingency Fund, Prime Minister's NationalRelief Fund and Member of Parliament Local Area District Scheme (MPLADS). Even the Insurance Schemes could be regarded as an important source for resource generation. Schemes such as Swarnajayanti Gram Swarozgar Yojna, National Agricultural Insurance, Seed Crop Insurance, Kisan Credit Card, etc., should be encouraged as practicable options of disaster mitigation.

There is a need to incorporaterecoveryplanning into preparedness planning. Inorderto ensure smooth inflow offunds, the stakeholders should act swiftly and maintain the interest ofthe influence groups in disaster recovery. The UN agencies: World Health Organisation (WHO), United Nations Children's Fund (UNICEF), United Nations Educational, Scientific and Cultural Organisation (UNESCO), World Food Programme (WFP), International Labour Organisation (ILO), United Nations Population Fund (UNFPA), and also the International MonetaryFund (IMF) as well as the World Bank working through International Development Association, International Finance Corporation, Multilateral Investment Guarantee Agency can also provide legitimacy to recovery process, and encourage donors to provide finances and seed capital for disaster recovery projects.

Developing Disaster-resistant Buildings

Physical rehabilitation calls for construction of disaster resistant structures and retrofitting of existing ones to make them disaster resilient. Different types of resistance components will have to go into earthquake-resistant, cyclone-resistant orflood-resistant structures. A recovery plan should have adequate provision for buildingdisaster-resistant structures as a guiding principle.

Earthquakes are no strangers to India, as 55 per cent of the country is prone to seismic shocks. Several earthquake-prone regions in the country have tradit ionally built houses that minimise the damage to life and property, and stand up well in the wake of the quake. The traditional wisdom and attention to details can be applied to modern materials

as well. These techniques are based on the use of traditional materials, for example, timber and bamboo for building houses. The structuralsystemneeds to be tensile and the material should be flexible, as is the case with timber, steel and bamboo. It also helps if the structure is constructed in a way that it vibratesasoneunit and swaystogether. Therecoveryplan has to lay emphasis ondisaster resistant construction techniques as most new constructions with heavy roofs (slate tiles or Reinforced Concrete Cement or RCC) supported by weak walls (random rubble in mud mortar) have performed badly in the recent past. Older houses in mountain regions have roofs held together by timber and tie-bands, horizontal timber beams spanning across the entire building, connecting the entire structure and giving it the character of a cage. Such houses have suffered little damage despite their mud and stone masonry.These types of constructions need to be promoted. Quake resistant houses should have tie-bands just above the level of the floor, the level of the doors and windows, and another at the roof level. Corners are the most vulnerable and thus ought to be strengthened. Elasticity ofthe structure can be enhanced with flexible steelrods or wood batons at corners. Doors and windows should be few, small and symmetrically placed awayfrom the corners. In short, properties of symmetry, ductility, deformability, rectangularity and simplicity have to be followed to build disaster resistant houses. The performance of earth or stone or brick buildings is generally very poor in earthquakes if tie bands and timber are not used. Wooden buildings perform better but most dangerous aspect of wooden buildings has been their poor fire resistance and therefore a high danger of catching fire during earthquakes, due to short-circuitingofelectric wiring. Evenstone and brick buildings have not had a good track record. As far as flood resistant housing is concerned, structures need to be erected on a higher elevation on best bearing soil and raised moundsusingconcretecement and water proofing. Building failure occurring due to cyclones is mainly confined to the roof. Cyclone resistant structures thus need to be sturdy, wind resistant and concrete in texture. Mangalore tiled and RCC roofs help in this regard.Theguidelines for housing in a good recovery plan should make a note of all these aspects. A good recovery plan should identify and promote them.

The role of Building Authorities and Research Institutes such as National Building Construction Corporation (NBCC), Building Materials and Technology Promotion Council (BMTPC), Housing and Urban Development Corporation (HUDCO), Structural Engineering ResearchCentre, etc., is veryimportant inthisregard. Their activities have to berightly networked in order to derive advantages from their work and experience in disaster-resistant construction. Building Resilient Communities No rehabilitation package, as weknow can succeed without taking into view the psychology of those affected by disasters. Human psyche comes into play at every stage of disaster management cycle, be it mitigation, rescue and relief or restoration and rehabilitation. A participatory disaster recovery programme that involves the local people, civil society organisations and grass roots agencies at decision-making and implementationstages would go a long way inshaping a more humane and feasible disaster rehabilitation programme.

A good recovery plan must aim at building resilient communities. This can be ensured through four major strategies (i) Community Participation, (ii) Education and Training, (iii) Stress Management, and (iv) Positive Role of the Media. Let us discuss these now: Long -term counter disaster planning should be based on building the resilience of victims. A number of Community Based Disaster Management (CBDM) projects are coming up indifferent partsofthe world. Some of these have worked well, while others represent good examples towards making of success stories. Though, almost in all cases, the successes have been driven by external, international and national agencies.

The World Conference on Disaster Reduction held from 81to22January2005in Kobe, Hyogo, Japan has adopted a Framework for Action (2005-2015) on "Building the Resilience of Nations and Communities to Disasters". It is a positive step, as the Conference has provided a unique opportunity to promote a strategic and systematic approach to reducing risks and vulnerabilities to hazards.There is certainly a need to give due importance to self-help and people's participation in building resilient communities. A recovery plan should incorporate provisions of creating Village Task Force, Disaster Task Force and PaniPanchayats, etc. It would facilitate the process of capacity building as well as people's resilience and self-sufficiency.

Education and training are means of learning, and play a significant role in building resilient communities. Educationand training have an important role to playin planning and implementing disaster recoverystrategies at boththe pre-disaster and post-disaster stages. Sustenance ofdisaster education is dependent on well-formulated training and research strategies.

PART-I: DROUGHT RECOVERY PLAN OF THE DISTRICT

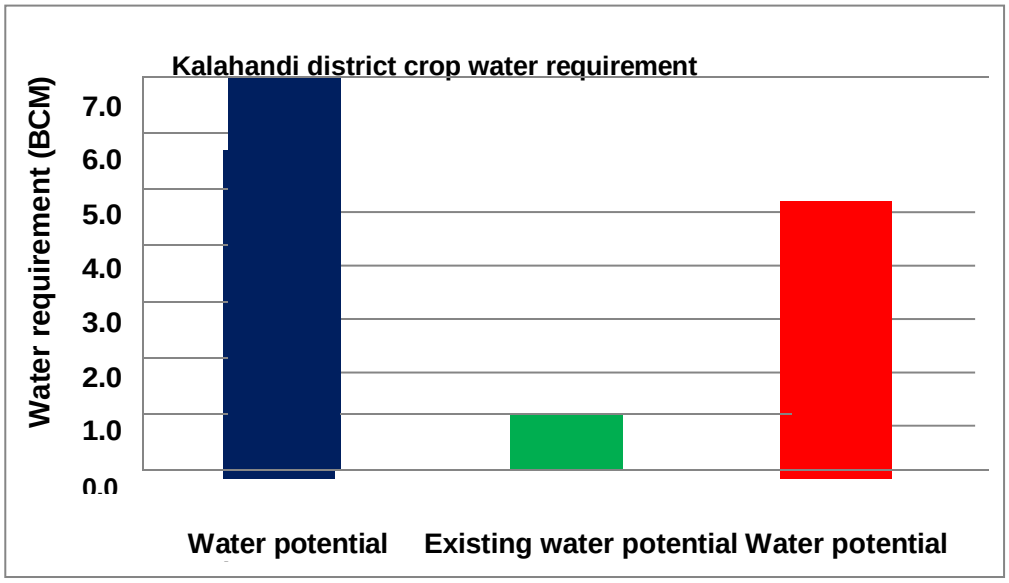
Total Water Demand of the district for various sector

Total water demand of the district fo various sector										
Block	Components for 2008(InBCM)					Components for 2025(InBCM)				
	Domestic	Crop	Livestock	Industrial	Total	Domestic	Crop	Livestock	Industrial	Total
Golamunda	0.00284	0.04753	0.00092	0.00043	0.05171	0.00572	0.30245	0.00097	0.00086	0.30999
Dharamagarh	0.00305	0.04753	0.00044	0.00046	0.05148	0.00615	0.85585	0.00047	0.00092	0.86340
Junagarh	0.00380	0.2568	0.00085	0.00057	0.26134	0.00767	1.5981	0.00090	0.0085	1.60083
Koksara	0.00261	0.06074	0.00087	0.00039	0.06461	0.00527	0.33361	0.00091	0.00079	0.34058
Jaipatna	0.00291	0.09422	0.00065	0.00044	0.09821	0.00587	1.01697	0.00068	0.00088	1.02440
Kalampur	0.00132	0.07537	0.00026	0.00020	0.07714	0.00265	0.59524	0.00027	0.00040	0.59856
Th.Rampur	0.00170	0.00592	0.00124	0.00026	0.00912	0.00344	0.09213	0.00131	0.00052	0.09739
Lanjigarh	0.00204	0.03891	0.00085	0.00031	0.04210	0.00412	0.12779	0.00089	0.00062	0.13341
Bhawanipatna	0.00373	0.05729	0.00142	0.00056	0.06300	0.00753	0.29729	0.00149	0.0083	0.30744
Kesinga	0.00254	0.05859	0.00090	0.00038	0.06240	0.00512	0.28604	0.00094	0.00077	0.29287
Karlamunda	0.00126	0.06471	0.00053	0.00019	0.06669	0.00254	0.23598	0.00056	0.00038	0.23945
M.Rampur	0.00812	0.03889	0.00069	0.00027	0.04167	0.00368	0.15101	0.00072	0.00055	0.15596
Narla	0.00265	0.06324	0.00082	0.00040	0.0678	0.00534	0.28062	0.00086	0.00080	0.28763
Total	**0.02654**	**0.74220**	**0.00840**	**0.00398**	**0.7882**	**0.05353**	**5.49848**	**0.00882**	**0.00803**	**5.56887**

Source:DIP, Kalahandi

Crop water demand

Table4.2:Crop water requirement of Kalahandi district						
Crops	Area sown (ha)	Irrigated area (ha)	Crop water demand (mm)	Water potential required (BCM)	Existing water potential (BCM)	Water potential to be created (BCM)
Cereals	257437	162568	1000	4.385996	0.19865	4.194831
Coarse cereals	21575	5716	450	0.076441	0.007787	0.068654
Pulses	812151	19823	500	0.361632	0.004416	0.357215
Oilseeds	48390	8615	500	0.137931	0.048856	0.089076
Cotton	4548	0	1000	0.056764	0.021517	0.035246
Horticulture	19827	4432	900	0.122025	0.021517	0.100508
Vegetables	6851	483	550	0.061264	0.021517	0.039746
Anyother	90049	59767	600	0.964042	0.021517	0.942524
Total	671691	265034	5500	6.166095	0.987938	5.178157



Source:DIP,Kalahandi

Domestic Water Demand of Kalahandi district

Domestic WaterDemand of Kalahandi district										
District	Block code	BlockName	Population2008			Population2025			GWD208 (BCM)	GWD 2025 (BCM)
			Rural	Urban	Total	Rural	Urban	Total		
Kalahandi	260	Golamunda	129499	0	129499	156694	0	156694	0.002836	0.005719
	261	Dharamagarh	139359	0	139359	168624	0	168624	0.003052	0.006155
	262	Junagarh	173660	0	173660	210129	0	210129	0.003803	0.007670
	263	Koksara	89304	0	89304	144358	0	144358	0.002613	0.005269
	264	Jaipatna	124569	6155	130724	150728	7448	158176	0.002908	0.005869
	265	Kalampur	60075	0	60075	72691	0	72691	0.001316	0.002653
	266	Th.Rampur	77840	0	77840	94816	0	94816	0.001705	0.003438
	267	Lanjigarh	93179	0	93179	82747	0	82747	0.002041	0.00485
	268	Bhawanipatna	170527	0	170527	206338	0	206338	0.003735	0.007531
	269	Kesinga	85828	0	85828	140152	0	140152	0.002537	0.00586
	270	Karlamunda	57481	0	57481	69476	0	69476	0.001257	0.002536
	271	M.Rampur	72632	7892	80524	87885	9549	97434	0.008121	0.003679
	272	Narla	120992	0	120992	146400	0	146400	0.002650	0.005344
Total			**1454882**	**14047**	**1468929**	**1760407**	**16997**	**1777404**	**0.032272**	**0.065093**

Industrial water demand of Kalahandi district

Industrial water demand of Kalahandi district					
Block	Nameofthe Industry	Waterdemand(BCM)		Existing water potential (BCM)	Water potential to be created (BCM)
		2008	2025		
Golamunda	Industry of different types, hotels, hospitals, lodges, schools, offices etc.	0.000425404	0.000857899	0.048383949	-0.04752605
Dharamagarh		0.000457794	0.000923219	0.84049972	-0.83126753
Junagarh		0.000570473	0.00850454	0.257261255	-0.25680801
Koksara		0.000391914	0.000790359	0.061530567	-0.060740208
Jaipatna		0.000436168	0.000880313	0.095101725	-0.094221412
Kalampur		0.000197346	0.000397982	0.075766852	-0.07536887
Th.Rampur		0.000255704	0.000515671	0.00643532	-0.005919649
Lanjigarh		0.000306093	0.000617288	0.039527438	-0.038910151
Bhawanipatna		0.00056088	0.00829699	0.058414971	-0.057285272
Kesinga		0.000380495	0.000767332	0.059354654	-0.058587323
Karlamunda		0.000881681	0.00038038	0.065092585	-0.064712205
M.Rampur		0.000273163	0.000551786	0.039443907	-0.038892121
Narla		0.000397459	0.000801542	0.064046276	-0.063244734
Total(BCM)		**0.0039816**	**0.0080302**	**0.813685471**	**-0.805655258**
*If water potential to be created is negative indicates surplus avialbility of water resource					

RT-II: LIVELIHOOD RECOVERY PLAN

Sl	Scheme	Department	Activities	CostNorms
1	MGNREGS	Panchayati Raj and Drinking Water Department	1. Irrigation Channel 2. DugWell 3. NADEP composting 4. Vermi composting 5. Liquid Bio Manures 6. Land Development with field bunding 7. Creation of water bodies including farm pond, de-silting of ponds,canals,defunct waterbodies	1. Irrigation channel as per estimated cost 2. DugWell upto Rs.1.60lakh 3. Nadeep compostRs.14,000/- (26:74) 4. Vermi compost-Rs.20,000/- (24:76) 5. Liquid Bio Manure-Rs.2000/- (30:70) 6. Land development as per estimate
2	PMKSY	Watershed Development Mission	1. Lining 2. Inlet 3. Outlet 4. Silttrap 5. Adjustable gates etc.	1. Material cost beyond the specified limit,i.e.,40% inthe MGNERGA
3	Jalanidhi	Agriculture	1. Dugwell 2. Borewell 3. Shallow Tube Well (Individual Farmer and cluster of farmer)	1. 75%of the project cost subject to a limit of Rs.75000/- 2. 75% of the project cost subject to a limit of Rs.50,000/- (excluding cost of electrification). In addition75% of Genset / electrification cost subject to a limit of Rs.50000/- (for energisation) 50% subsidy of the cost or maximum Rs. 20,000. In addition, incase of cluster of10 nos. or more STWs the cost of electrification will be borne by the Government subject to a ceiling of Rs 4.00 lakh per cluster
4	Biju Krushak KalyanYojana (BKKY)	Health	Smart card for health treatment (Those families not covered under RSBY are to be benefitted with Rs 1 lakh for medical treatment both in Govt. & private hospital)	Health benefit upto1lakh

5	Infrastructure development for post harvesting	Agriculture/ PRD	Concrete Drying-cum-threshing Floor	20x20 meter community harvesting yard free of cost
6	Pradhan Mantri Crop insurance	Agriculture and Cooperation	Insurance facilities for the farmers cultivating paddy,groundnut,Ginger, Turmeric, Cotton etc.	The premium rate is 2% of total sum assured amount for Kharif crop,1.5%for Rabi crop and5per cent for annual commercial horticulture crops
7	State Plan	Agriculture	1. Promotion SRI method 2. Soil Test 3. TechnologyTransfer 4. Demonstration, 5. Incentive to the farmers 6. Promotion of Improved Agronomic Package and Practices 7. Extension Services 8. Supply of Pump Set	Incentive of Rs.4,700 per hectare to the farmer who adopting SRI method
8	Farm Mechanisation		Subsidy Assistance on Tractor, Power Tiller, Combined Harvester etc.	As per scheme guidelines
9	NFSM		Improve Package and Practices of Rice,Wheat, Pulses and Core Cereals	As per scheme guidelines
10	OLM	PRD	Promotion Producers Groups, Forward and Backward Linkages,bank linkage	As per the approved proposal

Chapter-16

Financial Arrangement

National Disaster Response Fund (NDRF)

The National Disaster Response Fund (NDRF) has been constituted by the Government of India as per the sub-sections (1) of section (46) of Disaster Management Act, 2005 and recommendation of the 13th Finance Commission. NDRF has been constituted by replacing the National Calamity Contingency Fund (NCCF). It is administered by the National Executive Committee (NEC).

In the event of a calamity of a severe nature when the State Disaster Response Fund (SDRF) is insufficient to meet the relief requirements, additional central assistance is provided from NDRF, after following the laid down procedure. The State Government is required to submit a memorandum indicating the sector-wise damage and requirement of funds. On receipt of memorandum from the State,

- AnInter-Ministerial CentralTeam is constituted and deputed for an onthe spot assessment of damage and requirement of funds for relief operations, as per the extant items ad norms.
- The report of the Central Team is considered by the Inter-Ministerial Group (IMG) / A Sub- committee NEC constituted under section 8 of DM act, 2005, headed bythe Home Secretary.
- Thereafter, the High Level Committee (HLC) comprising of the Finance Minister, the Agriculture Minister, the Home Minister and the Deputy Chairman, Niti Ayog considers the request of the State Government based on the report of the Central Team recommendation of the IMG thereon, extant norms of assistance and approves the quantum of assistance form NDRF.
- This is, however, subject to the adjustment of 75% of the balance available in the State's SDRF for the instant Calamity.

State Disaster Response Fund (SDRF)

As per the provisions of Disaster Management Act, 2005 sub-section (1)(a) of Section (48) and based on the recommendation of the 13th Finance Commission, the Government of Odisha has constituted the StateDisaster Response Fund (SDRF) replacingthe CalamityReliefFund (CRF). The amount ofcorpus of the SDRF determined by the 13th Finance Commission for each year the Finance Commission period 2010-15 has been approved by the Central Government. The Central Government contributes 75% of the said fund. The balance 25% matching share of contribution is given by the State Government. The share of the Central Government in SDRF is released to the State in 2 installments in June and December respectively in each financial year. Likewise, the State Government transfers its contribution of 25% to the SDRF in two installments in June and December of the same year.

Ministry of Home Affairs, upon being satisfied that exigencies of a particular calamity so warrant, may recommend an earlier release of the Central share up to 25% of the funds due to the State in the following year. This release will be adjusted against the installments of the subsequent year.

As per the Guidelines on Constitution and Administration of the State Disaster Response Fund (SDRF) laid down by the Ministry of Home Affairs, Government of India, the SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims of cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst and pestattack.The State Executive Committee(SEC) headed by the Chief Secretary SEC decides on all matters connected with the financing of the relief expenditure of immediate nature from SDRF.

Chief Minister Relief Fund (CMRF)

Chief Minister's Relief Fund aims to provide assistance to calamities and in distress condition, to indigent persons suffering from critical ailments and to undertake charitable activities for public welfare.

Cases Eligible for Assistance underCMRF

Poor and persons in distress: Relief to the poor, including grant and aid (financial or otherwise) to persons in distress.

Aged, differently able, orphans, AIDS affected: Assistance for the relief and rehabilitation of the aged, differently able' orphans, HIV/AIDS affected persons/families and those otherwise differently able or incapable of earning their livelihood, by grant and aid (financial and otherwise) and / or maintenance, establishment and support of institutions and homes for the benefit of such persons.

Persons affected by calamities or violence: Assistance for relief & rehabilitation of persons affected by natural or man-made calamities, communal violence', naxal violence or public disorder of a serious nature or any other calamity' affecting a family or a community, which deserves extreme compassion and not covered under any existing assistance scheme of State/central Government.

Assistance for Rural Development: Financial assistance out of CMRF may also be considered to undertake, promote, aid or otherwise support rural development including any programme for promoting the social and economic welfare of the public in any rural area either directly or through an independent agency following due procedure.

To assist more number of deserving person and for better utilisation ofthe Chief Minister’s Relief Fund, the State Government have delegated powers to the Collectors for sanction of assistance out of CMRF so as to extend such assistance to the deserving persons immediately at the time oftheir need.

Release of Funds to Departments and Districts:

Funds required towards pure relief to affected persons / families for natural calamities in shape of emergency assistance, organizing relief camp / free kitchen / cattle camp, agriculture input subsidy and other assistances to affected farmers, ex-gratia as assistance for death cases, grievous injury, house building assistance, assistance to fisherman / fish seed farmers / sericulture farmers, assistance for repair / restorationof dwelling houses damaged due to natural calamities are administered through the respective collectors.

Part funds towards repair / restoration of immediatenature of the damagedpublic infrastructure are released to the Departments concerned. On receipt of requisition from the Collectors / Departments concerned, funds are released after obtaining approval/ sanction of S.E.C. However, funds towards pure relief

are released under orders of Special Relief Commissioner / Chief Secretary and the same is placed before the State Executive Committee in its next meeting for approval. To save time, Collectors have been instructed to disburse the ex-gratia assistance from the available cash and record the same on receipt of fund from Special Relief Commissioner.

Damage Assessments and Report after Flood/Cyclone

Private properties and properties of Government under different Departments are damaged by high floods and cyclones. As per para-75 of Odisha Relief Code, the Collector shall undertake assessment of damages to private properties as well as properties of Government. This assessment shall be done quickly soon after the abatement of flood inthe prescribed formats prescribed in Appendix-X ofOdisha Relief Code.

16.8 Submission of preliminary damage report (Para-76ofORC)

1. The Collector as well as the district level officers under each Department of Government shall immediately after assessment of flood damage forward a copy of their report to their immediate Head of Department. The district level officers may also supply reports to the Collector.

2. The Heads of Departments after necessary scrutiny shall forward their reports to their respective Departments of Government with copy to Special Relief Commissioner, not later than two weeks from the date of abatement of flood.

3. The SpecialRelief Commissioner shall compile the State report and shall furnish the consolidated preliminary report to the Revenue Department within a week of the receipt of the reports fromthe Heads of Department.

4. The preliminary flood damage report should be prepared as accurately as possible, as the relief measures, if any, are to be based on the merit and statistical data of that report.

Submission of final flood damage report (Para-77ofORC)

The concerned Heads of Departments as well as the Collector shall take immediatesteps to compile the final report on flood/cyclone damage in the formats prescribed in Appendix- X soon after submission of the preliminary report.

Accidental errors, clerical mistakes, shortcomings, if any, noticed should be rectified in the final report. The final report shall be made available to Special Relief Commissioner as soon as possible and notlater than one month from the date of abatement of flood.

On receipt of the reports from the different sources, Special Relief Commissioner shall forthwith compile the State report and furnish the same to the Revenue Department.

Central and State Government programmes and Schemes onNatural Calamities

Mainstreaming Disaster Management in development planning is the most critical component to mitigate disaster risks. That's whyit's importantto make noteof financial resources which are used in the implementation of such programmes and schemes which can lessen the risk from disasters by reducing vulnerability. It is also crucial to build communities resilience to deal with them. Moreover, as mandated by Ministry of Finance & Ministry of Home Affairs on 01st and 03rd June, 2014 respectively, 10 % flexi- fund within the centrally sponsored schemes (CSS) to be utilised, inter alia for mitigation / restoration activities in the event of natural calamities in

the sector covered by CSS. Thus, relevantCentral Government and State Government funded schemes are identified which are crucialto build over resilience of communities in the context of the district.

Table: Different State and Central Government Schemes and Programms

SlNo.	Name of the Scheme	Sector	Nodal Department	Objective of the Scheme
1	National Agriculture Insurance Scheme (NAIS)/ Rastriya Krishi BimaYojna (RKBY)	Crop Insurance	Agriculture Insurance Companyof India(AICI)	To protect the farmers against the losses suffered by them due to crop failures on account of natural calamities, such as droughts, floods, hailstorm, storms,animal depredation,etc.
2	JanashreeVima Yojna	Life Insurance	Life Insurance Corporation Of India	The objective of the scheme is to provide life insurance protection to the rural and urban poor persons below poverty line And marginally above the poverty line.
3	Pradhan Mantri Jeevan Jyoti BimaYojna	Life Insurance		Life insurance cover for death due to any reason
4	Pradhan Mantri Surkhya BimaYojna	Life Insurance		Accidental insurance for death/full disability or partial disability
5	Postal Life Insurance (PLI) and Rural Postal Life Insurance (RPLI)	Life Insurance	Postal	Life insurance under a number of schemes for employees in government, public sector banks andgovernment-aidededucation institutions
6	Pradhan Mantri FasalBimaYojana (PMFBY)	Crop Insurance	Agriculture	Insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as aresult of natural Calamities, pests and diseases.
7	RashtriyaKrishi BimaYojana	Health Insurance	Agriculture	Crop insurance

8	Biju Krushaka KalyanYojana (BKKY)	Health Insurance	Health	financial support through health and accident insurance

9	MahatmaGandhi BunakarBimaYojana	Accidental Insurance	Handloomand Textile	Insurance for accidental death And disabilities
10	Accident Insurance Scheme	Accident Insurance	Fishery	Assistant to fishermen towards hospitalization expenses during Serious disease
11	DiseaseControl Programmes			Protective vaccination for various diseases to livestock and treatment of animals
12	Mahatma Gandhi National Employment Guarantee scheme	Mitigtion measures	PRDept.,Govt. of India	Providing Employment opportunity to the poor villagers and to reduce the vulnerability of Panchayat vis a vis natural hazards such as drought, forest fire, cloud floods, etc by construction of different structure.
13	Pradhan Mantri GramSadakYojana	Roads	RuralWorks	Construction of all weather road and to ensure that in case of disasters these roads get provision for restoration to ensure all Weather connectivity
14	IndiraAwasYojana	Housing	Rural Development/ PanchayatiRaj	To promote measures like application of Hazard resistant design in construction of IAY houses, appropriate sitting of IAY housing. Besides, fire proofhouses to fire victim for special allocation quota.
15	SSA/RMSA/RUSA	Education	Human Resource Developme nt	To induce institutional safety plan and development of Policy paper of institutional safety at various level of education.
16	National Rural HealthMission	Health	Health and FamilyWelfare	To ensure that the village Health Plan and the District health plan explicitly address the disaster risk reduction concerns in the vulnerable habitations and the Vulnerable districts and the disaster management plan as per DM Act 2005 takes links itself to the District and village Health plans.
17	Finance Commission Grant	Infrastructure Development	PRDept.	10%of the fund will be dedicated to disaster related projects

Roles of District Planning committee on financial outlay on Mainstreaming Disaster Risk Reduction (DRR) in development programms.

By bringing two major amendments to the Indian Constitution, the Government of India has introduced 73rdand 74thConstitutionalAmendment Actsinthe year 1992-1993, which laid the foundation for bottom up planning approach by introducing 3rd and 4th levels ofplanning at the grassroots level. These 3rd and 4th grassroots level planning organizations are 'District Planning Committee' and 'GramaSabhas/Ward Committees'respectively. The first and second levels ofplanning bodies are Central Planning Commission and State Planning Board respectively. So as per the73rd and 74th amendments Act of the Constitution of India there is provision for an impetus to the process of decentralized planning having mandated devolution of powers to Panchayati Raj Institutions (PRIs) at village, block and district levels and its mandatory for setting up of District Planning Committees (DPCs) for consolidating plans prepared by Panchayats and Municipalities in the district into District Plans.

In view of this, Government of Odisha has ensured the formation of DPCs through the Odisha District Planning Committee Act, 1998 and subsequent Odisha District Planning Committee Rules, 2000 which have been enacted for effective planning process at the districtlevel.Subsequently, DPMU, Kalahandi have been set up in the district for preparing the Comprehensive District plan. The vision documents 2020 of Kalahandi stressed upon interventions to mitigate the critical risks. Further, under Section 38 (2) (e) of the DM Act, the State Government is to ensure that the integration of measures for prevention of disaster or mitigation have been incorporated by the departments of the Government of the State in their development plans and projects.

Role of DPC for mainstreaming Disaster Risk Reduction (DRR)

While the issues of climate change cripple formulated climate action in the district, mainstreaming climate change adaptation has emerged as a new area of focus for building resilience of vulnerable communities. Climate adaptive planning spans across departments (agriculture, water resources, rural development etc.) and vertical bureaucratic levels (district, block and village). CCA, i.e. adjustments in human and natural systems inresponse to actual or expected climatic variation, witha view to moderating harm or exploiting beneficial opportunities, is an area ofgrowing concern for the district. The myriad and uncertain effects of a changing climate pose significant risks for development and achievement of the Sustainable Development Goals (SDGs) at district level. Following roles of DPC would be articulated to be reduced the disaster risk at various levels.

- Make certain that all the development programmes and projects are designed with evident consideration for potential disaster risks and to resist hazard impact in the district.

- Make certain that all the development programmes and projects do not in advertently increase vulnerability to disaster in all sectors: social, physical, economic and environment

- Make certain that all the disaster relief and rehabilitation programmes and projects are designed to contribute to developmental aims and to reduce future disaster risk.

Procedure/Methodology for Mainstreaming of DRR and CCA in District Level Planning

Major Stakeholders and their Roles

Key players for DRR and CCA mainstreaming into development process at district level:

- NDMA, for research and development on the subject, formulation of strategies and guidelines, coordination and information management for DRR financing through international donor coordination and national level policy advocacy.
- SDMA, for research and development on the subject, formulation of province specific DRR strategies and guidelines and their implementation, coordination and information management for DRR financing and provincial level policy advocacy.
- Districtl Planning, Development and Special Initiatives Department, for formulating DRR and Climate Change mitigation measures including building codes, formulation ofchecklists and mainstreaming DRR at provincial level development programs.
- Departments of Agriculture & Livestock, for identification of vulnerabilities in development projects in agriculture & livestock department and introducing changing cropping patterns in the wake of climate change.
- Department of Education, for detailed research and risk assessment of new education projects and detailed risk assessment of the present education infrastructure and recommendation of mitigation measures.
- Department of Health, for detailed research and risk assessment for new health projects and detailed risk assessment of the present health infrastructure and recommend mitigation measures accordingly. Also assess future health related hazards due to climate change and make necessary strategies accordingly.
- Department of Revenue, especially offices of Deputy Commissioner and Assistant Commissioner, for spearheading mainstreaming efforts in the district.
- Planning Office, for doing all the spadework and coordination of all the main streaming strings with all the stakeholders.
- Department of Irrigation,for detailed research and risk assessment for new irrigation projects and detailed risk assessment of the present irrigation infrastructure, recommend mitigation measures and monitor mitigation and mainstreaming initiatives.

Components of Disaster Risk Disaster Risk= $\frac{\text{Hazard x Exposure x Vulnerability}}{\text{Capacity}}$

Disaster Risk Management (DRM)

Disaster risk management (DRM) aims to avoid, reduce or transfer the adverse impacts ofhazards on people, property and the environment through activities and measures. It is the systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.Disaster Risk eduction (DRR) Disaster risk reduction is the preparation and application of policies, strategies and practices to minimize vulnerabilities and hence disaster risk throughout society. It is the concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Few key actions for mainstreaming of DRR and CCA in development planning CCD of the district should consider the following key action points.

- Provision for adequate budget, dedicated staff, capacity development, a monitoring framework, and inter departmental cooperation need to be in place for effective mainstreaming.
- More attention needs to be paid to the monitoring and measuring of mainstreaming. This should include an assessment of inclusion of gender issues and BelowPoverty Line families in climate change planning.
- Risk diversification in the context of unpredictable climate patterns is necessary. The options need to include effective programmes of contingency crop planning, crop diversification including the use of hazard resistant crops as well as promoting supplementary income generation from off-farm and non- farm activities.
- The main obstacle in the path of government departments being able to address climate change concerns is dedicated personnel. Officials need to be highly skilled and trained. Additional qualities that an official needs to have in order to function effectively include empathy and communication.
- Detailed procedures that list the precise steps that are to be implemented in case of an emergency and by whom need to be put intoplace. This will ensure thatsystems work irrespective of the caliberof the individual official in position at that time. Preparation fora disaster as wellas risk reduction should be incorporated in the development agenda of all departments. This step will ensure that citizens who are usuallythe first onthe scene ofa disaster are well-equipped to dealwithemergencies and also reduce dependence on the National Disaster Response Force.

  To facilitate the process a set of checklists are given for vetting different projects/ developments through the lens of DRR and CCA as well as to check that they protect the communities from future disaster risks and do not increase their vulnerabilities to disasters. Each question is to be answered in Yes or No with specific remarks for the answer, if required.

Fund provision for Disaster Preparedness & Capacity Building

Allthough the district does not have separate capacity building funds provisions to face various types of disaster, but training programmes have been conducted for different stakeholders like government personnel and community on awareness for drought, flood and heat waves hazards by various departments as per the need of the districts and instructions communicated by the Govt. from time to time. Agriculture, Soil Conservation, Horticulture, ARD, Forest and PR departments organizes different training programme and exposure visit on different similar situation. In order to tackle heat wave situation department like Health, PR, RWSS and PHED, H&UD, Veterinary and forest organizes training programmes to minimize the effects of heat waves and reduce causality. Funds of the existing programme (funds allocated under CB components or contingency funds) have been used for this purpose.

Preparation and Implementation of District Disaster Management Plan

The Disaster Management Act.2005

India has been traditionally vulnerable to natural disasters on account of its unique geo-climatic conditions. Floods, droughts, cyclones, earthquakes and landslides have been a recurrent phenomena. Being highlyvulnerable to naturaldisaster, 25states outofa totalof35 states/UTs inIndia are considered disaster prone. 68%ofIndian land is draught prone, 12%to flood and 8%to cyclone. The loss interms of private, community and public assets has been astronomical. Therefore disaster management occupies an important place in this country's policy framework as it is the poor and the under-privileged whoareworst affected on account of calamities/disasters. At the global level too, there has been considerable concern over natural disasters.

Approach to Disaster Management Till recently, the approach to Disaster Management has been reactive and relief centric. A paradigm shift has now taken place at the national level fromthe relief centric syndrome to holistic and integrated approach with emphasis on prevention, mitigation and preparedness. These efforts are aimed to conserve developmental gains as also minimize losses to lives, livelihood and property. A typical Disaster Management continuum as shown below, comprising of six elements i.e., Prevention, Mitigationand Preparedness inpre-disaster phase, and Response, Rehabilitation and Reconstruction in post-disaster phase, defines the complete approach to Disaster Management.

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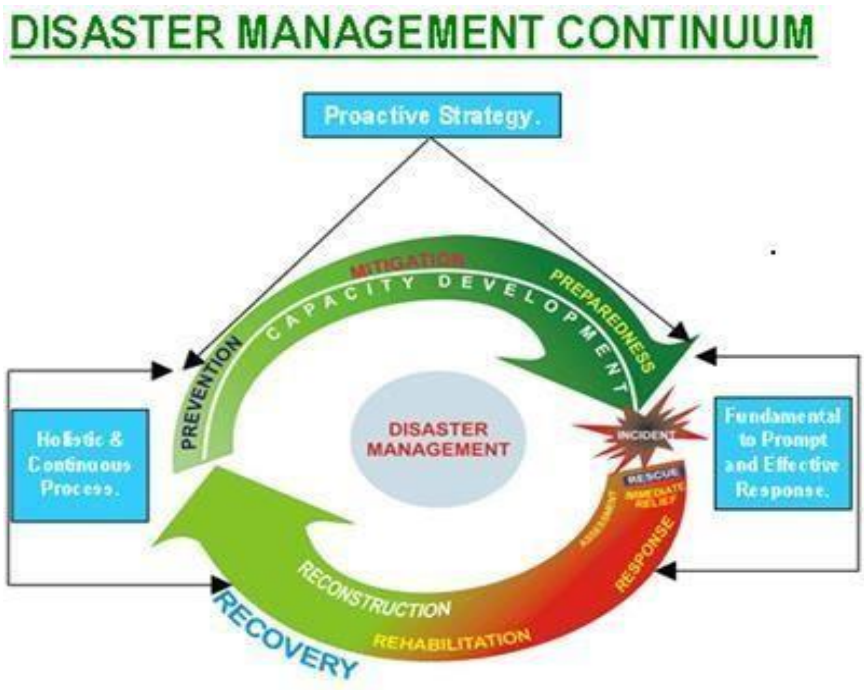


The Disaster Management Act – 2005 is aimed at preparedness, prevention and early planning towards disaster. By this Act three authorities namely, National Disaster Management Authority, State Disaster Management Authority and District Disaster Management Authority have been established. As stated in the act, there shall be no discrimination on the ground of gender, caste and community in providing compensation and relief. The act also provides penalties for obstruction, false claims etc and ensure the establishment of Disaster Response fund and Disaster Mitigation fund at central, state and district level.

Disaster results not only in the loss of life & shelter but also creates lack of food, increase in diseases and disturb socio-economic activities. Therefore it is one of the major area of concern for a developing country like India. Disaster Managementhas to be a multi-disciplinary and pro-active

approach. Besides various measures for putting in place institutional and policy framework, disaster prevention, mitigation and preparedness initiatives taken by the Central andState Governmentsthe NGOs, the community, civil societyorganizations and the media also have a keyrole to play in achieving the goal of moving together, towards a safer India.

District DisasterManagement Authorities Every State Government, in turn is to establisha District Disaster Management Authority for every district in the State with the Collector or District Collector or Deputy Commissioner as the Chairperson and such number of other members. The District Authoyriits to act as the district planning, co ordinating and implementing body or disaster management and take all measures for the purposes of disastermanagement in the district in accordance with the guidelines laid down by the National Authority and the State Authority.

Procedure for preparation of DDMP as per the Disaster Management Act 2005:

Preparation of the District DisasterManagement Plan is the responsibility of the District Disaster Management Committee of the district.

- Thefirst draft plan isto be discussed in the DDMA and later the Chairperson of the DDMA shall improve on it.
- The main steps involved in the development of this plan are:
    - Data collection from all line departments
    - Data analysis
    - Discussion with experts
    - Reference of national and international literature
    - Preparation of action plansfor all line departments
    - Preparation of draft plan document
    - Mock drill to check the viability and feasibility of the implementation methodology
    - Wide circulation for public and departmental comments
    - Preparation of the final plan document Stakeholders & the irresponsibilities:

Roles of ADM, DEO and Nodal Officers support from other line Departments.

As per Section 31 of the DM Act 2005 Every office of the Government of India and of the State Government at the district level and the local authorities shall, subject to the supervision of the District Authority,

-

a) Prepare a disaster management plan setting out the following, namely

    i) Provisions for prevention and mitigation measures as provided for in the District Plan and asis assigned to the department or agency concerned;
    ii) Provisions for taking measures relating to capacity building and preparedness as laiddown in the District Plan;
    iii) The response plans and procedures, in the event of,any threatening disaster situation or disaster;

b) Coordinate the preparation and the implementation of its plan with those of the other Organizations at the district level including local authority, communities and other stakeholders;
c) Regularly review and update the plan;and
d) Submit a copy of its disaster management plan and of any amendment there to,to the District Authority.

Preparationof a Disaster Preparedness Plan involves the following steps:

Steps	Whatistobedone	Whoaretobeinvolved	Methodology
I	Reviewand Analysis	Collector, ADM, Emergency Officer, BDOs, Tahasildars Village community, NGOs/CBOs, Community/Village level workers	▪ Past history of disasters to be discussed and documented ▪ Extent of severity and damage to be recorded ▪ The nature of the Warning issued to be analyzed Then ature and extent of the rescue and restoration done, to be revisited
II	Situation Analysis	BDOs, Tahasildars Village community, NGOs/CBOs, Community/Village level workers	▪ Mapping the geography and topography of the risk prone areas, block-wise, GP-wise and village-wise ▪ Demographic details to be recorded ▪ Mapping of the habitation in the concerned areas ▪ The natural resources to be marked onthe maps ▪ Listing all the livelihoods and properties ▪ The existing risk prone/ safe infrastructure to be marked on the map
III	Hazard Analysis	BDOs, Tahasildars Village community, NGOs/CBOs, Community/Village level workers	▪ Identification of all possible hazards in the area based on past experience and available records ▪ Identification of the most vulnerable areas with relation to threat to life,livelihoods and property
IV	Vulnerability Assessment	BDOs, Tahasildars Village community, NGOs/CBOs, Community/Village level workers	▪ Locations ofthe vulnerable areas are to be mapped separately ▪ Identification of the vulnerable people suchas, the elderly, the disabled, children and pregnant women, families living in thatchedhouses, fishermen at sea (ifany), ailing people, etc. ▪ Identification of property or assets which are likely to be affected, such as, cattle and other livestock, kachcha houses,weak structures, pump sets, tube wells and other installations, crops, horticulture and plantations, boats, nets, ▪ Identification of weak points on embankments (if any) ▪ Marking the drainage system in the concerned area

V	OpportunityAnalysis	BDOs, Tahasildars Village community, NGOs/CBOs, Community/Village level workers	▪ Identification of the existing resources which may help to reduce risks to life and property ▪ Identification of the safe houses and buildings for shelter and storage ▪ Listing the existing flood/cyclone shelters, if any ▪ Identification of the elevated and up-lands which can act as natural barriers to protect livestock ▪ Listing of the existing health and Sanitation facilities ▪ Identification of the sources of funds to carry out the preparedness activities

Cooperation of Line Depatment

Without the cooperation of Line department by providing their information essential for the preparation of this District disaster management plan would not have possible for the district to prepare this plan. Their timely submission of the information and valuable advice in this regard will asways be appreciated. Disaster Management is not task which can be done single handedly without the external suppot. In this respect interdepartmental coordination with line department is an important aspect of this plan.

Timeline for preparation of DDMP

SlNo.	Activities to be done	Timeline
1	Consultation with line department officials and important stakeholders at district level	1st week of January
2	Submission of base line data by all line departments	3rd weekof January
3	Compilation of information'sand preparation DDMP. Sharing of draft with Chairperson, members of DDMA and other stakeholders	1st week of February
4	Necessary modification and finalization	2nd weekof February
5	Placing the final copy before DDMA, finalization and submission of a copy to SDMA	Lastweekof February
6	Approvalby DDMA	By March
7	Consultation with line department officials and important stakeholders at district level	1st weekof January
8	Submission of baseline data by all line departments	3rd weekof January
9	Compilation of information's and preparation DDMP. Sharing of draft with Chairperson,members of DDMA and other stakeholders	1st weekof February
10	Necessary modification and finalization	2nd weekof February
11	Placing the final copy before DDMA, Finalization and submission of a copy to SDMA	Lastweekof May
12	Approval by SDMA	By June

Details of consultation meetings oranised for discussion with stakeholder for modification and changes in DDMP 2025-26.

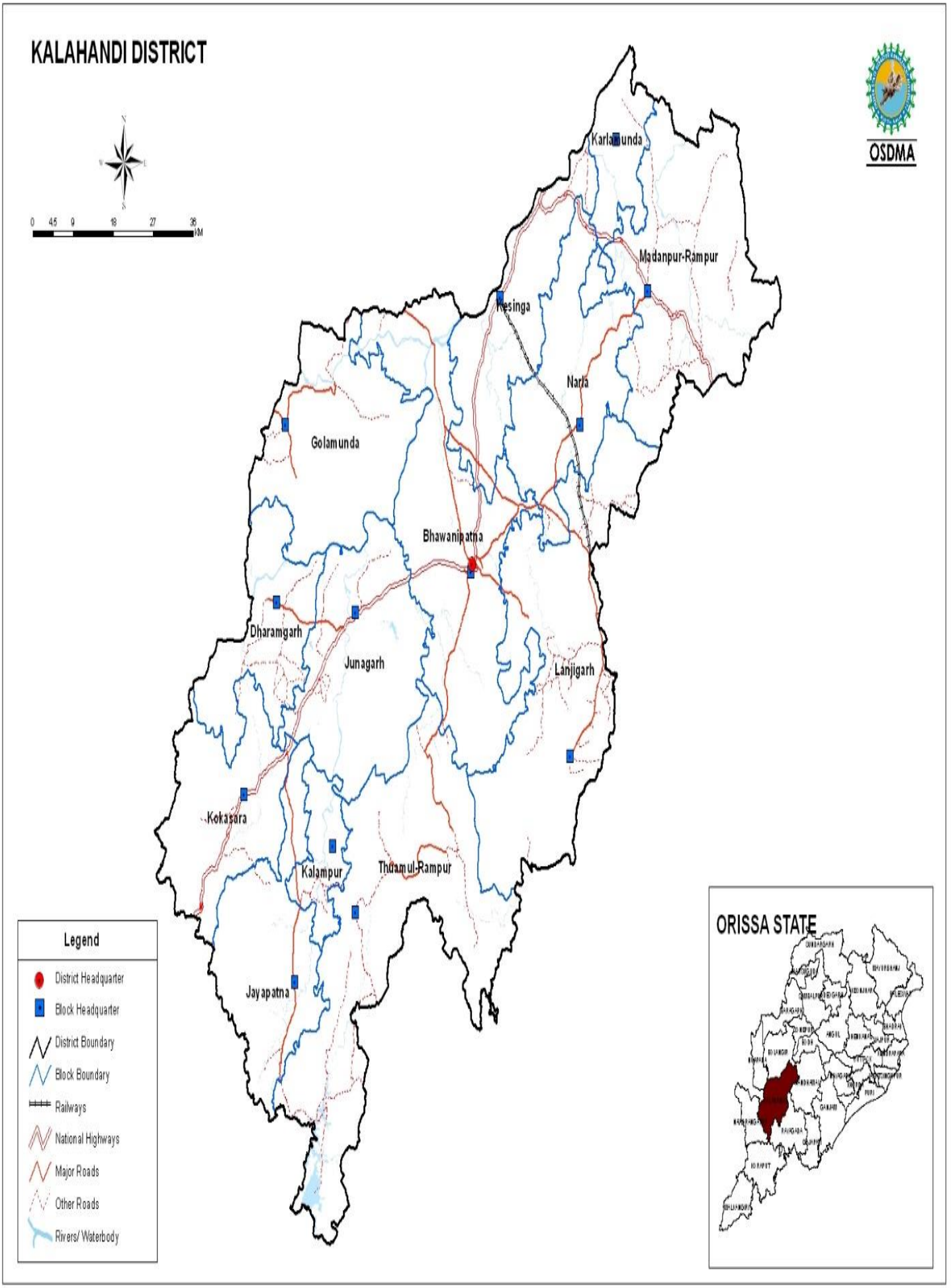
- Organisation of DDMP meeting with District level officers and officials of Line departments .
- Orientation of the concerned officials on objective of DDMP-2025-26
- Fixation of dateline for submission of DDMP information in prescribed formats by 30th June in consultation with DEO, Kalahandi as per instruction received from OSDMA in review meeting.
- Mailing the soft copy of formats to all the concerned line departments from the official mail ID of Emergency Section/OSDMA.
- Web hosting of DDMP formats in the official website of Kalahandi District portalwith the help of District Information Officer.

- Segregated the formats (deptt.wise) and mailing the form to each concerned line departments again for simplifying their task to search their concern formats.
- Mailing of formats and letters from theE-MailID of DEOC,Kalahandi and WhatsApp group of district level officials for better response.
- Forwarding letter to each line department by the signature of ADM,Kalahandi for nominating the name of their point person who will be responsible for submission of required information.
- Reminded the concerned officials telephonically for submission of information by the dateline.
- Telephonically clearing the doubts on the formats to the concerns.
- Discussing with ADM, Kalahandi & Emergency Officers on collection of information.
- Incorporated the "preparation and updation of DDMP 2025" as an agenda for the "Heat Wave meeting 2024" held at Collectorate, Kalahandi to take the matter to the concern of Collector.
- Orgnisation of Review meeting on DDMP,2025-26 to review the status information submission by the line department and officials.
- Mailing of reminder letter to the concerned official for submission of information.
- Taken the references of different web portals for collection of information to be incorporated in the DDMP,2025-26
- Taken the support and guidance of SPOs time to time for preparation of the plan.
- Taken the help of previous year files of emergency section, collectorate to understand the process of preparation of DDMP.

Sharing and placing before DDMA for approval

As per Section 31(2) of the Disaster Management Act 2005, there shall be a plan for disaster management for every district of the State. The District Plan shall be prepared by the District Authority, after consultation with the local authorities and havingregard to the National Plan and the State Plan, to be approved by the State Authority.

Also, as per Section 31(6)of the Disaster Management Act 2005, the District Authorityshall senda copy of the District Plan to the State Authority which shall forward it to the State Government.Plan Review &Updation Periodicity. As per Section 31(4) The District Plan shall be reviewed and updated annually. Also, As per Section 31(7) The District Authority shall, review from time to time, the implementation of the Plan and issue such instructions to different departments of the Government in the district as it may deem necessary for the implementation thereof.


KALAHANDI DISTRICT
OSDMA
Karlamunda
Madanpur-Rampur
Kesinga
Narla
Golamunda
Bhawanipatna
Dharamgarh
Junagarh
Lanjigarh
Kokasara
Kalampur
Thuamul-Rampur
Jayapatna
Legend
District Headquarter
Block Headquarter
District Boundary
Block Boundary
Railways
National Highways
Major Roads
Other Roads
Rivers/ Waterbody
ORISSA STATE

GOVERNMENT OF ODISHA

REVENUE AND DISASTER MANAGEMENT (DISASTER MANAGEMENT)

NOTIFICATION

No. 4695 /R&DM(DM) Dated 29/08/2023
RDM-RLF-EMER-0004-2023

Government of Odisha has implemented Incident Response System (IRS) as the preferred disaster response system in the State. For execution of the same at the District Level, Incident Response system (IRS) is hereby notified as follows-

1) Responsible Officer	Collector & District Magistrate
2) Incident Commander	Addl. District Magistrate (Emergency)
3) Deputy Incident Commander	Nominated by RO/CDO/Sub-Collector
4) Safety Officer	Superintendent of Police/CDMO/CDVO/Sr. Station Officer, Fire & ES
5) Liaison Officer	Dy. Collector(Emergency)
6) Information & Media Officer	District Information and Public Relation Officer
7) Operation Section Chief	ADM/Addl. SP/DSP/ADMO/ADVO/Dy. Collector (Emergency)
a. Staging Area Manager	APD Administration
b. Rescue & Response Branch	
i.Natural Disasters	Sr. Station Officer, Fire & ES/ Commandant ODRAF/ Commandant Coast Guard
ii.Epidemic & Health Hazard	CDMO/CDVO
iii.Manmade Disaster	Superintendent of Police/ Officer nominated by RO
c. Transport Branch (Road, Rail, Water & Air Unit)	RTO/ARTO/Dist. Forest Officer/Dist. Fishery Officer
8) Planning Section Chief	Deputy Collector (Emergency)
a. Situation Unit	Deputy Collector/Asst. Collector/SRA
b. Resource Unit	Deputy Collector /Asst. Collector/SRA
c. Documentation Unit	Deputy Collector /Asst. Collector/SRA
d. Demobilization Unit	Deputy Collector /Asst. Collector/SRA
9)Logistic Section Chief	Deputy Collector (Emergency)
a. Service Branch	Addl.EO (ZP)/APD (Admin.)
i. Communication Unit	DEO/Fire Officer/DEGM/BSNL
ii. Medical Unit	CDMO/CDVO

iii. Food Unit	CSO, Food & Civil Supply Department
b. Support Branch	Addl.EO (Tech)/All Superintendent Engineer
i. Resource Provisioning Unit	All Superintendent Engineer
ii. Facilities Unit	All Superintendent Engineer
iii. Ground Support	All Superintendent Engineer
c. Finance Branch	Deputy Collector /PM Finance
i. Time Unit	Deputy Collector
ii. Compensation/Claim Unit	Nizarat
iii. Procurement Unit	APD(Finance)
iv. Cost Unit	Nizarat

The District Level Incident Response Team (IRT) will be activated by the Responsible Officer (Annexure-I) in the event of occurrence of any major emergencies/disasters.

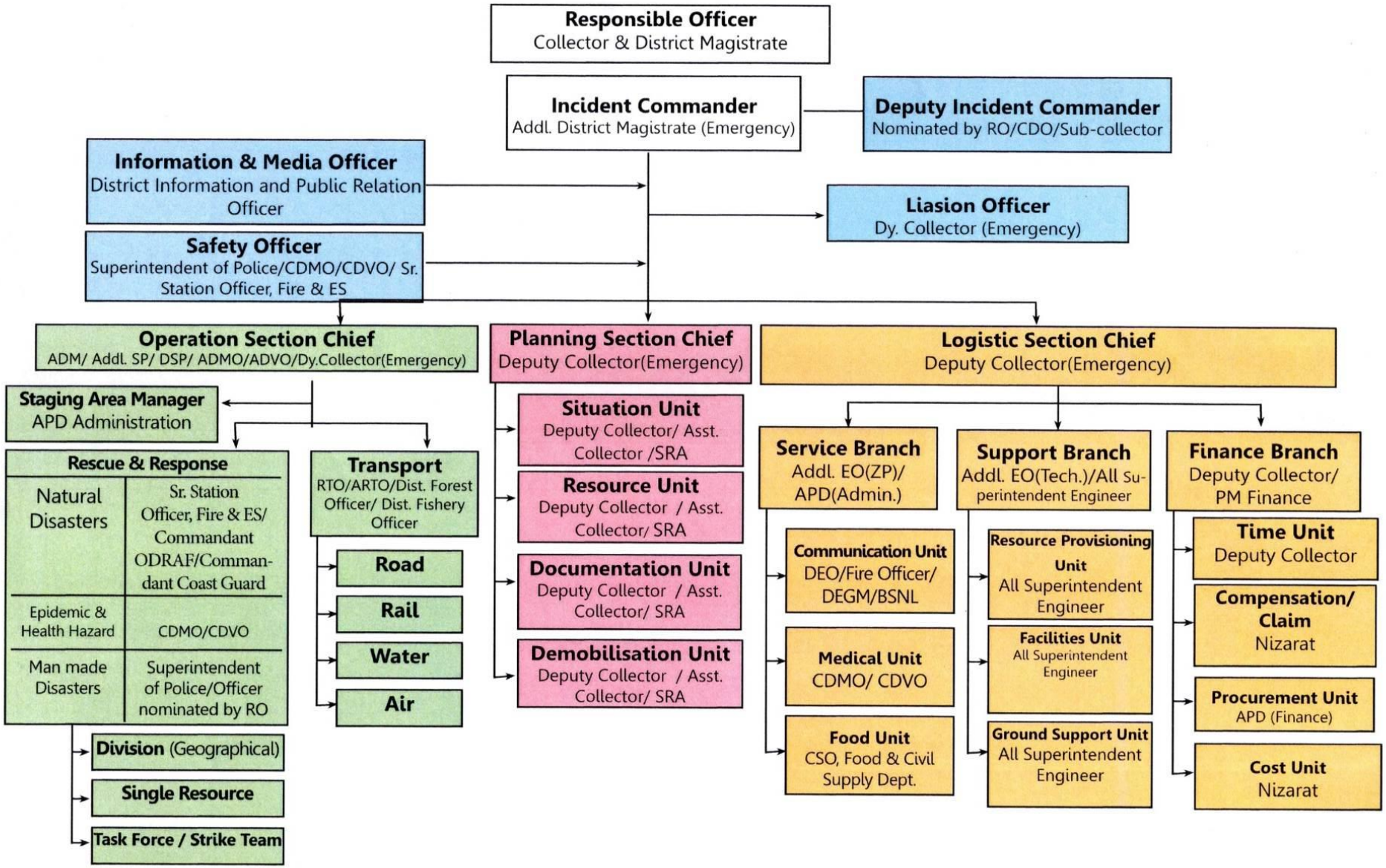
This will come into force with effect from the date of publication of this notification.

29/8/23

Special Relief Commissioner &
Additional Chief Secretary
Government of Odisha

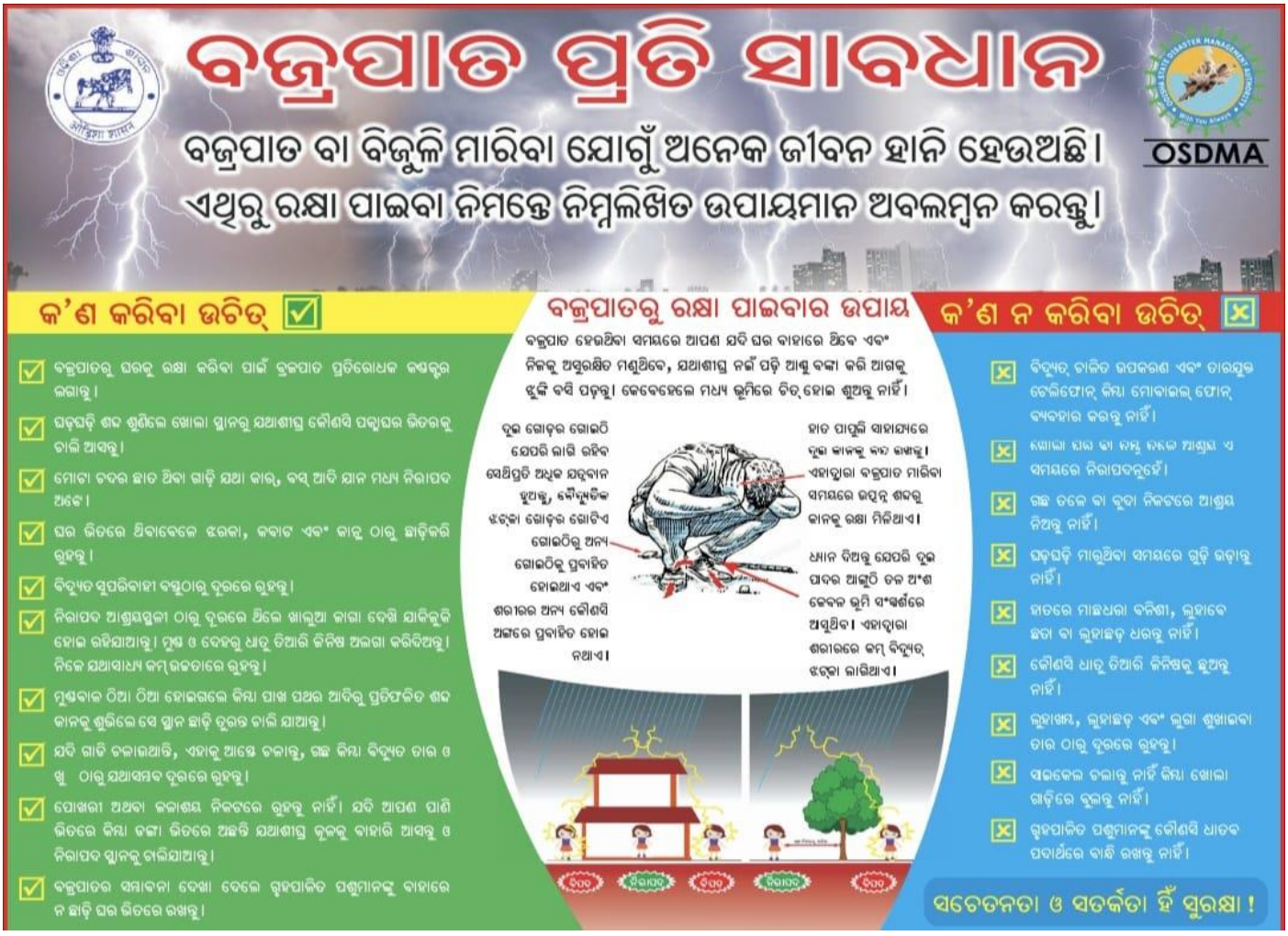
INCIDENT RESPONSE TEAM - DISTRICT LEVEL

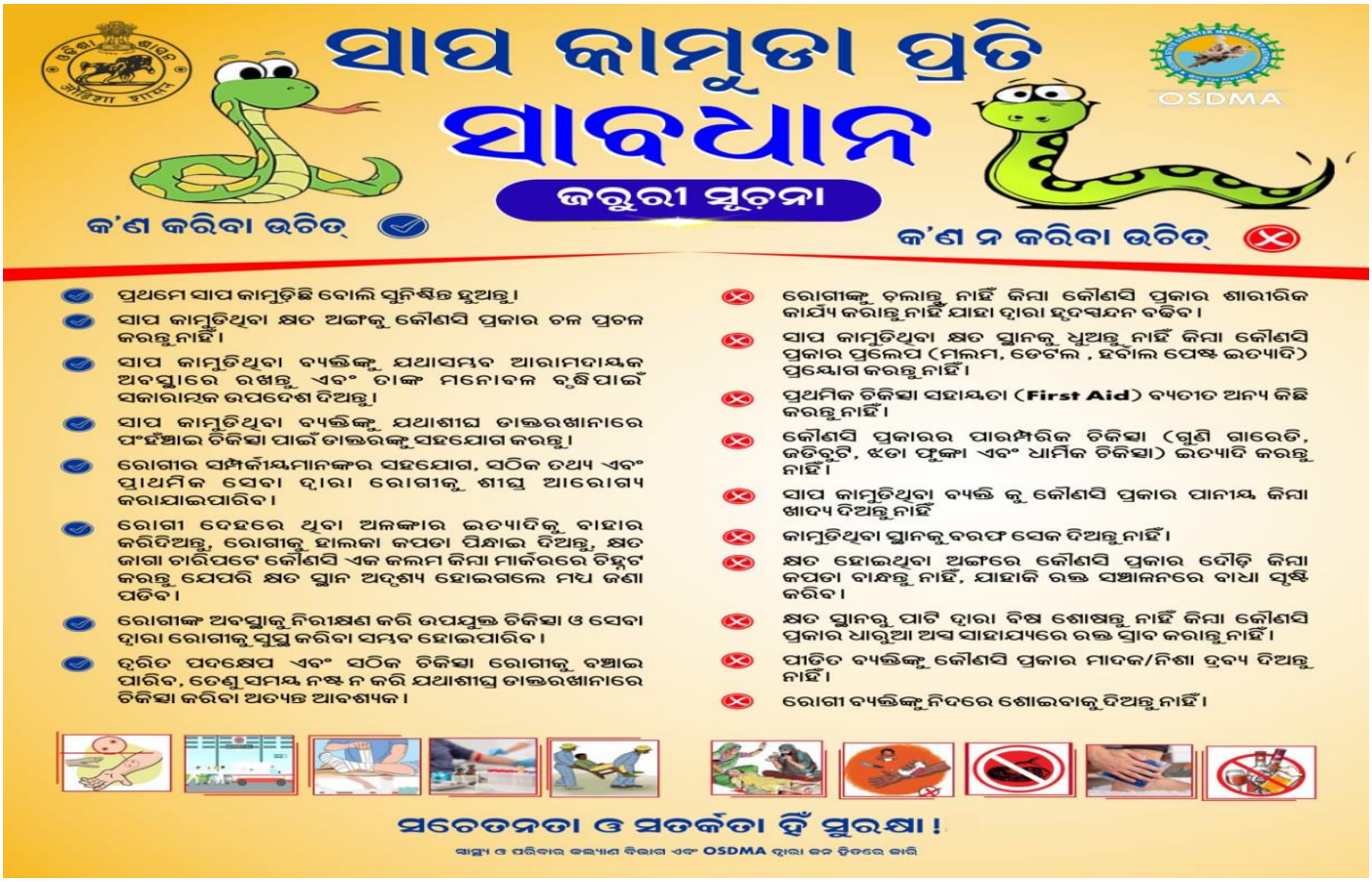
Annexure-I



(District Level Committe on Natural Calamities Meeting, 2025)

(Table Top Exercise and Disaster Management Exercise 2025)





(IEC Posters on Lighting and Snake Bite Death Reduction)