



-DEPARTMENTAL DISASTER MANAGEMENT PLAN-
HOUSING & URBAN DEVELOPMENT DEPARTMENT
GOVERNMENT OF ODISHA
FOR THE YEAR
2019





Housing & Urban Development Department
Govt. of Odisha

Departmental Disaster Management Plan,
Housing & Urban Development Department, Govt. of Odisha

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-Preface-

The State of Odisha is vulnerable to natural calamities & disasters arising out of Cyclones, Drought, Flood, Storm, Heat Wave, Lightning, Water Logging etc. which occurs almost in routine manner as if natural allies in an interval of one/two year. Due to its sub-tropical littoral location, the state of Odisha is prone to tropical cyclones, storm surges and tsunamis. It has a 481 km coastline. There are 11 major river systems in Odisha such as the Subarnarekha, the Budhabalanga & Jambhira, the Baitarani, the Brahmani, the Mahanadi, the Rusikulya, the Vansadhara, the Nagabali, the Indravati, the Kolab, and the Bahuda. Its densely populated coastal plains are the alluvial deposits of its river systems. The rivers in these areas with heavy load of silt have very little carrying capacity, resulting in frequent floods, only to be compounded by breached embankments. About two-third of the total cultivated area being rain-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), the Brahmani-Mahanadi graven and their deltaic areas come under Earthquake Risk Zone-III (Moderate Damage Risk Zone) covering 44 out of the 114 urban local bodies of the state. Although the coast of the State was not affected by the Tsunami of December 2004, it remains a potential hazard for the State.

Besides these natural hazards, human-induced disasters such as road accidents, stampede, fire, etc, vector borne disasters such as epidemics, animal diseases and pest attacks and industrial / chemical disasters add to human suffering.

-Acknowledgement-

The Disaster Management Act, 2005 mandates that each Department is to prepare and review its Disaster Management Plan annually. Accordingly, Housing and Urban Development Department like previous year has prepared/ reviewed its DM Plan for the year 2019.

In course of the preparation plan special thanks may also be extended to all the concerned higher authorities in the line of the Department who have rendered their valuable suggestions, cooperation and inputs.

Sri S. K. Thakur, State Project Officer, OSDMA has given valuable guidance and support for preparation of the Departmental Disaster Plan 2019.

The sense of gratitude may also be offered to the Sub-ordinate Officers for whose contribution, the above job work could not have been accomplished in time.

Relief & Rehabilitation Section,
H & U.D. Department.

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Acronyms and Abbreviation

AMRUT	Atal Mission for Rejuvenation and Transformation
BSNL	Bharat Sanchar Nigam Limited
CB	Capacity Building
CBDP	Community Based Disaster Preparedness
CBDRR	Community Based Disaster Risk Reduction
CCA	Climate Change Adaptation
CO	Community Organizer.
CSO	Civil Society Organization
CMRF	Chief Minister relief Fund
DOWR	Department of Water Resources
DM	Disaster Management
DMTC	Disaster Management Training Centre
DM ACT, 2005	Disaster Management Act, 2005
DIPRO	District Information and Public Information Officer
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
EOC	Emergency Operations Centre
GIS	Geographic Information System
GoI	Government of India
H&FW	Health & Family Welfare
HI	Handicap International
HRVA	Hazard Risk Vulnerability Assessment
HPC	High Powered Committee
HRD	Human Resource Development
HR	Human Resources
H&UD	Housing and Urban Development
IMD	India metrological Department
IT	Information Technology
IRS	Indian railway Service
IEC	Information, Education and Communication
IRCS	Indian Red Cross Society
IDRN	India Disaster Resources Network
INGO	International Non-Government Organization
JICA	Japan International Co-operation Agency.
JnNURM	Jawaharlal Neheru National Urban Renewal Mission.
MIS	Management Information System
MHA	Ministry of Home Affairs
MC	Municipal Corporation.
NAC	Notified Area Council.
NDRF	National Disaster Response Force
NSS	National Service Scheme
NYK	Nehru Yuva Kendra
NBC	Nuclear, Biological and Chemical
NCDM	National Committee on Disaster Management

NCC	National Cadet Corps.
NCRMP	National Cyclone Risk Mitigation Project
NDRF	National Disaster Response Force
NDMA	National Disaster Management Authority
NDMRCs	National Disaster Mitigation Resource Centers
NGO	Non-Government Organization
NIDM	National Institute of Disaster Management
NULM	National Urban Livelihood Mission.
ODRAF	Odisha Disaster Rapid Action Force
ODRP	Odisha Disaster recovery Project
ORC	Odisha Relief Code
OSDMA	Odisha State Disaster Management Authority
OSIP	Odisha Sanitation Improvement Project.
OISIP	Odisha Integrated Sanitation Programme.
OULM	Odisha Urban Livelihood Mission.
OUIDF	Odisha Urban Infrastructure Development Fund.
OWSSB	Odisha Water Supply and Sewerage Board.
PMAY	Pradhan Mantri Awas Yojana.
PHEO	Public Health Engineering Organization.
RAY	Rajiv Awas Yojana
R&DM	Revenue and Disaster Management
ROTI	Revenue Officers' Training Institute
SBM	Swachh Bharat Mission.
SCM	Smart City Mission.
SDRF	State Disaster response Fund
SEC	State Executive Committee
SEOC	State Emergency Operation center
SOPs	Standard Operating Procedures
SRC	Special Relief Commissioner
SIDM	State Institute of Disaster Management
SDMA	State Disaster Management Authority
SJSRY	Swarna Jayanti Shahari Rojgar Yojana.
SLCC	State level Calamity Committee
SSG	Swayank Sahayak Group
SUDA	State Urban Development Agency.
SWM	Solid Waste Management
ULB	Urban Local Body
UNDP	United Nations Development Programme
UNISDR	United Nations International Strategy for Disaster Reduction
UNICEF	United Nations Children Fund
URR	Urban Risk Reduction
W&CD	Women & Child Development
WFP	World Food Programme

-Executive Summary-

India has been traditionally vulnerable to natural disasters on account of its unique geo-climatic conditions. Floods, cyclones, droughts, earthquakes and landslides have been a recurrent phenomenon. About 60% of the landmass is prone to earthquake of various intensities, over 40 million hectares is prone to floods, about 8% of the total area is prone to cyclones and 68% of the area is susceptible to drought.

Disaster are either natural, such as floods, droughts, cyclones and earthquakes, or human-made such as riots, conflicts, refugee situations and others like fire epidemics, industrial accidents and environmental fallouts. Often, the difference between them is marginal. Definitions and categorization of disasters vary according to geo-sectors, the geographical and social settings in which they are located. Every new disaster adds a dimension to human suffering. At the global level, there has been considerable concern over natural disasters. Even as substantial scientific and material progress is made, the loss of lives and property due to disasters has not decreased.

Disaster is - Massive loss of life and property, Disrupts normal life, requires external aid, affecting a large number of people.

There are 114 Urban Local Bodies (ULBs) under Housing & Urban Development Department of Odisha. These cities are vulnerable to multi-disasters, i.e.

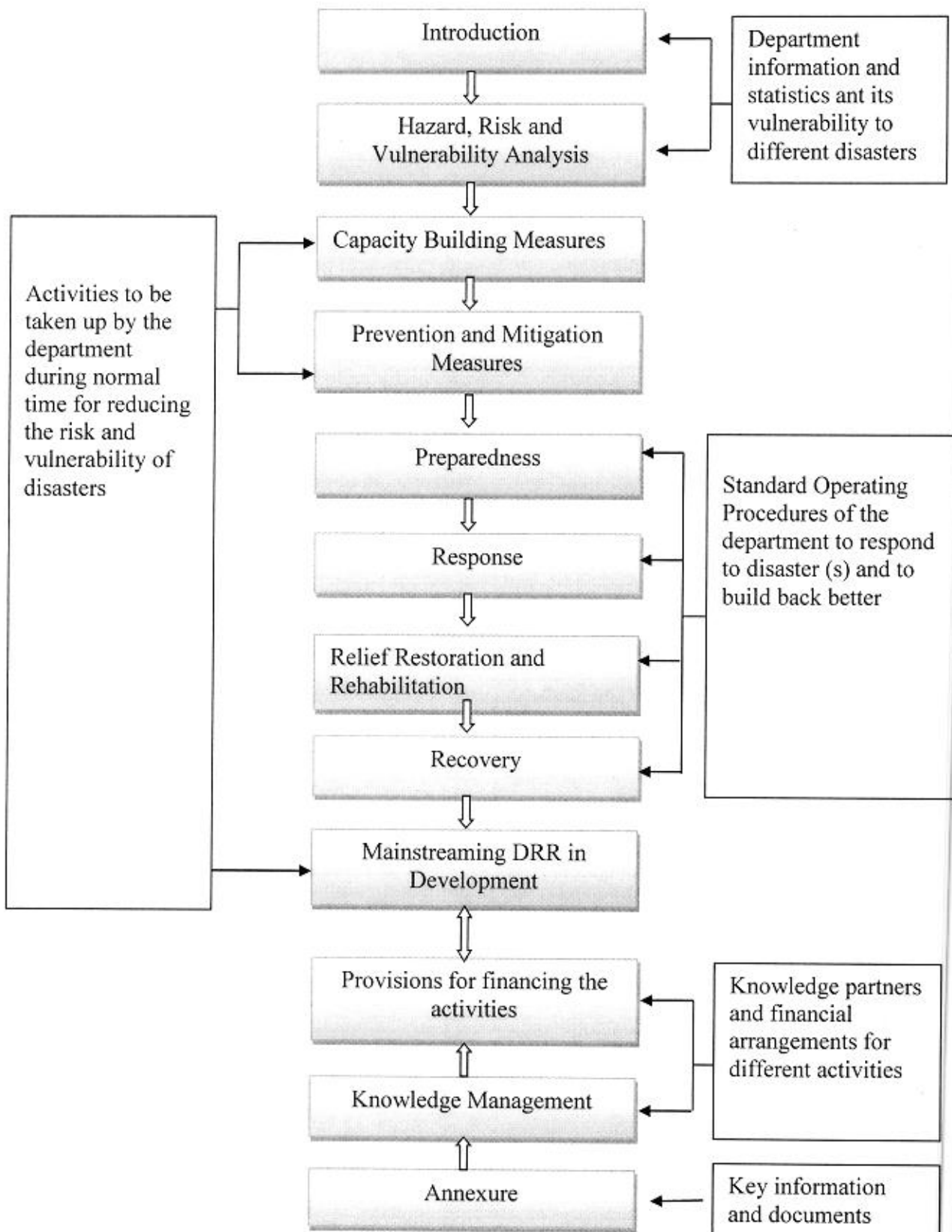
- Cyclone
- Flood
- Urban Fire
- Some Cities are prone to Earthquake
- Water logging
- Biological Disaster like Swine Flu (H1N1)

We can make all our ULBs Safer by-

- Generating Awareness at all level
- Preparing the community to respond to disasters in a better manner
- Training and capacity building
- Networking knowledge of best practices
- Formation of Disaster Management Plans at all levels

The main aim of the plan is to ensure disaster preparedness by the department and build awareness among all the Urban Local Bodies and line departments functioning under Housing & Urban Development Department to handle any unprecedented situation. The plan is required to institutionalize Disaster Management in the ULBs/ Department and to tackle with the Disaster situation in a better way.

How to use the plan



-Chapter 1-

Introduction

- 1.1.Objective
- 1.2.Scope of the plan.
- 1.3.Overview of the Department.
- 1.4.Progress in Disaster Management (Past Achievement).
- 1.5.Acts, Rules and Policies governing the business of the Department.
- 1.6.Institutional Arrangement for disaster management.
- 1.7.Preparation and implementation of departmental disaster management plan.

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 Bairarani, the Brahmani, the Mahanadi, the Rusikulya, the Vansadhara, the Nagabali, the Indravati, the Kolab, and the Bahuda. Its densely populated coastal plains are the alluvial deposits of its river systems. The rivers in these areas with heavy load of silt have very little carrying capacity, resulting in frequent floods, only to be compounded by breached embankments. About two-third of the total cultivated area being rain-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), the Brahmani-Mahanadi graven and their deltaic areas come under Earthquake Risk Zone-III (Moderate Damage Risk Zone) covering 44 out of the 114 urban local bodies of the state. Although the coast of the State was not affected by the tsunami of December 2004, it remains a potential hazard for the State.

1.1 Objectives of the Plan:

The Housing & Urban Development Department is the nodal Department for ensuring proper and planned growth of cities and towns with adequate infrastructure and basic amenities. The continuous exodus of rural population to urban areas has contributed to the exponential growth resulting in severe strain on the existing infrastructure and subsequent demand for additional provisions. To keep pace with the growing demands of the urban area, the Department has been taking effective and adequate steps for efficient management & delivery of basic urban services like provision of Safe Drinking Water, Sanitation, Roads, Solid Waste Management, Housing, etc

Further one of the important reforms during 1990s was the 74th Constitutional Amendment Act which empowered the Urban Local Bodies (ULBs) to function as Local Self Government. Thus, the Housing & Urban Development Department has got paramount responsibility to make the ULBs self-sufficient and centers for good governance. The Department strives to bring about both qualitative and quantitative changes in the living standard of the urban people by putting emphasis on the following areas:

- Urban Planning and development
- Strengthening urban infrastructure, viz., roads with drains, water supply, sewerage and efficient solid waste management.

- Development of public amenities including public parks, urban greenery and conservation of water bodies.
- Urban reforms and e-Governance.
- Provision of housing in the urban area and especially for the urban poor.
- Skill up-gradation and financial support to the urban poor.

To help achieve the vision and ensure that the dreams come true, this Department is striving hard to rope in funds from various sources like State Plan, Non-Plan, and Government of India Assistance, Municipal Fund, Local Area Development Fund of Hon'ble MLAs, and Hon'ble MPs. The Department is further facilitating Urban Reforms and Policy Level changes to strengthen the Urban Local Bodies (ULBs) in terms of their finance, administration and effective and efficient delivery of basic services to the public at large.

Our vision & mission is to ensure planned development of cities/towns into livable, economically vibrant and productive, sustainable and efficient entities with provision of adequate durable public infrastructure and amenities such as drinking water supply, sanitation, roads, drainage, solid waste management, transportation, public parks, recreation areas including preservation of water bodies and heritage sites, urban forestry and affordable housing for all sections of society and bringing out efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of ULBs/ Parastatal agencies towards citizens, in an integrated manner.

The main aim of the Plan is to minimize the loss of life and property of the residents of the ULBs. And the objectives are-

- To study the disaster cycle, study of disasters and hazard analysis.
- Institutionalization of disaster management in the ULBs.
- Vulnerability reduction and disaster mitigation through better planning process.
- Preparedness prevention and mitigation of natural and manmade disasters.
- To identify the highly vulnerable areas.
- Instant response and effective decision making in disasters
- Better co-ordination among the line departments in the ULBs.
- Encouraging and empowering the local community towards disaster management.
- Keeping update of available resources in and around the ULBs to tackle any kind of disaster.

1.2 Scope of the Plan

An indicative List is given below;

- Taking up of proactive measures to prevent disaster and mitigate its effects.**
- Necessary policies and planning to reduce the loss of public and private property, especially critical facilities and infrastructure.**
- Better management of future development to mitigate the effect of natural hazards.**
- Convergence of different departmental schemes for disaster risk reduction.**
- Enhance the capacity to respond to disaster.**

- vi. Development of standardized mechanism to respond to disaster situation to manage the disaster efficiently.
- vii. Prompt relief, rescue and search support in the disaster affected areas and to build back better.)

1.3 Overview of the Department.

The Housing And Urban Development Department (H&UD) is the administrative department of Government of Odisha responsible for ensuring proper and planned growth of cities and towns with adequate infrastructure, amenities and services provided to the citizens through the Urban Local Bodies and Parastatal agencies. The Department has been taking concrete measures for more effective citizen-centric urban governance; creation, maintenance, efficient management and delivery of urban infrastructure, amenities and citizen services with the twin objectives of planned and inclusive urbanization.

1.2.1 Vision

To ensure planned and inclusive development of cities/towns into livable, economically vibrant and productive, sustainable and efficient entities with provision of adequate and durable public infrastructure and amenities, including affordable housing and livelihood opportunities for all sections of society and bringing out efficiency in the service delivery mechanisms, community participation and accountability of Urban local Bodies and Parastatal agencies towards citizens, in convergent manner.

1.2.2 Mission

Realizing the vision by embarking on implementing urban reforms and e-governance; strengthening urban planning with citizens' participation, enforcing municipal rules /regulations, building capacity of Urban local bodies (ULBs) to deliver services, creating and maintaining urban infrastructure, operationalizing effective water supply and sanitation systems including solid waste management, developing public spaces and amenities, making provision of affordable housing for urban poor, upgrading skills of the urban poor for increasing their employability and improving economic condition.

1.2.3 Objectives

Listed below are the key objectives of the department.

- Improving urban planning and governance for effective enforcement of plans, rules, efficient urban management and service delivery.
- Facilitating reforms and policy interventions to improve financial base of ULBs and better citizen interface in service delivery.
- Enhancing service standards, transparency and accountability towards simplifying process for grievance redressal.

- Creation and maintenance of urban infrastructure in the areas of water supply, sewerage, solid waste management, storm water drains, urban transport and other amenities.
- Encouraging PPP projects for infrastructure development (urban transport, municipal SWM, etc.)
- Effective implementation of programmes for skill development and urban poverty reduction.
- Slum redevelopment/ rehabilitation and implementation of housing schemes for EWS, LIG & MIG.
- Encouraging innovations in urban development.

1.2.4 Functions

- Implementation of urban governance reforms (e.g. Smart City Mission, AMRUT, 14FC, etc.).
- Formulation and implementation of enabling policies/ guidelines.
- Facilitate preparation and implementation of Comprehensive Development Plans/ Master Plans and City Development Plans (CDP).
- Capacity development of existing personnel and elected representatives.
- Effective implementation of e-governance programmes.
- Creation of a dedicated Municipal Cadre.
- Benchmarking urban services (Service Level benchmarking-SLB).
- Formulation and implementation of Citizen's Charter; Public Disclosure Law.
- Formulation and implementation of PPP Policy on Urban Development.
- Facilitating PPP projects in urban infrastructure, transport and solid-waste management.
- Encouraging group productive activities of urban poor women for economic entitlement.
- Dovetailing non-govern/ private/ corporate partners for skill training and placement of youth.
- Formulation and implementation of Affordable Housing Scheme with mandatory provision for creation of housing stock.
- According limited property rights to the slum dwellers and prevention of new slums.
- Mobilization of fund from various sources for successful implementation of flagship projects.
- Ensuring effective monitoring, reporting and review of projects, confirming to the project time line.
- Design and implementation of innovative pilot projects with community participation.

1.2.5 Directorate of Municipal Administration

Municipal Administration in Odisha is managed by the Directorate of Municipal Administration (DMA), which is the apex administrative organization that regulates functioning of all Municipal Corporations, Municipalities and Notified Area Councils in performing their regulatory and enforcement activities; by adhering to the policies, procedures and guidelines provided by the Government to achieve effective municipal administration in the state. It also does the monitoring and supervision of the developmental functions of the Urban Local Bodies.

Municipal Administration plays a vital role in guiding the process of urbanization and providing a road map for planned and inclusive urbanization. Odisha has 112 Urban Local Bodies consisting of 5 Municipal Corporations, 46 Municipalities and 63 NACs. The Municipal Administration plays a key role in ensuring proper implementation of the municipal regulatory framework and various schemes and programmes for the benefits of the urban citizens. It has the responsibility to place personnel, exercise disciplinary control, allocate funds, monitor utilization, develop municipal assets, ensure prudence and transparency in expenditure and hear appeals from the citizens against the decisions of ULBs. It also co-ordinates with the State Election Commission on all matters pertaining to elections to the ULBs.

1.2.6 Director of Town Planning (DTP)

The Director of Town Planning was established in Odisha with the purpose of promoting planned physical development of urban areas and is the nodal agency for all urban planning related activities. With continuous exodus of rural population to urban areas, there is a need to ensure planned development cities/ towns into livable, economically vibrant and productive and sustainable. The Directorate of Town Planning is headed by the Director, Town Planning. There are nine development authorities (DAs), seven regional improvement trusts (RITs) and forty special planning authorities (SPAs) in Odisha for ensuring planned growth of urban areas. The activities of the Department have been multifarious.

1.2.7 Public Health and Engineering Organization (PHEO)

The Public Health Engineering Organization (PHEO) is under the administrative control of Housing and Urban Development (H&UD) Department of the Government of Odisha. PHEO is the service provider that plans, executes, operates & maintains the urban water supply systems of the state with 6 PH (SE) Circles, 19 PH Divisions and 56 PH Sub-Divisions.

- Operation & maintenance of water supply systems consisting of intake arrangement, production wells, raising main, water treatment plant, pumping, distribution and storage systems.
- Maintenance of PH installations of public institutions, government buildings (Residential & Non-residential).

- Engineering supervision of water supply/ sewerage projects taken up ; under State plan/ CSP/ Drought/ Flood/ AUWSP/ AMRUT to complete and commission them within stipulated time.
- Installation/ Repair & maintenance of hand pumps.

1.2.8 Flagship Schemes and Programs of the Department

Odisha is one of the pioneering states in implementing various urban initiatives. The state government has been vigorously pursuing the implementation of various projects and reforms. However, beyond implementation of projects and reforms, the state government would like to tackle the challenges of urbanization in a more planned and prudent manner in the coming decades. In this regard, the Housing and Urban Development Department on its own and in partnership with the Govt. of India has embarked upon launching of novel flagship programmes for planned and inclusive urbanization in the state to improve quality of urban life and address the issues of rapid urbanization and consequent challenges.

1.2.9 Smart City Mission (SCM)

Smart City Mission (SCM) aims to drive economic growth and improve the quality-of-life of people by enabling local area development and harnessing technology, especially technology that leads to Smart outcomes. The core infrastructure elements in a smart city would include adequate water supply, assured electricity supply, sanitation including solid waste management, efficient urban mobility and public transport, affordable housing (especially for poor), robust IT connectivity and digitalization, good governance, especially e-governance and citizen participation, sustainable environment, safety and security of citizens particularly women, children and elderly, health and education.

1.2.10 Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was launched on 25 June 2015. Nine cities/ towns of Odisha with more than one lakh population i.e. Bhubaneswar, Cuttack, Rourkela, Sambalpur, Berhampur, Puri, Balasore, Baripada and Bhadrak are included under the central government initiative of Atal Mission for Rejuvenation and Urban Transformation (AMRUT). The thrust area of the mission are to (i) ensure that every household has access to a tap with assured supply of water and sewerage connection; (ii) increase the amenities value of cities by developing greenery and well maintained open spaces (e.g. parks); and (iii) reduce pollution by switching to public transport or constructing facilities for non-motorized transport (e.g. walking and cycling).

1.2.11 Swachh Bharat Mission (SBM)

The Swachh Bharat Mission (SBM) was launched on October 2, 2014 to fulfill the vision of a cleaner India by October 2, 2019 as a tribute to Mahatma Gandhi on his 150th birth anniversary.

The SBM envisages achievement of universal sanitation coverage, improving cleanliness and eliminating open defecation in the country. The SBM is being implemented by the Ministry of Urban Development (MoUD), Govt. of India for urban areas of the country.

1.2.12 Pradhan Mantri Awas Yojana (PMAY) - Housing for All

The Prime minister of India launched Pradhan Mantri Awas Yojana (PMAY) or Housing for All (Urban) missions on 25th June, 2015. The mission seeks to address the housing requirement of urban poor including slum dwellers through four programme verticals giving option to the beneficiaries

1. Slum rehabilitation of slum-dwellers with participation of private developers using land as a resource;
2. Promotion of affordable housing for weaker section through credit linked subsidy;
3. Affordable housing in partnership with public and private sectors and
4. Subsidy for beneficiary-led individual house construction or enhancement.

1.2.13 Odisha Urban Housing Mission, AWAAS

Recognizing the need for an effective and efficient institutional mechanism for achieving the objectives of Policy on Housing for All in Urban Areas, the Hon'ble Chief Minister of Government of Odisha launched the AWAAS mission or the Odisha Urban Housing Mission (OUHM) on 11th October, 2015. The state mission directorate with the name OUHM got registered as a society under Societies Registration Act, 1860 on 7th January, 2016. The office of the OUHM has been set up at Odisha State Municipal Council Union (OSMCU) Building adjacent to Bhubaneswar Municipal Corporation, Vivekananda Marg, Bhubaneswar.

1.2.14 National Urban Livelihood Mission (NULM)

Economic growth creates income opportunities through gainful employments and enterprises. However, skill development of the poor becomes vital to include them in the growth process, which can contribute to poverty reduction in a significant way. Especially urban areas where skills are in greater demand, there must be strategies to match skill demands with existing skill level after finding out the gaps.

Government of India launched the National Urban Livelihoods Mission (NULM) on September 23, 2013 to reduce urban poverty on a mission mode. Though the programme has been started with 33 ULBs initially, it was extended to cover all ULBs from the year 2016-17 onwards.

1.3 Statistical Profile of the Department

The Housing & Urban Development (H&UD) Department of Government of Odisha functions through three Directorates, viz., Directorate of Municipal Administration (attached to the Department), Directorate of Town Planning and Chief Engineer, Public Health Organization

(Urban). Besides, there are 6 PH SE Circles, 19 PH Divisions, 56 PH Sub-divisions, 20 District Town Planning Units, 114 Urban Local Bodies including (five municipal corporations, 46 municipalities and 63 notified area councils), 9 Development Authorities (including BDA, Bhubaneswar & CDA, Cuttack), 7 Regional Improvement Trusts, 56 Special Planning Authorities, Odisha State Housing Board (OSHB), Odisha Water Supply & Sewerage Board (OWSSB), Odisha Rural Housing Development Corporation (ORHDC), Valuation Organization, NIHM and SUDA.

With a total population of 59.8 lakhs in the State, Urban Population account for about 14% residing in 114 ULBs. The ULBs function under the supervision of H&UD Department, with Municipalities and Notified Area Councils governed by Odisha Municipal Act 1950 (amended twice so far in the years 1994 and 2002), and the Municipal Corporations being governed by Odisha Municipal Corporation Act, 2003. The Odisha Municipal Act provides for constitution of a Notified Area council for every transitional area, a Municipality for every smaller urban area; and a Municipal Corporation for every larger urban area. The list of the ULBs with 2011 census population is mentioned below:

Table 1: List of Urban Local Bodies in Odisha:

Sl. No	District	Sl. No	MC/ Municipality/ NAC	Total Population in 2011 census
1	Angul	1	Angul (M)	43795
		2	Athmallik (N)	12298
		3	Talcher (M)	40841
		4	Hindol (N)	17387
2	Bolangir	5	Bolangir (M)	98238
		6	Kantabanjhi (N)	21819
		7	Patnagarh (N)	21024
		8	Tusura (N)	10638
		9	Titlagarh (M)	31258
3	Balesore	10	Balesore (M)	118162
		11	Jaleswar (M)	25747
		12	Nilagiri (N)	17264
		13	Soro (M)	32531
4	Baragarh	14	Baragarh (M)	80625
		15	Padampur (N)	17625
		16	Barapalli (N)	20850
		17	Attabira (N)	16399
5	Bhadrak	18	Bhadrak (M)	107463

Sl. No	District	Sl. No	MC/ Municipality/ NAC	Total Population in 2011 census
		19	Basudevpur (M)	33690
		20	Dhamnagar (N)	22920
		21	Chandbali (N)	27086
6	Boudh	22	Boudhgarh (N)	20424
7	Cuttack	23	Athgarh (N)	17304
		24	Banki (N)	17521
		25	Chodwar (M)	42784
		26	Cuttack (MC)	610189
8	Deogarh	27	Deogarh (M)	22390
9	Dhenkanal	28	Bhuban (N)	22200
		29	Dhenkanal (M)	67414
		30	Kamakhyanagar (N)	16810
10	Gajapati	31	Paralakhemundi (M)	44469
		32	Kashinagar (N)	9684
11	Ganjam	33	Aska (N)	21428
		34	Belaguntha (N)	11297
		35	Berhampur (MC)	356598
		36	Bhanjanagar (N)	20482
		37	Buguda (N)	15176
		38	Chatrapur (N)	22027
		39	Chikiti (N)	11645
		40	Digapahandi (N)	13190
		41	Ganjam (N)	11747
		42	Gopalpur (N)	7221
11	Ganjam	43	Hinjilcut (N)	24671
		44	Kavisuryanagar (N)	17430
		45	Khallikot (N)	13022
		46	Kodala (N)	13965
		47	Polosara (N)	23119
		48	Purusottampur (N)	15366
		49	Rambha (N)	12111
		50	Soroda (N)	14867
12	Jagatsinghpur	51	Jagatsinghpur (M)	33631
		52	Paradeep (M)	68585

Sl. No	District	Sl. No	MC/ Municipality/ NAC	Total Population in 2011 census
13	Jajpur	53	Jajpur (M)	37458
		54	Vyasanagar (M)	48911
14	Jhasuguda	55	Belpahar (M)	38993
		56	Brajarajnagar(M)	80403
		57	Jharsuguda (M)	97730
15	Kalahandi	58	Bhawanipatna (M)	69045
		59	Junagarh (N)	19656
		60	Dharmagarh (N)	16585
		61	Kesinga (N)	19239
16	Kandhamal	62	Baliguda (N) (2001)	16685
		63	G. Udayagiri (N)	11302
		64	Phulbani (M)	37371
17	Kendrapara	65	Kendrapada (M)	47006
		66	Pattamundai (M)	36528
18	Keonjhar	67	Anandapur (M)	39585
		68	Barbil (M)	66540
		69	Champua (N) (2001)	12415
		70	Joda (M)	46631
		71	Keonjhargarh (M)	60590
19	Khurda	72	Balugaon (N)	17645
		73	Banapur (N)	17278
		74	Bhubaneswar (MC)	840834
		75	Jatni (M)	55925
		76	khurda (M)	46205
20	Koraput	77	Jeypore (M)	84830
		78	Koraput (M)	47468
		79	Kotpad (N)	16326
		80	Sunabeda (M)	50394
21	Malkangiri	81	Balimela (N)	11796
		82	Malkangiri (M)	31007
22	Mayurbhanja	83	Baripada (M)	109743
		84	Karanjia (N)	22865
		85	Rairangpur (M)	25516

Sl. No	District	Sl. No	MC/ Municipality/ NAC	Total Population in 2011 census
23	Nayagarh	86	Udala (N)	13152
		87	Khandapara (N)	9038
		88	Daspalla (N)	18470
		89	Ranpur (N)	14715
24	Nawarangpur	90	Nayagarh (N)	17030
		91	Nawarangpur (M)	29960
		92	Umerkote (M)	28993
25	Nuapada	93	Khariar (N)	15087
		94	Khariar Road (N)	18967
26	Puri	95	Nuapada (N)	16208
		96	Konark (N)	16779
		97	Nimapara (N)	19289
		98	Pipili (N)	17623
27	Raygada	99	Puri (M)	200564
		100	Gudari (N)	6931
		101	Gunupur (N)	24162
		102	Rayagada (M)	71208
28	Sambalpur	103	Kuchinda (N)	15576
		104	Redhakhol (N)	15379
		105	Sambalpur (MC)	335761
29	Subarnapur	106	Binika (N)	15765
		107	Sonepur (M)	20770
		108	Tarva (N)	8334
30	Sundargarh	109	Biramitrapur (M)	33442
		110	Rajgangpur (M)	51362
		111	Rourkela (MC)	310976
		112	Sundargarh (M)	45036
		113	Hinjilicut (M)	24671
		114	Bijepur(N)	11830
Total				6066993

1.4. Progress in Disaster Management (Past Achievement)

Out of the 2028 number of municipal wards across 114 ULBs 1181 municipal wards are fully covered , 710 wards are partly covered and remaining 137 wards are uncovered , so far urban water supply is concerned.

During 2017-18 the focus was on completion of all new and ongoing projects .Over 300 urban water supply projects have been completed/commissioned during 2017-18 and another 200 water supply projects are planned to be completed by the end of FY-17-18.

In the month of June 2015, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was launched by Govt. of India. Water Supply is kept as top priority of the thrust areas of AMRUT Mission, Starting from the year 2015-16, AMRUT Programme is under implementation for improvement of Water Supply in 9 ULBS.

The Action Plan focuses the following.

1. Free water supply connection to each urban poor house with two tap connection (one in the kitchen and another in the toilet).
2. 25% of total project cost allotted under Water Supply is for providing water supply to all slums in AMRUT cities.

1.5. Acts, Rules and Policies governing the business of the Department.

1. O.M. Act, 1950
2. O.M. Rules, 1953
3. O.M. (W.R.S&C.E) Rules, 1994
4. O.M.C, Act, 2003
5. O.M.C. Rules, 2003
6. O.M.C.(D.W.R.S& C.E) Rules, 2003

Amendments

The Odisha Municipal Corporation(Amendment) Act,2017 that provides for assigning property rights to identified slum dwellers and for redevelopment rehabilitation and up gradation of slums in Municipal Corporation of the state.

The Municipal Corporation (Second Amendment) Act-2017 enhancing the powers of the Corporation Authorities for administrative expedience.

The Odisha Municipal (Amendment) Rules, 2017.

The Odisha Municipal Corporation (Amendment) Rules.2017.

New Act/Rules/Regulation/Policy.

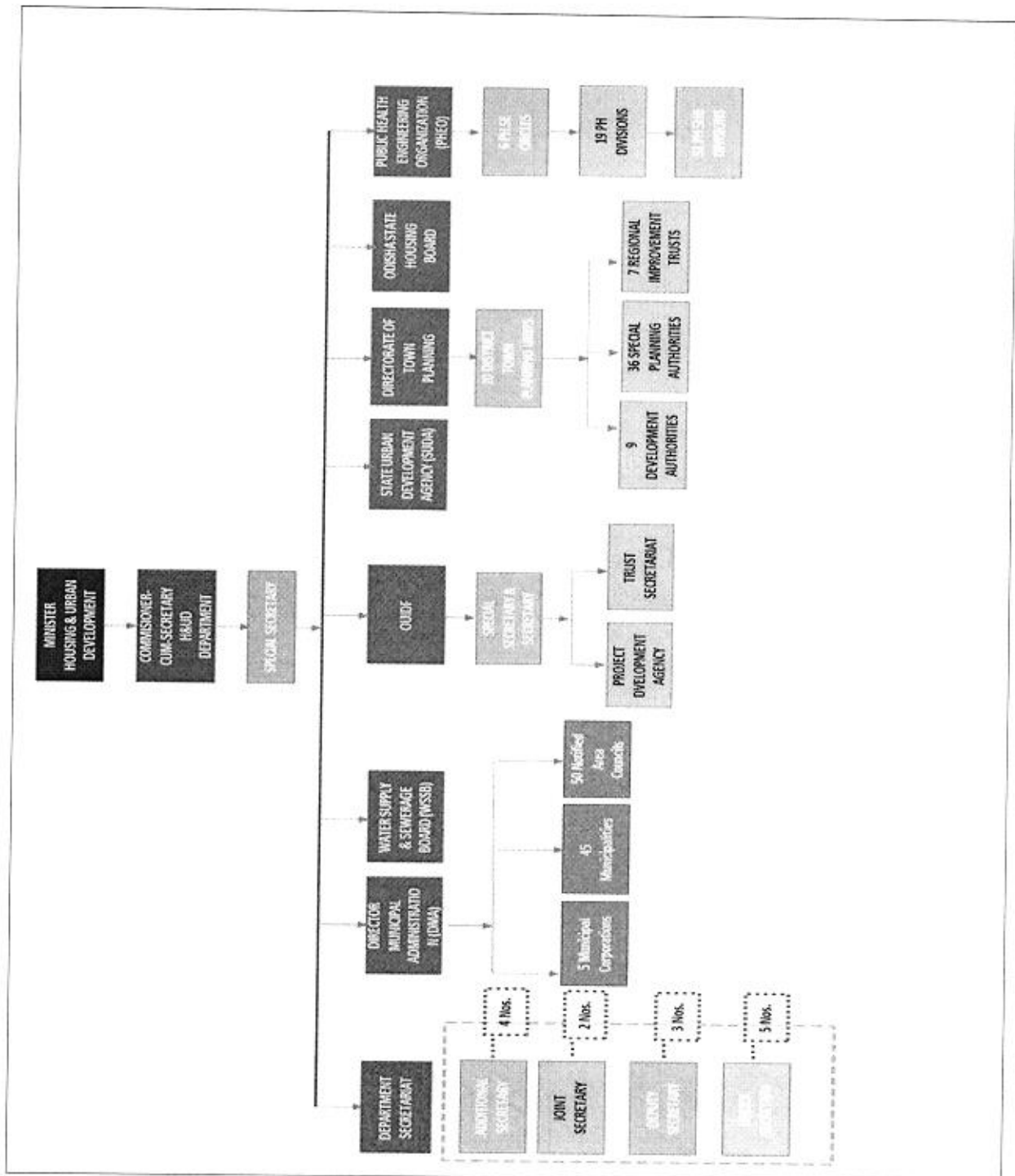
The Odisha Land Right to Slum Dwellers Act, 2017- that provides for assigning land rights to identified slum dwellers and for redevelopment , rehabilitation and up gradation of slums in Municipalities and NACs of the state.

The Odisha Land Rights to slum Dwellers Rules, 2017.

Odisha Real Estate Regulatory Authority Regulations, 2017

1.6 Institutional Arrangement for Disaster Management (Organizational Structure)

The various line departments functioning under H&UD Department are illustrated below:



1.7 Preparation and Implementation of the Departmental Disaster Management Plan.

The plan is meant for the Department as well as all ULBs. So, in preparing the plan, the help of all high level officials are required. And in preparing the plan the following steps shall be taken in to consideration:

- Referring National and International literatures
- Preparation of Draft plan
- Data collection from ULBs / line departments
- Data analysis
- Suggestion and comments from experts and high officials

1.8 Disaster Management Plan Structure

The organizational structure suggested in Disaster Management Plan will be based on following three concepts:

- Plans will work only in the case when present organizational structure is responsible to its non-emergency duties i.e. if a job is done well every day, it is best done by that organization during emergency.
- Crisis should be met at the lowest and most immediate level of government. Plans call for local response supplemented if necessary, by the next higher jurisdiction.
- Voluntary response and involvement of the private sector should be sought and emphasized. The emergency management partnership is important to all phases of natural and man-made disasters.

The PHEO organization of Housing & Urban Development Department will be responsible for Drinking Water Supply arrangement, restoration at disaster situation like Cyclone and Flood at ULB level. The Concerned Executive Officer of the ULB and the concerned officer from PHEO will take the necessary arrangement required to meet the situation.

-Chapter 2-

Hazard, Risk & Vulnerability Analysis

2.1 History/past disasters/losses in the department:

Table No. 02 Historical Past Disaster

Sl. No.	Year	Disaster event/ Incident	Location/ Affected districts/Area	Loss of Life	Damage to infrastructure	Other losses 1 (to be specified)	Other losses 2 (to be specified)
1.	October, 2013	Very severe cyclonic storm- Phailin	Hit the coast of Odisha.	Averted	Huge damage to the infrastructure in the Southern Districts especially in Ganjam dist.		
2.	October, 2014	Cyclonic storm- Hudhud	Crossed the Andhra coast near Kakinada.	Averted	Minimal damage		
3.	October 2018	Very Severe Cyclonic Storm- Titli	Hit the northern coast of Andhra Pradesh (near Palasa) and southern coast of Odisha	Loss of Life and properties	Huge damage to the infrastructure in the Southern Districts especially in Gajapati and Ganjam dist.		

2.2 Emerging Concerns:

2.2.1 Heat Wave

Due to unusual and low seasonal rainfall followed by irregular climatic condition, temperature is rising abnormally creating excessive heat which is term as heat wave. Further urban areas are often experiencing higher temperature due during summer due to large building surfaces, urban area metal road surfaces and other infrastructures absorbing solar heat energy. When heat wave prevails people suffer a lot including loss of life and property. For combating heat wave Department take all possible short and long term preventing measures for avoiding any eventuality in the urban area.

2.2.2 Migration

Rural people are migrating rampantly and abundantly to the urban areas in search of their livelihood due to poverty and absence of income sources. They are congregating in the urban areas lead to slum formation. Though these migrate people contribute to the urban development but in return cause various nuisance, unhygienic environment leading to spread of epidemic.

2.3 Hazard & Vulnerability Mapping:

Odisha is vulnerable to multiple disasters. Due to its sub-tropical littoral location, the state is prone to tropical cyclones, storm surges and tsunamis. Its densely populated coastal plains are the alluvial deposits of its river systems. The rivers in these areas with heavy load of silt have very little carrying capacity, resulting in frequent floods, only to be compounded by breached embankments. Though a large part of the state comes under Earthquake Risk Zone-II (Low Damage Risk Zone), the Brahmani Mahanadi graven and their deltaic areas come under Earthquake Risk Zone-III (Moderate Damage Risk Zone) covering 43 out of the 110 urban local bodies of the state. Besides these natural hazards, human-induced disasters such as accidents, stampede, fire, etc., vector borne disasters such as epidemics, animal diseases and pest attacks and industrial / chemical disasters add to human suffering

2.3.1 Cyclones

Odisha has always been vulnerable to cyclones during the months of April-May and September-November. Once every few decades a super cyclone strikes Odisha. Recent Super Cyclone that hit Odisha in the last Century were in 1942, 1971 and 1999. The Super Cyclone of 1999 killed about 10,000 and traumatized millions who survived its wrath. Over 15 million people were affected. Throughout India's massive coastline, there are 250 cyclone-warning sets, of which 34 are in Odisha, covering 480 Km of coastline.

Map 1: Cyclone Zones of Odisha



Odisha Disaster Mitigation Authority (OSDMA) promotes Community Based Disaster Preparedness activities so that people can face emergencies in an organized manner. OSDMA was formed to coordinate and implement the reconstruction work after the super cyclone, keeping in mind the need for disaster preparedness to face any future eventuality. During Super Cyclone of 1999, 97 nos. of blocks and 28 ULBs and about 1.25 crore population were affected. The total agricultural land affected was 17.3 lakh hectares with 9885 nos. of human casualties.

No detailed assessment has yet been made to ascertain the overall impact of past history cyclones on the urban local bodies of Odisha and their administration. The hazard risk and vulnerability assessment needs to be carried out based on the studies undertaken (if any) by OSDMA at the district level, based on which the ULBs may be classified under High Risk, Moderate Risk and Low Risk categories, for future planning.

2.3.2 Urban Flooding

The 481 km long coastline of Odisha exposes the State to flood, cyclones and storm surges. Heavy rainfall during monsoon causes floods in the rivers. Flow of water from neighbouring States of Jharkhand and Chhattisgarh also contributes to flooding. The flat coastal belts with poor drainage, high degree of siltation of the rivers, soil erosion, breaching of the embankments and spilling of floodwaters over them, cause severe floods in the river basin and delta areas. In Odisha, rivers such as the Mahanadi, Subarnarekha, Brahmani, Baitarani, Rushikulya, Vansadhara and their many tributaries and branches flowing through the State expose vast areas to floods. In Odisha, damages are caused due to floods mainly in the Mahanadi, the Brahmani, and the Baitarani. These rivers have a common delta where flood waters intermingle, and when in spate simultaneously, wreak considerable havoc. This problem becomes even more acute when floods coincide with high tide.

The water level rises due to deposits of silt on the river-bed. Rivers often overflow their banks or water rushes through new channels causing heavy damages. Floods and drainage congestion also affect the lower reaches along the Subarnarekha. The rivers Rusikulya, Vansadhara and Budhabalanga also cause occasional floods. The entire coastal belt is prone to storm surges. The storms that produce tidal surges are usually accompanied by heavy rain fall making the coastal belt vulnerable to both floods and storm surges. People die; livestock perish; houses are washed away; paddy and other crops are lost and roads and bridges are damaged. The floods of 1980, 1982, 2001 and 2003 in the State were particularly severe; property worth crores of rupees was destroyed in the floods.

While there have not been major incidents on urban flooding in the state, a detailed assessment needs to be made to ascertain the overall impact of past flooding on the urban local bodies of Odisha and their administration. The urban flooding is caused due to heavy rainfall which occurs in a short period of time; the low quality drainage construction which are non-compliant to earthquake resistant designs and inadequate capacity of drainages majorly leads to urban flooding. The urban households, slums and densely populated area in cities/towns have more threat of flooding. Based on the numbers of ULBs affected by floods over the past 30

year period, they may be classified under High Risk, Moderate Risk and Low Risk categories, for future planning. Following is the list of ULBs prone to flooding.

Table 3: List of major ULBs prone to floods

Sl.	District	ULB	Sl.	District	ULB
1	Angul	Athmalick(N)	15	Keonjhar	Anandapur(M)
2	Balasore	Balasore(M)	16	Keonjhar	Barbil(M)
3	Bhadrak	Bhadrak(M)	17	Mayurbhanj	Baripada(M)
4	Boudh	Boudhgarh(N)	18	Nuapada	Khariar Road(N)
5	Cuttack	Banki(N)	19	Puri	Puri(M)
6	Cuttack	CMC, Cuttack	20	Puri	Nimapara(N)
7	Cuttack	Choudwar(M)	21	Sambalpur	Sambalpur(M)
8	Dhenkanal	Bhuban(N)	22	Sambalpur	Hirakud(N)
9	Deogarh	Deogarh(M)	23	Sambalpur	Burla(N)
10	Jharsuguda	Brajarajnagar(M)	24	Subarnapur	Binika(N)
11	Jajpur	Jajpur(M)	25	Subarnapur	Sonepur(M)
12	Kendrapara	Pattamundai(N)	26	Subarnapur	Tarava(N)
13	Khurda	BMC, BBSR	27	Sundargarh	Rourkela(M)
14	Keonjhar	Joda(M)	28	Dhenkanal	Kamakhyanagar(N)

2.3.3 Earthquakes

A large portion of Odisha comes under earthquake risk zone-II (Low damage risk zone). The Mahanadi and Brahmani graven, Mahanadi delta and parts of Balasore and Mayurbhanj district come under earthquake risk zone -III (moderate damage risk zone). Over 43 urban centres (Census) come under earthquake risk zone-III with a population of nearly 27 lakh. Out of 9 class-I towns, 5 namely Bhubaneswar, Cuttack, Puri, Sambalpur & Balasore are located in zone-III. Besides, important industrial centres like Angul, Talcher and Paradeep also come within the same zone. The Bureau of Indian Standards (BIS) updated the seismic hazard map of India in 2007. There are no major changes in the zones in Odisha with the exception of the merging of Zones I and II in the 1984 BIS map.

ULBs that lie in the valleys of Mahanadi and Brahmani River lie in zone III, and within Odisha this zone stretches from Jharsuguda along the border with Chhattisgarh in a south-easterly direction towards the urban centres of Bhubaneswar and Cuttack on the Mahanadi Delta. The maximum intensity expected in these areas is around MSK VII. Districts in the north and south-west of the state lie in Zone II. The ULBs of districts coming under moderate damage risk zone are as follows:

1	Sundergarh (part)	7	Dhenkanal	13	Puri
2	Jharsuguda (part)	8	Jajpur	14	Bhadrak (part)
3	Bargarh (part)	9	Cuttack (part)	15	Balasore (part)
4	Sambalpur (part)	10	Kendrapada	16	Mayurbhanj (Part)
5	Deogarh (part)	11	Jagatsinghpur		
6	Angul (part)	12	Khordha (part)		

2.4. Heat Island Mitigation Action Plan for Ib-Jharsuguda Area

Urban Heat Island (UHI) is a situation with elevated air temperature in urban areas in contrast to their noon- urban rural vicinities.

The phenomenon is present in all big and small cities around the world with varying intensity.

The industrial agglomeration of Ib-valley in Jharsuguda faces the problem of heat island effect which may be attributed to changes in land cover energy intensive industrial activities , mining etc. the Ib-valley region of Jharsuguda is one of four identified UHIs (Jharsuguda), Titilagarh –Balangir ,Angul –Talcher, Bhubaneswar) in the state of Odisha . It was found that there has been a steady built –up of heat in the study area over the years resulting in higher night time temperature which can be attributed to increase in industrial activities coal mining , urban growth ,deforestation and increase in open non- vegetated surface.

The UHI phenomenon may be attributed to climate change, changes in land cover , energy intensive industrial activities coal mining congestion in urban pockets increase in built-up areas etc and can significantly affect human health , economic productivity as well as energy. Demand. Therefore it is important to develop mitigation strategies to reduce the causes of UHI and adaptation strategies to cope with the heat stress.

Mitigation Measures.

The most suitable set to heat mitigation measures have been recommended based on modelling and prioritized based on analysis of information collected from stakeholder's consultation using Multi- Criteria Decision Analysis (MCDA) through Analytic Hierarchy Process (AHP) approach. The sector covered include coal mining, industries, cropland and urban planning.

Adaptation Measures

Odisha has been one of the leading states to address the problem of heat wave through a systematic heat wave action plan involving all stakeholders. The states action plan outlines the responsibilities of the different wings of the state government Additional roles have been proposed for these agencies over and above their current roles in the heat wave action plan as elaborated .

An institutional Frame work has also been designed to coordinate the different adaptation response strategies as shown in figure 3. An institutional framework along the lines of heat wave action plan for implementing and tracking the progress of measures for heat island adaptation will go a long way to address the challenge.

Map 2: Earthquake Zones of Odisha



2.3.4 Heat Waves

Heat wave can be defined as a condition of atmospheric temperature that leads to physiological stress, which sometimes can claim human life. Quantitatively heat wave is defined as follows:

- The normal temperature is $< 40^{\circ}\text{C}$. Any increase from the above normal temperature is called heat wave. $+ (5 \text{ or } 6)^{\circ}\text{C}$ – Moderate heat wave
- 7°C . or more – Severe heat wave
- The normal temperature is $> 40^{\circ}\text{C}$. Any increase from the above normal temperature is called heat wave. $+ (5 \text{ or } 6)^{\circ}\text{C}$ – Moderate heat wave
- 7°C . or more – Severe heat wave
- If the maximum temperature of any place continues to be 45°C consecutively for two days, it is called a heat wave condition

In the year 1998 the State of Odisha faced an unprecedented heat wave situation, as a result of which 2042 persons lost their lives. Though extensive awareness campaigns have largely reduced the number of casualties during post 1998 period, still a good number of casualties are being reported each year which have put the State Government in very difficult situation. It has become a menace during hard summer causing insurmountable human suffering. The poor people, farmers and workers mostly suffer from sunstroke and lose their lives. In the Odisha Relief Code, the State Government has made provision for payment of Rs.10, 000/- towards ex-gratia relief to the bereaved family of each sunstroke victims. Since there is no provision in

the items and norms of expenditure for incurring expenditure from the Calamity Relief Fund (CRF) or NCCF to provide relief to the victims of 'Heat Wave', the State Government is incurring such expenditure out of the Chief Minister's Relief Fund (CMRF) though it is a natural calamity like Cyclone, Flood, and Earthquake etc.

Since the State Government is not in a position to meet the huge requirement of funds needed for preparedness in taking adequate ameliorative measures and for payment of ex-gratia to the bereaved families of Heat Wave victims out of its own fund each year, the issue has been repeatedly raised before the Government of India and Finance Commissions for consideration. During the visit of Hon'ble members of 13th Finance Commission, Government of India in February, 2009 the State Government put forth the demand to include the "Heat Wave" in the list of natural calamity under CRF.

2.3.5 Fire hazards

Damages to houses due to fire accidents present a serious problem, especially in rural Odisha. This is mostly due to the peculiar housing patterns adopted in the villages. These houses have generally mud-built walls with thatched roofs made out of timber, bamboo and straw. They spring up in clusters. In summer fire accident becomes frequent; it destroys houses and properties and causes serious distress to the afflicted people. The worst sufferers are the economically backward groups who live in congested localities.

Fire is fast, in less than 30 seconds a small flame can get completely out of control and turn into a major fire. It only takes minutes for thick black smoke to fill a house. In minutes, a house can be engulfed in flames. There is only little time to escape. *Fire is Hot* –the fire's heat alone can kill people, with room temperatures in a fire ranging from 100 degrees at floor level that can rise up to 600 degrees at eye level. Inhaling this super-hot air will scorch our lungs. This heat can melt clothes to our skin. In five minutes a room can get so hot that everything in it ignites at once. *Fire is Dark*, as the fire starts bright, but quickly produces black smoke and complete darkness. *Fire is deadly*, as the smoke and toxic gases kill more people than flames do. Fire uses up the oxygen we need and produces smoke and poisonous gases that kill. Breathing even small amounts of smoke and toxic gases can make us drowsy, disoriented and short of breath.

While living in an urban area may not decrease or increase the risk of fire, demographic changes including the growing numbers of elderly population, people with disabilities, and people living in poverty may impact fire safety in the city or an urban area. Fire departments of larger urban areas face particular challenges with limited resources with a need to leverage relationships with city-wide institutions, to enhance their coverage and focus on fire safety.

Vulnerability Assessment – Proposed Criteria:

Despite the applicable hazards in the state, the vulnerability of an area is specified by the capacity of its social, physical, environmental and economic structures to withstand and respond to hazards. An analysis of the vulnerability in a defined geographic location, an understanding of the socio economic factors and the capability of the community to cope with

disasters, will give an understanding to the development and planners to plan for disaster risk reduction against future hazards.

Physical vulnerability:

The state is handicapped due to inadequate electrification, irrigation facilities, insufficient storage facilities, insufficient marketing & promotion, poor road infrastructure. Basic services like housing etc., is also inadequate in certain remote areas. Poor accessibility to infrastructure increases the vulnerability of population during disasters.

Housing:

In Odisha as per Census 2001, 47% of houses are vulnerable to disaster impacts (made of mud, stone, un-burnt brick wall), which may be significantly higher than the Indian average of 39% as per Vulnerability Atlas of India 2007, it means that housing of the state is 20% more unsafe, as compare to the national level. From the technical point of view, the quality and design specifications of houses as well as materials used for housing have a bearing on the vulnerability of houses to earthquakes, cyclones, high wind, floods and fires. As a result, the houses due to their poor type of construction and materials used for the walls and roofs, are vulnerable to disaster impacts and the damage risk to such type of houses is very high.

In order to categorize and analyze the housing construction and subsequent vulnerability at the district level, the High, Medium and Low categories have been defined, as per the following:

- High level housing vulnerability, ULBs where % of Kuchcha houses more than 75%.
- Medium level housing vulnerability, where % of Kuchcha houses between 50 to 75%,
- Low level housing vulnerability, ULBs where % of Kuchcha houses is less than 50 %

There would be numerous ULBs under the unsafe category of high level housing vulnerability.

Urbanization:

Odisha is demonstrating an increasing trend of people migrating from rural areas to towns. The increasing influx of poor immigrants adds the additional pressure on the existing infrastructure. Being poor, these immigrants settle in slums or low lying areas, vulnerable to disasters, lacking in basic infrastructure like safe drinking water, sanitation and drainage facilities. Further, weak techno-legal regime and poor implementation of building bye-laws make the population highly vulnerable. Narrow roads, poorly maintained electrical and telephone wires, congested drains make the settlements more vulnerable during disaster time.

Socio- Economic Vulnerability:

Social vulnerability is one of the major components of the vulnerability leading to multiple shocks, including the repercussions of natural hazards. Social vulnerability refers to the inability of people, organizations, and societies to withstand adverse impacts from multiple

events to which they are exposed. The economy, population, education etc, all are socio economic factors.

Economy:

Poor economy, low per capital income and significant poverty contribute to the vulnerability of people. The economy of the state is under developing stage. However, agriculture is the primary sector of the state; it is characterized by low productivity due to the traditional practices, inadequate irrigation facilities and low investments. The lack of alternate occupation and repeated crop failures are making people more vulnerable and marginalized. Since the livelihood helps to improve the coping capacity of the people, therefore the livelihood vulnerability has been categorized on the basis of the following:

- High livelihood vulnerability –ULBs with BPL families> 50%
- Middle livelihood vulnerability –ULBs with % of BPL families between 35 to 50 %.
- Low livelihood vulnerability –ULBs with % of BPL families are less than 35%.

Population:

The population is another important vulnerability feature, and plays crucial part in vulnerability analysis. More population also sometime leads to more congestion and hence also increases the vulnerability. It is also observed that where the numbers of people are more, only the selected few ones are sensitized about issues such as disaster management not all, therefore the lack of public awareness also increases the social vulnerability in a way. As per provisional census data of 2011, the population vulnerability has been categorized into following categories:

- High population vulnerability - districts with population density > 250 persons/ sq.km.
- Moderate vulnerability – population density between 200 to 250 persons / sq. km.
- Low population vulnerability - districts with population density < 200 persons / sq.km.

The overall vulnerability analysis has been carried out on the basis of the data available pertaining to the key attributes applicable in various forms of the vulnerability. The ULB wise vulnerability summary format for Odisha is given in Annexure IV

-Chapter 3-

Capacity Building Measures

3.1 Gaps in the Existing Capacity of the department

The department is handicapped for technical competencies due to dedicated municipal cadres, which is the same even at the ULBs and parastatal agencies. Poor access to municipal infrastructure and services and limited technical manpower at ULBs increases the vulnerability of the population during disasters. There is a need to develop uniform and standard operation procedures in H&UD department to deal in various disaster situations.

The department personnel are not adequately trained regarding management and mitigation of different type of disasters including relief, rescue and rehabilitation. Adequate financial powers need to be vested in the H&UD Department/ ULBs to manage the crisis.

Further, in the absence of state level research and training facilities, the training and capacity building needs of the officials of urban local bodies and parastatal agencies viz., PHEO, OWSSB, DTP, etc., are being met from the training institutions of other states. The costs involved for participant travel and accommodation, discourage the department from planning residential training programs of during 2-3 days on technical aspects of urban development and planning. The existing facilities at State Urban Development Agency (SUDA), does not cater to the requirements for residential training

3.2 Existing Human Resources in the department trained on Disaster Management

Table 4: Total Staffs Position of the Department

Sl. no.	Category	Total Staffs	No of trained personnel on DM			
			Basic	ToTs	MoTs	Total
1	Administrative Staffs	266	-	-	-	-
2	Project Staffs	-		-	-	-
3	Accounts and Clerical Staffs	561	-	-	-	-
4	Support Staffs	7412		-	-	-

3.3 Capacity-Building Plans

3.3.1 Capacity-Building Programmers at different level

3.3.2 State level Capacity-Building Plans

Sl No.	Training for	Programmes
1	Training for Community Organizers and Executive Officers of ULBs	Awareness generation among community members on various aspects of disaster. Training programmes on preparedness measures. Training programmes on Relief and Restoration. Training programmes on documentation and reporting..

3.3.3 Community level Capacity-Building Plans

Sl No.	Training for	Programmes
1	Slum dwellers/ULBs	Awareness programme on various aspects of disaster management more importantly on urban flooding.

3.4 Capacity-Building of Stakeholders and Beneficiaries of the department

Training the stakeholders is one of the key requirements of any disaster management planning. The H&UD department will ensure regular training of the officials from urban local bodies as well as parastatal agencies to meet compliance during disaster situations. As per the Disaster Management Act, the State Disaster Management Authority (SDMA) and the state disaster management plan are mandated to provide direction and coordination to ensure the implementation of all disaster management policies and plans.

Training needs have to be identified for each department, appropriate training programs need to be designed and conducted at all levels involving broad spectrum of stakeholders (from government, NGOs and civil society) to fully realize the needs of sensitization, knowledge/information management and skill development of personnel involved in the disaster management functions.

The training needs along with the capacity building plan for the H&UD department are presented below:

Table 5: Training needs - Housing & Urban Development Department

#	Title of the program	Objectives	Training Type		Training level			Duration	Participant profile	No.
			A	O	S	D	SD			
1	Concepts of Disaster Management	<ul style="list-style-type: none"> Knowledge on types of disasters Principles of disaster management Disaster Management Cycle Prevention & Mitigation Strategies 						1-2 days	All staff of HUDD/ ULB/ PHEO/ OWSSB/ Dev. Authority/ RITs & SPA	750

		<ul style="list-style-type: none"> Disaster Preparedness measures 							
2	Preparation of City Disaster Management Plan	<ul style="list-style-type: none"> Discuss NDMA Guidelines for Prevention & Mitigation Impact of disasters in cities, need for risk sensitive urban planning. Major issues for unsafe built urban form and space planning. Good practices - DMP preparation at State/District/City level 					1-2 days		50
3	Mainstreaming of Disaster Management in Development Schemes/ Plans and Projects	<ul style="list-style-type: none"> Integration of DM concepts in spatial/ infrastructure development planning, national and state level policies, programs and projects Techno-legal instruments available for safe urban development Good practices 					1-2 days	Commissioners/ Executive Officers/ SEs/ Chief Town Planners	50
4	Development of Incident Response System for Disaster Management	<ul style="list-style-type: none"> Institutional framework and Operational aspects of Incident response systems Use of technology for incident reporting and management Good practices on IRS 					1-2 days	Commissioners/ Executive Officers	50
5	Mass casualty management during major disasters	<ul style="list-style-type: none"> Knowledge and skills on mass casualty in disaster situations. Good practices 					1-2 days	CO/ JE to AE	50
6	Urban fire risk management	<ul style="list-style-type: none"> Causes and extent of fire risks in urban areas. Mitigation and preparedness measures Basic fire-fighting techniques for household fires. Good practices 					1-2 days	JE to AE	50

*A – Awareness; O- Operational; S-State; D-District; SD-Sub District

Presented below is an estimated budget for imparting training to departmental officials on 'basic concepts on disaster management'. Support will be sought from OSDMA, R&DM Department to provide the technical resource personnel for specialized training identified above.

Table 6: Budgetary Requirement for Training officials of H&UD Department

#	Description of item	Program Duration	Unit cost	Units	Total cost (Rs.)
1	Training programs for Commissioners & Executive Officers of ULBs – Working lunch	1-day	300	120	36,000
2.	Training Programs for ULB officials (CO/JE/TC) – Working lunch	1-day	300	230	69,000
3.	Training Programs for PHEO officials (JE/AE/EE/SE/CE) – Working lunch	1-day	300	250	75,000
4.	Training Programs for Town Planning officials of DA, RIT & SPA– Working lunch	1-day	300	150	45,000
5.	Cost of training hall charges for 25 programs @ 30 participants in each program		5000	25	1,25,000
6.	Cost of trainers for 100 sessions across 25 programs @ 1100/- per each session		1100	100	1,10,000
7.	Documentation and other charges for 25 programs		4000	25	1,00,000
				Total	5,60,000

To minimize the costs, the training would be imparted at the respective district headquarters. Where required, the H&UD department will leverage the training facilities of State Urban

Development Agency (SUDA, H&UD Dept.) available at Bhubaneswar to impart training for various participant groups.

A number of other requisite training program shall also be organized/ facilitated by H&UD department for specialized groups at community level office bearers, school teachers and principals, architects, engineers, doctors, masons, etc. The professionals from all section shall be trained. There are organizations like Civil Defense, NYK, NSS, CBOs/ NGOs etc. at ULB level, which have hundreds of volunteers. They shall be sensitized and given training on disaster management. They shall be given training on disaster management. They shall also be encouraged to organize awareness campaigns in their areas.

3.6 Annual training calendar of the department

To be prepared taking into consideration of the availability of Officers and staff.

Sl. No.	Name of the Course/ Training Programme	Participants	Duration of the Training Programme	Month of Organization	Training Institutions	Remarks if any
						To be prepared taking into consideration of the availability of Officers and staff.

3.7 Table top Exercises

To be decided later.

3.8 Mock Drills

Sl. No.	Mock Drills on	Participants	Month of Organization	To be organized by	Remarks
1	Earthquake	All employees of the departments in phase wise manner	October-December 2019	State Urban Development Agency	Will take help of OSDMA/Fire Services.
2	Fire	All employees of the departments in phase wise manner	January-February 2020	State Urban Development Agency	Will take help of OSDMA/Fire Services

-Chapter 4-

Prevention & Mitigation Measures

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

The requisite information on infrastructure available with the 112 ULBs, PH divisions and various parastatal agencies are being obtained by the H & U.D. Department.

This aspect is to be looked in to later.

Structural Measures:

Sl. No.	Activity/ Project	Starting Date	Date of Completion	Cost	Funding Source	Out Come (persons to be benefited/ vulnerability reduction of area)
01	Night shelter for urban homeless	Already constructed in Bhubaneswar, Cuttack, Berhampur, Sambalpur & Rourkela.	-	-	-	-
02	Municipality/NACs guest house	Existing in some ULBs	-	-	-	-

Non-structural Measures:

Sl. No.	Activity/ Project	Starting Date	Date of Completion	Cost	Funding Source	Out Come(persons to be benefited/ vulnerability reduction of area)

-Chapter 5- Preparedness

This section should describe, in general, the capabilities and processes the department has in place to implement the range of preventive/ protective actions that may be required for various hazards. The preparatory activities listed below are activities that may be required to implement preventive/ protective actions in response to certain types of hazards.

5.1 Nodal person

Sl No.	Name & Designation of the Nodal person for Disaster Management in the Department	Contact No.	
		Office	Mobile
	Shri Anil Kumar Pattanaik		9437165718

5.2 Contact details of the Heads of the Department/Division

Sl No.	Name of the District/Division	Name of the Nodal /Head	Contact No	
			Office (with STD code)	Mobile
01	Director , Municipal Administration	Sri S. Nayak	0674-2392104	9861149057
02	EIC, PH	Sri S.Laxmi Pati	0674-2393909	9437644466
03	Director, Town Planning	Sri S. Mishra	0674-2390596	9861015567
04	Member Secretary, OWSSB	Sri M.R. Das	0674-2571185	8280121608

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5.3 Details of Human Resources trained on Disaster Management

SI No.	Staff Category	Total staff	No of trained personnel		
			Basic	ToTs	MoTs
1	Administrative	266	-	-	-
2	Clerical & Financial	561	-	-	-
3	Project/scheme	-	-	-	-
4	Menial/Support	7412	-	-	-
	Total	8239	-	-	-

5.4 Resources

SI No	Type of Resources	Description (utility during Disaster)	Details	
			Name of the District/Division	Total (In Nos.)
1	Infrastructure-			
a				
b				
2	Support Equipment for DM-			
a		For supplying of drinking water, temporary electricity restoration and transportation of relief materials theses equipment can be sued.		225 Tankers 85 DG Set 4 Truck, 23 Tractors, 416 PVC tanks
b				

3	Human Resources - 8239		
a	Trained on DM	0	
b	Untrained	0	
4	Others (Specify)		
a			
b			

5.5 Important Contact Nos. (At Annexure-1)

Sl No.	Name of the Agency/Department	Name of the Nodal Person	Contact details

5.6 Preparedness at Department level

The objective of the disaster management plan at H&UD department level is to conceptualize the mitigation & prevention as well as preparedness activities, which may further be integrated into the Odisha State Disaster Management Plan and institutionalize the same, in line with Odisha State Disaster Management Policy. This will fulfill the need to develop sustainable and comprehensive disaster management framework to ensure systematic incorporation of Disaster Reduction elements into the Mitigation Planning process in order to reduce the risk factors. The department shall develop a detailed investment plan for implementing the prevention & mitigation measures based on the city level disaster management plans. The disaster preparedness measures, especially on training and capacity building) of the department are given in section 3.5.

-Chapter 6-

Response Plan

6.1 Public Warning System

Early warning of floods and other hazards are based on the technology, which is highly critical in current scenario and play a vital role in reducing the risk and planning for evacuation of affected areas. India Meteorological Department (IMD) has been entrusted with this function since its inception in 1875. IMD has nodal stations across the country which monitor the overall weather conditions and also come up with the forecasting. It is marked that the early warning message of a disaster declared by its concerned competent agency first through electronic media and print media. Based on such early warning or report from district collector on occurrence of a disaster the State disaster response mechanism will be activated and kept on standby position to respond to the situation on priority basis. The details of competent agencies work on early warning is given below.

Disaster	Competent Agencies
Earthquake	IMD
Floods	Water Resource Dept. Irrigation Dept. IMD
Cyclones	IMD
Tsunami	INCOIS, IMD
Drought	Agriculture Department
Epidemics	Health and Family Welfare Dept.
Industrial and Chemical Accidents	Industry Department
Fire	Fire and emergency services

Early warning dissemination system:

On occurrence of a disaster in the State the message will be communicated immediately to the concerned authorities and agencies at State and National level.

- At State Level - Governor, Chief Minister, Home Minister, State Cabinet, Guardian Minister of the district, non-officials of the affected district namely MLAs and MPs.
- At National Level - PMO, Cabinet Secretary, Secretary Home and defense, NDMA and MHA

Dissemination of warning shall be done by the following means:

- Inform, update through website, sending emails to the concerned
- Telecast of warning bulletins through TV broadcasting
- Broadcast of information through AIR
- Informing through Police Wireless
- Bulletins to the press
- Broadcast through Postal and Telegraph's (P&T) radio stations.

Key activities involved in early warning dissemination are presented below:

Activities	Responsibilities
a) Setting up Control Rooms to function round the clock at the site/ district	a) Special Relief Commissioner
b) Assigning duties/functions to the District officials and Sub-Collectors/ Tehsildars.	b) Revenue & Disaster Management Dept.
c) Arranging vehicles and sound system for information broadcasting	c) Govt. Departments (at state, district level)
d) Alerting NGOs and seeking assistance from them; assigning responsibilities	d) District Collector
e) Early warning to communities close to the rivers and canals	e) Emergency Officers
f) Holding District-level natural calamity meeting by the District Collector	f) All district level officials
g) Insure functioning of warning systems and communication systems	g) Local cable operators and radio stations
h) Drafting local cable operators to broadcast alerts as running flashes on the TVs/SMS	h) State and local NGOs.
i) State-wide amber alerts	
j) Drafting local radio stations with early warning message	
k) Undertaking mock drills and rehearsals of Preparedness.	

The State and District Control room shall be activated to function round the clock in the concerned district/ city. The State IRT shall furnish the status report about the establishment of control room at district levels. The Incidence Response Team (IRT) of affected cities led by Municipal Commissioner/ Executive Officer shall apprise the District Administration about the protocol to be followed from time to time issued by the Central/State Government.

6.1.1 Existing arrangements of the department for information collection and dissemination

In addition to the control rooms at SDMA and DDMA levels in response to the occurrence of natural disasters, the control room shall also be set up at the H&UD department level to ensure effective coordination, which will be headed by the Secretary assisted by the Dy. Secretary (R&R). While the ULBs work under overall supervision of Director, Municipal Administration (DMA) in the event of disasters and post disaster, the PH divisions shall be supervised by Engineer-in-Chief (PH). However, the DMA and EIC (PH) shall also appraise the Secretary on the disaster management initiatives.

This Unified Control Room will be activated to function round the clock in event of any impending/ sudden disaster. This control room will act as a coordination point between Nodal Office, whosoever competent and nominated by the District Collector, to source information from the field and pass on the necessary information to the relevant authorities at the State level for

triggering response for prevention, mitigation, and rescue & relief operation as the case may be. The Nodal Officer will furnish a daily report to the State Control Room on the important messages received from the field, action taken thereon and any additional support required from the State Control Room. Post issue of early warning, the Municipal Commissioners/Executive Officers of the vulnerable ULBs shall explain the detailed response plan at district level meeting of District Disaster Management Authority (DDMA) constituted in every district in conformity with GoI guideline.

6.1.2 Existing system of Public Warning in the departments.

As in Section 6.1.

6.1.3 Establishment of control rooms at State and District level

State Level Control room

Sl No.	State/Districts	Contact Person	Contact no. of the control room	E-mail ID
01	H & U.D. Deptt.	Sri A.K. Patnaik, Joint Secretary	9437165718	-

6.2 Inter-Departmental Coordination

6.2.1 State Level

Housing and urban Development co-ordinates with various Directorates and Department to ensure seamless of various urban citizen services. It co-ordinates with Water Resources Department for storm water drainage, co-ordinates with health Department for health and sanitation, co-ordinates with R & D.M. Department, OSDMA (SRC) for undertaking Disaster related activities.

6.2.2 Appointment of Nodal Officers to support Inter-departmental coordination

Sl No.	Level	Name of the Nodal Officer	Contact No.	Alternative contact no.	Roles/Responsibilities
1	State	Sri S. Nayak, Director Municipal Administration and ex-officio Addl. Secy. to Govt.	0674- 2392104	-	Co-ordinates arrays of activities concerning the ULBs, liaison with several other directorates and deptt. to ensure seamless delivery of various urban citizen services.

6.3 Incident Response Teams (IRTs)

Sl No.	Level	Head of the IRT	Team Members	Roles / Responsibilities
1	State	Yet to be formed.		

6.4 Disaster Specific Response Plan of the Department

Sl No.	Natural Calamity	Responsibility	Response Time line	Who is responsible
1	Flood	IMD, Bhubaneswar & Water Resource Deptt.		Water Resource Deptt.
2	Cyclone	IMD		IMD
3	Drought/ Moisture Stress	Agriculture Deptt./IMD		Agriculture Deptt./IMD
4	Cyclone/ Hailstorm/ Tidal waves	IMD		IMD
5	Pest & Disease attack	Agriculture Deptt.		Agriculture Deptt.

6.5 Roles of NGOs and Voluntary Organization for better coordination

There is a wide network of Community Based Organizations and voluntary agencies in Odisha. Regular meetings will be held at more frequent intervals to face any untoward incident. Such coordination meetings can be held at district level under the chairmanship of DM & Collectors. Participation of the community is crucial in Disaster Management. However, preparing the community for appropriate response within a limited time and motivating it for adopting long-term mitigation measures would require a much sustained, intimate and a flexible approach. This is a challenge which can be effectively addressed through involvement of NGOs and CBOs (Community Based Organizations) due to their close linkages with the community, their outreach and flexibility in procedural matters. NGOs and CBOs, due to their proximity to the community, can act as a vital link between government and the community particularly during emergencies. They are in a better position to appreciate the area and time specific problems of the people and their flexibility in approach makes them more acceptable in the community. These organizations work generally in the fields of health, education, livelihood, micro-finance, infrastructure, animal husbandry, social reforms, etc. After the super-cyclone of October 1999 the NGOs involvement in restoration of livelihood of the affected people and Community based disaster preparedness programmes brought them still closer to the people. Civil society organizations will be involved in all phases of crisis management. So the GO NGO coordination is more vital and both organizations would be partner and regular interaction for better management of any crisis.

The activities of all Non-Government and Non-official Organizations and private individuals shall be coordinated at the level of Commissioner. Commissioner in consultation with the Committee referred to there in may allot specific areas or specific aspect of relief work to such Organizations and individuals, including starting of mid-day meal centers, free kitchens, distribution of dry or cooked food, keeping in view the type of assistance which the particular organization intends to

render. In case any feeding programme, mid-day meal centers or free kitchen for a certain period is undertaken by a non-official organization or private individual in any area allotted by the Commissioner similar programme if continuing in that area at Government cost shall be reduced, suspended or closed as the case may be in order to obviate duplication and consequential wastage.

Inter-agency coordination: All the ULBs (Municipal Corporations/ Municipalities and NACs) shall organize meetings on regular basis with local/national/international NGOs and aid agencies like Indian Red Cross Society, etc., Ambulance service providers, Civil Defense, locally prevalent Bus Owners Association, Truck Owners Association, CDVO (Veterinary Control Room), Police Control Room, CDMO/CMO Control Room, Agriculture Control Room, Water Resource (Irrigation) Control Room and the control rooms of R&B, RD, PHED, Fire Prevention Officer, Electricity, ODRAF, Civil Supply and H&UD Department for better coordination & timely response to any disastrous situation within the city.

6.6. Standard Operating procedure for different departments

Name of the Department	On Receiving Warning	Response time	Post Disaster
Housing and Urban Development	<p>Response planning measures are those which are taken instantly prior to, and following, a disaster aimed at limiting injuries, loss of life and damage to property and the environment and rescuing those who are affected or likely to be affected by disaster. Response process begins as soon as it becomes apparent that a disastrous event is imminent and lasts until the disaster is declared to be over. Response includes not only those activities that directly address the immediate needs, such as search and rescue, first aid and shelters, but also includes systems developed to coordinate and support such efforts. For effective response, all the stakeholders need to have a clear perception/vision about hazards, its consequences and actions that need to be taken in the event of it.</p>		Relief, Rehabilitation and Reconstruction jobs are taken immediately.

6.7 Relief

6.7.1 Minimum Standards of Relief

The minimum standards describe conditions that must be achieved in any humanitarian response and relief in order for disaster affected population to survive and recover in stable conditions and with dignity. Focusing on the period of humanitarian response and relief, the sphere minimum standards cover activities which meet the urgent survival needs of disaster affected populations. The Sphere Handbook 2011 may be followed for the purpose of adhering minimum standards in the following sectors:

- Minimum standards in water supply, sanitation and hygiene promotion (WASH)
- Minimum standards in food security and nutrition
- Minimum standards in temporary shelters, and non-food items
- Minimum standards in Health Action

Under each section of minimum standards, there are few sub sections to address the respective sectors, like in the first case of WASH, apart from it there will be other sub sections on water supply, vector control, hygiene, drainage and solid waste management etc. The sphere standards are the guiding tools, further the review and adherence will come under the scope of OSDMA.

Administration of food assistance during crisis period shall be the responsibility of City administration. Food assistance shall be provided to the affected people for desired number of days as per detailed guidelines laid down in the Orissa Relief Code. Guidelines on minimum quality standards are laid down by the Government.

Municipal Commissioner/ Executive Officer shall identify inaccessible pockets and areas likely to be cut off and ensure pre-storage of adequate food stuff and other essential commodities in inaccessible/ strategic places. The PDS centers shall be used for storage and distribution during crisis period. At the State level SRC coordinates with Food Supplies and Consumer Welfare Department, FCI, OMFED, Fisheries and Animal Resources Development Department and other State Governments to establish a State-wide network of supply chain.

6.7.2 Management of relief supplies/speedy management

It is the fore most job of the Department for smooth and efficient management of relief supplies and to ensure that same is reach to the affected persons.

-Chapter 7-

Relief Restoration & Rehabilitation

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

The district is the primary level to respond to any natural calamity & take up restoration & rehabilitation activities wherein the role of the heads of the department play a vital role to evaluate, assess the quantum of loss & report the situation to the Special Relief commissioner/ State Government for assistance. Further, The Department must undertake all the steps for restoration & rehabilitation of all such infrastructure damaged in disaster by supplying essential commodities, group assistance to the affected people, damage assessment and administering appropriate rehabilitation and restoration measures.

However, for any assistance from the state government the requisition must reach the SDMA & SRC office in the prescribed format as detailed below for smooth & quick processing.

7 Relief

7.1 Reporting Procedures and formats for damage assessment and others

ULB being the administrative unit for H & U.D. Department, the executive officer of the ULB will be responsible to collect and compile the statutory reports determined by the department for disaster management.

The Nodal Official will compile the report and submit to State Authority, who will send the report to Housing and Urban Development Department, for requisite actions and response measures. The first choice for sending the report will be through E-Mail. The following regular reports will be collected. The other occasional reports will be collected as per the need specific to disaster.

- a. First information report
- b. Initial assessment report
- c. Technical assessment report
- d. Disaster documentation report.

7.2 Rehabilitation Plan

7.2.1 Damage Assessment procedures and formats

Assessment of damage to the public infrastructure shall be taken by the concerned 'line departments' as per the specifications laid down by the government of India (Ministry of Home Affairs) and Special Relief Commissioner. Extent of damage to private properties will be assessed by the Tehsildar through field level officers. Disbursement of assistance in case of death, house damage, agriculture, etc. shall be made by the Collectors through respective Municipal Corporations as per CRF norms and procedures laid down in Orissa Relief Code. Assistance in case of injury, loss of limb, damage of livelihood assets of urban artisans, death of small and big domestic animals will be disbursed by the line departments/ Collectors as per Govt. instructions and CRF norms.

7.3 Financial mechanism

Calamity Relief Fund (CRF) is set up at the national level to meet the expenditure for providing immediate relief to the victims of drought, earthquake, fire, flood, and various other disasters. Government of India contributes 75% of the yearly allocation in the form of non-plan grant and remaining 25% is covered by the state government. Outlay of funds in consultation with the state government is allocated by the Finance Commission. In the event of shortfall of funds, on the request of the state government, additional financial assistance from National Calamity Contingency Fund (NCCF) is provided by the Government of India.

7.4 Action plan for Reconstruction – 'Building back better'

The Rehabilitation and Reconstruction planning activities come under the post-disaster phase. Rehabilitation refers to the activities that are undertaken to support the victims, in order to return to normal life. The Reconstruction includes the replacement of buildings, houses, infrastructure, and lifeline facilities so that long-term development prospects are enhanced. The reconstruction and rehabilitation planning is carried out specifically for worst case scenario. It is activated in case of a strong disaster in which the capacity of State and District authorities have been overwhelmed and require assistance from the Central Government for re-establishing normalcy in the State.

The key activities of post disaster reconstruction phase are detailed damage assessment, restore/relocate houses accordingly, finalize reconstruction & rehabilitation after generating substantial funds from appropriate & reliable sources. The activities in the post disaster phase will be primarily carried out by the local bodies (Gram Panchayats, Block, District, Municipal Corporations, and Municipalities etc.) and various Government departments and boards, under supervision and periodic guidance of State Disaster Management Committee/ SEC. These post disaster reconstruction and rehabilitation activities shall be carried out, in conjunction with the implementing authorities.

-Chapter 8-

Recovery

A series of long term activities framed to improve upon the repaired activities in the Reconstruction & rehabilitation phase are covered under Recovery phase. Recovery includes all aspects 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 way to continue various functions of their lives. The Recovery process is therefore a long-term process in which everyone has a role – the Government including the PRI members, NGOs and especially the affected people, their families and the community.

The Role of the Departments are to explore the scope for

- Preparation of Recovery plan for displaced population, vulnerable groups, environment, livelihoods
- Organize 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 (International Agencies / Civil Society / Corporate Sector)
- Allocate funds for the stabilization of the repaired & reconstructed infrastructure.
- Integrate Climate change & Disaster Risk Reduction features in the recovery programmes

The heads of the department will be the co-coordinator of all Recovery activities under the department. The role of the Heads of the department will be to:

- Generally monitor the management of the recovery process;
- Ensure implementation of the recovery plan at the district level & below.
- Ensure Effective service delivery minimizing overlap and duplication;

-Chapter 9-

Mainstreaming Disaster Risk Reduction (DRR) in developmental projects of the department

9.1 Identification of existing programmes of the department.

- A) Smart City Mission**—It aims to drive economic growth and improves quality of life of people by enabling local area development and harnessing technology, especially technology that leads to smart outcomes. This means retrofitting the cities for comprehensive development of the city for improving the quality of life of people, create employment and enhance income for all. Bhubaneswar and Rourkela have been included in this mission.
- B) AMRUT**- It aims for overall development of households living in cities and towns. The thrust areas of the mission are to ensure that every household has access to a tap with assure supply of water and sewerage connection, increasing the amenity value of city by developing greenery and well maintained open spaces/park and reduce pollution by switching to public transport or constructing facilities for non-motorized transport-walking, cycling.
- C) NULM**-For providing sustainable livelihood for the urban poor by way of gainful employment and enterprises.
- D) Swachh Bharat Mission**-In order to make the towns and cities clean and pollution free, the scheme was launched on October 2, 2014 with a target to complete the mission by October, 2019
- E) HRIDAY**-For undertaking strategic and plan development of Heritage city aiming at improvement on overall quality of life with specific focus on sanitation, security, tourism, heritage revitalization and livelihood retaining the city's cultural identity. Puri being the prime pilgrimage and heritage city of Odisha has been included under this scheme.

9.2 This Department is adopting all sorts' norms for disaster resilient structures be it for public or private for reducing for disaster risk.

Scope for integrating different schemes for Disaster Risk Reduction (DRR) activities:

Sl. No.	Scheme/ Project	Possible activities for DRR
01	Smart City Mission	Construction of disaster resilient buildings, roads, drains, flyovers etc.
02	AMRUT Mission	Disaster resilient infrastructure to be erected
03	NULM Scheme	Awareness to be created for the community for disaster mitigation.
04	Swachh Bharat Mission	Urban areas to be kept clean and sanitized to check health hazard/epidemic.
05	HRIDAY Scheme	Aims at preserving and revitalizing disaster resilient heritage City.

Chapter 10

Provisions for financing the activities

As per the sub-section (2) of Section (40) of the DM act, every department of the state government while preparing the Departmental Disaster Management Plans shall make provision for financing the activities specified therein.

10.1 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 State Disaster Response Fund (SDRF) replacing the Calamity Relief Fund (CRF). The amount of corpus 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.

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 pest attack. 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.

10.2 National Disaster Mitigation Fund

As per Section 47 of the DM Act 2005, Central Government may constitute a National Disaster Mitigation Fund for projects exclusively for the purpose of mitigation. This Section has not been notified by the Government so far. As mentioned earlier, the FC-XIV restricted its recommendation to existing arrangements on the financing of the already constituted funds (National Disaster Response Fund and State Disaster Response Fund) only, as per its terms of reference. The FC-XIV did not make any specific recommendation for a mitigation fund.

10.3 Recommendations of the Fourteenth Finance Commission

In regard to grants for disaster management, Fourteenth Finance Commission (FC-XIV) has adopted the procedure of the XIII FC and used past expenditures on disaster relief to determine

the State Disaster Response Fund corpus. While making recommendations, XIV FC have taken note of the additional responsibility cast on States and their district administrations under the Disaster Management Act. XIV FC has also taken note of the location-specific natural disasters not mentioned in the notified list, which are unique to some States.

10.4 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 / restoration of dwelling houses damaged due to natural calamities are administered through the respective collectors.

Part funds towards repair / restoration of immediate nature of the damaged public 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.

10.5 Allocation by Ministries and Departments

Section 49 provides for Allocation of funds by Ministries and Departments. It states that:

“(1) Every Ministry or Department of the Government of India shall make provisions, in its annual budget, for funds for the purposes of carrying out the activities and programmes set out in its disaster management plan.

(2) The provisions of sub-section (1) shall, *mutatis mutandis*, apply to departments of the Government of the State.”

10.6 Fund provision for disaster preparedness & capacity building of the department

Formats for provision of funds for disaster management in the annual budget of the department

Sl No.	Categories	Sub-Categories	Total provision of funds in lakhs for the financial year 2019-2
1	Mitigation	Structural	An amount of Rs.10.00 crore has been allocated for capacity building and DPR preparation. All the expenditure in regard to mitigation, capacity building, training, preparedness will be met out of this fund.
		Non-Structural	
2	Capacity-Building	Training Programmes	
		Mock drills	
		IEC materials	
3	Procurement	Materials	
		Resources	

10.7 Flexi Funds as a part of Centrally Sponsored Schemes

As per Department of Expenditure, Ministry of Finance, O.M No. 55(5)/PF-II/2011 dated 6.1.14, all Central Ministries shall keep at least 10 percent of their Plan budget for each CSS as flexi-fund (except for schemes which emanate from a legislation or schemes where the whole or a substantial proportion of the budgetary allocation is flexible. States may use the flexi-funds for the CSS to meet the following objectives:

- a) Provide flexibility to States to meet local needs and requirements within the overall objective of each program or scheme;
- b) Pilot innovations and improve efficiency within the overall objective of the scheme and its expected outcomes;
- c) Undertake mitigation /restoration activities in case of natural calamities in the sector covered by the CSS;

The utilization of flexi-funds for mitigation/restoration activities in the event of natural calamity must be in accordance with the broad objectives of the CSS. It is possible to combine flexi-fund component across schemes within the same sector but the flexi-funds of a CSS in a particular sector however, shall not be diverted to fund activities/schemes in another sector. The flexi-funds constitute a source of funding for mitigation activities within overall objectives of the particular National Disaster Management Plan 143 CSS(s) under which they are allocated and this would still leave a gap in terms of funding purely mitigation related projects especially those addressing cross cutting themes that cover multiple sectors.

Annexure- 1

Reporting formats of the department for SDRF norms

Sector	Damage in Physical terms	Requirement of funds for repair of immediate nature	Out of (3) amount available from annual budget	Out of (3) amount available from related schemes/ programmes / other sources	Out of (3) amount proposed* to be met from SDRF/NDRF as per the list of works indicated in the revised items & norms
1	2	3	4	5	6
Roads & Bridges					
Drinking water Supply works (Rural)					
Drinking water Supply works (Urban)					
Irrigation					
**Power					
Primary Health Centers					
Community assets in social sectors covered by Panchayats					

Annexure-2

Format for working out the requirements under the head of repair of damaged infrastructure of immediate nature

Roads & Bridges	Sector	Damage in physical terms	Requirement of funds for repair of immediate nature	Out of (3), amount available from annual maintenance budget	Out of (3), amount available from related schemes/ programs/ other sources	Out of (3), amount proposed to be met from CRF/NCCF in accordance with list of works indicated in the Appendix to the revised items and norms
	PWD Roads	No. of breaches- Length of Road damaged – No. of culverts damaged – No. of culverts washed away –				
	Rural Roads	No. of Roads damaged – Length of Road damaged – No. of breaches – No. of CD/Bridge damaged– No. of CD/Bridge washed away –				
	Urban Roads	Length of drain damaged – Length of Road damaged No. of culverts damaged –				
	Panchayat Roads	No. of Roads damaged – Length of breaches – Length of Road damaged – No. of culverts damaged – No. of culverts washed away				

	River/Canal Embankment Roads	No of Roads damaged in river embankments— Length of Road damaged in river embankments — No of Roads damaged in canal embankments — Length of Road damaged in canal embankments —				
Drinking Water Supply	Rural Water Supply	No of Tube wells damaged — No of platforms damaged — No. of Rural pipe water supply system damaged -				
	Urban Water Supply					
	River Embankment	No of breaches — Length of breach in Km — No of partial damage -				
Irrigation	Canal Embankments	No of breaches — Length of breach in Km — No of partial damage -				
	M I projects	No of Minor Irrigation projects damaged -				
	Clearance of Drainage channels	Length of drainage channels congested with vegetative materials —				
Primary Education PHCs	Primary School Buildings	No of Primary School buildings damaged -				
	PHCs	No of Primary Health Centres damaged -				

Departmental Disaster Management Plan-2019

Housing & Urban Development (H&UD) Department

Community assets owned by Panchayats	Community Halls	No of Panchayat Ghar/Community Hall damaged -				
	AWW Centres	No of Anganwadi Centres damaged -				
Power	Electrical lines	No of Primary sub-stations damaged - 33 KV lines damaged - 11 KV lines damaged - Distribution Transformers damaged - LT lines damaged -				
Total						

Annexure-3
Animal Husbandry (Replacement of Animals)

Name of the Block	No of Livestock / Birds lost				No of animals qualifying for relief grant (i.e., subject to ceiling of 3 large Milch animal or 30 small Milch animals or 3 large draught animal or 6 small draught animal per household				Expenditure incurred (Milch animals @ Rs.30,000 for large animal , Rs.3000 for small animals & Draught animals @ Rs 25000 for large animal, Rs. 16,000 for small animals)				Poultry @ 50/- per bird subject to a ceiling of assistance of Rs.5000/- per beneficiary household.	Total expenditure (11+12+13+14+15)	
	Milch Animal		Draught Animal		Poultry Birds		Milch Animal		Draught Animal						
	Buffalo / Cow	Sheep / Goat	Camel / Horse/ Bullock	Calf/ Donkey/ Pony	Buffalo / Cow	Sheep / Goat	Calf/ Donkey/ Pony	Buffalo / Cow	Sheep / Goat	Calf/ Donkey/ Pony					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)

Annexure-4

Guidelines of Flexi-funds within Centrally Sponsored Scheme

F.No.55(5)/PF.II/2011
Ministry of Finance
Department of Expenditure
Plan Finance-II Division

New Delhi, dated January 6, 2014

Office Memorandum

Subject: Guidelines for Flexi-Funds within Centrally Sponsored Schemes (CSSs).

Objectives

The introduction of a flexi-fund component within the Centrally Sponsored Schemes (CSS) has been made to achieve the following objectives:-

- (i) To provide flexibility to States to meet local needs and requirements within the overall objective of each programme or scheme;
- (ii) To pilot innovations and improve efficiency within the overall objective of the scheme and its expected outcomes;
- (iii) To undertake mitigation/restoration activities in case of natural calamities in the sector covered by the CSS.

Budgetary Allocation

2. Central Ministries concerned shall keep at least 10% of their Plan budget for each CSS as flexi-funds, except for Schemes which emanate from a legislation (e.g. MGNREGA), or, schemes where the whole or a substantial proportion of the budgetary allocation is flexible (e.g. RKVY)

Allocation of State Share

3. After approval of the Plan Budget, Central Ministries shall communicate tentative allocations for each CSS to States including the allocation of flexi-funds by the end of May of every financial year. In the CSS that are demand-driven or project-driven and it is not feasible to make allocations to States, tentative allocations for a quarter/half-year/year shall invariably be communicated to States by the end of May of every financial year. Allocation to the States shall be based on transparent and equitable criteria. Central Ministries shall make allocations for 10% of flexi-funds for the CSS amongst States in the same proportion as tentative State allocations in the 90% portion of the CSS.

4. Flexi-funds will be a part of the CSS and the name of the concerned CSS will precede the word 'flexi-funds', in the communication to States. There will be no separate budget and account head for this purpose.

5. As flexi-funds are a part of the concerned CSS, the same State share (including beneficiary contribution, if any) would be applicable for the flexi-fund component as well. However, States may provide additional share (including beneficiary contribution, if any) over and above the required State share for the flexi-funds component of the allocation for the CSS.

Use of flexi-funds

6. States may use the flexi-funds for the CSS to meet the objectives mentioned above in accordance with the broad objectives of the main Scheme. The flexi-funds may also be utilized for mitigation/restoration activities in the event of natural calamities in accordance with the broad objectives of the CSS. However, the specific guidelines of the CSS, applicable for 90% of the CSS allocation, will not be essential for the Flexi-funds component of the CSS, except for State share requirements.

7. The flexi-funds of a CSS in a particular sector, however, shall not be diverted to fund activities/schemes in other sectors. For example, if a particular CSS relates to elementary education, the flexi-funds for that scheme can only be used for elementary education and not for agriculture or any other sector. But it would be permissible to converge flexi-funds of different schemes to improve efficiency and effectiveness of outcomes.

8. The purpose of providing flexi-funds is to enable States to undertake new innovative schemes in the particular area covered by the CSS. Flexi-funds shall not be used to substitute State's own non-Plan or Plan schemes/expenditure. It shall also not be used for construction/repairs of offices/residences for Government officials, general publicity, purchase of vehicles/furniture for offices, distribution of consumer durables/non-durables, incentives/rewards for staff and other unproductive expenditure.

9. Schemes taken up with Flexi-funds shall invariably carry the name of concerned CSS.

10. The State-level Sanctioning Committee (SLSC) may sanction projects under the flexi-funds component. States will not be required to send the project to Ministries for approval under the flexi-funds window as the SLSC will have a representative of the concerned Ministry and Planning Commission.

States wishing to use flexi funds as part of the normal 90% component are free to do so.

Release of Flexi-funds

11. Release of flexi-funds for each CSS may be made on a prorata basis along with the normal releases under CSS. In other words, no separate system for release or for utilization certificates for flexi-funds would be required.

12. Flexi-funds within each CSS will be subject to the same audit requirements as the main CSS including the audit by the Comptroller & Auditor General of India (CAG).

Monitoring & Evaluation

13. Web-based requirements for reporting the use of flexi-funds may be designed by adding modules to the existing MIS. Outcomes (medium term) and outputs (short term) need to be part of the MIS along with pictures/images and good practices to ensure greater transparency and cross-learning across States. For this purpose, web portal for sharing best practices is proposed to be created in Planning Commission.

14. Evaluation of flexi-funds may be done through the existing evaluation processes including those by Ministries, Programme Evaluation Organisation (PEO) and Independent Evaluation Organisation (IEO), Planning Commission and by independent third parties. Terms and conditions for evaluation may be designed in such a manner that outcomes of the Scheme as a whole as well as flexi-funds are well identified/measured.

15. These guidelines will be applicable from the financial year 2014-15.

Saurabh Garg 6/1/14
(Dr. Saurabh Garg)
Joint Secretary (Plan Finance-II)
Government of India

To,

1. Secretaries,
All the Departments/Ministries
Government of India.
2. Chief Secretaries,
All States/Union Territories.

-Chapter 11-

Knowledge Management

Implementation Roadmap for Knowledge Management

11.1 Need of creating network of knowledge institutions

Disaster preparedness is inculcated among others by developing strong knowledge base on the subject, and here comes the role of Knowledge Management into picture. There are various modes of spreading knowledge. Odisha has some high quality educational and research institutions within the state, which may be leveraged for the purpose. While dispersed and non-coordinated knowledge generation related to state specific hazards is going on, there is a need to develop DM specific knowledge management center.

Despite not having a dedicated institute, the State Disaster Management Authority (OSDMA), based at Bhubaneswar, facilitates the conduct of wide range of trainings, to State as well as other district level stakeholders. H&UD Department in consultation with OSDMA shall network with institutions carrying out the research, studies & analysis on climate change, disaster risk reduction in urban areas, disaster resistant building technologies. The department would strive to reach to certain level of satisfaction from knowledge management point of view. And in order to achieve that, the role of knowledge resource center / hub will be the key.

11.2 Identification of Knowledge institutions and mechanism of knowledge sharing

Knowledge Resource Centre (KRC): KRC will act as the hub of knowledge and information, pertaining to disaster management. The major functions of KRC will be to train state government officials, sensitize the district and sub district level staff, and spread awareness amongst community on the disaster preparedness. A trained team of disaster management experts will lead the KRC initiatives across the state. Awareness programmes on the disaster management, will specifically consist of sensitizing the vulnerable communities, farmers and other stake holders at the house hold level, community level and organizational institutional level by involving Corporate, NGOs, and voluntary organizations.

Knowledge Resource Center (KRC) will act as a knowledge facilitation service center that will also provide a platform for disaster management practitioners to discuss the concerned issues, share information and gather solutions to existing or anticipated challenges that they face on a day-to-day basis. Involving schools, colleges and other educational institutions will be made mandatory. With support from KRC, the awareness will have to be sustained through regularly updating and incorporating latest innovations and technologies in the field of disaster management. The Hospitals, Health Institutions, Public Health Centers, Sub-centers, Private

Health Agencies and other allied entities will also be encouraged to address the disaster management component, with support from KRC.

11.3 Documentation of lessons learnt and Rehabilitation Plan

State DM Resource Gallery: Recommended at the level of OSDMA, the resource gallery shall have a repository of sound disaster management experiences, and will play an important role in the research and development on the subject matter. A dedicated and qualified team will run the resource gallery, and will work under supervision of R&DM Cell.

In view of making the available resources relating to disasters management to decision makers and concerned stakeholders, the efforts will be made to collect, compile and disseminate disaster related studies, best practices, innovations and promotional materials from various stakeholders including technical, academic, training and government agencies.

Primarily the traditional knowledge, indigenous wisdom and good old practices shall be widely documented and disseminated in local language (Odiya). Further, a statutory order will be preferred to make it mandatory for all the DM stakeholders to make available Odisha related disaster management research studies to be used for disaster risk reduction of the State. Provision will be made for disaster management stakeholders to have access to these resources to gain knowledge and understanding about the subject and to effectively part take in the Disaster Risk Reduction efforts of the State. An online web portal will also be developed and maintained for ease of the concerned users of resource gallery.

11.4 Documentation of best practices and uploading of the same in the departmental websites

The department has a website i.e. www.urbanodisha.gov.in where all the plans, procedures, circulars, guidelines, documents, best practices, reports, trained human resources would be stored under the title 'Disaster management'. This would be useful to support the future implementation of the department's disaster management plans.

Knowledge management on provision of service delivery and infrastructure in the urban areas of the state can play a vital role through ensuring the availability and accessibility of accurate and reliable disaster response measures when required. Identification of key disaster knowledge factors will be an enabler to manage disasters successfully.

ANNEXURE 1: Contact number of Executive Officers of ULBS

SL. NO	Name of the ULBs	Name and Designation	STD	OFFICE	MOBILE
1	Anandpur (M)	Hitansu Sekha Samal	06731	240260	9439564103
2	Angul (M)	Subhendu Jena,ORS	06764	230582	7978103804
3	Aska(N)	Ashok Ku Panda, I/c	06822	273068	9861197959
4	Athamallik(N)		06763	254207	
5	Athagarh(N)	Satya Ranjan Panda	06723	220369	9938477137/ 8917298772
6	Attapura(N)	Dr Tapaswini Guru	0668	2221212	9438089891
7	Baripada(M)	Saroj Ku Dsh, OAS , I/C	06792	252703	9437034184 /9437107864
8	Balasore(M)		06782	251222	
9	Baragarh(M)	Susanta Ku. Rout, E.O	06646	234347	9438179248
10	Barbil(M)	Addl. Tahasildar, I/C	06767	275278	
11	Banki (N)	Binayaranjan Mohapatra .E.O.	06723	240228	9439777178
12	Banpur(N)	Santosh Ku. Nial	06756	223091	873537158
13	Balugaon(NAC)	Surendra Ku Khuntia I/C	06756	220486	9437834948
14	Balimela(N)	Sri Krushna Chandra Rath	06861	232924	943741308
15	Baliguda(N)	JayadevSarangi E.O.			8249699904
16	Barpali(N)	Bhagirathi Pradhan E.O.	06646	275278	8763495384
17	Basudevpur(M)		06788	221262	
18	Belpahar (M)	LokanathTiwari E.O.	06645	250244	7751921801
19	Bhadrak(M)		06784	251519	
20	Bhawanipatna (M)	Biswambar Mishra	06670	230424	9437222804
21	Bhuban(N)	P. K. Baral	067469	272023	9861197959/ 9437395961
22	Bhanjanagar(N)	Bhajaram Biswal, I/C	06821	241107	9438342244
23	Biramitrapur(M)	Sambit Das	0661	2670228	8249674151
24	Binika(N)	Dukhiram Nayak	06654	283019	9437330061
25	Boudh(N)	Manoranjan Panda	06841	222024	9938720555
26	Bolangir(M)	Bipin Bihari Dip, ORS	06652	232790	9078563058
27	Brajrajnagar(M)	Dilip Kumar Patel, E.O.	06645	242075	9438713768
28	Buguda(N)	Rasmi Ranjan Dash,	06818	250135	9438089891
29	Belaguntha(N)	Sunil Ku Tripathy	06821	258255	9438604486
30	Berhampur MC	Chakrabarty singh Rathore, I.A.S.	0680	2250290	
31	BBSR(BMC)	Samartha Burma, I.A.S.	0647	2432895	9439277733
32	Champua(N)	Sapan Ku Sahu,ORS	06811	263975	9853207679
33	Chandbali(N)	Prabhu Kalwan Das, ORS	0674		9438567523

34	Chikiti(N)	Sujit Ku Choudhury	0680	2497222	8895196088
35	Chhatrapur(N)	Girija sankar Mallick, ORS,E.O.	06811	263975	99110091413/ 7978622746
36	Choudwar(M)	Satyabrata Mantry	0671	2394272	9437318133
37	Cuttack (CMC)	Sarat Ch Nayak OAS	0671	2308087	9437164240
38	Deogarh(M)	Kunjaban Pradhan ,E.O.	06641	226231	9438678810/ 9438867810
39	Dhamnagar(N)	Jatindra Ku Mishra			9437007113
40	Dhenkanal(M)	Atanu Ku Samanta	06762	224401	9438256399
41	Digapahandi(N)	Prafulla Ku Dakua, ORS	06814	247330	
42	Daspalla(N)	Addl. B.D.O. I/c	06762	224401	9853394861
43	Dharmgarh(N)	Prafulla Ku Sahu			9438307959
44	Ganjam(N)	Addl. Tahasildar I/c	0681	264357	9861078949
45	Gopalpur(N)	Uma sanker Sethi, E.O.	0680	2343029	9437773102
46	Gudari(N)	Gayatri Sahu	06862	260332	7751958160
47	Gunupur (N)	Bhabagrahi Sahoo,E.O.	06857	250438	7735537724
48	G.Udayagiri(N)	Sanjib Ku Mohapatra ORS	06847	260057	9938176780
49	Hinjilcut(N)	Ashok Ku Panda I/C	06811	280025	9438342414
50	Hindol(N)				
51	Jagatsinghpur (M)	Baldev Behera ORS	06724	220073	9438825364
52	Jajpur(M)	Ajay Ku Mohanty	06728	225199	9861276937/ 8280545937
53	Jaleswar(N)	Hrusikesh Pani.	06781	222250	
54	Jatni(M)	Tapan Ku Mohapara	0674	2490826	9853239784
55	Jeypur(M)	SubCollector, I/C ,E.O	06854	231098/232300	
56	Jharsuguda(M)	Ram Ch. Pradhan, E.O.	06645	273019	9437257507
57	Joda	Suryamani Patajoshi E.O.	06767	272214	9437338364
58	Junagarh(N)	Iswar Pujari,I/C	06672	243247	9438162433
59	Kabisuryanagar (N)	B.N.Nayak , E.O.	06810	270623	8895772966
60	Kantabanjhi(N)	Bishnupriya Mishra	06657	220241	9438074780
61	Karanjia(N)	Bijaya Krushna Nayak,E.O.	06769	220201	9556272960
62	Kamakhyanagar (N)	Biraja Prasad Rath, E.O.	06769	270434	9437332012
63	Kashinagar(N)	Pravat Ku Masanta	06815	284215	9438420254/ 9861139174
64	Kendrapara(M)	Deba Prasad Bal E.O.	06727	232780	9437727311
65	Keonjhoragarh(M)	Niranjan Jena. OAS. E.O.	06766	255413	9437800833
66	Kesinga	Biswamber Mishral/c	06670	222062	
67	Khariar Road(N)	Debandra Moharana	06678	222239	7328882121
68	Khariar(N)	Kishore ku Sahu E.O	06671	224294	9438420254
69	Khallikote(N)	Ram Chandra Mishra	06810	256333	9438078503
70	Khandapada(N)	Itshree Sarangi. E.O.	06757	230019	9438779591
71	Khordha(M)	Swetapadma D. Satpathy	06755	220674	9438250704
72	Kodala(N)	Swapnarani Padhi	06810	268335	
73	Konark(N)	M Srinivash.E.O.	06758	236826	9778297197
74	Koraput(N)	Gour Ch Pattnaik E.O.	06852	250629	7735537724
75	Kotpad(N)	Alok Ranjan Samantray	06860	283063	9238892185
76	Kuchinda(N)	Jitendra Mohapatra ,E.O.	06642	220060	9437253406
77	Malkangiri(N)	M. Nilakantha Naidu ORS	06861	230244	

78	Nabarangapur(M)	Nabin Ku Patel, ORS	06858	222031	7008796410
79	Nilagiri(N)	Ajay Mohapatra	06782	233259	9437376206
80	Nayagarh(N)	Santosh Ku Jena	06753	252231	9937853670
81	Nimapara(N)		06758	250229	
82	Nuapara(N)	Ram Ch Majhi E.O			9938607235
83	Parlakhemundi (M)	Ashok Ku. Rout, E.O.	06815	222252	8895926340
84	Paradeep(M)	Dilip Ku. Mohanty E.O.	06722	222485	9437829447
85	Padmapur(N)	Ashok patra E.O., I/c	06683	223536	9439459755/ 9437144351
86	Pattamundai(M)	Sampada Ku swain ORS, E.O.	06729	224232	7873432379/ 9556272960
87	Pipili(N)	Kadambini Jena E.O	06758	241442	8280909892
88	Phulbani(M)	Radhamohan Behera ,E.O.	06842	253619	9437358193/ 7008442891
89	Polasara(N)	Prasanna Ku. Das, E.O.	06810	282235	9861167787
90	Puri(M)	Harish Ch. Nayak, OAS	06752	222122	9437156194
91	Patnagarh(N)	Sukanta Ku Beura, ORS	06658	222247	8917649835
92	Purusottampur(N)	A.Nagaswar Rao, E.O.	06811	275333	9439957729
93	Rajgangpur(M)		06624	220450	
94	Rayagada(M)	Sachidananda Satpathy	06856	235067	8249471400
95	Rambha(N)	Maheswar Das OAS I/C E.O.	06810	278336	7008328838
96	Ranpur(N)	Archana Nayak			9438729972
97	Redhakhol(N)	Chitaranjan Panigrahi	06644	253466	8763538838
98	Rairangpur(M)	Bhagabat Prasad Mohapatra, ORS	06794	222054	9437615527
99	Rourkela(MC)	Rashmita Panda, IAS	0661	2500388	9437812129
100	Sonepur(M)	Jagadish Mahananda ORS	06654	220475	8763802894
101	Sorada(N)	Bipin Bihari Pradhan OAS	06819	270129	9439304011
102	Soro(M)	Bidyadhar Dandapat	06788	221262	99378727731
103	Sundargarh(M)	Ashok Ku Mishra	06622	272266	8249098291
104	Sunabeda(M)	Swastik Jamadar	06853	220315	
105	Sambalpur(M)	Trilochan Majhi, OAS	0663	2411316	
106	Talcher(M)	Smt Atasi Parida ORS.EO.	06760	240259	9438208548
107	Tarva(N)	Kanika Chakrabati E.O	06654	286230	9439041359
108	Titilagarh(M)	Santosh KumarBehera E.O.	06655	220471	9437639301
109	Tusura(N)	Bipin Behari Dip,ORS I/c			9078563058
110	Udala (N)	Ratan Ku Pattnaik	06795	232268	9438004385
111	Umerkote(N)	V.Prasad Rao, E.O.	06866	270230	8081004455
112	Vyasanagar(M)	Sapan Ku Nanda,ORS	067262	2202076	9439532699
113	Hinjilicut(M)	Ashok Ku Panda	06811	280025	9438342414
114	Bije pur (N)	Shushanta Rout, I/c			9438179248