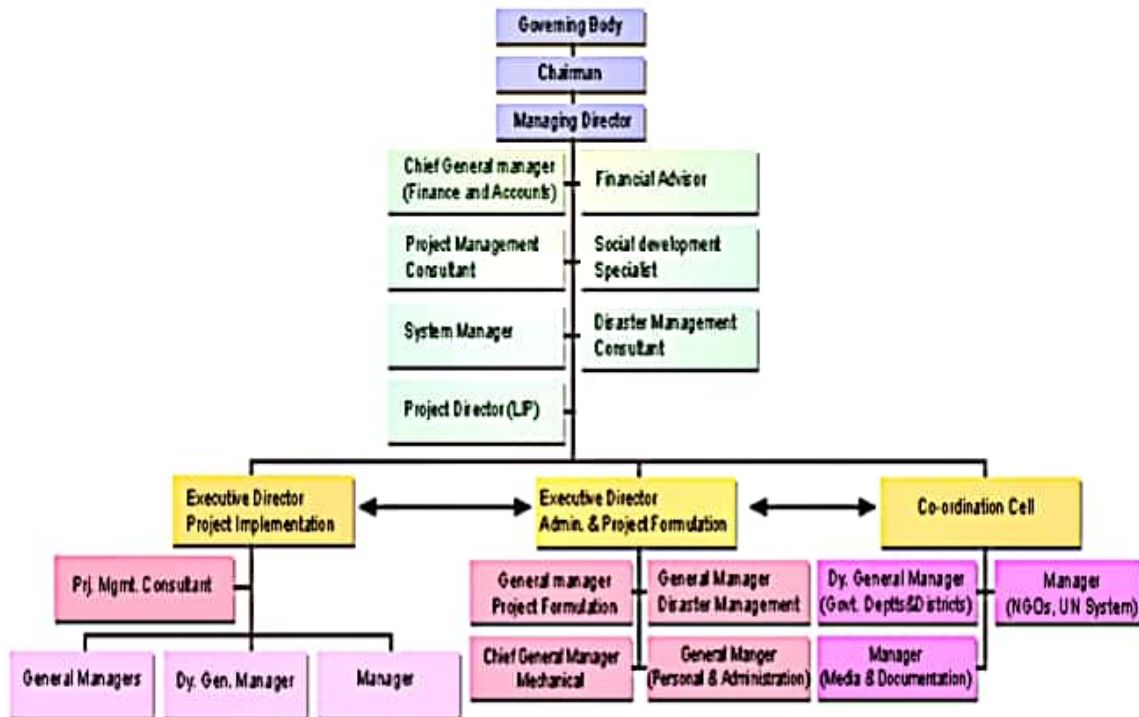


Disaster risk reduction (DRR) is a systematic approach to identifying, assessing and reducing the risks of disaster. It aims to reduce socio-economic vulnerabilities to disaster as well as dealing with the environmental and other hazards that trigger them. Here it has been strongly influenced by the mass of research on vulnerability that has appeared in print since the mid-1970s.^[1] It is the responsibility of development and relief agencies alike. It should be an integral part of the way such organizations do their work, not an add-on or one-off action. DRR is very wide-ranging: Its scope is much broader and deeper than conventional **emergency management**. There is potential for DRR initiatives in just about every sector of development and humanitarian work.

The Policy Makers Dialogue and Capacity Development for Disaster Risk Reduction and Management in Asia and the Pacific - Harnessing Information and Space Technology and Geographic Information System is organized by the Information and Communications Technology and Disaster Risk Reduction Division of ESCAP, in collaboration with Japan Aerospace Exploration Agency (JAXA), from 23 to 25 September 2014 in Bangkok.

In recent years, Asia and the Pacific has been relentlessly battered by a series of natural disasters. Rapid growth in urbanization amongst disaster prone countries calls for greater consideration for disaster risk reduction, as the potential for loss of life, loss of property and assets and negative economic impacts increases. In many cases, disruption to economic activities spills over into other countries and markets. Such supply chain disruptions can impact livelihoods beyond the immediate vicinity of disaster area. Therefore, taking measures to save lives through early evacuation, as well as early recovery of economic activities, are integral processes in disaster risk reduction and prevention. Effective use of Information and communication Technology (ICT), space technology applications and geographic Information systems (GIS) plays a key role in addressing these challenges. Against this backdrop, ESCAP member States adopted resolution 69/11 on "Implementation of the Asia-Pacific Plan of Action for Applications of Space Technology and Geographic Information Systems for Disaster Risk Reduction and Sustainable Development, 2012-2017" as well as resolution 69/12 which set out the agenda for further "Enhancing regional cooperation for building resilience to disasters in Asia and the Pacific". As part of the implementation of these resolutions, the ESCAP secretariat is organizing this dialogue meeting with policy makers from disaster risk reduction and management; stakeholders and authorities of ICT, space technology and GIS applications; experts on innovative technologies applications; UN agencies; and the private sector.

OSDMA Organizational Structure



OSDMA's role in Disaster Management Plans

The major focus of OSDMA's activities is preparedness and response planning for various disasters.

These include

- **Disaster Management Framework for the State**
- **Disaster Management Policy for the State**
- **Draft Disaster Management Plan focussing on:**
 - Water and Climate-Related Hazards*
 - Geological Hazards*
 - Chemical/ Industrial/Nuclear Disasters*
 - Accident-Related Disasters*
 - Biological Disasters*
- **Draft Disaster Management Bill**
- **Community Based Disaster Preparedness Programme**

Gujarat State Disaster

Management Authority (OSDMA)

- Lay down guidelines to be followed by a State Authority in drawing up the State Plan;

Mandate of the NDMA

- Lay down guidelines to be followed by different Ministries and Departments of the Government of India for the purpose of integrating the measures for prevention of disaster or the mitigation of its effects in their development plans and projects;
- Coordinate the enforcement and implementation of the policies and plans for disaster management;
- Arrange for, and oversee, the provision of funds for mitigation measures, preparedness and response;
- Provide such support to other countries affected by a major disaster as may be determined by the Central Government;

Mandate of the NDMA

- Lay down guidelines for the minimum standards of relief to be provided to persons affected by disaster;
- Give directions regarding relief in loan repayment or for grant of fresh loans on such concessional terms as may be appropriate in the judgement of the Authority;
- Take such other measures for the prevention of disaster, of the mitigation of its effects, or for preparedness and capacity building for dealing with the threatening disaster situation or disaster as it may consider necessary.

Nodal Agencies for Management of Disasters in India

- Floods : CWC, Ministry of Water Resources
 - Cyclones : Indian Meteorological Directorate
 - Earthquakes : Indian Meteorological Directorate
 - Epidemics : Ministry of Health and Family Welfare
 - Chemical Disasters : Ministry of Environment and Forests
 - Industrial Disasters : Ministry of Labour
 - Rail Accidents : Ministry of Railways
 - Air Accidents : Ministry of Civil Aviation
 - Fire : Ministry of Home Affairs
 - Nuclear Incidents : Department of Atomic Energy
 - Mine Disasters : Department of Mines
-

The First Institutions in Disaster Management in India

The Orissa State Disaster Mitigation Authority (OSDMA) was set up in Orissa after the 1999 Orissa Supercyclone

The Gujarat State Disaster Management Authority (GSDMA) was set up in Gujarat after the 2001 Bhuj Earthquake

* the need for a permanent arrangement to handle a calamity was evident in both cases



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State Disaster Management Authority (SDMA):

The Disaster Management Act 2005 also provides for setting up of State Disaster Management Authorities under the Chairpersonship of the Chief Minister. State Authority is to be assisted by a State Executive Committee under the Chairpersonship of the Chief Secretary of the State.

The Committee shall prepare a state plan which would include assessment of vulnerability of different parts of the state to different forms of disasters; measures to be adopted for prevention and mitigation of disasters; capacity building; and role of departments of State Government. Apart from the planning aspect it is also involved in taking up and supervising relief and rescue operations at the time of disaster and in disseminating information about any impending disaster.





2. National Institute of Disaster Management (NIDM):

Capacity building is an important aspect of disaster management. This requires developing human resources to handle disaster management work and undertake studies and research on the subject.

Disaster Management Act gives this mandate to the National Institute of Disaster Management.

The institute was formed as National Centre for Disaster Management (NCDM) in 1995 but was re-designated as National Institute of Disaster Management in 2005 after the enacting of the Disaster Management Act. The institute is headed by the Union Home Minister and Vice-Chairman, NDMA also acts as the Vice-President of the Institute.

Day to day works are looked after by the Executive Director. The institute has five divisions i.e., Geo-Hazard Division; Hydro-Met Hazard Division; Policy Planning and Cross Cutting Issues Division; Response Division; and Administrative and Finance Division.

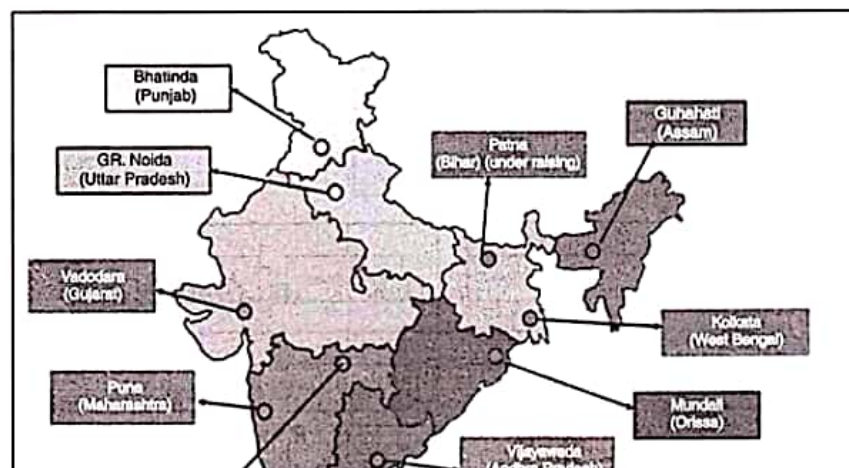
3. National Disaster Response Force (NDRF):

NDRF was constituted in 2006 with 8 battalions drawn from the paramilitary forces. Presently it has strength of 10 battalions. General superintendence of the

3. National Disaster Response Force (NDRF):

NDRF was constituted in 2006 with 8 battalions drawn from the paramilitary forces. Presently it has strength of 10 battalions. General superintendence of the force vests in NDMA and the force is headed by the Director General of NDRF and Civil Defence. These battalions are positioned at different locations to provide timely response to disaster situations and are available to State Governments at the time of need.

The force provides specialized response during disasters, is pro-actively deployed in impending disaster situations, imparts training to state disaster response force personnel and conducts programmes for creating awareness and community capacity building.



National Disaster Management Authority, abbreviated as **NDMA**, is an apex Body of Government of India, with a mandate to lay down policies for disaster management. The phrase disaster management is to be understood to mean 'a continuous and integrated process of planning, organising, coordinating and implementing measures, which are necessary or expedient for prevention of danger or threat of any disaster, mitigation or reduction of risk of any disaster or severity of its consequences, capacity building, preparedness to deal with any disaster, prompt response, assessing the severity or magnitude of effects of any disaster, evacuation, rescue, relief, rehabilitation and reconstruction'.^[2] NDMA was established through the [Disaster Management Act](#) enacted by the [Government of India](#) on 23 December 2005.^[3] NDMA is responsible for framing policies, laying down guidelines and best-practices for coordinating with the State Disaster Management Authorities (SDMAs) to ensure a holistic and distributed approach to disaster management.^[4] It is headed by the Prime Minister of India and can have up to nine other members. Since 2014, there have been four other members. There is a provision to have a Vice Chair-person if needed.^{[5][6]} NDMA has a vision to "build a safer and disaster resilient India by a holistic, pro-active, technology driven and sustainable development strategy that involves all stakeholders and fosters a culture of prevention, preparedness and mitigation."^[7] NDMA equips and trains other Government officials, institutions and the community in mitigation for and response during a crisis situation or a disaster. It works closely with the [National Institute of Disaster Management](#) for capacity building. It develops practices, delivers hands-on training and organizes drills for disaster management. It also equips and trains disaster management cells at the state and local levels.^[8]

National Disaster Management Authority



National Disaster Management Authority

- The apex body for Disaster Management in India set up after the Indian Ocean Tsunami
- Set up as a part of the Government of India's decision to put in place necessary institutional mechanisms for drawing up and monitoring the implementation of disaster management plans, ensuring measures for prevention and mitigation of disasters and for undertaking a holistic, coordinated and prompt response to any disaster situation.

National Disaster Management Authority

- NDMA shall have the responsibility for laying down the plans and policies for disaster management.
The NDMA may:
- Lay down policies on disaster management;
- Approve the National Disaster Management Plan;
- Approve plans prepared by the Ministries and Departments of the Government in accordance with the National Disaster Management Plan;
- Lay down guidelines to be followed by a State Authority in drawing up the State Plan;

Orissa State Disaster Mitigation Authority (OSDMA)

- OSDMA came into existence after the catastrophic super cyclone of October 1999, which hit the Orissa coast
- The super cyclone caused destruction and death in fourteen districts of the State.
- The objective was to have an autonomous body exclusively devoted to disaster management, to promote a culture of preparedness for different types of disasters and also for coordinating disaster mitigation activities including restoration and strengthening of infrastructure.

- OSDMA works in close coordination with

*Government of India and its agencies,
Government of Orissa, its departments and agencies
Administration of all 30 districts of the State
Panchayati Raj Institutions and Urban Local Bodies
Communities
Non-Governmental Organisations (NGOs)
Community Based Organisations (CBOs)
Bilateral and Multilateral aid agencies
U.N. agencies
State Governments of other states
Disaster Management Organisations and Institutes.*

- It seeks to forge a stronger alliance with all the stakeholders with a view to making Orissa more disaster resilient and participate in national and international initiatives for disaster reduction and prevention.

1. National Disaster Management Authority (NDMA):

The Disaster Management ACT, 2005 provides for setting up of a National Disaster Management Authority (NDMA) with the Prime Minister as Chairperson. Apart from him there are members whose number shall not exceed nine. One of these can be nominated as Vice-Chairperson of the Authority.

Presently, Sh. M. Shashidhar Reddy, a sitting member of Andhra Pradesh Legislative Assembly is the Vice-Chairman of the Authority. NDMA is responsible for laying down policies, plans and guidelines for disaster management for ensuring timely and effective response to disaster

NDMA is to be assisted by a National Executive Committee which comprises of Secretaries to the Government of India heading various Ministries or Departments having administrative control over Agriculture, Atomic Energy, Defence, drinking water supply, environment and forests, finance, health, power, rural development, science and technology, space, telecommunication, urban development and water resources. Chief of the Integrated Defence Staff of the Chiefs of Staff Committee is also a member of the Executive Committee.

National Executive Committee is responsible for preparing and updating a National Plan for disaster management. The Plan includes measures to be taken for prevention of disasters or the mitigation of their effects; measures to be taken for the integration of mitigation measures in the development plans; measures to be taken for preparedness and capacity building to effectively respond to any threatening disaster situation or disaster; and defining the roles of various departments in respect of these measures

District Disaster Management Authority (DDMA):

The structure of disaster management institutions goes down to the district level where the responsibility is given to DDMA which is headed by the Collector/ District Magistrate with elected representative of the local authority as co-chairperson.

DDMA will act as the planning, coordinating and implementing body for disaster management at the district level.

It will prepare the District Plan for disaster management in accordance with instructions by NDMA and SDMA. The DDMA will also ensure that the guidelines for prevention, mitigation, preparedness and response measures laid down by the NDMA and the SDMA are followed by all the Departments of the State Government at the District level and the local authorities in the District.

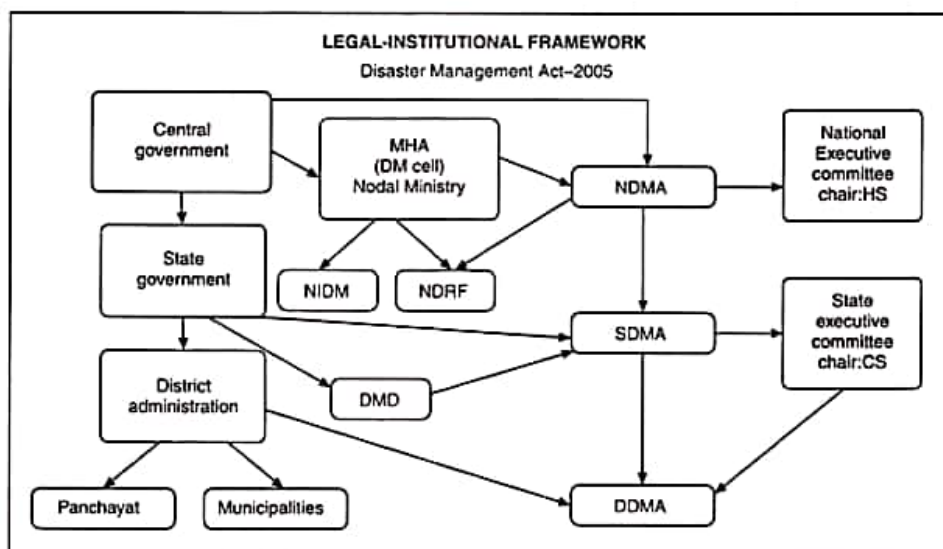


Fig. 6.11. Legal institutional framework

Local Authority:

For the purpose of disaster management, local authorities would include Panchayati Raj institutions and those agencies which control and manage civic services. These bodies are required to ensure capacity building of their employees for managing disasters and carrying out relief and reconstruction activities in the affected areas.

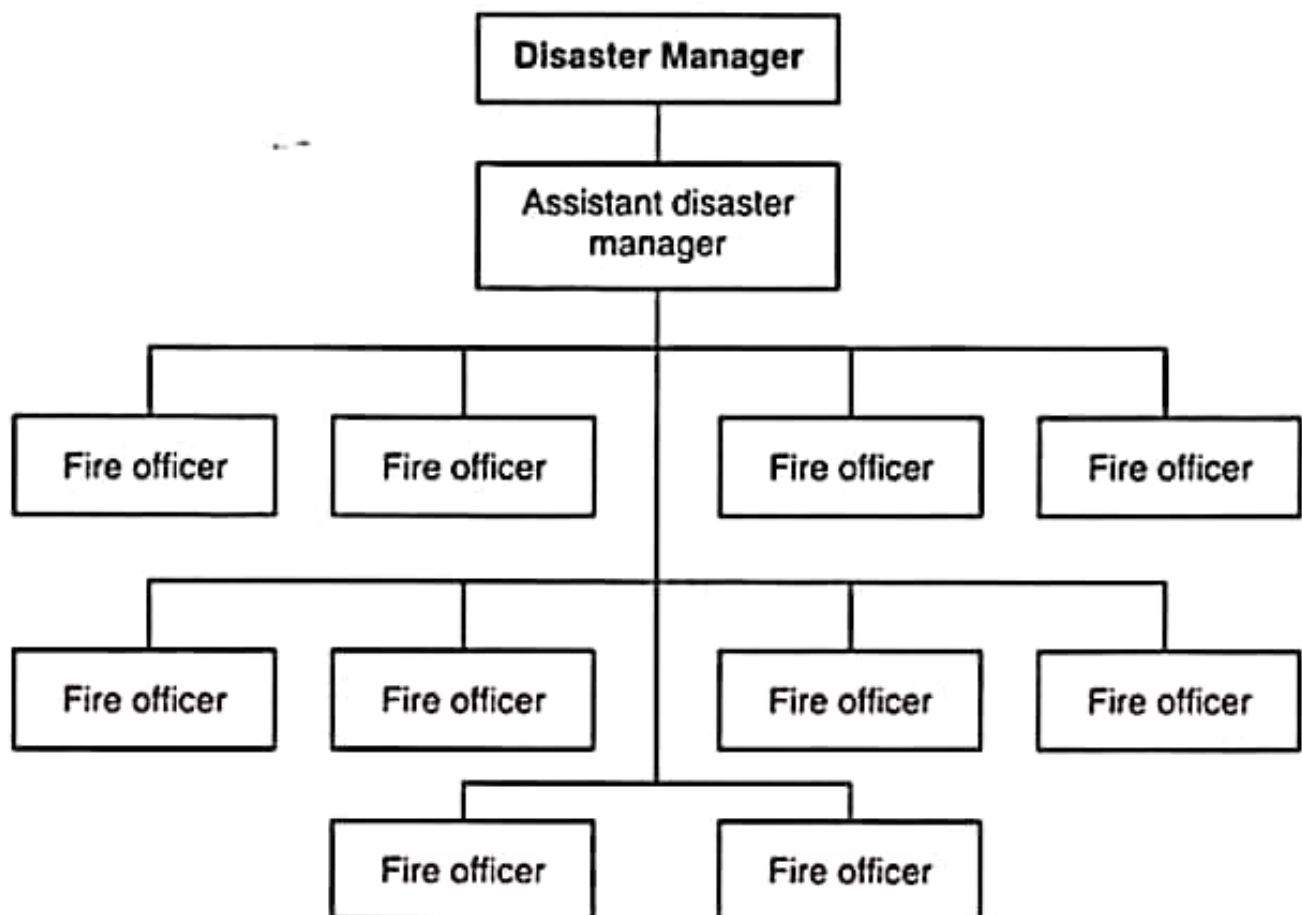


Fig. 6.12. Showing district level Disaster Management Structure