



**Andaman and Nicobar Administration**

# Disaster Management Plan

2012

## Andaman & Nicobar Islands



*Rescue*



*Shelter Management*



*Psychosocial Care*



*NDMA*



*SCR Early Warning*



*Rescue*



*First Aid*



*Mock Drill*

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अण्डमान तथा निकोबार द्वीप समूह  
**Andaman and Nicobar Islands**

### **P R E F A C E**

Disasters when they occur impact all irrespective of political, social, economic or geographic boundaries. There has been an increase in the number of natural disasters over the past few years. The impact of such calamities transcends physical components and impacts the socio-economic condition of affected persons and places.

A & N islands have been pursuing a paradigm shift in disaster management from a relief centric approach in the past to the current holistic one, encompassing all facets of disaster management. Any approach to disaster management should consider that a single death in any disaster is more than a loss of human life; it impacts the entire family and puts the environment around them under stress.

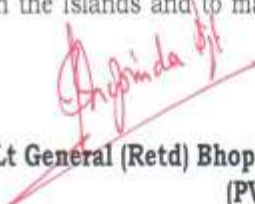
We have made long strides in several areas towards strengthening the institutional mechanism and response capacity for different activities related to disaster management. However, despite the best preparedness and highest response standards, disasters remain a challenge to humankind.

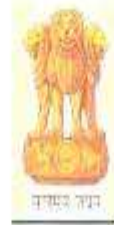
The challenge before us, therefore, is to strive towards higher levels of understanding, preparedness, mitigation efforts and response mechanisms. This in turn needs to be backed by better coordination among different organizations, departments, Panchayati Raj Institutions, academic institutions, the civil society and citizens at large.

Training of all government functionaries as well as capacity development of construction professionals and non-government functionaries is required to support and implement a disaster management plan. There are several good practices in the country and a variety of measures to promote such information and knowledge-sharing will have to be encouraged. Our effort has to be to ensure immediate "golden hour" response to a disaster, as this can mitigate the effects of a disaster to a large extent.

The Andaman & Nicobar Islands Disaster Management Plan captures the measures undertaken and system established for disaster management in A&N Islands. It also articulates the next steps required. I hope that disaster management practitioners would find the document useful and utilize it to promote collaborative efforts to reduce disaster risk in this Union Territory.

I would urge all the stakeholders to come together and work concertedly for reducing disaster risk in the Islands and to make them as safe as possible.

  
**Lt General (Retd) Bhopinder Singh**  
**(PVSM, AVSM)**  
**Lt. Governor, A & N Islands**



अण्डमान तथा निकोबार प्रशासन  
**A & N Administration**

## FOREWORD

Andaman and Nicobar Islands are one of the multi hazard prone areas of India. Coastal areas are particularly prone to hydro- meteorological disasters such as floods, cyclones, storm surges, cloud bursts and tornadoes. The Andaman and Nicobar Islands are in the Bay of Bengal (which is one of the five cyclone prone areas of the world) and since they are open to sea from all the sides, they are further exposed to hydro-meteorological disaster risks. Andaman and Nicobar Islands also fall in cyclogenesis zone and significant number of cyclones striking the East Coast of India and Bangladesh are generated every year in the Andaman Sea. Heavy rainfall due to monsoons leading to localized flooding is a frequent occurrence.

Andaman and Nicobar Islands are also prone to various geological disaster risks. They are located in one of the most seismically active parts of the world and several great earthquakes have occurred in the past. ANI runs accurately parallel to the boundary separating the Australian and Eurasian plates in the Indian Ocean that are continuously jostling with each other. The Islands are most susceptible to very high intensity of seismicity and as per the seismic zoning map of India contained in IS 1893-1984, these Islands are classified in Seismic Zone-V.

The devastating earthquake that occurred on December 26, 2004 caused horizontal and vertical movement of land mass in the Andaman and Nicobar Islands. Survey of India's observations reveal that due to earthquake the land mass in the northern area has gone up (0.4-0.6m at Rangat, 0.8-1m at Aerial Bay, Diglipur) and in the southern area has gone down (1.3m at Campbell bay and 1m at Chatham). As a result, there is increased risk of floods in the southern areas and the ground water table particularly in Middle and North Andaman has considerably gone down resulting in drying of wells/ponds etc. and creation of moisture stress for vegetation and other standing crops. It is also apprehended that 'fissures' have developed due to earthquakes beneath the earth surface which have destroyed coastal protection provided by mangroves, while inundation caused by the killer waves called "TSUNAMI" loosened land area and created stagnant water bodies in the once dry and low-lying areas. In Baratang, two major and some minor mud volcanoes erupted during the earthquake. Evidence of liquefaction has also been noted in South, Middle and North Andaman Islands.



The Andaman & Nicobar Islands Disaster Management Plan (DM Plan) emphasizes providing uniformity in approach and clear perception of the various issues at hand, thus avoiding undue confusion and at the same time, the plan provides for the coordination between different departments/agencies from the field to the Union Territory level. The objective is to provide a quick and effective response in emergency situations.

The Union Territory Administration has prepared DM Plan for the entire A&N Islands in tune with the Disaster Management Act, 2005. The Administration has constituted the following Authorities under the Disaster Management Act, 2005:-

1. A & N Islands Union Territory Disaster Management Authority constituted vide Administration's Notification No. 01/2008 dated 9.1.2008 headed by the Hon'ble Lt. Governor, A&N Islands.
2. A & N Union Territory Disaster Management Executive Committee constituted vide Administration's Notification No. 2/2008 dated 9.1.2008 headed by the Chief Secretary, A&N Administration.
3. District Disaster Management Authorities have been constituted for all the three Districts vide Administration's Notification No. 03/2008 dated 9.1.2008 headed by the Deputy Commissioners of the concerned districts as the Chairperson.

Six Emergency Operation Centres have been established in 6(six) different Islands viz. Port Blair, Mayabunder, Hut Bay, Car Nicobar, Kamorta and Campbell Bay for the purpose of early warning to the general public and could be used as Incident Command Posts during any disaster. The State Control Room is also functioning 24x7 in the Directorate of Disaster Management and is connected with all the Emergency Operation Centres, Police Control Rooms, the three District Control Rooms as well as Andaman and Nicobar Command and Ministry of Home Affairs Control Room.

This DM Plan essentially concentrates on the institutional setup and information flow for providing hazard specific responses along with the roles of primary agencies involved. Such an approach allows flexibility in response at the local level while still under the direct supervision and control of the State Authorities. While the action plan assumes an element of preparedness on part of the Administrative Authorities, it also calls for substantial involvement of NGOs and private initiatives. Community participation is one of the most effective inputs for the management of disasters. Training of the community and key social functionaries are thus essential elements for the successful execution of the Plan.

We thus have to keep the 5 Cs in mind:-

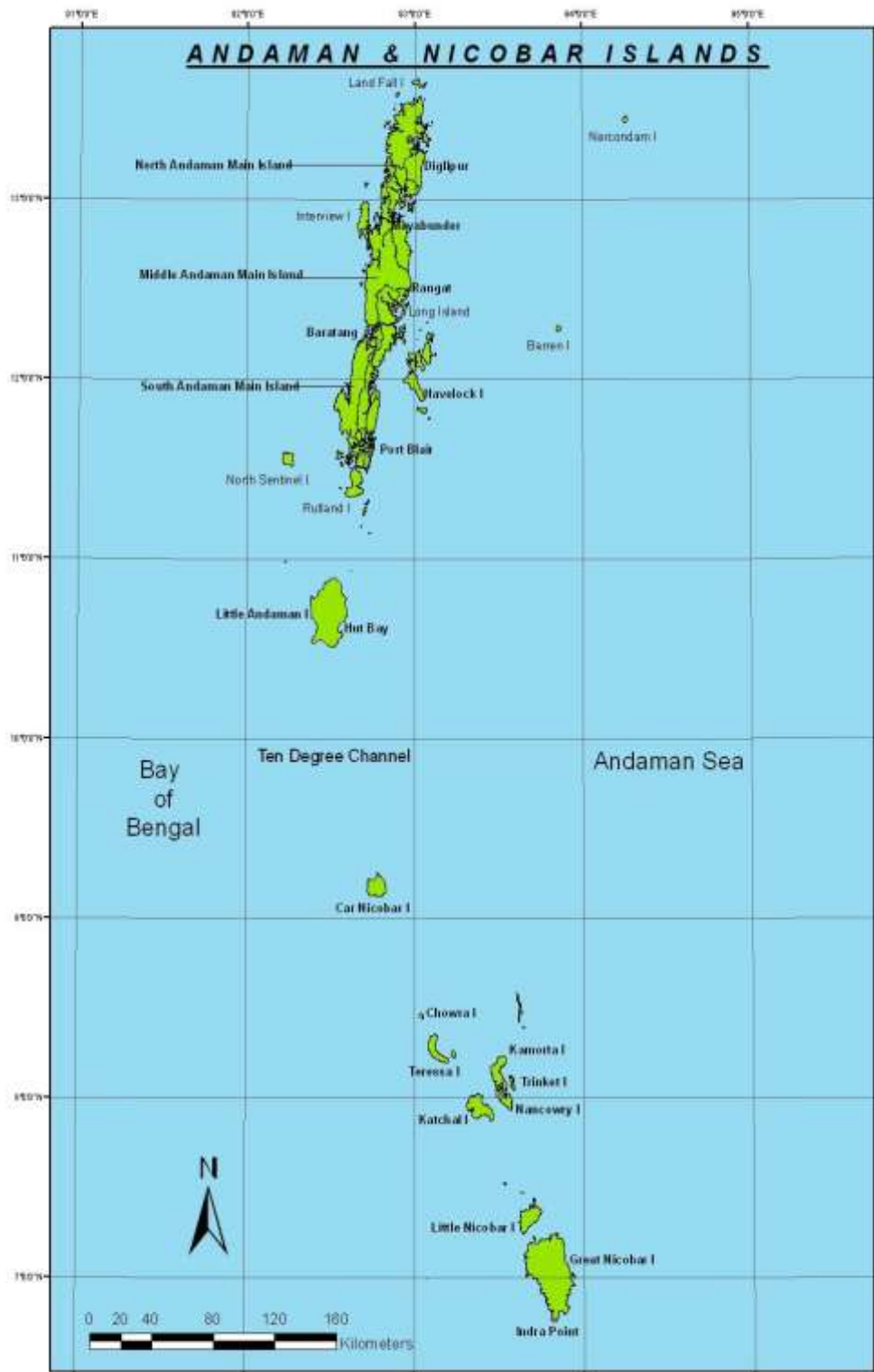
1. Community Based Disaster Management, including last mile integration of policies, plans and execution.
2. Capacity development in all related areas.
3. Consolidation of past initiatives and best practices.
4. Cooperation with agencies at National, Regional and International Levels.
5. Compliance and coordination to generate a multi-sectoral synergy.

Response to disasters, in the absence of a defined plan, would be ad-hoc and tentative leading to over emphasis on some action and absence of other critical action. The objective of this Disaster Management Plan is to bring all stakeholders together and to the maximum extent possible contain and minimize the impact on life, environment and property. A formal plan for managing disasters is therefore necessary. The plan therefore:

- Utilizing disaster mitigation as a tool for location and area specific planning using scientific and technological advances in Remote Sensing, GIS etc.
- Pre-planning a proper sequence of response actions to minimize the impact of disasters in terms of human, physical and material loss.
- Allocation of responsibilities to the participating agencies.
- Developing codes and Standard Operating Procedures for various departments and relief agencies involved.
- Developing inventory of existing facilities and resources to make it an exercise in capacity building.
- Mechanism for effective management of resources.
- Co-ordination of all relief activities, including those of NGOs, to ensure a coordinated and effective response.
- Co-ordination with the State response machinery.
- Monitoring, evaluation and proper documentation of action taken during rescue, relief and rehabilitation.

Lt. Gen. (Retd.) Bhopinder Singh, (PVSM,AVSM), Hon'ble Lt. Governor of these Islands has frequently highlighted the need for formulation of a Disaster Management Plan with emphasis on protecting life, environment and property while ensuring mitigation of the effect of disasters to the maximum extent possible and has guided us through the process. Sincere thanks are also due to A & N Command and line departments of the Administration for their contribution towards formulating the Plan. I hope that all the departments take steps to implement the plan in a pro-active manner for it is through alertness and preparedness that we can make Andaman & Nicobar Islands a safer and disaster resilient territory.

  
(Shakti Sinha, IAS)  
Chief Secretary  
A & N Administration





## **Chapter-I**

### **INTRODUCTION**

#### **ISLANDS AT A GLANCE**

##### **1.1 LOCATION**

**1.1.1** The Union Territory of Andaman and Nicobar Islands stretches over 700 kms from North to South with 37 inhabited Islands. The archipelago, consisting of 572 small and big islands and rocks are aligned from North to South in the form of a chain of Islands between Cape Negaris (of Myanmar) in North and Achin Head in Sumatra (of Indonesia) in South, the former being situated 192 Km. from northern tip of Andaman and latter 144 Km. from southern tip of Nicobar i.e. Indira Point. Preparis and Cocos are two small islands interjecting between Cape Negaris and Andaman.

There are two groups of Islands viz. Andaman and Nicobar separated by 10<sup>0</sup> Channel. The Andaman Group of Islands consists of South and North Andaman Districts covering a gross length of 467 kms, while Nicobar Islands constitute the Nicobar District covering approximately 259 kms. The total geographical area of the Andaman and Nicobar Islands are 8249 Sq.kms. The geographical area of Andaman Island is 6408 Sq.kms and that of Nicobar Island is 1841 Sq.kms. The Andaman & Nicobar Islands lies between 92<sup>0</sup> & 94<sup>0</sup> East Longitude and 6<sup>0</sup> & 14<sup>0</sup> North Latitude. The climate of A&N Islands is described as Tropical Climate. Nearly, 86 % of the total area of these Islands is covered by Forests.

##### **1.2 ADMINISTRATIVE SUB-DIVISIONS**

**1.2.1** The Union Territory of Andaman & Nicobar Islands has been divided into three Districts viz. (i) South Andaman District (ii) North and Middle Andaman District and (iii) Nicobar District. Port Blair, the Capital of this territory, is also the headquarters of South Andaman District, Mayabunder is the headquarter of North and Middle Andaman District and Car Nicobar is the headquarter of Nicobar District. Deputy Commissioners are the head of each District.

**1.2.2** The Andaman District consists of one Sub-Division i.e. South Andaman. The South Andaman Sub-Division consists of 3 tehsils i.e. Port Blair, Ferrargunj and Hut Bay. The North and Middle Andaman consist of 2 Sub-Divisions. Mayabunder and Diglipur Sub-Division consisting of 3 Tehsils i.e. Diglipur, Mayabunder and Rangat.

**1.2.3** The Nicobar District (consisting of 19 Islands) is divided into 3(three) sub-divisions namely Car Nicobar, Nancowry and Campbell Bay consisting of 3 Tehsils. Only 7 villages of Great Nicobar Island under Nancowry sub-division have been recognized as Revenue villages while the remaining area of Nicobar District (consisting of 192 Census villages) has been declared as Tribal reserves.

### **1.3 PHYSICAL FEATURES**

#### **1.3.1 Topography**

Barring a few small Islands in the Nicobar group, all the others have undulating terrain with main ridges running North to South. There are also spurs running East to West in between the main ridges. The submerged valleys form deep inlets and creeks. Flat lands are few and perennial streams non – existent in most of the Islands except in Great Nicobar where there are 5 perennial rivers and coral reefs surrounded most of the Islands.

#### **1.3.2 Geology**

The Islands are composed mainly of thick Eocene sediments deposited on Pre-Tertiary sandstone, siltstone and shale with intrusions of basic and ultra – basic igneous rocks. In the geologically Younger Ritchie’s archipelago, calcareous sandstones are more common.

The available geological evidence leads scientists to assume the possibility of geological period when the Andaman and Nicobar Islands formed a range between (Burma) Myanmar and Sumatra. The Andaman and Nicobar Islands with Preparis and Cocos formed one continuous hill connecting this with (Burma) Myanmar through Cape Negaris.

This range was separated from Nicobar the other continuous Island by a strait of say 400 fathoms deep and 144 Km wide. Further in South the Nicobar Island was separated from Sumatra by yet another strait of 600 fathoms deep and about 48 Km wide.

It is believed that the active Volcano of Barren Island belongs to the immediate Sunda group of Volcanoes, while the Narcondum Volcano belongs to the Pegu group, both belonging to the general Sunda group. These Volcanic Islands in line with Nicobar form one of the principal lines of weakness in the earth’s surface. It is noteworthy that the Andaman is just off this and escapes the violent earthquakes to which the others are liable.

It is possible that the reason for Andaman escaping violent earthquakes while Nicobar are subject to them is that they are just off the line of greatest weakness which may run from Sumatra through Great Nicobar, Car Nicobar, Barren and Narcondum Islands to Aracan Yoma.

#### **1.3.3 Soil**

The Soils of the Andaman and Nicobar Islands have been classified into 3 orders: Entisole, Inceptisole and Alfisole. The main agricultural soils are found in the valleys and are of alluvial and colluvial origin. The coastal areas prone to tidal floods may have acid sulphate soil. On the whole soils of these Islands are nutritionally poor and their organic matter content is on decline.

#### 1.3.4 Climate

The climate of Andaman and Nicobar Islands is described as Tropical Climate. The Islands are situated in the Hot or Torrid Zone. Nearly 86 % of total area in these Islands is covered by forest. There are only two seasons viz. Rainy Season and Summer Season and there is virtually no Winter Season. The Islands are visited by South - West and North - East monsoons during the period from May to December. Average annual rainfall in these Islands is 3000 mm. The period from January to April is Summer Season. The mean relative humidity is 79% the mean maximum temperature is 30.2<sup>0</sup> C and mean minimum temperature is 23.0<sup>0</sup> C.

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## **Chapter-II**

### **HAZARD ANALYSIS**

#### **Types of Crisis / Hazards / Disaster agents**

**2.1** Thirty odd types of hazards/ disaster agents have been identified and the same have been grouped into five categories:

1. Terrorist Outrages
2. War and International Situation
3. Water and Climate related disasters
4. Migration/Exodus/Infiltration
5. Breakdown of services
6. Man-made Disasters
7. Nuclear Disasters
8. Natural Disasters
9. Law and Order
10. Geologically related disasters
11. Chemical, Industrial and Nuclear related disasters, and
12. Accident related disasters

#### **1. Terrorist Outrages**

- a) Hijacking, forcible seizure of Aircraft on ground and attack on ground installations, terminal buildings and facilities
- b) Hostage or siege situation requiring specialized handling
- c) Use, attempt or threat of use of nuclear/biological/chemical agents or weapons of mass destruction
- d) Assassination or attempted assassination or kidnapping or disappearance of an Indian or foreign high dignitary.
- e) Major attack/suicide attacks/sabotage/bomb explosion at any place including historical monuments or place of worship or important Government buildings/vital installations/symbols of democracy and governance which may inflict heavy casualties, cause large scale damage evoke grave public reactions or communal backlash.

#### **2. War and Interstate Situation**

- a) Any inter-state development having immediate and grave implications for India's security or interests
- b) Imminence of war or major hostilities against India requiring action other than that by the Armed Forces

- c) Foreign invasion or civil war in a country neighbouring India or closely allied to India

### **3 Migration/Exodus/Infiltration**

- (a) Large scale exodus of people/ refugees from any neighbouring countries into India over a short period.
- (b) Large scale evacuation of Indian expatriates from a country/region facing hostilities/threat of war or under actual war.

### **4. Breakdown of Services**

- (a) Major breakdown of any of the essential services posing wide-spread and protracted problems (Oil sector, Power sector etc.)
- (b) Major Transport Strikes
- (c) Major Port Strikes/Hijack of an Indian Merchant Ship or Indian crew in a Foreign Ships

### **5. Man-made Disasters**

- (a) Forest Fires
- (b) Chemical disasters
- (c) Biological disasters and Epidemics
  - Pest Attacks
  - Cattle Epidemics
  - Food Poisoning
- (d) Marine Pollution, Sanitation and Sewage

### **6. Nuclear Disasters**

Nuclear accident inside or outside the country which poses healthy or other hazards to people in India.

### **7. Natural Disasters**

- (a) Major earthquake
- (b) Cyclone
- (c) Floods
- (d) Tornado
- (e) Hurricane
- (f) Tsunami
- (g) Drought
- (h) Land Slide

**8. Law & Order**

Major breakdown of law & order or imminent threat thereof.

**9. Water and Climate Related Disaster agents:**

- Floods
- Cyclones
- Tornado's and Hurricanes
- Cloud Burst
- Thunder and Lightening
- Sea Erosion
- Drought
- Land Slide

**10. Geologically related Disaster agents:**

- Earthquake
- Landslides and Mudflows
- Dam Bursts

**11. Accident related Disaster agents:**

- Urban Fire
- Village Fire
- Forest Fire
- Electrical Disasters & Fire
- Serial Bomb Blasts
- Oil Spill
- Festival related Disasters
- Air, Road and Sea Accidents
- Boat / Ship Capsizing
- Major Building Collapse

**2.1.1 The A & N Islands are vulnerable because of**

- Volcanic activity in Barren Island
- Being water logged Islands
- Distance from mainland
- Isolated & dispersed Islands
- Vast coastline
- Situation on geographical seismic zone
- Eye location near of the cyclones

**2.1.2 STATUS OF DISASTERS IN ANDAMAN & NICOBAR ISLANDS****a) Climate Change Impact:**

The earth has experienced oscillations between warm and cool periods. These shifts in climate have been traced to wide variety of 'climate forcing' like orbital variations, solar fluctuations, volcanic activities, water vapour and the atmospheric concentration of Green House Gases (GHG) such as CO<sub>2</sub>. The main culprit for causes of Global Warming is Green House Gases like Carbon dioxide, Methane and Nitrous oxide are playing hazards in the present times. Green houses gasses are the ingredients of the atmosphere that add to the greenhouse effect. The average façade temperature of the Globe has augmented more than 1<sup>0</sup> F (Fahrenheit) since 1900 and the speed of warming has been almost 3 fold the century long average since 1970. About 20% of carbon dioxide emitted in the atmosphere comes from burning of gasoline in the engines of the vehicles. But changes that are happening today are occurring at a more rapid rate with stronger magnitudes and patterns that cannot be explained by natural cycles. No one will be immune from its overall impacts. Nonetheless, it will have a dis-proportionate effect on the lives of poor people. Climate change is global but the effects are local. Localized physical impacts will be determined by geography and macro level interactions between global warming and existing weather patterns. Few commonly identified global climate change consequences are:-

- Temperature change
- Rainfall pattern changes (Seasonal and latitudinal shift in precipitation)
- Sea level rise
- Severe events/disaster ( the incidence and magnitude of extreme events are exacerbated)

The following table elaborated the consequences of each of the above change on Andaman and Nicobar Islands (ANI). Changes in all the areas would make the impact more severe.

Likely impact of Climate Change (Global)	Possible Impacts on the People of ANI
<p><b>Temperature Change :</b>                      The consensus amongst scientists are that, this warming trend has been triggered by the emission of carbon dioxide (CO<sub>2</sub>) and other Green House Gasses from various human activities (e.g. Industrial processes, fossil fuel combustion and land use changes such as deforestation). The most up-to-date projections of future warming suggest a global increase of 1.8°C to 6.4°C by 2100. There is no hard and fast line separating 'dangerous' from 'safe' climate change. However, beyond a threshold of 2°C the risk of large scale human development setbacks and irreversible ecological catastrophes will increase sharply.</p>	<p><b>Livelihood:</b>                      The economic thrust of ANI is on FAT- Fisheries, Agriculture and Tourism.</p> <p><b>Impact of Fisheries:</b></p> <ul style="list-style-type: none"> <li>✦ Higher temperature may lead to fish habitat modification, affect abundance and spawning of fish.</li> </ul> <p><b>Impact on Agriculture:</b></p> <ul style="list-style-type: none"> <li>✦ Reduce food production due to higher rate of evapotranspiration, heat stress on crops, erratic weather which undermines rain –fed agriculture systems.</li> <li>✦ Higher temperatures increase the incidence of pests and diseases that affect crops and cattle/livestock</li> </ul> <p><b>Impact on Tourism :</b></p> <ul style="list-style-type: none"> <li>✦ Coral bleaching as a result of warming sea may have implications on tourism.</li> </ul> <p><b>Health:</b>                      Health facilities in ANI are limited and people depend heavily on health services of mainland.</p> <ul style="list-style-type: none"> <li>✦ Major killer diseases(Malaria, Dengue etc.) could expand its coverage</li> <li>✦ Reduce the variety and availability of medicinal plants on which local people continue to rely</li> <li>✦ Higher temperature will lead to quick evaporation of rainwater storage tank creating water crisis and leading to healthier hazard</li> </ul> <p><b>Environment:</b>                      ANI is ecologically very fragile and environmental degradation would further enhance its disaster risk.</p> <ul style="list-style-type: none"> <li>✦ Higher ocean temperatures, salinity devastate marine organism. For example, bleaching of coral reef as a result of warming sea</li> <li>✦ Increasing acidity in the ocean is another long term threat to marine ecosystem.</li> <li>✦ It is likely that some species may not be able to compete successfully and may lose out in favour of other species.</li> <li>✦ Increased Salination and mineralization of soil.</li> </ul>
<p><b>Rainfall pattern change (Seasonal &amp; latitudinal shift in precipitation)</b>                      Climate change is reducing the</p>	<p><b>Water Resources (Drinking and Household Use) :</b>                      ANI is dependent on rainwater for drinking and household use except very few springs and one river at North Andaman. Rainwater is harvested and collected</p>



<p><b>amount of useful precipitation in many parts of the world.</b></p>	<p>into tank and supplied to household.</p> <ul style="list-style-type: none"> <li>○ Erratic rainfall will create seasonal acute water crisis as happened in year 2007.</li> <li>○ Decrease in available surface water will lower water tables and slow aquifer recharge rates. As a result, decline and/or increase variability in water supply.</li> </ul> <p><b><u>Livelihood (Agriculture) :</u></b></p> <ul style="list-style-type: none"> <li>○ Crop loss and reduced agricultural productivity due to seasonal variation of precipitation.</li> </ul> <p><b><u>Health:</u></b></p> <ul style="list-style-type: none"> <li>○ Weather conditions determine malaria transmission to a considerable extent. Heavy rainfall results in puddles, which provide good breeding conditions for mosquitoes. Moreover, water scarcity would affect hygiene and sanitation, leading to further health concerns.</li> </ul> <p><b><u>Social Issues (conflict &amp; Migration):</u></b></p> <ul style="list-style-type: none"> <li>○ Conflicts are expected to flare around diminishing resources – especially water – and add to the staggering numbers of people on the move and needing help (environmental refugee)</li> </ul>
<p><b><u>Sea level Rise :</u></b>  <b>Sea level could rise rapidly with accelerated ice sheet disintegration. Climate change is also causing many glaciers, like those in the Himalaya and Andes, to shrink at alarming rates.</b></p>	<p><b><u>Water Resources:</u></b></p> <ul style="list-style-type: none"> <li>○ Increased seawater percolation may further reduce freshwater supplies.</li> </ul> <p><b><u>Livelihood (Agriculture, Fisheries, Tourism):</u></b></p> <ul style="list-style-type: none"> <li>○ Agriculturally fertile coastal area are vulnerable to inundation and salination</li> <li>○ May create some scope for Inland fisheries.</li> <li>○ Some small islands/beaches which are popular tourist destination may be lost due to inundation.</li> </ul> <p><b><u>Social Issues (Displacement and Urbanization):</u></b></p> <ul style="list-style-type: none"> <li>○ Beyond actual inundation rising sea levels will also put millions of people at greater risk of flooding. This will displace a large number of people and result in rapid urbanization straining resources and putting more pressure on civic amenities.</li> <li>○ Sea level rise will make southern group of islands which are inhabited by tribal or primitive tribal more vulnerable due to subsidence of land due to earthquake (2004)</li> </ul> <p><b><u>Environment:</u></b>          Sea level rise will affect mangroves by eliminating or modifying their present habitats and creating new tidally inundated areas to which some mangrove species may shift (IPCC</p>

	<p>2001). As about 260 km of the coast of Andaman and Nicobar Islands are lined with mangroves and they have restricted scope of adjustment in response to sea level rise, the impact of climate change on extent and species composition of mangroves may be devastating when sea level rise exceed about 10cm/ 100 years.</p>
<p><b>Severe events/Disaster(The incidence and magnitude of extreme events are exacerbated)</b>  <b>Rising temperatures caused by Green House gases (GHG) emissions are altering ocean currents and weather pattern. Statistical evidence suggests that the frequency and destructive power of extreme weather conditions and event is already increasing.</b></p>	<p><b><u>Enhancement of Disaster Risk:</u></b></p> <ul style="list-style-type: none"> <li>✚ More frequent and intense cyclone is predicted. Change in path of cyclone will increase the disaster risk for ANI with more frequent and powerful wind. Andaman houses are traditionally sloped and light roofed due to heavy rainfall and earthquake, but high cyclonic wind could be devastating.</li> <li>✚ Flood event would increase and more and more area would be affected. More frequent and intense storm surge with more inland penetration. These would demand moving coastal population into inland where land is already scarce. It would lead to destroying the forest area.</li> <li>✚ Extreme summer temperature would be new hazard and put more pressure on ‘energy’ which is generated through expensive way from diesel.</li> <li>✚ Disaster would create new environmental problems and risks Natural Hazards can trigger release of toxic substances into the environment–damage of sewage system, hazard materials production and storage facilities.</li> <li>✚ Disaster will further degrade ecosystem and degraded ecosystem reduces community resilience to cope with disaster. Poor are most vulnerable and least resilient to disasters.</li> <li>✚ Post disaster recovery can have both immediate and long lasting effect on environment like depletion of natural resource due to cumulative effect of reconstruction.</li> <li>✚ Economic, social and environmental losses and retardation of development process would be inevitable.</li> </ul>

**b) Impact of Earthquake :**

Of the various types of hazards listed above these islands are susceptible to very high intensity of seismicity, hence classified as seismic **Zone V of IS 1893-1984**. A large number of earthquakes of magnitude more than 5.0 is known to have occurred in and around these Islands.

**2.1.3** Disasters have been classified as minor, L1, L2 or L3 as per the order of the Administration issued vide No. 796 dated 12.8.2005.

<b>Disaster Type</b>	<b>Features (Extent of Damage)</b>	<b>Authority competent to declare the level</b>
<b>Minor</b>	(a) The spread of disaster does not exceed five villages or (b) No loss of human lives is reported or (c) The loss of property does not exceed value of ` 50 lakhs.	<b>Assistant Commissioner</b>
<b>L1</b>	(a) The spread of disaster does not exceed 10 villages or (b) Loss of human lives does not exceed 20 or (c) The value of property loss exceeds ` 50 lakhs but less than ` 10 Cr.	<b>Deputy Commissioner</b>
<b>L2</b>	(a) All Districts are affected by L1 or (b) Loss of human lives exceeds above 20 or (c) Loss to property exceeds ` 10 Cr. (d) The District authority asked for assistance from Defence forces or (e) Is declared to be large scale disaster without assistance from GOI by A&N Admn.	<b>Relief Commissioner/Chief Secretary</b>
<b>L3</b>	Large Scale Disaster in these Islands wherein direct intervention from GOI has to be sought	<b>Relief Commissioner, MHA, GOI.</b>

## 2.2. EARTHQUAKES

### 2.2.1

As per Seismic Zoning Map of India contained in IS 1893-1984 the A&N Islands fall in the **Zone V**, which is the most severe seismic zone (very high damage risk zone). The Andaman and Nicobar Islands are located near the boundary of the Indian plate and the Burmese Microplate. The Andaman trench marks this boundary and lies in the Bay of Bengal to the west of the archipelago. Another prominent feature is the North-South West Andaman fault which is strike-slip in nature and lies in the Andaman Sea, to the east of this island chain. A tectonic process called “Sea Floor Spreading” is presently widening the Andaman Sea, just like the Atlantic Ocean. This is taking place along undersea ridges on the seafloor. The Indian plate is diving beneath the Burmese Microplate along the Andaman Trench in a process known as "Subduction". Shallow and occasional intermediate-depth earthquakes delineate the subducted slab under the Andaman-Nicobar islands joining the seismicity trend of the Indo-Burma ranges. In recent and historic times only two high magnitude earthquakes have occurred in this region. The first of these was in 1881, in the Andaman Sea, near the Nicobar Island and the second, off the west coast of Middle Andaman Island in June 1941.

### 2.2.2 EARTHQUAKE OF 31<sup>st</sup> DECEMBER 1881 (NNW of the Andaman Islands, Mw 7.9)

No recording stations were present at the time, though calculations were made by various agencies of the seismic vertical from the time of the shock recorded at different locations including Kolkata (formerly Calcutta), Vishakhapatnam, Chennai and Port Blair. They also recorded the arrivals of tsunamis at different points on the eastern coast of India. The tsunami had a maximum run-up of 1.2 meters on the Coromandel coast. Damage occurred to masonry buildings at Port Blair.

### 2.2.3 EARTHQUAKE OF 1941

#### 1941 - Andaman Islands, India, Mw 7.7

- **Date** : **26<sup>th</sup> June 1941**
- **Epicenter** : **20.5 kilometers west of Flat Island**
- **Latitude** : **12.500° N**
- **Longitude** : **92.570° E**
- **Magnitude** : **7.7 Mw. ( Momentum Magnitude Wave)**

The earthquake of June 26, 1941 is among the strongest earthquakes ever recorded in the Andaman & Nicobar Islands. It had a magnitude of 7.7 (Mw). It was centered in the Bay of Bengal, roughly, 20.5 kilometers west of Flat Island or 96.7 kilometers NNW of Port Blair (South Andaman Island). It was the last great earthquake in the Andaman and Nicobar Islands. The 1881 Nicobar Islands earthquake (M 7.9) is the only other event of comparable magnitude.

This 1941 earthquake caused widespread damage on Middle and South Andaman Islands. Most masonry structures in and around Port Blair were badly affected. The Cellular Jail which was a 3 storey building with 696 solitary Control Rooms and infamous for the imprisonment, torture and murder of freedom fighters was destroyed as were all the elegant buildings and wide roads, on Ross Island, the administrative centre of the Britishers. The maximum intensity was experienced at Baratang Island, Shoal Bay creek, North of Port Blair.

A tsunami was triggered by this earthquake in the Bay of Bengal. As per journalistic sources, the height of the tsunami was of the order from 0.75 to 1.25 meters. At the time no tidal gauge was in operation. Mathematical calculations suggest that the height could be of the order of 1.0 meter. This tsunami was witnessed along the eastern coast of India. It is believed that nearly 5,000 people were killed by the tsunami on the East coast of India. Local newspapers are believed to have mistaken the deaths and damage to a storm surge.

#### **2.2.4 EARTHQUAKE TREMORS OF 1982-83**

The Great Nicobar Island experienced a series of earthquake tremors during 1982 –1983. Though the quake was not severe, it kept the people on the tenterhooks. The ex-servicemen settlers were ready to desert the island in the ships.

#### **2.2.5 EARTHQUAKE TREMORS OF 2002**

Date -	14 <sup>th</sup> September 2002
Latitude -	13.087 <sup>0</sup> N
Longitude -	93.112 <sup>0</sup> E
Magnitude -	Mw 6.5
Location -	23.6 kms SSE of Diglipur (North Andaman Island)

A major earthquake shook the Andaman Islands at 03:58 AM local time on 14<sup>th</sup> September, 2002. It had a magnitude of 6.5 (Mw) and lasted 2 minutes. The earthquake was centered in the Andaman Sea, 23.6 kms SSE of Diglipur (North Andaman Island). A jetty at Aerial Bay was also damaged and 3-4 shops nearby collapsed. Diglipur in North Andaman was worst affected. Wooden and bamboo houses were relatively unaffected compared to concrete structures.

A tsunami was also experienced on Ross Island and Smith Island. A lighthouse on East Island (uninhabited) was damaged by the earthquake and the tsunami and 50 kilograms of mercury used in the beacon spilled as a result. Tremors from the main shock were experienced on Smith Island, Ross Island, Mayabunder, Kalighat, Baratang and at Port Blair. The strongest aftershock was recorded at 01:28:41 AM on 15<sup>th</sup> September, 2002 and was centered in the Andaman Sea, 12.3 km. west of Saddle Peak (North Andaman Island).

### **2.2.6. EARTHQUAKE TREMORS OF 2004**

The nature jolted the Andaman and Nicobar Islands on 26<sup>th</sup> Dec, 2004 at 06:28:53 AM when a major earthquake with magnitude of 9.3 shocked the earth and the epicenter of the quake was at Sumatra Islands which created Tsunami and cost lakhs of lives. The Tsunami affected almost all the coastal areas of Asia and it gave a partial affect around the globe also.

### **2.2.7 TSUNAMI**

Tsunami is the Japanese word known as “*Harbour Waves*”. This is an ocean wave produced by an event at sea like an earthquake, landslide, sliding of Ice berg, collision of Asteroids in the sea and/or volcanic eruption in the sea. These waves may reach enormous size upto 15 – 30 mtrs. height and have been known to travel at a speed 600-900 km/h and mostly cover across entire oceans.

Flat Islands like Car Nicobar, Chowra, Teressa, Katchal, Nancowry, Pilowmillow, Little Andaman, Neil, Havelock, Strait and Long Island etc. are vulnerable to tsunami. Absence of coastal plantation/mangroves and non availability of high altitude grounds/buildings can enhance the vulnerability of the people to tsunami.

### **2.2.8 CYCLONE AND HIGH VELOCITY WINDS**

The design wind speed in the whole UT is 44 m/s (158 km/h), which could be reached during monsoon. Andaman and Nicobar Islands is classified as Moderate Damage Risk Zone-A. The cyclone affected coastal areas are classified in 50 m/s zones (Very High Damage Risk Zone-B) and 55 m/s zones (Very High Damage Risk Zone-A). The basic wind speeds are applicable to 10m heights above mean ground level in an open terrain.

Cyclones are associated with strong winds, torrential rains and storm surges (abrupt rise of sea level at the time storm crossing the coast). Storms surge is the most destructive phenomena associated with a cyclone. Due to this low-lying areas along the coast are inundated by the sea water, which can result in the loss of human lives unless the people are evacuated from those areas.

The cyclone of 24<sup>th</sup> Nov, 1988 was followed by floods in Diglipur, Mayabunder and other areas on 8<sup>th</sup> Dec, 1988. About five thousand people were affected.

### **2.2.9 FLOODS**

Certain areas/islands have poor natural drainage due to peculiar geographical features. The islands like Car Nicobar are flat, sandy with elevated areas at certain places. Such islands where the drainage is predominantly by seepage are vulnerable

to flooding in case of heavy downpour. Floods can also be caused by dam bursts due to various reasons.

**2.3.0 VOLCANO**

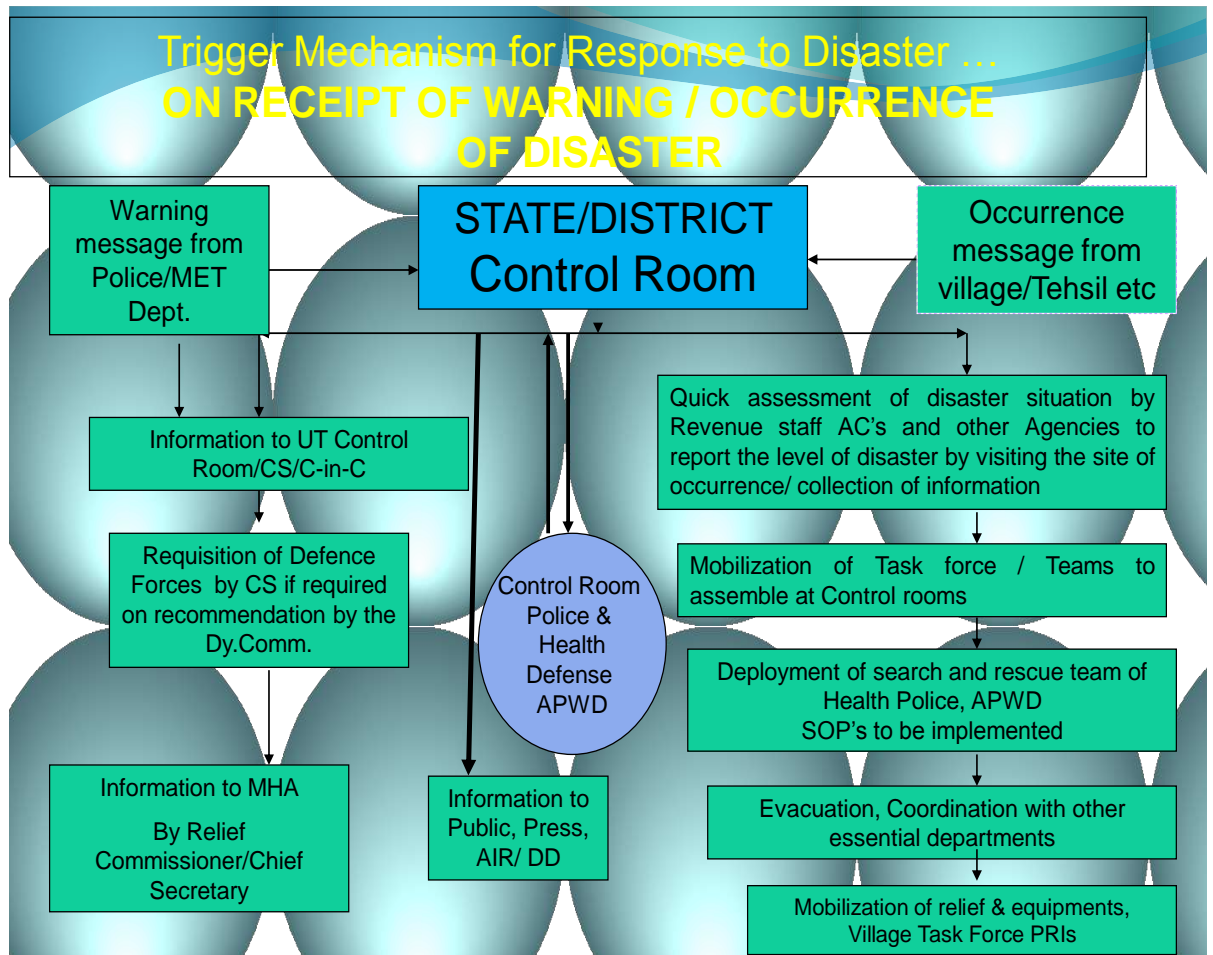
**2.3.1** Barren Island in Andaman district is the only active volcano in India. After eruption in 1803 A.D, it again became active in 1991 and 1995. The islands are uninhabited and away from other inhabited islands. The other volcano at Narcondum is dormant for centuries. There is a police outpost and a police radio centre at Narcondum.

**2.3.2** There are many spots on the active mud volcano in Baratang Island in Andaman district from where mud is slowly oozing out. Any large-scale effusion can lead to burial of things falling in the mudflow path.

**2.3.3** Activities and sub-activities for different crises situations have been visualized and identified and the response time for each activity has been determined:

1	Active Volcanoes	Barren Island- Erupted in 1803, 1891, 1995 and 2005 can be cause of Earthquake, Tsunami- etc.
2	Dormant Volcanoes	Narcondum is dormant for centuries also active - can be cause of Earthquake, Tsunami- etc.
3	Cyclone and High Velocity Winds	A&N are in moderate damage risk Zone- A with a wind speed of 120 Km/h.
4	Floods	Car Nicobar is vulnerable to floods as the drainage is predominantly by sepage. The low-lying adjoining areas of Port Blair and parts of North and Middle Andaman are prone to flash floods during heavy torrential rains.
5	Tsunami	1881- Port Blair, 1941-South Andaman & Middle Andaman, 2004 – South Andaman and Nicobar District

**2.3.4 Trigger Mechanism for Response to Disaster**



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## **Chapter-III**

### **UNION TERRITORY DISASTER MANAGEMENT SYSTEM**

#### **3.1 INTRODUCTION:**

The A&N Islands are susceptible to very high intensity of seismicity, hence classified as seismic zone V of IS 1893-1984. During 2010, the earth jolted 84 times having intensity of more than M.5.0 in Andaman and Nicobar Islands.

These Islands are located near the boundary of the Indian Plate and Burmese micro plate. Recently on 26<sup>th</sup>, Dec, 2004 an earthquake with the magnitude of 9.3 hit near Sumatra Islands and rocked these Islands towards disaster. Devastating EQ & Tsunami had caused horizontal and vertical movements of the landmass and generated killer waves causing immense damage to lives and properties. Islands have physically moved horizontally by 2 to 3 meter in South-Westerly direction towards the mainland and rotated in anticlockwise direction.

The machineries of Andaman and Nicobar Administration activated to cope up with the natural disaster and a core group of authorities functioned primarily for the rescue and evacuation of inhabitants and other relief works along with the support of Non- Governmental Agencies who came forward hand to hand with the Administration for the interim relief of the affected peoples scattered in various affected Islands.

The natural disasters cannot be prevented with the man's present depth of knowledge and technology; nonetheless his sufferings can be reduced by application of his wisdom. It is in this context establishment of a separate department of Disaster Management found necessary to combat disasters.

Sufficient manpower and infrastructure are required to tackle the natural and manmade disasters. Keeping the infrastructure ready and well oiled to face any eventuality can reduce the loss of lives and damages to the properties and rescue of the lives to the great extent. Previously, all the resources and skills of all the line departments have been pooled together at the time of emergencies but there is lack of coordination and full preparedness to face disasters.

The Directorate of Disaster Management Department is coordinating training for the staffs and awareness campaigns for the benefit of the Islanders in coordination with different NGO's and National Disaster Management Authority also made small levels mock drill on Search and Rescue and First Aid to all the Govt. Officials of the Administration.

The A&N Administration to cope up the emergency crisis and to make it available certain basic principles and preliminary infrastructure at Tehsil, District and State Level with regard to various issues and situations arising out of calamities/disasters prepared the UT Disaster Management Plan-2011. This plan provides for institutional arrangements, roles and responsibilities of the various agencies, interlinks in disaster management and the scope of their activities.

Six (06) Emergency Operation Centres also been constructed at Port Blair, at Mayabunder in North and Middle Andaman ,at Hut Bay, Car Nicobar, Campbell Bay and Kamorta. All these EOCs are connected with the State Control Room at Directorate of Disaster Management under a fine Disaster Management Emergency Communication System.

Further, the Directorate of Disaster Management conducting training on disaster preparedness in different tehsils and also activated IEC (Information, Education and Communication) activities as a part of public awareness. Guidelines for School Safety Programme also been prepared and will be implemented in 399 schools in A&N Islands under the guidelines on National School Safety Programme of Govt. of India. 140 Relief Shelters /Godowns have already been setup in almost all the Islands after the mega earthquake of 26th Dec, 2004 followed by TSUNAMI and maintained stock of emergency relief materials.

### **3.1.1 UNION TERRITORY DISASTER MANAGEMENT PLAN: (UTDMP)**

This Union Territory proposes to evolve a system of process of planning, organizing coordinating and implementing measures which are necessary or expedient for:-

1. Prevention of danger or threat of any disaster;
2. To assess the status of existing resources and facilities available with the various departments and agencies involved in Disaster Management in the UT;
3. To assess their adequacies in dealing with a disaster;
4. To identify the requirements for institutional strengthening, technological support, up- gradation of information systems and data management for improving the quality of administrative response to disasters at the UT level;
5. To make the UTDMP an effective response mechanism as well as a policy and planning tool;
6. The UTDMP addresses the UT response to demands from the District Administration and in extraordinary emergency situations at multi-district levels. It is associated with disasters like major fires, earthquakes, cyclones and epidemics. The present plan is a multi-disaster response plan for the disasters which outlines the institutional framework required for managing such situations;
7. The UTDMP specifically focuses on the role of various governmental departments, agencies and the Emergency Operations Centre in case of any of the above mentioned disasters. This plan concentrates primarily on the response strategy;
8. Mitigation or reduction of risk of any disaster or its severity or consequences;
9. Capacity Building and training;
10. Prompt response to any threatening disaster situation;
11. Assessing the severity or magnitude of effects of any disaster;
12. Evacuation, Rescue and Relief;
13. Rehabilitation and Reconstruction;

### **3.1.2 PLANNING ASSUMPTIONS**

This action plan can function optimally only if a prior study of the risks and vulnerability of a particular area is undertaken and the institutional setup responsible for disaster mitigation is understood clearly.

### **3.1.3 OBJECTIVES OF DM PLAN**

The Disaster Management Plan provides a well structured, participatory, fail safe, multi-disciplinary, multi-departmental and systematic approach to guide administrative mechanisms at all levels of government, private sectors, NGO's and CBO's(Community Based Organization) to work seamlessly.

It also provides for uniformity in approach and clear perception of the various issues at hand, thus avoiding undue complications. At the same time, the plan provides for the coordination of different agencies from the field level to the Central Government. The objective is to provide a quick and effective response in emergency situations.

Although, effective disaster specific plans have been previously prepared by different departments/agencies, there is a growing awareness of the need for a multi-disaster action plan in order to tackle multi-faceted effects of disaster. This essentially concentrates on the institutional setup and information flow, providing hazard specific responses along with the roles of primary agencies involved. Such an approach allows flexibility in response at the local level, while still under the direct supervision and control of the UT.

While the action plan assumes an element of preparedness on part of the administrative authorities, it also calls for substantial involvement of the NGOs and private initiatives. Community participation is one of the most effective inputs for the management of disasters. Training of the community and key social functionaries thus become essential elements for the successful execution of a Disaster Management Plan.

### **3.1.4 POLICY STATEMENT**

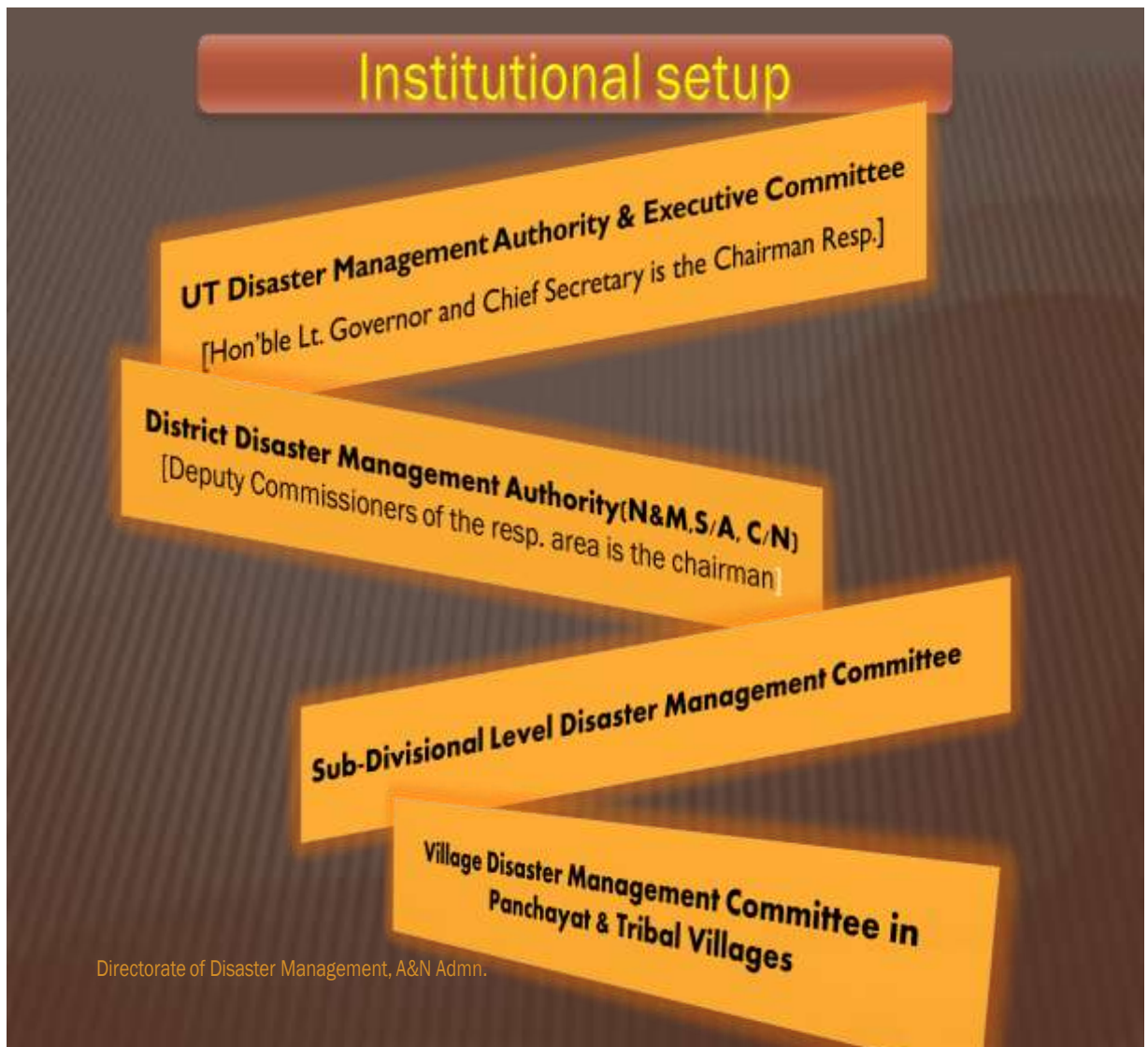
Although containing disasters will basically be at the district level, it is important to build confidence and self reliance at the district level, which can be best effected through timely, supportive and planned interventions by the UT.

A Disaster Management Plan is backed by continuous preparedness. Only a sustained effort at preparedness can make a disaster management plan effective.

### 3.1.5 INSTITUTIONAL ARRANGEMENTS

The A&N Administration has constituted the following Authorities under the powers conferred under sub-section (1) of the Section 14 , Section 20 & Section 25 of the Disaster Management Act, 2005:-

1. A&N Islands Union Territory Disaster Management Authority has been constituted vide Notification No. 01/2008 dated 9.1.2008.
2. A&N Union Territory Disaster Management Executive Committee has been constituted vide Notification No. 2/2008 dated 9.1.2008.
3. District Disaster Management Authorities have been constituted for all the three Districts vide Notification No. 03/2008 dated 9.1.2008.



**3.1.6 ANDAMAN AND NICOBAR ISLANDS UNION TERRITORY DISASTER MANAGEMENT AUTHORITY**

The Union Territory of Andaman Administration in exercise of the powers conferred under sub-section (1) of the section 14 of the Disaster Management Act 2005, the Hon'ble Lt. Governor, A&N Islands had established the A&N Islands Union Territory Disaster Management Authority and shall consist of the following :-

- |    |  |          |
|----|--|----------|
| 1. | Lt. Governor, A&N Islands                        | Chairman |
| 2. | Member of Parliament, A&N Islands                | Member   |
| 3. | Chief Secretary, A&N Admn.                       | Member   |
| 4. | Director General of Police, A&N Admn.            | Member   |
| 5. | Chief of Staff, Andaman & Nicobar Command        | Member   |
| 6. | Principal Chief Conservator of Forest, A&N Admn. | Member   |
| 7. | Development Commissioner, A&N Admn.              | Member   |
| 8. | Commissioner-cum-Secretary (Health), A&N Admn.   | Member   |
| 9. | Commissioner-cum-Secretary (RR), A&N Admn.       | Member   |

**A. Duties and functions of the Disaster Management Authorities:-**

The A&N Islands Union Territory Disaster Management Authority will lay down policies and plans for Disaster Management in the Union Territory inter-alia approve the UT Plan in accordance with the guidelines laid down by the National Disaster Management Authority, coordinate the implementation of the UT Plan, recommended provision of funds for mitigation and preparedness measures and review the developmental plans of the different departments of the state to ensure integration of prevention, preparedness and mitigation measures.

Subject to the provision of the Act, A&N Islands UT Disaster Management Authority has the following responsibility for laying down policies and plans for disaster management in the Union Territory:-

1. Lay down policies on Disaster Management.
2. Approval of UT Disaster Management Plan.
3. Approve plans prepared by the Departments of UT.
4. Lay down guidelines to be followed by the UT Authority in drawing up the UT plans.
5. Recommend Provision of funds for mitigation and also apply the same.
6. Lay down guidelines to be followed by different departments of the UT Administration for integrating the measures for prevention of disasters or the mitigation of their effects in their development plans & projects.
7. Coordinate the enforcement & ensure implementation of the policy & plans for Disaster Management.
8. Recommend guidelines for minimum standards of Relief to be provided to the persons affected by Disasters.
9. In case of disasters of severe magnitude, recommend relief in repayments of loans or for grants of loans to the persons affected by disaster on such concessional terms as may be appropriate.

The Union Territory Disaster Management Authority shall be involved in the Management of large scale Disasters. The Lt. Governor, A&N Islands in consultation with the Chief Secretary, A&N Administration and other members of the authority shall decide its involvement after the receipt of the report from the Deputy Commissioners of the Districts. Following the decision, the Secretary (Relief and Rehabilitation), Andaman and Nicobar Administration shall initiate action to trigger all the Emergency Operation Centres / Control Rooms. He shall issue Orders for deployment of Stakeholder/Incident Response Teams as per their pre designated roles in accordance with the Incident Response System.

The Director of Disaster Management will coordinate all the government machineries, stakeholders of the A&N Administration and other governmental and non-governmental agencies, NGO's with the A&N Islands UT Disaster Management Authorities.

#### **B. Meeting of the A&N Islands UT Disaster Management Authority**

Meetings of the A&N Islands UT Disaster Management Authority under sub-section (1) of Section 15 of the Disaster Management Act, 2005: the A&N Islands UT Disaster Management Authority shall meet as and when necessary and at such time and place as the Chairperson may decide.

#### **3.1.7 Functions of Union Territory Disaster Management Authority**

Following shall be the functions of Union Territory Disaster Management Authority:

- (a) Assess the scale of Disasters
- (b) Inform the Government of India about Disaster
- (c) Requisition the assistance of Defence Forces to manage Disaster.
- (d) Seek assistance/help from the Govt. of India
- (e) Monitor the Rescue, Relief and Rehabilitation Operations.
- (f) Recognition of meritorious service rendered by persons in the Disaster Management.
- (g) Dissemination of information.

##### **(i) Assessment of Scale of Disaster**

**3.1.8** The Union Territory Disaster Management Authority shall be actively involved in the management of Large Scale Disasters. The Large Scale Disaster is one wherein [pl refer at page 17 (2.1.3)]:

- (a) All the Districts in these Islands are occurred by Medium Scale Disaster (Medium Scale Disaster is the one whose spread/effect does not exceed ten villages or death toll does not exceed 20 and loss of property does not exceed ` 10 Crores) or

- (b) Loss of human life in one or in all the Districts exceeds 20 or
- (c) Loss of property in one or in all Districts exceeds ` 10 Crores or
- (d) Any one or in all the District Disaster Management Control Rooms have asked for assistance from Defence Forces or
- (e) Any one or all the Districts have sought more funds in addition to those normally allotted every year to manage the Disasters or
- (f) Is declared to be a large scale disaster by the A & N Administration

**(ii) Information about Disaster to Government of India**

**3.1.9** The Chief Secretary, Andaman and Nicobar Administration shall inform the Secretary to the Government of India, Ministry of Home Affairs and Ministry of Agriculture through FAX/Telex/Wireless/NIC NET about the occurrence of the Disaster. The copies of the message shall go to the Private Secretary to the Prime Minister, Home Minister, Agriculture Minister for their information. Another copy of the message shall be sent to the Director (C.P.C), Ministry of Home Affairs, Government of India, New Delhi.

**(iii) Assistance from Defence Forces**

**3.2.0** The Commander-in-Chief, Andaman and Nicobar Command shall keep the Armed Forces on alert following the receipt of information from Director, Disaster Management or from the Deputy Commissioner or on receipt of forewarning about the impending occurrence of a Disaster so that Defence Forces shall plunge into action as soon as their assistance is sought by the UTDMA/DDMAs.

**3.2.1** The extent and nature of assistance required from the Defence Forces in the first instance shall be assessed by the District Disaster Management Authority and intimated to Union Territory Disaster Management Authority.

**3.2.2** The Union Territory Disaster Management Authority shall hold quick deliberations on the nature and extent of help to be sought from the Government of India. This assistance shall be for (a) Short (Immediate) Term Measures (b) Medium Term Measures and (c) Long Term Measures.

**3.2.3** The assistance for Immediate Term Measures is meant for the Rescue and Relief Operations. The Rehabilitation Operations after a Disaster constitute the medium term measures. The assistance from Government of India for the medium term measures could be to restore the public utility services and to help the general public to restart their occupations. Assistance from the Government of India for long term measures will be sought under the Annual Plan.

**3.2.4** The concerned Departments shall make a quick assessment of damage in their sector/ activities and project the requirement of funds to the Union Territory Disaster Management Authority. The District Disaster Management Authority/Deputy Commissioner shall with the assistance of Government Departments make a quick estimate of damage / impact and requirement of funds.

**3.2.5** The request for the immediate assistance from Government of India could go through a fax / wireless / NIC NET from the Lt. Governor following his conversation with Union Minister of Home Affairs and the Prime Minister.

**(iv) Monitoring Rescue Relief and Rehabilitation Operation**

**3.2.6** The Union Territory Management Authority shall receive the reports from District Disaster Management Control Rooms at the following periodicity:-

- (a) Report on Rescue Operation - at 1200 hours daily
- (b) Report on Relief Operation - Everyday at 2000 hours
- (c) Rehabilitation Operation - Every week on Monday. Later this report could be obtained every month.

**3.2.7** These reports for Rescue, Relief and Rehabilitation could be obtained.

**3.2.8** The Departmental field functionaries may place certain requirements with their respective Head of the Department for the purpose of carrying out Rescue Relief and Rehabilitation Operations. The concerned head of the Department shall take necessary action and send Action Taken Reports to the Directorate of Disaster Management or to the District Disaster Management Authority.

**(v) Recognition of Meritorious Service**

**3.2.9** The meritorious service rendered / outstanding work done by the persons including Government Servants in the Disaster Management shall be recognized and rewarded by the Administration. The Union Territory Disaster Management Authority shall consider the recommendations made by District Disaster Management for the Union Territory level and National level recognition depending on the merit of the cases. The Lt. Governor may award his Commendation Certificate or may recommend the case to Government of India for National Level Award in recognition of distinguished service rendered in the Disaster Management. The award may be given additional benefits by the Competent Authority as deemed fit.

**(vi) Release of Press Note**

**3.2.10** The concerned Deputy Commissioner shall be releasing Press Note every day at 1600 hours during the peak period of the Rescue and Relief Operations. This Press Note of the Deputy Commissioner is primarily for the information of the general public in his District and the local Press in Andaman and Nicobar Islands.

**3.2.11** The Chief Secretary, Andaman and Nicobar Islands may release Press Note periodically for the information of the National Press and the public. The Press Note may give basic information about the Andaman and Nicobar Islands too, in addition to that relating to the large scale Disaster and its Management.

**3.2.12** The basic information about the Islands includes their location, distances, communication details i.e. contact numbers transport facilities, prevailing weather etc. The comprehensive details about the Disaster Management and the basic information about these Islands would also facilitate in the decision-making by the Philanthropic Organizations to render help in the Disaster Management.



## **Chapter-IV**

### **UNION TERRITORY DISASTER MANAGEMENT EXECUTIVE COMMITTEE**

#### **4.1 UNION TERRITORY DISASTER MANAGEMENT EXECUTIVE COMMITTEE**

The Union Territory of Andaman Administration in exercise of the powers conferred under sub-section (1) of the section 20 of the Disaster Management Act 2005, the Hon'ble Lt. Governor, A&N Islands also had established the Union Territory Disaster Management Executive Committee and shall consist of the following members vide Notifications in the official gazette vide No.2-124/2006/Rev dated 09/01/2008 and No. 2-124/2006-R&R dated 28/01/2010:-

- |  |                    |
|--|--------------------|
| 1. Chief Secretary, A&N Admn.                    | - Chairperson      |
| 2. Director General of Police, A&N Admn.         | - Member           |
| 3. Chief of Staff, ANC                           | - Member           |
| 4. Development Commissioner, A&N Admn.           | - Member           |
| 5. Principal Secretary (Shipping), A&N Admn.     | - Member           |
| 6. Principal Secretary (Health), A&N Admn.       | - Member           |
| 7. Commissioner-cum-Secy (APWD), A&N Admn.       | - Member           |
| 8. Chief Engineer, APWD, A&N Admn.               | - Member           |
| 9. Chief General Manager, BSNL                   | - Member           |
| 10. In-Charge, Meteorological Dept., A&N Islands | - Member           |
| 11. Officer-in-charge, NIOT, A&N Islands         | - Member           |
| 12. Principal Secretary (R&R)                    | - Member Secretary |

#### **4.1.1 FUNCTIONS OF UNION TERRITORY DISASTER MANAGEMENT EXECUTIVE COMMITTEE:**

- (a) Coordinate and monitor the implementation of the National Policy, the National Plan and the State Plan;
- (b) Examine the vulnerability of different parts of the State to different forms of disasters and specify measures to be taken for their prevention or mitigation;
- (c) Lay down guidelines for preparation of disaster management plans by the departments of the Government of the State and the District Authorities;
- (d) Monitor the implementation of disaster management plans prepared by the departments of the Government of the State and District Authorities;
- (e) Monitor the implementation of the guidelines laid down by the State Authority for integrating of measures for prevention of disasters and mitigation by the departments in their development plans and projects;

- (f) Evaluate preparedness at all governmental or non-governmental levels to respond to any threatening disaster situation or disaster and give directions, where necessary, for enhancing such preparedness;
- (g) Coordinate response in the event of any threatening disaster situation or disaster;
- (h) Give directions to any Department of the Government of the State or any other authority or body in the State regarding actions to be taken in response to any threatening disaster situation or disaster;
- (i) Promote general education, awareness and community training in regard to the forms of disasters to which different parts of the State are vulnerable and the measures that may be taken by such community to prevent the disaster, mitigate and respond to such disaster;
- (j) Advise, assist and coordinate the activities of the Departments of the Government of the State, District Authorities, statutory bodies and other governmental and non-governmental organizations engaged in Disaster Management;
- (k) Provide necessary technical assistance or give advice to District Authorities and local authorities for carrying out their functions effectively;
- (l) Advise the State Government regarding all financial matters in relation to Disaster Management;
- (m) Examine the construction, in any local area in the State and if it is of the opinion that the standards laid for such construction for the prevention of disaster is not being or has not been followed, may direct the District Authority or the local authority, as the case may be, to take such action as may be necessary to secure compliance of such standards;
- (n) Provide information to the National Authority relating to different aspects of Disaster Management;
- (o) Lay down, review and update State Level Response Plans and guidelines and ensure that the District Level Plans are prepared, reviewed and updated;
- (p) Ensure that communication systems are in order and the Disaster Management drills are carried out periodically;
- (q) Perform such other functions as may be assigned to it by the State Authority or as it may consider necessary.

**4.1.2** The Union Territory Disaster Management Executive Committee shall meet during third week of June every year. The minutes of the meetings shall be drawn and issued to all concerned for further action. The action taken shall be reviewed in the next meeting of the Committee.

**4.1.3** In view of the provisions of the Disaster Management Act, 2005 and as per the administrative structures existing in the country at the District and State Level, the role of the Chief Secretary and the District Magistrate/District Collector is all encompassing as regards response. The role of Chief Secretary and Districts Deputy Commissioner have been distinguished (Responsible Officer- as per Incident Response System) as per the provisions laid down under Section 22(2), 24, 30 and 34 of the Disaster Management Act, 2005.

**4.1.4** In any disaster response, the cutting edge would always be the District Administration. However, when Districts are overwhelmed in any situation then support necessarily has to come from the Union Territory and National Level.

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## **Chapter-V**

### **DISTRICT DISASTER MANAGEMENT**

#### **1.1 DISTRICT DISASTER MANAGEMENT AUTHORITIES FOR THE DISTRICT OF SOUTH ANDAMAN, NORTH & MIDDLE ANDAMAN AND NICOBAR DISTRICT.**

The Union Territory of Andaman & Nicobar Administration in exercise of the powers conferred under sub-section (1) of the section 14 of the Disaster Management Act 2005, the Hon' ble Lt. Governor, A&N Islands also had established the District Disaster Management Authority for the districts of South Andaman, North & Middle Andaman and Nicobar District and shall consist of the following members vide notifications in the official gazette vide No. 2-124/2006/Rev dated 09/01/2008 and No. 2-124/2006-R&R dated 28/01/2010: -

#### **1. SOUTH ANDAMAN DISTRICT**

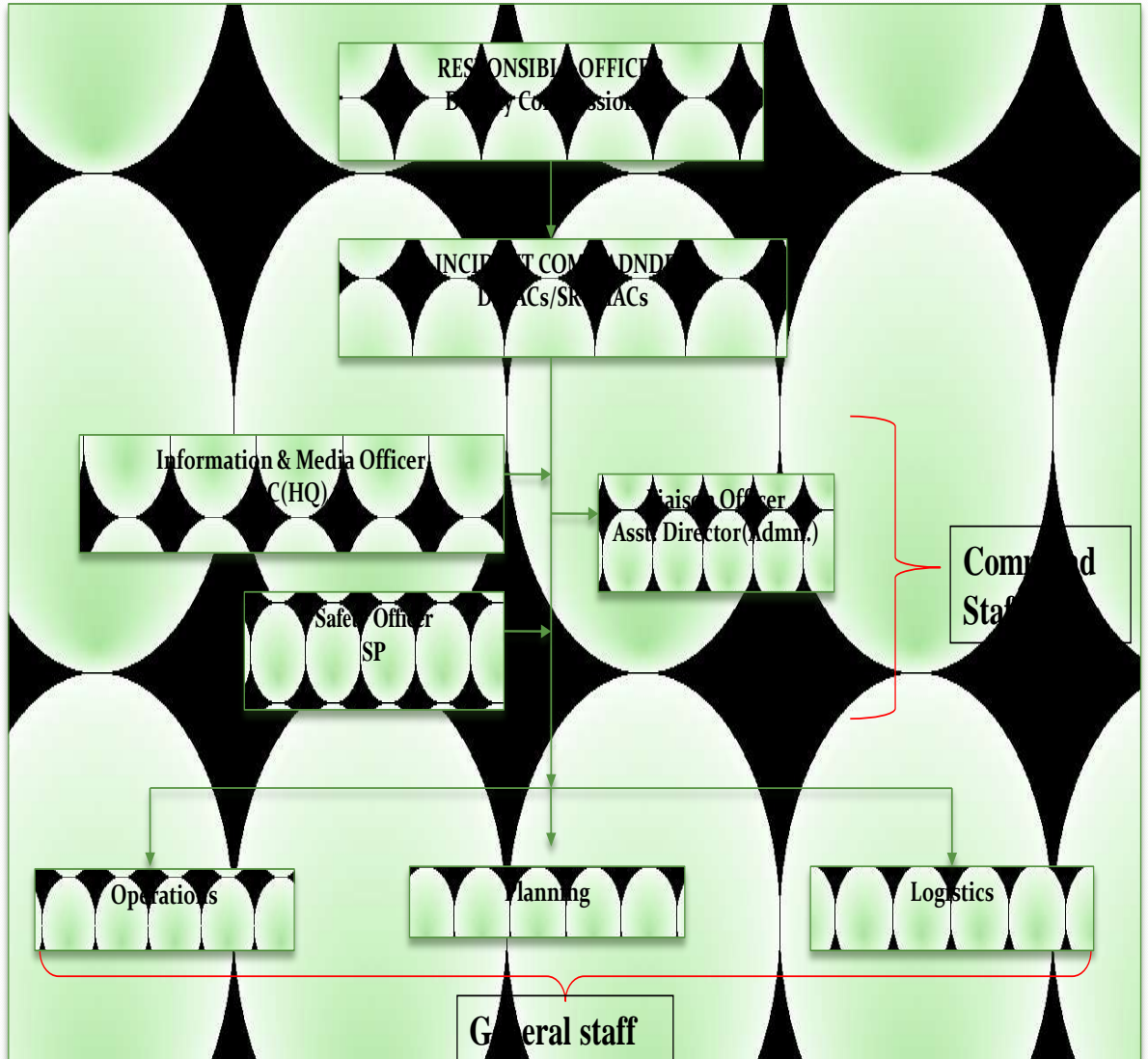
- Deputy Commissioner, South Andaman - Chairperson
- Adhyaksha, Zilla Parishad - Co-Chairperson
- Superintending Engineer (CC-1, APWD) - Member
- Superintendent of Police (South Andaman) - Member
- General Manager, BSNL, A&N Islands - Member
- Director (Health Services) - Member
- Director (Education) - Member
- Superintending Engineer (Electricity) - Member
- Director (Shipping Services) - Member
- Additional District Magistrate (South Andaman) - Chief Executive Officer

#### **2. NORTH AND MIDDLE ANDAMAN DISTRICT**

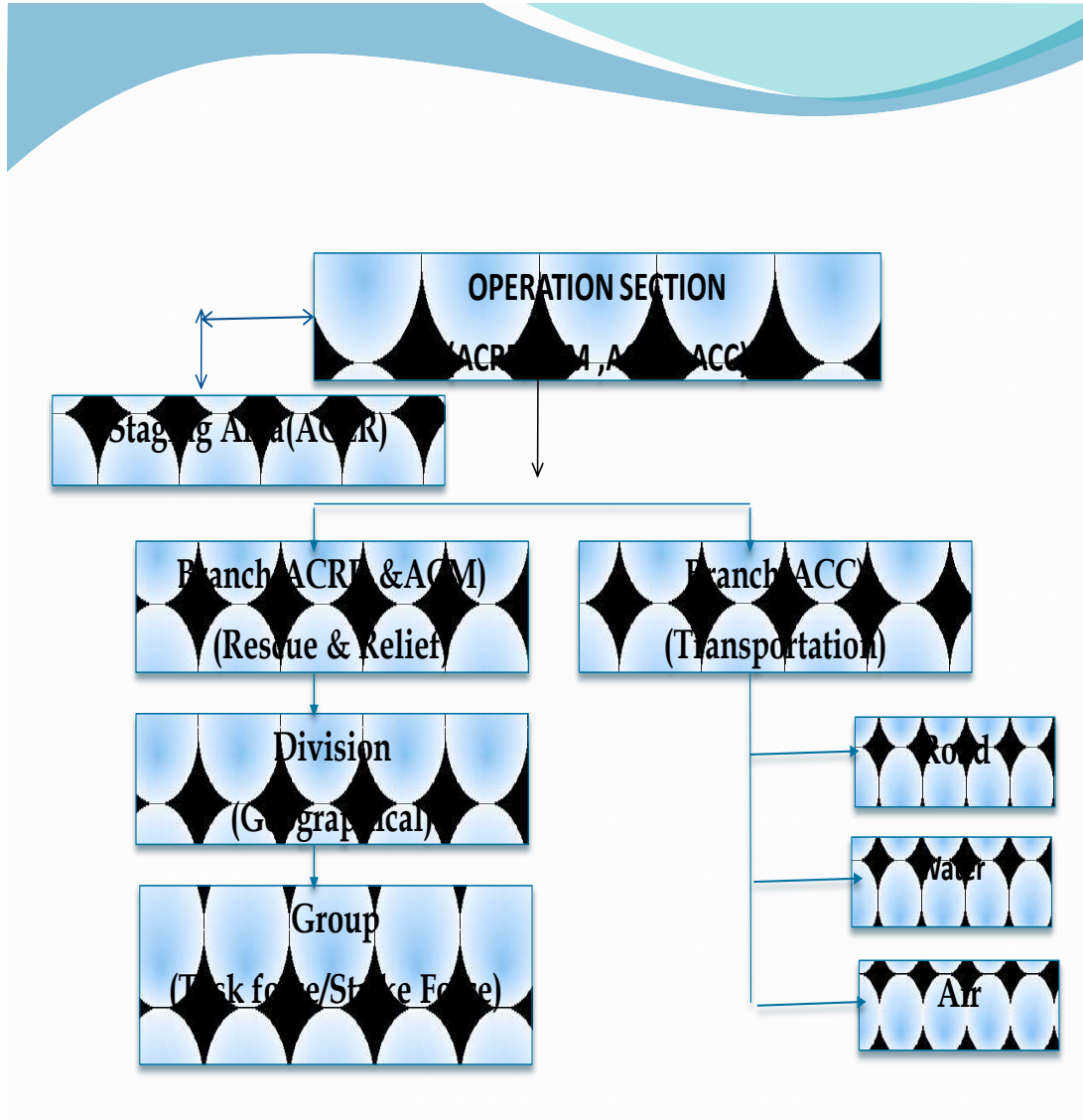
- Deputy Commissioner (N&M) - Chairperson
- Adhyaksha, Zilla Parishad - Co-Chairperson
- Superintendent of Police(N&M Andaman ) - Member
- Dy. General Manager/SDO BSNL - Member
- Chief Medical Officer, Mayabunder - Member
- Superintending Engineer (APWD.),N&M - Member
- Deputy Education Officer, Middle Andaman - Member
- Executive Engineer (Elec.) ,N&M Andaman - Member
- Asst. Commissioner, Mayabunder - Chief Executive Officer

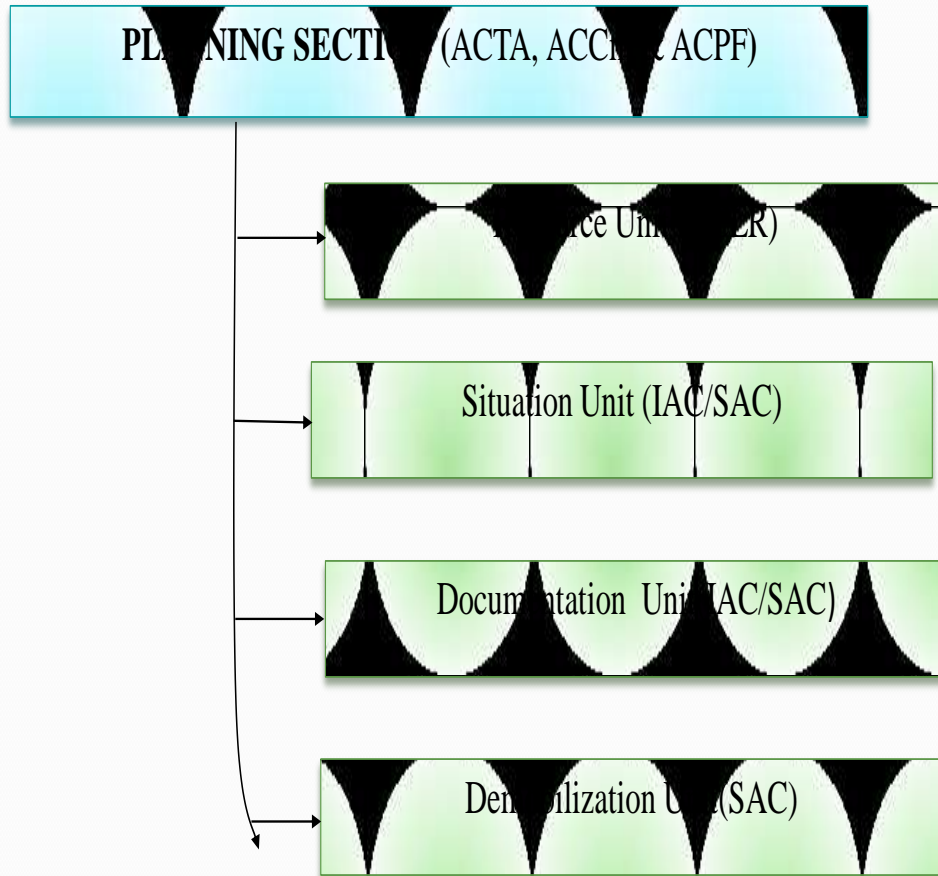
#### **3. NICOBAR DISTRICT**

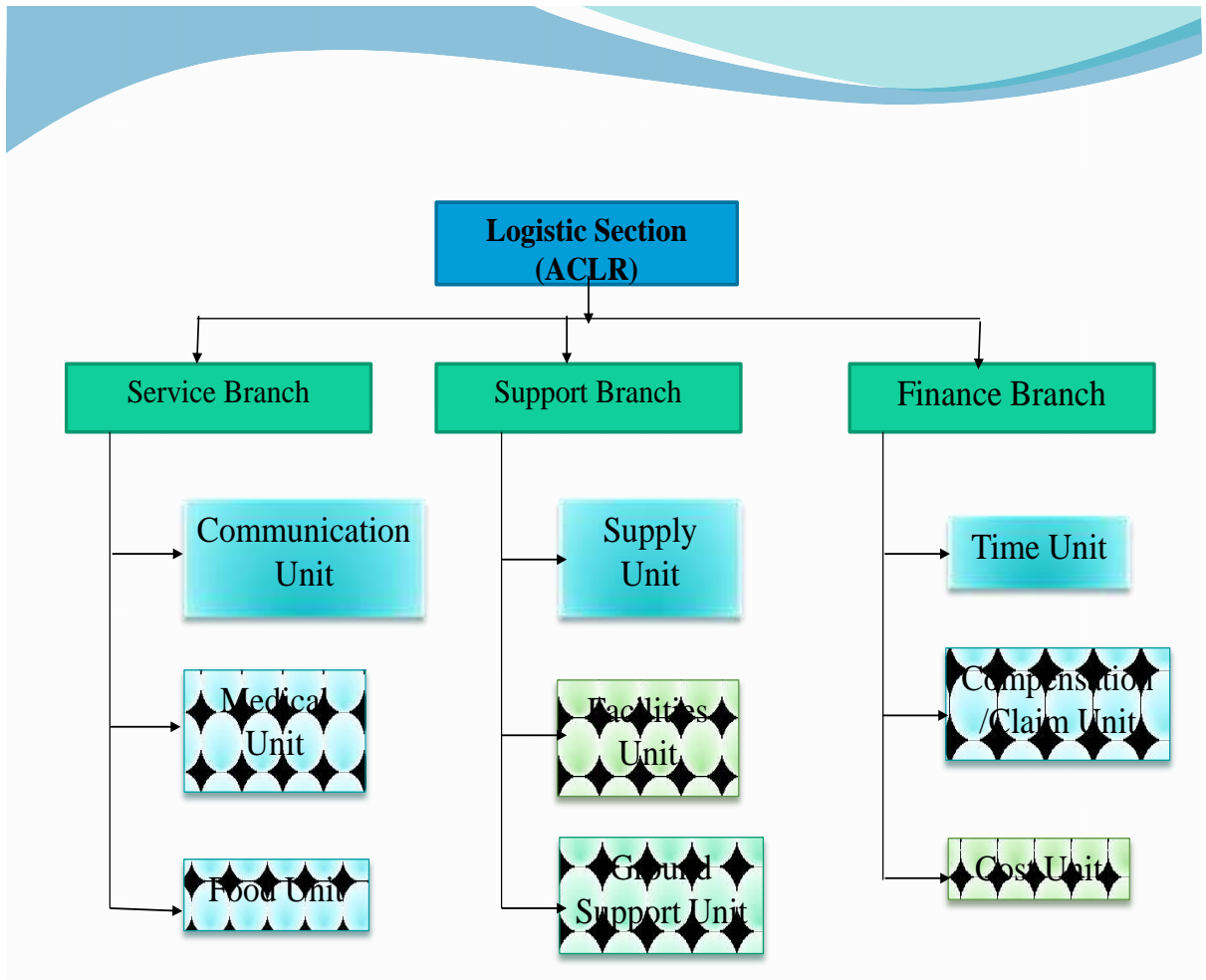
- Deputy Commissioner, Nicobar - Chairperson
- Chairperson, Tribal Council, Car Nicobar - Co-Chairperson
- Station Commander, Indian Air Force, Car Nic. - Member
- Superintendent of Police, Nicobar - Member
- Dy. General Manager/SDO BSNL,C/N - Member
- Medical Superintendent, Car Nicobar - Member
- Superintending Engineer (APWD), Nicobar - Member
- Education Officer, Car Nicobar - Member
- Executive Engineer (Elec.), Car Nicobar - Member
- Asst. Commissioner (HQ), Car Nicobar - Chief Executive Officer



## STRUCTURE OF GENERAL STAFF DURING DISASTER AT DISTRICTS







**1.1.1** The District Disaster Management Authority will be headed by the Deputy Commissioner/District Magistrate with the elected representative of the local authority as the Co-Chairperson, DDMA will act as the Planning, Coordinating and Implementing body for Disaster Management at the District Level and take all necessary measures for the purpose of Disaster Management in accordance with the guidelines laid down by the National Disaster Management Authority and Andaman and Nicobar Islands, Union Territory Disaster Management Executive Committee. It will inter alia prepare the District Disaster Management Plan for the District and monitor the implementation of the National Policies, the Union Territory Policy, the National DM Plan, the UT DM Plan and the District DM Plan. The District Disaster Management Authority will also ensure that the guidelines for Prevention, Mitigation, Preparedness and Response measures lay down by the NDMA and the UTDMA are followed by all the departments of the Government at the District level and the local authorities in the District.

**1.1.2 MEETINGS :**

The District DM Authority shall meet as and when necessary, at such time and place as the chairperson may think fit as provided under section 27 of the Disaster Management Act, 2005.



**5.1.3 POWERS AND FUNCTIONS OF DISTRICT DISASTER MANAGEMENT AUTHORITY:**

As per the section 30 of the Disaster Management Act, 2005 provides –

- (1) The District DM Authority shall act as the district planning; coordinating and implementing body for disaster management and take all measures for the purposes of disaster management in the district in accordance with the guidelines laid down by the National DM Authority and the State DM Authority.
- (2) Without prejudice to the generality of the provisions of sub-section (1), the District DM Authority may-
  - (i) Prepare a Disaster Management Plan including District Response Plan for the district;
  - (ii) Coordinate and monitor the implementation of the National Policies, State Policies, National DM Plan, State DM Plan and District DM Plan;
  - (iii) Ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are undertaken by the Government Departments at the district level as well as by the local authorities;
  - (iv) Ensure that the guidelines for prevention of disasters, mitigation of its effects, preparedness and response measures as laid down by the National DM Authority and the State DM Authority are followed by all Government departments at the district level and the local authorities in the districts;
  - (v) Give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary;
  - (vi) Lay down guidelines for prevention of Disaster Management Plans by the Government departments at the districts level and local authorities in the districts;
  - (vii) Monitor the implementation of Disaster Management Plans prepared by the Government Departments at the District level;
  - (viii) Lay down guidelines to be followed by the Government Departments at the District level for the purposes of integration of measures for prevention of Disasters and Mitigation in their development plans/projects and provide necessary technical assistance thereof;
  - (ix) Monitor the implementation of measures referred to in clause (viii);
  - (x) Review the state of capabilities for responding to any disaster or threatening disaster situation in the district and give directions to the relevant departments/authorities at the district level for their up-gradation as necessary;

- (xi) Review the preparedness measures and give directions to the concerned departments at the district level or other concerned authorities where necessary for bringing the preparedness measures to the levels required for responding effectively to any disaster or threatening disaster situation;
- (xii) Organize and coordinate specialized training programmes for different levels of Govt. officers & employees and village voluntary rescue workers in the district;
- (xiii) Facilitate community training and awareness programmes for prevention of disaster mitigation with the support of local authorities, governmental and non-governmental organisations;
- (xiv) Set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public;
- (xv) Prepare, review and update district level response plan and guidelines;
- (xvi) Coordinate response to any threatening disaster situation;
- (xvii) Ensure that the Government Departments at the district level and the local authorities prepare their response plans in accordance with the district response plan;
- (xviii) Lay down guidelines for, or give direction to, the concerned Government Departments at the district level or any other local authorities of the district to take measures to respond effectively to any threatening disaster situation;
- (xix) Advise, assist and coordinate the activities of the Government Departments at the district level, constitutional bodies and other governmental and non-governmental organisations in the district engaged in the disaster management;
- (xx) Coordinate with, and give guidelines to, local authorities in the district to ensure that measures for the prevention or mitigation of threatening disaster situation or disaster in the district are carried out promptly and effectively;
- (xxi) Provide necessary technical assistance or give advice to the local authorities in the district for carrying out their functions;
- (xxii) Review development plans prepared by the Government Departments at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster mitigation;
- (xxiii) Examine the construction in any area in the district and, if it is of the opinion that the standards for the prevention of disaster mitigation laid down for such construction is not being or has not been followed, may direct the concerned authority to take such action as may be necessary to secure compliance of such standards;
- (xxiv) Identify buildings and places which could, in the event of any threatening disaster situation, be used as relief centres/shelter or camps and make arrangements for water supply and sanitation in such buildings or places;
- (xxv) Establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice;

- (xxvi) Provide information to the State DM Authority relating to different aspects of disaster management;
- (xxvii) Encourage the involvement of non-governmental organisations and voluntary social-welfare institutions working at the grassroots level in the district for disaster management;
- (xxviii) Ensure communication systems are in order, and disaster management drills are carried out periodically;
- (xxix) Perform such other functions as the State Government or State DM Authority may assign to it or as it deems necessary for disaster management in the District level.

**5.1.4 DISTRICT PLAN:**

- (1) There shall be a plan for disaster management for every district of the State.
- (2) The District Plan prepared by the District DM Authority, after consultation with the District Disaster Management Committee and having regard to the National and State DM Plan, to be approved by the State DM Authority.
- (3) The District DM Plan include -
  - (a) The areas in the district vulnerable to different forms of Disasters;
  - (b) The measures to be taken, for prevention and disaster mitigation, by the Government Departments at the district level and local authorities in the district;
  - (c) The capacity-building and preparedness measures required to be taken by the Government Departments at the district level and the local authorities in the district to respond to any threatening disaster situation;
  - (d) The response plans and procedures, in the event of a disaster, providing for:-
    - (i) Allocation of responsibilities to the Government Departments at the district level and the local authorities in the district;
    - (ii) Prompt response to disaster and relief thereof;
    - (iii) Procurement of essential resources;
    - (iv) Establishment of communication links; and
    - (v) Dissemination of information to the public;
  - (e) Such other matters as may be required by the State DM Authority.

- (4) The District DM Plan reviewed and updated annually.
- (5) The copies of the District DM Plan referred to in sub-sections (2) be made available to the Government Departments in the district/State.
- (6) The District DM Authority send a copy of the District DM Plan to the State Authority which shall forward it to the UT Government.
- (7) The implementation of the District DM Plan and issue such instructions to different Government departments in the district as it may deem necessary for the implementation thereof.

#### **5.1.5 FUNCTIONS OF DISTRICT CONTROL ROOM (DCR)/EMERGENCY OPERATION CENTRES (EOCs):**

The functions of DCR/EOC similar to those assigned to State Control Room (SCR). All Control Rooms should maintained proper documentation for receipt of messages/letters/email/fax, two Log Books, one for receipt of messages and the other for issue of messages. The Disaster Management Officer(DMO)/Tehsildar shall be a Key Officer in the respective District Control Rooms/Emergency Operation Centres.

Following are the functions of DCR/EOC:

- Broadcasting the forewarning about arrival of calamity whenever advance information is received.
- Broadcasting of general DOs and DONTs for the people in the District to tackle the Disaster.
- Preparation of computerized Monitoring chart based on receipt of First Information Report on Disaster visit from each of the affected Patwari Circle/ Village/ Camp.
- Monitoring of Rescue, Relief and Rehabilitation Operations.
- Assessment of the scale of the Disaster.
- Mobilization of Village Volunteers from other unaffected villages to manage the Disasters in worst affected villages.
- Monitoring the maintenance of essential services during the Disaster in the District.
- Requisition the assistance from Armed / Defence Forces and to coordinate the combined efforts to manage Disaster.
- Issue of press Note for the information of general public and the Press.
- Enlistment and channelization of voluntary organizations/Non-Governmental Organizations.
- Recognition of Meritorious Service rendered by persons in Disaster Management
- Sensitization of Disaster Management Machinery and Review of Disaster Preparedness.
- Assessment of Disaster Vulnerability.

**5.1.6 Broadcasting of Forewarning:**

Some calamities like Cyclones, Floods, and Droughts can be forecasted with considerable accuracy. The District Disaster Management Control Room shall issue further forewarning to the people in the District through repeated special News Bulletin of Akashwani Port Blair and local Press. The Akashwani Port Blair shall broadcast the forewarning in all its languages so that the public is forewarned in advance. The special News Bulletins will also contain advice to the general public about the precautionary measures to be taken by them so that they remain prepared for the calamity in such way that effects of the Disaster is mitigated. The forewarning will also be issued to all Assistant Commissioners, Tehsildars and Revenue Inspectors in the District through the Police Radio / Port Control Rooms.

**5.1.7 Issue of General DO's and DON'Ts for Public:**

The Do's and Don'ts for the general public may be issued in three phases viz:

a) Before the arrival of the Disaster:

These include such activities and actions by the general public due to which they remain prepared so that the effects of the Disaster are minimized.

b) After the arrival of the Disaster and during the Rescue Operations:

These do's and don'ts by the general public will facilitate the effective Rescue Operations by the Rescue Squads.

(c) Relief Operations.

**5.1.8** Apart from the Do's and Don'ts for the affected people, there will be some instructions for general public who are not affected but are living in neighboring areas. Further reference may be made to Community Awareness Material and Para 10 of the Standard Operating Procedure for District Control Room.

**5.1.9** The relevant Do's and Don'ts depending on the disaster shall be issued by District Disaster Management Authority for the public through Mass-Media like Akashwani (All India radio), Doordarshan and Media/Press. Special bulletins on the disaster may be broadcasted on All India Radio. Such address through Mass-Media can boost the morale of affected people and other stakeholders. The District Disaster Management Committee will regularly review the DOs and DONTs to incorporate the latest scientific knowledge and technology.

**5.1.10** Village-wise computerization of maps and Disaster Management.

**5.2** The Patwari/ PRIs of the village, senior most official of Camp Village, Secretary of Municipal Council send the following periodical returns to Deputy Commissioner and others:

- (a) Village Location and House Type
- (b) Transport and Communication Infrastructure
- (c) Resources Availability
- (d) Prevailing Prices
- (e) Relief Sites
- (f) Private and Retired Professionals and Skilled Persons.

**5.2.1** The village maps are already in existence as a part of Revenue records in the Districts. The Patwari include further details contained in Returns in the extra copies of village maps and send the same to the Deputy Commissioner. Concerned Tehsildar for prepare such maps in respect of Village areas.

**5.2.2** The details contained in all returns computerized in the District Offices. The Village Computer maps plotted in colour indicating physical details of (a), (b) and (e) above. The Computerized Information System would greatly facilitate District Disaster Management Authority to monitor Disaster Management.

**5.2.3** There shall be following sets of Computerized maps:

- (a) A & N Islands Union Territory map
- (b) District map for each District.
- (c) Island map for each inhabited Island
- (d) Village map for each Revenue, Tribal and Camp Village in the District.

**5.2.4** The Union Territory Disaster Management Authority shall keep:

- (i) Andaman & Nicobar Islands Union Territory map
- (ii) District map for each District.
- (iii) Island Map

**5.2.5** The District Disaster Management Authority shall keep:

- (i) District map
- (ii) Island map for each inhabited Island.
- (iii) Village map for each Revenue, Tribal and Camp Village in the District.

**5.2.6** The EOCs shall keep:

- (i) District map
- (ii) Island Map
- (iii) A&N Islands map for each inhabited Island.
- (iv) Village map for each Revenue, Tribal and Camp Village in the District.

**5.2.7** The Patwari Circle/ Tribal Village / Camp Village Disaster Management Control Room shall keep:

- (i) District map
- (ii) A&N Islands map for each inhabited Island.
- (iii) Island Map
- (iv) Village map for each Revenue, Tribal and Camp Village in the District.

**5.2.8** The A&N Islands map, District map, and Village map shall contain the details as indicated under respective category of maps as enumerated below:

**I.** Andaman & Nicobar Islands Union Territory map shall indicate the following:

- (a) Islands Boundaries.
- (b) Inhabited & Uninhabited Islands.
- (c) District Boundaries.
- (d) Tehsil Boundaries (each Tehsil area in different colour)
- (e) Trunk Roads.
- (f) Wharfs and Jetties.
- (g) Control Rooms
- (h) Villages
- (i) Airstrips and Helipads.

**II.** The District map for each District shall indicate the following:

- (a) Each Tehsil area in different color shade.
- (b) Patwari Circle boundaries.
- (c) Revenue, Tribal village, Camp Village locations.
- (d) Trunk Roads
- (e) Wharfs and Jetties.
- (f) Air-strips and Helipads
- (g) Police Radio Station, Port Control Tower, Fire Stations/ Fire Brigade.
- (h) Factories/ Industrial Establishments (other than small scale ones), Power Houses, Drinking water/ Irrigation dams.
- (i) Relief Shelters/Godowns in the District.

**III.** The Island map shall contain the following details:

- (a) Village (Revenue, Tribal, camp) boundaries.
- (b) Village roads/ Footpaths (katcha/pacca) connecting (katcha/ pacca) Trunk Roads.
- (c) Road leading to wharf, jetty, airstrip, helipad, Police Radio, Port Control Tower, Police Stations, Police Out Post/ Police Look Out Post, Hospital, Primary Health Centre (P.H.C), Medical Centre, Fire Brigade.
- (d) Factories/ Industrial Establishments (Other than Small Scale Industries, Power Houses, Irrigation/ drinking water dams.

**IV.** The Village map shall indicate the following:

- (a) Village roads (katcha/pacca) / footpaths (katcha/pacca)
- (b) Location of important existing establishments like Hospital, P.H.C, Medical Sub-Centre, Police Radio, Port Control Tower, Quay, wharfs, jetty, helipad, airstrip, Police Station/Look Out Post , Fire Brigade, Power House, Drinking water sources, fair Price Shops, Government Offices/ Establishments.
- (c) Location of possible sites for Relief Camps.
- (d) Electricity transmission grid.
- (e) Drinking water Tanks, Pipeline network.

- (f) Location of all five types of occupied houses viz.
- (i) All thatched.
  - (ii) Thatched wall with tin / asbestos roof
  - (i) Timber wall with tin / asbestos roof.
  - (ii) Pucca wall with tin/ asbestos roof.
  - (iii) RCC wall with R.C.C roof.

**5.2.9** All the Patwari Circle Disaster management Control Rooms/ Camp Disaster Management Control Rooms/ Tribal Village Disaster Management send the report to the concerned District Disaster Management Authority whenever any Disaster occurs in any part of Andaman & Nicobar Islands. A Computerized chart shall be prepared indicating the Name/ Number of /Patwari Circle/ Tribal Village/ Camp Village which has been affected by the Disaster, so that Disaster Management is constantly monitored. The District Control Room/EOC send the First Information/Summary Report on Disaster to the SCR and State/UT DM Authorities immediately.

**5.2.10** The District Disaster Management Authority shall ensure that all affected Patwari Circle/ Tribal Village/ camp Village/ Disaster Management Control Rooms function effectively. If the Patwari is not in his area or he is disabled due to the disaster, the concerned Revenue Inspector shall immediately take over the charge till alternate arrangements are made. The Patwari from the unaffected Circle could be posted to manage the disaster by the Deputy Commissioner.

**5.2.11** Similarly if the First Captain of the Tribal Village is away from his affected village or he is disabled due to the Disaster, the Second Captain / Third Captain/ or the Senior / Respected head of a Tuhet(Joint Family) shall automatically take over the charge. The Islands/ Tehsil Disaster Management Control Rooms shall ensure that all affected Tribal Disaster Management Control Rooms function effectively during the Disaster Management.

#### **Monitoring of Rescue, Relief and Rehabilitation Operations -**

**5.2.12** The District Disaster Management Authority receive the serially numbered periodical Rescue, Relief and Rehabilitation Reports from all affected Patwari Circle/ Camp Village / Tribal Village Disaster Management Control Rooms. The Rescue, Relief and Rehabilitation Reports shall be sent by the above noted Control Rooms at every 12(twelve) hours, every day and every week respectively. After some time the Rehabilitation Reports could be sent every month. These field reports with Action Taken Report from all concerned Heads of the Departments / Organization shall be analyzed constantly by District Disaster Management Control Room/EOC.

**5.2.13** The District Disaster Management Control Room/EOC Co-ordinate the activities for mobilizing necessary resources based on requisition received from the field. The difficulties communicated by the field level Disaster Management Control Rooms shall be carefully studied and the necessary inputs in the form of



technological / management skills will be provided to the field Disaster Management Control Rooms.

**Assessment of Scale of Disaster-**

**5.2.14** The Disasters are classified as Minor, L-1, L-2 or L-3 on the basis of the spread and extent of damage caused. [pl see at page 17 (2.1.3)]

**5.2.15** The Village Level Disaster Management Control Rooms send the First Information Summary Report to the District Disaster Management Authority immediately following the arrival of a disaster. The District Disaster Management Authority shall compile a summary report on the basis of returns received.

**5.2.16** The District DM Authority send the Disaster Assessment Report to the State/UT DM Authorities and the head of all Essential Service Departments.

**5.2.17** This Immediate/First Assessment of Disaster by the District DM Authority shall put the Union Territory Level Disaster Management machinery on alert. This quick start mechanism is complementary to the self-start at the grass root i.e., Village Level Disaster Management.

**5.2.18** The District Disaster Management Authority compile summary reports on loss of lives and properties, sent by each Patwari Circle/ Camp Village / Tribal Village Disaster Management Control Room at the end of the Rescue Operation at the respective field .The compiled report for the District will be sent to Union Territory Disaster Management Authority. Similarly the District Control Room shall compile the detailed reports of loss of lives and property sent by the field level Control Rooms through Tehsil and Sub-Divisional Control Rooms at the end of relief Operations, the Summary Report for the District will be sent to Union Territory Authority.

**Mobilization of Village Volunteer Task Force-**

**5.2.19** The District Disaster Management Authority shall make quick assessment of extent of Disaster in the District, including the Manpower requirements at various places. If there is a demand for the Manpower in some part of the District the same could be met by moving the Village Disaster Management Volunteers Task Force of that part of the District, which is not affected by the Disaster. Members of the District Disaster Management Committee may make field visits to personally see the disaster on the spot.

**Monitoring the Maintenance of Essential Services during the Disaster-**

**5.2.20** There are certain core activities which are necessary to maintain the Essential Services and normal life in an area. Following are the important ones which are largely maintained by the Government Departments:-

<b>Services</b>	<b>Department</b>
(a) Water	Andaman P.W.D/PRI's/PBMC
(b) Food	Directorate of Civil Supplies & Consumers Affairs
(C) Health	Directorate of Health Services
(d) Electricity	Electricity Department
(e) Shipping	Directorate of Shipping Services
(f) Road Transport	Directorate of Transport
(g) Telecommunication	(i) Andaman and Nicobar Police Radio (ii) BSNL, A&N Islands (iii) Air Tel (iv) Vodafone (v) Reliance
(h) Law and Order	District Magistrate and Superintendent of Police.

**5.2.21** There are certain essential items like clothes and arrangement of shelter which can also be dealt by the PRI's/ LSG Bodies.

**5.2.22** The Head of the Core Sectors/Departments shall send daily reports on the status of their Core activities to the concerned District DM Authority. They shall intimate the extent of effect of disaster on the respective core activity, action taken to restore mainly, time required to restore it and suggestion where ever necessary to obtain extra Departmental assistance to cope up with the disaster situation.

**5.2.23** The District Disaster Management Authority shall assess the situation with regard to Essential Services and requirements of the disaster condition and accordingly request the Union Territory Disaster Management Authority for the assistance from the Defence Forces if required, to manage the Large Scale Disaster.

**Requisition for assistance from Defense Forces and Coordination of Disaster Management.**

**5.2.24** The District Disaster Management Authority assess the scale of disaster, extent of disruption in Core activities/Essential Services and requirements to manage the disaster vis-à-vis the resources/ capabilities available with the Core Departments.

**5.2.25** The Commander-in-Chief, ANC shall be requested to deploy a Senior Officer as Commanding Officer of the Operation in the District. He shall be co-opted as Member of the District Disaster Management Authority.

**Issue of Press Note on Disaster-**

**5.2.26** The District DM Authority issue press note every day at 1600 hours during the peak period of the disaster. The frequency of the Press releases may be reduced later. The Press Note shall contain basic information about the disaster and it's Management.

**5.2.27** The District Disaster Management Control Room/EOC documentation of the Disaster and its management in the form of video films, Photographs etc.

- 5.2.28** To avoid diversion of resources and manpower from disaster management, VIPs will be requested not to visit the disaster areas during the peak period of the disaster (especially during Rescue and initial Relief Operation). Enlisting and Channelizing the Efforts of NGOs
- 5.2.29** The District DM Authority may enlist/ register organizations with humanitarian aims and objectives and if they possess adequate resources to render assistance in Disaster Management. He shall issue Identity Cards to the members / personnel of such organizations. The representatives of NGOs may be incorporated as the Members of District Disaster Management Committee.
- 5.2.30** The District DM Authority may issue a proclamation in the Press inviting the Non-Governmental/philanthropic Organizations to enlist themselves for philanthropic activities in the Districts. They may be asked to furnish their credentials. NGOs may be enlisted with prior approval of A&N Administration and with the consent of Government of India.
- 5.2.31** The NGOs shall enter an Agreement/Memorandum of Undertaking with the District DM Authority. They shall abide by the directions/ instructions / rules issued by the Government and work for the cause of humanity. The District DM Authority may de-recognize any NGOs any time, if in his opinion such an Organization violates the terms of the Agreement/ Memorandum of Understanding or acts contrary to its stated aims and objectives or has been declared as unlawful body under any law for the time being in force.
- 5.2.32** The NGOs shall send in the context of each Disaster, a Note of intention to the District DM Authority giving their Plans and activities with full details about the men, materials and machines at their command, and the areas/villages they would be adopting to assist in Disaster Management. The NGOs function in the District under the overall control of the District DM Authority.

**Recognition of Meritorious Service rendered by the persons in Disaster Management.**

- 5.2.33** The District Disaster Management Authority shall consider the report sent by the Assistant Commissioners/Tehsildars about the outstanding work done by persons in Disaster Management. Depending on the merit of the work nature of contributions in the Disaster Management, the District Disaster Management Authority shall recommend the award which could be a Commendation Certificate to be awarded by the Hon'ble Lt. Governor or National Award to be given by the Government of India or a Certificate of distinguished service to be awarded by the District DM Authority.
- 5.2.34** The District DM Authority shall maintain a Register of Awards. He shall write to the respective Head of Departments about the Awards, if the awardees are Government Servants. A note on the distinguished service contribution for the society shall be recorded in the Annual Confidence Report by the concerned reporting Authority and shall remain as part of the personal records of such Government Servant. An advance increment may also be sanctioned to them as a part of recognition in the following manner:

- (a) National Awardees – three advance increments.
- (b) U.T Awardees (LG’s Commendation Certificate) - two advance increment
- (c) District Awardees (Certificate of Distinguished Service) - one advance increment.

**5.2.35** The senior and executive Officers who attend the National/International Seminars, Conferences, and Workshops on Disaster Management shall discuss latest developments & experiences in the Disaster Management in the periodical meetings of Disaster Management Committee. The Disaster Management Machinery shall be sensitized with case studies following such disasters elsewhere. The rehearsals during normal situation shall sensitize the Disaster Management Machinery. Such rehearsals can be carried out for a few days every year.

**5.2.36** The process of sensitization will be done at all levels from village to the Union Territory and Returns shall be sent twice every year. The Patwari/ First Captain of Tribal Village/ Camp Officer of Camp village/ Secretary Municipal Council shall send returns to his Next Senior Authority and the District DM Authority. The Tehsildar shall send consolidated Return for the Tehsil to the Assistant Commissioner who in turn shall file such Returns for Sub-Division to the District DM Authority. The latter shall send the returns to the Union Territory Disaster Management Authority. The District Management Authority shall analyse the Disaster preparedness Returns sent by various Disaster Management Control Rooms and the Disaster Preparedness will be discussed in the District Disaster Management Committee. The corrective measures will be taken by all the Departments and Organizations to remove the inadequacies if any in the preparedness.

**Assessment of Vulnerability of Disasters -**

**5.2.37** The District Disaster Management Control Room/EOC on the basis of the Returns (received from the field level Disaster Management Control Rooms) assesses the general vulnerability in the District. The general Vulnerability includes the Vulnerability of the people’s habitations, their shelters and their activities.

**5.2.38** The concerned authorities of the Factories, Industries and Infrastructure Establishments of Government and Non-Government Organizations shall make annual primary assessment of Vulnerability of their establishment and send Action Taken Report to the respective District DM Authority with copies to Assistant Commissioner and Village Level Disasters Management Control Rooms in second week of May every year.

**5.2.39** The Assessments Returns sent in various formats shall be discussed and reviewed in the meeting of District Disaster Management Committee during Second week of June every year. The recommendations if any, made by the committee shall be implemented by the concerned authorities and confirmed to the District DM Authority, Assistant Commissioner and Village level Disaster Management Control Rooms within stipulated time following the discussions in the District Disaster Management Committee.

## **Chapter-VI**

### **DIRECTORATE OF DISASTER MANAGEMENT**

#### **6.1 DEPARTMENT OF DISASTER MANAGEMENT**

In accordance with the guidelines of the Govt. of India, Ministry of Home Affairs [as per tenth plan under sub-section 2.12 of section 11], the Andaman and Nicobar Administration converted by diverting the skeleton of officials working in the relief operation to establish a Department of Disaster Management during Sept, 2008.

The primary function of a Disaster Management Department is to implement the Disaster Management Action Plan which includes coordination, policy-making, operations management, data collection, record keeping, Information, Education and Communication activities, public information, preparedness, community based disaster preparedness training to all levels of the community, establishing of adequate warning systems, uprising the situation from time to time to the Union Territory Disaster Management Authority and to the National Disaster Management Authority, Capacity Building & Training and Mock Exercise in different levels of community and constitution of various task forces in various level including in village and grass root levels of the community with a main objective to create awareness on disaster preparedness and resource management under the Director of Disaster Management.

The Disaster Management Department, its system and procedures are designed in such a way that information can be promptly assessed and relayed to concerned parties. Rapid dissemination contributes to quick response and effective decision-making during an emergency. As the master coordination and control point for all counter-disaster efforts, the Disaster Management Department is the centre for decision-making under a unified command. In a disaster situation, the Disaster Management Department will come under the direct control of the Chief Secretary and or Commissioner-cum-Secretary (RR) or any other person designated by him as the chief of operations.

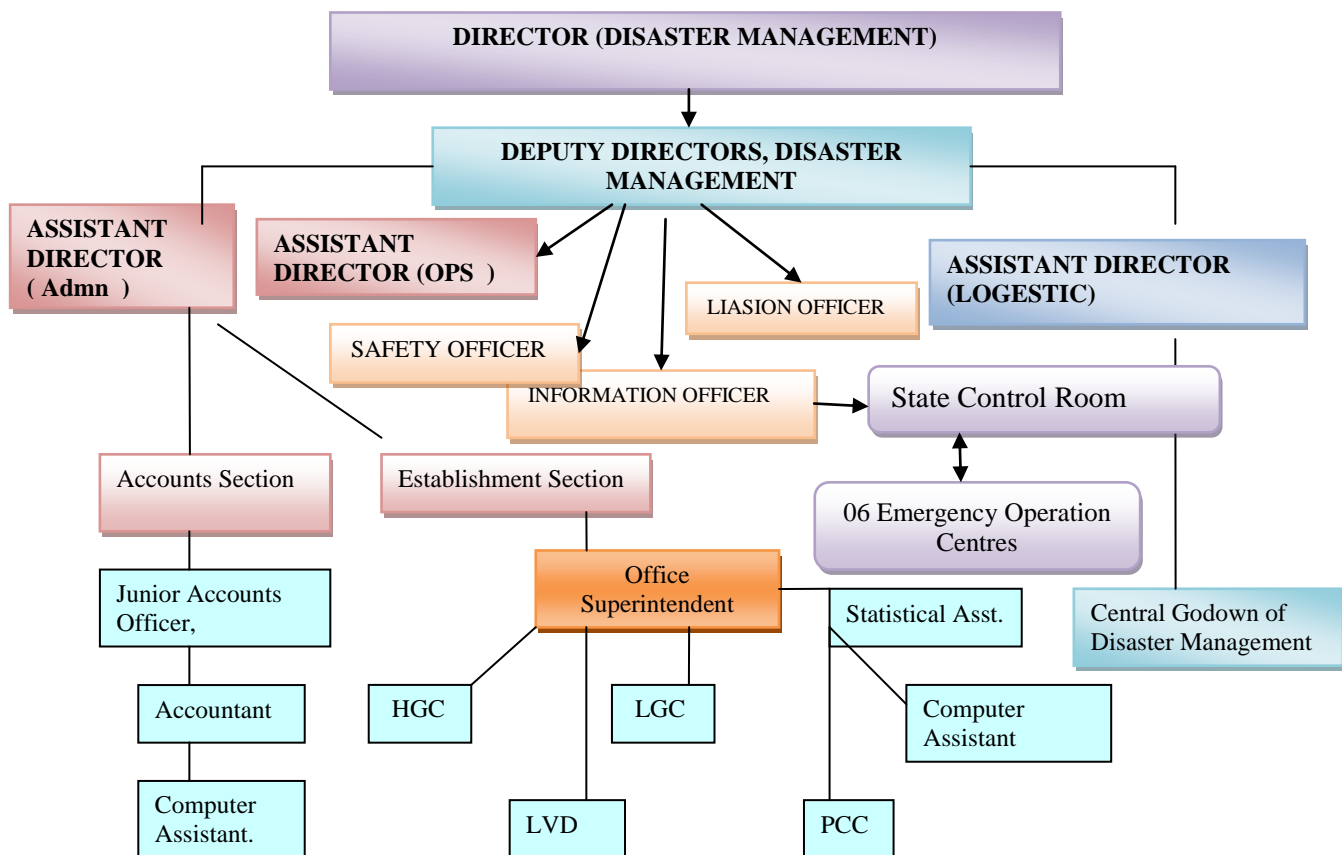
The Directorate of Disaster Management is coordinating training for the Govt. Employees and awareness campaigns for the Islanders to tackle any disaster/crisis situation in coordination with National Disaster Management Authority, State DM Authority, Line Departments and with NGOs also to make small levels mock drill for Disaster Preparedness in A&N Islands.

The A&N Administration to cope up the emergency crisis and to make it available certain basic principles and preliminary infrastructure at Tehsil, District and State Level with regard to various issues and situations arising out of natural calamities/disasters prepared the UT Disaster Management Plan. This plan provides institutional arrangements, roles and responsibilities of the various Stakeholders, Organisations, agencies to interlink the disaster management and the scope of their activities.

The Six (06) Emergency Operation Centres also been established in various Islands i.e. at Port Blair, Mayabunder in North and Middle Andaman, Hut Bay, Car Nicobar, Campbell Bay and Kamorta. All these EOCs are connected with the State Control Room, Directorate of Disaster Management under a Disaster Management Emergency Communication Networking and further is in the process of up-gradation.

The Directorate of Disaster Management conducting training on disaster preparedness in different Tehsil/villages and also activated IEC (Information, Education and Communication) activities as a part of public awareness campaign. Guidelines for School Safety Programme also been prepared and will be implemented in 399 schools in A&N Islands under the guidelines on National School Safety Programme of Govt. of India. 140 Nos of Relief Shelters /Godowns has already been identified in almost all the Islands after the mega earthquake of 26th, Dec, 2004 and maintained stock of emergency relief/disaster preparedness materials.

The Structure of the Department of Disaster Management is expanded in hierarchy manner is as under:-



**Disaster Management Department will oversee the following:-**

1. Ensure that all districts continue to regularly update the District Disaster Management Action Plan and encourage districts to prepare area-specific plans for areas prone to specific disasters;
2. Identify and interact with the central laboratories, research institutions and NGOs to evolve mitigation strategies and setup study groups and task forces for specific vulnerability studies;
3. Serve as a data bank and ensure that due consideration is given to mitigation strategies in the planning process; identify agencies and institutions for locating inventory items;
4. Upgrade and update the UTDMP according to changing situations in the UT;
5. Disseminate information about the UTDMP to other departments of the Administration and UT level agencies;
6. Monitor the training imparted to UT level officials, private sector and NGOs;
7. Organize post-disaster evaluation and update the UTDMP accordingly;
8. Ensure that the warning and communication systems and instruments in the SCR are in working condition.

On receipt of warning or alert from any such agency which is competent to issue such a warning, or on the basis of reports from Assistant Commissioner/District DM Authority of the occurrence of a disaster, all community preparedness measures including counter-disaster measures will be put into operation.

**6.1.2 EMERGENCY OPERATION CENTRES (EOC)**

- ✚ Emergency Operation Centres (EOC) are established in the secured location as control rooms to co-ordinate actions and make critical decisions at the time of emergency and disaster.
- ✚ EOCs to have VHF, HF, V-Sat, Broadband, Video-Conferencing, fax, computer, Xerox, scanner, digital cameras.
- ✚ Receive information from MET Department/Police/Tehsil/ Island/PRI/Public regarding warning on Disaster.
- ✚ Alert the Officers concerned about the warning / any message received.
- ✚ Pass instructions received from DDMA/SDMA to concerned Departments/ Officers.
- ✚ Give information to public through AIR, Doordarshan about the warning and any other status on the instructions of DDMA/SDMA.
- ✚ Prepare reports about the loss of lives, properties, relief requirements etc.
- ✚ Issues of general Do's and Don'ts for public.

**6.1.3 Response Structure at Union Territory Level on occurrence of Disaster**

The Chief of Operations will spell out the priorities and policy guidelines coordinate services of various departments and agencies including national and international aid agencies (with the consent of GOI) and central government agencies. The State Control Room in its expanded form will continue to operate as

long as the need for emergency relief operations continues till the long-term plans for rehabilitation are finalized.

For managing long-term rehabilitation programmes, the responsibilities will be that of the respective line departments. This will enable the State Control Room to attend disaster situations, if need any other resources.

The main branches in the State Control Room during a disaster situation will be operations, logistics, planning, resources, infrastructure, health and communication information management. Each branch will have specific tasks to perform with a Disaster Management officer. The capacity of the various branches to coordinate amongst themselves and with the field units will ultimately decide the quality of response.

#### **6.1.4 COMMUNITY BASED DISASTER MANAGEMENT PLAN**

*“The principal resource is the people themselves and their local knowledge and expertise.”*

*Paradigm shift from reactive emergency management to disaster risk reduction which can be further categorized as prevention, mitigation and preparedness*

##### **Definition of community**

A community is a group of individuals and households living in the same location and having the same hazard exposure, who can share the same objectives and goals in disaster risk reduction.

##### **What is Disaster Preparedness?**

“Measures taken in anticipation of a disaster to ensure that appropriate and effective actions are taken during emergency such as setting up the systems for early warning, coordinative & institutional arrangements, evacuation & emergency operations, public awareness, disaster & evacuation drills and stockpiling.

##### **Why community based disaster preparedness**

- First to respond
- Building confidence in the community
- Pride in being able to make a difference
- Enhanced capacities to pursue disaster preparedness and mitigation
- Ownership of the community
- Use of local dialects/values/cultures
- Innovative and do-able
- Highlights the potential of local resources
- Familiar with local coping mechanisms
- Cost effective
- Sustainable
- Ultimate sufferer



### **How do we do Community Based Disaster Preparedness: Transforming at Risk Communities to Disaster Resilient Communities?**

- Site entry & report building: Mutual respect and trust are the key elements
- Community situation analysis: Process of gathering all relevant data about the community such as physical characteristics, demographic features, socio-political aspects
- Identification of priority sector: Target group or sector (most in need/most at risk)
- Identification of the natural leaders or progressive members.
- Feedback/validation of the results of the community situation analysis. The purpose is to inform the community about the whole situation and fill in the gaps.
- Further analysis of priority problem/needs/aspirations: the process whereby the community discusses and analyzes their problem and transforms it into community goals and aspirations.
- Planning of the solution/action: the process whereby the community plans how to solve their problems.
- Organization of the group: the roles and responsibilities of each member vis-a-vis the community activities and tasks are identified and agreed upon.

*The uniqueness of the Community Based Disaster Mitigation (CBDM) program lies in its emphasis on the process of transforming the at-risk and vulnerable communities to disaster resilient communities. Community preparedness as the key concept looks at the external aspects of the community and is driven by organizations and individuals that live and have a stake in the economic sustainability of the community. The community groups and community organizations in disaster management are essential in sustaining the risk reduction process for the community to meet intended aims and targets.*

### **The Process of CBDM: The process for Disaster Risk Reduction**

- Initiating the process: linkage and building rapport with the community
- Community profiling: initial understanding of disaster situation and orientation on CBDM
- Community risk assessment: participatory assessment of hazards, vulnerabilities, capacities and people's perception of risk
- Formulation of initial Disaster Risk Reduction Plan: Identification of appropriate mitigation and preparedness measures including public awareness, training and education.
- Formation of Community Disaster Response Organization: community organizing and mobilization, capacity building in CBDM it and preparedness.

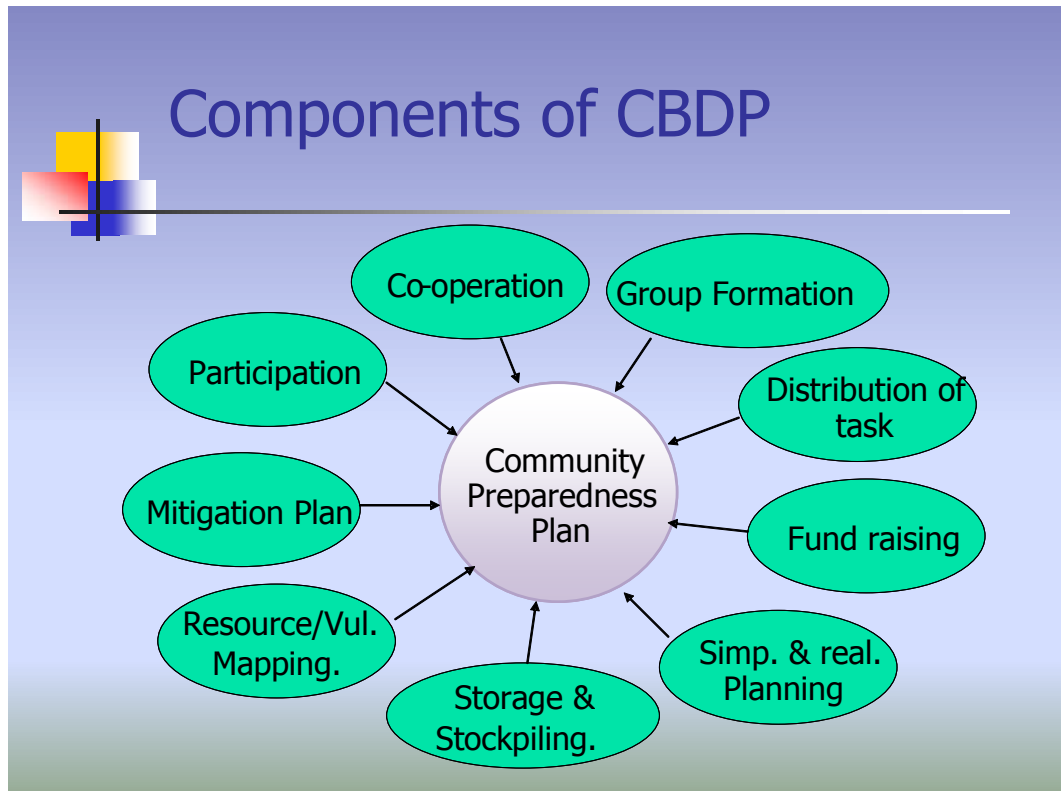
- Implementation of short, medium and long-term risk reduction measures, activities, projects and programs – implementing strategies and mechanisms, organizational/institutional strengthening.
- Monitoring and evaluation: Continuous improvement in disaster risk reduction plan, documentation and dissemination of good practices for replication.

**Basic elements and features of CBDP**

- People's participation: Community members are the main actors and propellers.
- Priority for the most vulnerable groups, families and people in the community
- Risk reduction measures are community specific and are identified after an analysis of the community's disaster risk (hazards, vulnerabilities, capacities and perception of disaster risk).
- Existing capacities and coping mechanism recognized: CBDM it builds upon and strengthens the existing capacities and coping strategies.
- The aim is to reduce vulnerabilities by strengthening capacities; the goal is building disaster resilient communities.
- Links disaster risk reduction with development – addresses vulnerable conditions and causes of vulnerabilities.
- Outsiders have supporting and facilitating role

**Key indicators are:**

- Safety
- Livelihood security
- Health
- Education
- Amenities
- Natural and physical environment
- Socio-economic and physical development & general wellbeing



**Steps involved in Community Based Disaster Preparedness**

Step 1: Information Dissemination and arranging a large scale meeting for a community:

- Through the help of PRI representatives, Election representatives, NGOs or CBOs etc.
- Coordinating a meeting within community people ensuring adequate participation of same community people.
- Encourage women participation also.

Step 2: Preparing Community profile

- Demographic details i.e. Population details
- Social details and Economic Details

Step 3: Identification of hazards in the community

- Experience of Natural and Manmade Disasters
- Scientific knowledge
- History of Hazards
- Geographic location and details
- Elements of risk

- Most frequent Manmade Disaster
- Present response of the Community
- Do's and Don'ts of various disasters

Step 4: Risk and Vulnerability Analysis: Socio-economic vulnerability

- ◆ Handicapped
- ◆ Senior citizen
- ◆ Children
- ◆ Economically backward families
- ◆ Women headed households
- ◆ Residents of unsafe shelter ( disaster specific)

Step 5: Resource Mapping

- ◆ Inventory preparing and map making of First-Aid and Health
  - Identification of nearest health centres
  - Local trained Human Resources
  - Vehicles
  - First Aid kits
- ◆ Identification of Search & Rescue Equipments
  - Tools & equipments
    - Earth-moving
    - Transportation
    - Lighting arrangements
  - Local trained Human Resources

Step 6: Preparation of Action Plan Response Plans for the emergency situation

would be active in:-

- ◆ Pre-disaster
- ◆ During disaster
- ◆ Post disaster
- ◆ Joining hands of Community with Government
- Activate the Disaster Management Teams (DMTs)
- Coordinate with District Control Room/EOCs
- Disseminate information to respective focal points

Step 7: Understanding of basics of Mitigation Measures

- Structural measures
  - Construction of Hazard safe housing
  - Retrofitting of new / existing structures
  - Construction of appropriate public works
- Non-structural measures
  - Capacity building of people

- Awareness generation within community
- Implementation of building byelaws
- Educating new generation and community for disaster management
- Updating and implementation of land suitability analysis and

**Step 8: Preparation of Emergency Contact and Phone Numbers**

- ◆ Community Disaster Management Committee (CDMC) members
- ◆ DMT members (of resident and neighbouring colonies)
- ◆ PRI members
- ◆ Sub-division focal points
- ◆ Health centres
- ◆ Police stations
- ◆ Fire brigades
- ◆ Other resourceful / authority holding stakeholders

**Step 9: Preparation of Community Task Forces**

- ◆ Warning Dissemination Team
- ◆ Search and rescue Team
- ◆ First Aid Team
- ◆ Trauma Counseling Team
- ◆ Disaster Assessment Team
- ◆ Any other in special case
- ◆ These are called as local teams which would be useful at the time of emergency
- ◆ These teams would also responsible to carry out mock drills and attend trainings arranged by the State Government.

**Vehicles for Institutionalizing CBDP**

**CBOs/SHGs/Youth Group:**

- Immense volunteer capacity
- Understanding of community needs and awareness of the most vulnerable populations
- Built-in credibility with the community
- Access to social and population groups that may avoid interaction with government officials
- The power of persuasion and community influence
- The ability to make decisions outside of government processes

**Task Force:**

- Guidance to the communities through warning, rescue and relief toward shelters.

- Help in identifying the most vulnerable sections i.e. children, pregnant, lactating, disabled and elderly providing them special care and support
- Help in recouping the communities

**Village Council:**

- Power to influence the village and inform the people to take the necessary action pre, during and after a disaster
- Moral support and hope to the community to rebuild their lost lives and livelihoods

**Government:**

- Help in habitat improvement of the communities through proper houses, drainages & culverts, so that the geographical vulnerability of the area is reduced.
- Give the initial warning through officers as well as using media.
- Provide compensation to the victims.
- Provide help for repair and reconstruction.

**NGO/Agencies:**

- Training the communities on Community Based Disaster Preparedness on various aspects such as Task Forces, Contingency Planning, and First Aid etc.
- Provide legal guidance and support.
- Undertake relief, rehabilitation and reconstruction work.
- Work in mitigation of disasters through initiatives such as tree plantation etc.
- Work towards comprehensive development in the disaster prone areas.

**International Agencies:**

- Comprehensive development in reducing the vulnerability of the communities.
- Providing Relief & rehabilitation at the right time.
- Convergence with the existing government programmes and encourages local participation for sustainability.
- Bring in best practices for replication keeping the local context in view.

**Media:**

- AIR, TV, Newspapers, Internet etc. can immediately spread the warning of an impending calamity.
- In peace times they can also create general awareness on disaster preparedness.
- Risk Reporting revealing the plight of the affected communities to the general public far from the disaster zone.

- Carrying messages and information from the affected communities.
- Highlighting the best practices in the relief, rehabilitation and reconstruction initiatives.

At the end of the session, the community should be able to articulate the following in terms of Community Based Disaster Preparedness:

- What? Response Mechanism.
- Why? To minimize loss.
- When? Throughout the year.
- Where? Villages/Hamlets/GPs/ Blocks.
- Who? Villagers/PRI/NGOs/Govt. Officials.
- How? With the involvement of the Community

**Community Disaster Management Plan consists of:**

- Community participation - for quick response, mitigation of the disaster and rehabilitation process.
- Village disaster management plan are under preparation in each Panchayat  
Circle involving PRIs, village level officials, youth clubs and Mahila Mandals.
- Orientation programme has been given at Port Blair, Ferrargunj and Hut bay Tehsil areas.
- Special emphasis on preparation of village mapping including vulnerable area, demographical details, safe buildings etc.
- Formation of village task force for pre and post disaster responses.
- Capacity Building of Task Force on their roles & responsibilities before, during and after disaster.
- Training involving NGOs/Agencies.
- Undertaken civil defence training and mock drills

**6.1.5 ACTION TO BE UNDERTAKEN BY VARIOUS STAKEHOLDERS IN THE EVENT OF CRISIS**

1. District Control Room/EOCs to inform all Nodal Officers of the Line Dept.
2. District Control Rooms/EOCs to inform all Asst. Commissioners/Tehsildars
3. Deputy Commissioners to inform Chief Secretary and Secretary (Relief and Rehabilitation).
4. All HODs report to State District Control Rooms.
5. Alert/by blowing of sirens
6. Inform Public about the do's and don'ts
7. Alert all task force committees/groups.
8. Constituted in various departments/at Villages level
9. Dispatch Search and Rescue/Collapsed Structures Search & Rescue and Establish MFR Station.

10. Establish Relief Camps in identified Schools
11. Direction for restoration of water and electricity.
12. Distribution of Relief Materials.
13. Evacuation of affected persons to camps by rescue teams.
14. First Aid /Medical
15. Arrangement for food supplies.
16. Special care for vulnerable sections like woman, aged, children, physically handicapped by rescue teams.
17. Removal of debris.
18. Disposal of Dead/Carcass.
19. Spray insecticides/disinfectants by sanitation teams.
20. Collect and transmit information to the Nodal Ministry.
21. To keep the State Level Authorities apprise of the developments on a continuing basis.

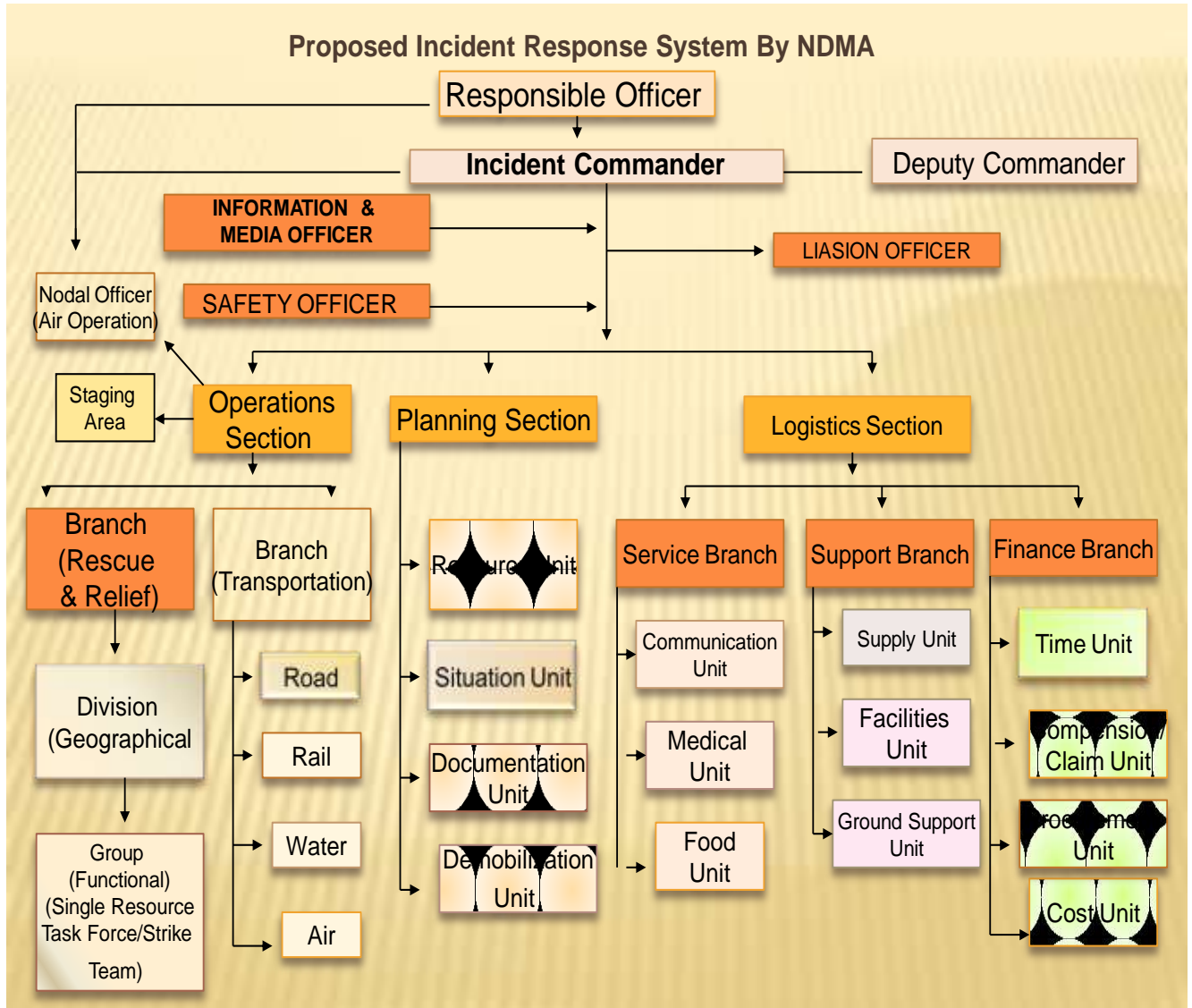
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## Chapter-VII

### INCIDENT RESPONSE SYSTEM

#### 7.1 ORGANISATION STRUCTURE OF UTDM INCIDENT RESPONSE SYSTEM



#### 7.1.2 Identified Incident Response teams (IRTs):

The Identified Incident Response teams (IRTs) is a team comprising of all positions of Incident Response System (IRS) organisation as shown in the figure above, headed by Incident Commander(IC). The Operation Section (OS) helps to prepare different tactical operations as required. The Planning Section (PS) helps in obtaining different information and preparing plans as required. The Logistic Section (LS) assesses the availability and requirement of resources and takes action for obtaining them.

IRTs will function at State, District, Sub-Division and the Tehsil / Block levels. These teams will respond to all natural and man-made disasters.

The lowest administrative unit (Sub-Division, Tehsil or Block) will be the first responder as the case may be. If the incident becomes complex and is beyond the control of local IRT, the higher level IRT will be informed and they will take over the response management. In such cases the lower level IRT will merge with higher level IRT.

When a lower level of IRT (e.g. Block / Tehsil) merges with a higher level (e.g. Sub-Division, District or State) the role of Incident Commander (IC) of lower level of IRT will change. When the Block level IRT merges with Sub-Division level IRT, IC of the Block level may play the role of Deputy IC or Operation Section Chief (OSC) or any other duty that the IC of higher authority assigns. This process will be applicable at all levels.

<b>INCIDENT RESPONSE TEAMS (IRT) STATE / DISTRICT / SUB-DIVISION</b>				
Sl.No	POSITION /ROLE	STATE LEVEL	DISTRICT	SUB-DIVISION LEVEL
1.	RESPONSIBLE OFFICER(RO)	Chief Secretary	Deputy Commissioners	Asst.Comm
2.	INCIDENT COMMANDER(IC)	Principal Secy (R&R)		
3.	INFORMATION & MEDIA OFFICER (IMO) Promoting a productive partnership with the media to create awareness and contributing towards capacity development, Mass Communication, Liaison with all Participating and Cooperating Departments, Stakeholders participation through Civil Defence, NCC, NYKS, NSS and local NGOs.	Director Information & Publicity	Public Relations Officer	Tehsildar
4.	LIASON OFFICER(LO)	Secretary (GA)	AD(Admin), DC Office	Office Superintendent, DC Office
5.	SAFETY OFFICER (SO) Safety	Chief Fire Officer	Dy SP Dist	Inspector of Police
6.	LIAISON WITH ARMED FORCES	ANC disaster management officer/Command Intelligence Officer/JOC (Joint Operation Control Room (PBR) HQ, ANC. Tel No. 03192240056	ANC disaster management officer/Command Intelligence Officer/JOC (Joint Operation Control Room (PBR) HQ, ANC. Tel No. 03192240056	ANC disaster management officer/Command Intelligence Officer/JOC (Joint Operation Control Room (PBR) HQ, ANC. Tel No. 03192240056
7.	<u>OPERATIONS SECTION CHIEF (OSC)</u> Situational Unit In charge, Finalization of	Deputy Inspector General of	Superintendent of Police (District)	Dy SP

	SOPs for Search and Rescue, Medical Assistance and casualty management, evacuation,	Police(Law & Order)		
8.	STAGING AREA MANAGER	Inspector of Police	Inspector of Police	Sub Inspector of Police
9.	BRANCH DIRECTOR-SEARCH & RESCUE (BD-SR)	Superintendent of Police (S/A)	Dy SP	Dy SP
10.	DIVISION AND GROUP SUPERVISORS	Dy SP	Dy SP	Inspector of Police
11.	STRIKE TEAM OR TASK, FORCE LEADER	Dy. SP	Inspector of Police	Inspector/Sub-Inspector of Police
12.	SINGLE RESOURCE LEADER Logistics	Executive Engineer, APWD	Assistant Engineer, APWD	Junior Engineer, APWD
13.	SHIPPING BRANCH DIRECTOR(SBD) Shipping Operations	Director of Shipping Services	Dy Director of Shipping Services	Asst Director (Shipping)
14.	GROUP SUPERVISOR(ROAD OPERATION)	Director of Transport	Assistant Director of Transport	Assistant Director of Transport
15.	VEHICLE COORDINATOR	Assistant Director of Transport	Assistant Director of Transport	Assistant Director of Transport
16.	LOADING/UN-LOADING IN-CHARGE	Controller Labour Force	Controller Labour Force Representative	Controller Labour Force Representative
17.	GROUP SUPERVISOR(SHIPPING OPERATION)	Asst Director (Shipping)	Asst Director (Shipping)	Asst Director (Shipping)
18.	SHIP COORDINATOR	Wharf Superintendent	Wharf Superintendent	Wharf Superintendent
19.	NODAL OFFICER (AIR OPERATION)	CSO (ops)/JOC(PBR), HQ ANC	CSO (ops)/JOC(PBR), HQ ANC	CSO (ops)/JOC(PBR), HQ ANC
20.	GROUP SUPERVISOR (AIR OPERATION)	CSO (ops)/JOC(PBR), HQ ANC	CSO (ops)/JOC(PBR), HQ ANC	CSO (ops)/JOC(PBR), HQ ANC
21.	HELIBASE/HELIPADE-IN-CHARGE	CSO (ops)/JOC(PBR), HQ ANC	CSO (ops)/JOC(PBR), HQ ANC	CSO (ops)/JOC(PBR), HQ ANC
22.	<u>PLANNING SECTION CHIEF (PSC)</u> (Situation Assessment, Analysis and Planning, Resources and Requirements, Documentation, MIS, Demobilization)	Deputy Director (Disaster Management)	Asst Commissioner	Tehsildar
23.	RESOURCE UNIT LEADER (RUL)	Labour Commissioner	Assistant Commissioner	Labour Inspector
24.	CHECK-IN/STATUS RECORDER	Revenue Department Representative	Revenue Department Representative	Revenue Department Representative
25.	SITUATION UNIT LEADER (SUL)	Director of Industries	Asst Director (Industries)/Industries Promotion Officer	Industries Promotion Officer/ Extension Officer
26.	DISPLAY PROCESSOR (DP)	Manager IT	Assistant Manager (IT)	Computer Operator (IT)
27.	FIELD OBSERVER (FO)	Tehsildar	Revenue	Patwari

		Inspector (RI)		
28.	DOCUMENTATION UNIT LEADER (DUL)	Statistical Officer (DM)	Senior Investigator, DC Office	Junior Investigator
29.	DEMOBILIZATION UNIT LEADER (DEMOB-UL)	Deputy Registrar of Cooperative Societies	Deputy Registrar of Cooperative Societies	Assistant Registrar of Cooperative Societies
30.	TECHNICAL SPECIALISTS (TS)	SE, APWD	EE, APWD	AE, APWD
31.	<u>LOGISTICS SECTION CHIEF (LSC)</u> Supply Unit, Communication Unit , Storage Unit	Director (Civil Supplies)	Deputy Director( Civil Supplies)	Asst Director ( Civil Supplies)
32.	SERVICE BRANCH DIRECTOR (SBD)	Director (Health)	Medical Superintendent	Chief Medical Officer
33.	COMMUNICATION UNIT LEADER (CUL) Developing contemporary forecasting and early warning system backed by responsive and fail- safe communication and information technology support. Management Information Services (MIS) & Coordination with BSNL, Airtel, Vodafone , Reliance and ISRO.	Special Secretary IT	Deputy Manager IT,	Sub Divisional Officer, BSNL
34.	MEDICAL UNIT LEADER (MUL) Enhance capacity in emergency medical response, developing and training of medical teams, post disaster surveillance, mobile surgical teams.	Medical Superintendent	Chief Medical Officer	Medical Officer
35.	FOOD UNIT LEADER (FUL)	AD Civil Supplies	AD Civil Supplies	AD Civil Supplies
36.	SUPPORT BRANCH DIRECTOR (SUP.BD)	SE(PWD)	EE(PWD)	AE(PWD)
37.	SUPPLY UNIT LEADER (SUP.UL)	Inspector Weight & Measures	Inspector Weight & Measures	Deputy Tehsildar
38.	TOOL AND EQUIPMENT SPECIALIST	Executive Engineer (E & M) APWD	Asst Engineer (E & M), APWD	Junior Engineer (E & M)
39.	FACILITIES UNIT LEADER (FAC.UL) Facilities Unit, Power Task Force	Superintending Engineer (Electricity)	Executive Engineer (Electricity)	Assistant Engineer (Electricity)
40.	GROUND SUPPORT UNIT LEADER (GSUL)	Executive Engineer (Civil) APWD	Asst Engineer (Civil) APWD	Junior Engineer (Civil) APWD
41.	FINANCE BRANCH DIRECTOR (FBD) Constitute Disaster Mitigation and Response Fund, Catastrophic Risk Financing, Risk Insurance, micro finance and micro insurance, Procurement Unit, Damage Assessment	Director Accounts & Budget	Sr Pay & Accounts Officer	Junior Accounts Officer
42.	TIME UNIT LEADER (TUL)	Labour Commissioner	Asst.Labour Commissioner	Labour Inspector
43.	PROCUREMENT UNIT LEADER (PUL)	Conservator of Forests	Deputy Conservator of Forests	Assistant Conservator of Forests

44.	COMPENSATIONS/CLAIMS UNIT LEADER (COM./CUL)	Pay & Accounts Officer (HQ)	Pay & Accounts Officer (Dist)	Assistant Accounts Officer
45.	COST UNIT LEADER (CUL)	Jr Pay & Accounts Officer	Jr Accounts Officer	Senior Accountant
46.	SCIENCE & TECHNOLOGY (ST) Hazard Zonation, Mapping and vulnerability analysis in multi hazard frame work, Use of GIS, remote sensing and GPS in DM Establishment of technological frame work to create an enabling regulating environment and a compliance regime , Knowledge Management through Technical Specialists ,Establish upgrade and modernize the forecasting and early warning systems and partnership with World Meteorological Organization , Pacific Warning System and other regional and global institutions	Director Science & Technology	-	-
47.	SOCIAL WELFARE (SW) Welfare Task Force, Welfare of old, disabled, physically handicapped, children, widows Counseling etc.	Director Social Welfare	CDPO	Mukhya Sevika
48.	Overall Management of Shelters	CCF(HQ)	DCF	ACF
49.	MUNICIPAL COUNCIL (PBMC) Setting up of temporary Relief camps , Temporary Shelter Task Force, Revision of Municipal Regulations and safe construction practices, Corpse Disposal Unit	Secretary, Municipal Council	-	-
50.	Setting up of temporary Relief camps , Temporary Shelter Task Force, Revision of Building Regulations and safe construction practices, Corpse Disposal Unit	CEO, Zila Parishad/PRI's	Executive Officer ZP	Secretary, Panchayat Samity
51.	Livelihood Support and Capacity Building	Director(Ind)	AD(Ind)	IPO
52.	Disaster Management Education and Capacity Building in School Safety	Director(Edn)	ADE(Admin)	AEO

### 7.1.3 DUTIES & RESPONSIBILITIES

#### 1. RESPONSIBLE OFFICER (RO) –Chief Secretary

The Chief Secretary who is the Chairperson of the Union Territory Disaster Management Executive Committee and member of the UT Disaster Management Authority, shall perform responsibilities down under clause 22(2) and 24 of the DM Act, 2005.

- i. Section 22 (h) of the Disaster Management Act, 2005 provides the Chairperson of Union Territory Disaster Management Executive Committee to give directions to any department of the Union Territory or any other authority or body in the Union Territory regarding actions to be taken in response to any threatening disaster situation or disaster. Thus, She/he shall ensure active participation of all departments at Union Territory level;

ii.	Ensure that IRS is integrated in the Union Territory and District Disaster Management Plan;
iii.	Activate IRTs at Union Territory headquarters, and issue order for their demobilization on completion of response;
iv.	Set overall objectives and incident-related priorities;
v.	Coordinate with the central govt. for mobilization of Armed Forces, air support etc. as and when required;
vi.	Identify suitable nodal officer to coordinate air operation activities and ensure that all District ROs are aware of it;
vii.	Ensure that incident management objectives do not conflict with each other;
viii.	Consider the need for the establishment of Area Command if required,
ix.	Establish Unified Command if required and get approval of Lieutenant Governor;
x.	Keep the Chairperson of UTDMA informed of the progress of incident response;
xi.	Ensure overall coordination of response relief activities; and
xii.	Ensure that relief activities by governmental and NGO are performed in an equitable manner.
<b>2. INCIDENT COMMANDER(IC) Commr-cum-Secretary (RR&amp;DM)</b>	
	The Principal Secretary (RR), A&N Administration is the member of the UT Disaster Management Authority and member secretary of the Union Territory Disaster Management Executive Committee.
i.	Assess the situation and/or obtain a briefing from prior incident commander;
ii.	Determine incident objectives and strategy. i.e. MBO (Manage by objective);
iii.	Establish the immediate priorities;
iv.	Establish an incident command post , Symbol is - <input checked="" type="checkbox"/>
v.	Establish an appropriate organization;
vi.	Ensure Planning Meetings are scheduled as required;
vii.	Approve and authorize the implementation of an incident action plan;
viii.	Ensure adequate safety measures are in place;
ix.	Coordinate activity for all command and general Staff;
x.	Coordinate with key people and officials and keep agency, administrator informed;
xi.	Approve request for additional resources or for the release of
xii.	Approve the use of volunteers and auxiliary personnel;
xiii.	Authorize release of information to the News Media;
xiv.	Order the demobilization of the incident;
xv.	Assess the situation and/or obtain a briefing from prior incident commander;
xvi.	Establish an incident command post (ICP) <ul style="list-style-type: none"> <li>- Initially wherever the incident commander is located. (Control Room)</li> <li>- As the incident grows, incident commander to establish a fixed location</li> <li>- ICP provides a central coordination point</li> <li>- ICP can be type of facility that is available and appropriate, e.g. vehicle, trailer, tentage and open area. Be located at the incident base</li> </ul>

xvii	Ensure that relief activities by governmental and NGO are performed in an equitable manner;
xviii	Ensure Web based/ on line incident Response Solution is in place in the EOC to support field level IRTs;
xix	Identify, mobilize and allocate critical resources according to established priorities;
xx	Ensure that effective communications are in place.
<b>3. DISTRICT: Deputy Commissioner as RO</b>	
i.	Ensure that IRS is integrated in the District Response Plan as per Section 31 of the DM Act, 2005;
ii.	Ensure web based/on line incident Response solution is in place to support field level IRTs;
iii.	Delegate responsibilities to the IC;
iv.	Activate IRTs at District HQ, Sub-division, Block/Circle levels, when required;
v.	Appoint/deploy, terming and demobilize IC and IRT;
vi.	Decide overall incident objectives and priorities and ensure that various objectives do not conflict with each other;
vii.	Ensure that Incident Action Plan is prepared by the IC and acted upon;
viii.	He should be fully briefed on the IAP;
ix.	Coordinate all response activities;
x.	Give directions for the release and use of resources available with any Department of the Government and the local authority in the district;
xi.	Appoint a nodal officer at the District level to organize air operation in coordination with the Union Territory and Central Nodal Officer. Also ensure that all incident Commander (s) of the district are aware of it;
xii.	Ensure that the non-governmental organizations carry out their activities in an equitable and non-discriminatory manner;
xiii.	Deploy the district level IRT at the incident site, in case of need;
xiv.	Ensure that effective communications are in place;
xv.	Ensure provision for personnel accountability and a safe operating environment;
xvi.	In case the situation deteriorate, the RO may assume the role of the IC and may seek support from the Union Territory Level RO;
xvii.	Mobilize experts and consultants in the relevant fields to advise and assist as she/he may deem necessary;
xviii.	Procure exclusive or preferential use of amenities from any authority person.
<b>4. INFORMATION &amp; MEDIA OFFICER (IMO)(DIP&amp;T)</b>	
1.	Responsible for preparing and releasing information about the incident to the media/agencies/persons/officers_ with the approval of incident Commander (IC);
2.	Ask for additional personnel support depending on scale of incidents;
3.	Obtain information from all agencies including Media regarding the incident that may be useful to incident planning;
4.	Maintain, display and keep updating incident status; assigned/available/out of service of resource, personnel etc. and keep the IC informed with the information;
5.	Organize IAP meetings as and when required;

6.	Coordinate with IMD to collect weather information and pass it to all concerned;
7.	Perform such other duties as instructed by IC; and
8.	Maintain records of various activities performed.
<b>5.</b>	<b>LIASON OFFICER(LO) Secretary (GA) for State, AD (Admn) in Dist. and OS in Sub-Div.</b>
1.	Maintain a list of assisting and cooperating line department/agencies (CBOs, NGOs, etc.) and their representatives at various affected sites;
2.	Carry out liaison with all involved agencies and line departments of government;
3.	Monitor incident operations to identify current or potential inter-organizational problems;
4.	Participate in planning meeting, & provide current information regarding involvement and activities of various line departments of government and other agencies;
5.	Collect relevant resources information and pass it to IC and other section Chiefs;
6.	Ask for personnel support if required;
7.	Keep the IC informed about arrivals of all the government and non-government agencies;
8.	Arrange and ensure a concluding briefing session of all governmental and non governmental agencies with the IC;
9.	Perform such other duties as instructed by IC; and
10.	Maintain records of various activities performed.
<b>6.</b>	<b>SAFETY OFFICER (SO) CFO in State, Dy.SP in Dist. and Dy.SP in Sub-Divisional level</b>
1.	Recommend measure for assuring responders' Safety, and to assess or anticipate hazardous and unsafe situations;
2.	Give general advice/guidelines for safety of affected population in consultation with IC/OSC;
3.	Ask for assistants and assign responsibilities as required;
4.	Participate in planning meetings for preparation of IAP( Incident Action Plan);
5.	Review the IAP for safety implications;
6.	Exercise authority to stop or prevent unsafe acts and communicate such exercise of authority to the IC;
7.	Obtain details of accidents that have occurred within the incident area if required or as directed by IC and inform the appropriate authorities;
8.	Review and approve the Site Safety Plan, as and when required;
9.	Perform such other duties as instructed by incident Commander (IC); and
10.	Maintain records of various activities performed.
<b>7.</b>	<b>OPERATIONS SECTION CHIEF (OSC) DIGP in State, SP-in Dist. Dy.SP in</b>



<b>Sub-Division</b>	
1.	Coordinate with the activated Section Chiefs;
2.	Responsible for management of all field operations directly applicable to the accomplishment of the incident objectives;
3.	Ensure the overall safety of personnel involved in the operation section and the affected community;
4.	Deploy, activate, expand and supervise organizational elements; branch, division, group, etc.; in his / her section in consultation with IC and in accordance with the IAP;
5.	Assign appropriate personnel keeping in mind their capabilities for the task;
6.	If required, request IC for providing a <u>Deputy OSC</u> for assistance;
7.	Brief the personnel in Operations Section at the beginning of <u>each operational period</u> ;
8.	Ensure information sharing, coordination and cooperation between various branches of his/ her section;
9..	Prepare section operational plan keeping IAP in mind;
10.	Suggest expedient changes in the IAP to the IC;
11.	Consult the IC from time – to – time and keep him/her fully briefed;
12.	Determine need for additional resources and place demand accordingly and ensure its arrival; s/he shall keep the planning section informed of the resource status;
13.	Perform such other duties as instructed by RO / IC; and
14.	Maintain Unit Log.
<b>8.</b>	<b>STAGING AREA MANAGER – Inspector of Police in State, Insp. of Police in District and SI in Sub-Division Level</b>
1.	Establish Staging Area with proper layout;
2.	Determine any support needs for feeding, sanitation, and security etc of his team and the received resources;
3.	Report all receipts and dispatch to OSC and maintain their record;
4.	Responsible for managing all activities of the Staging Area;
5.	Establish Check-in function as appropriate;
6.	Request maintenance service for equipments at Staging Area as needed;
7.	Ensure that communication is established with the incident Command Post ( ICP ) and other required locations e.g. different staging area, base camp etc;
8.	Maintain and provide resource status to Planning Section and Logistic Section;
9.	Maintain Staging Area in orderly condition and ensure that there is no obstruction to the in-coming and outgoing vehicles / resources etc;
10.	Demobilize Staging Area in accordance with Incident Demobilization Plan (IDP); and

11.	Perform such other duties as instructed by OSC;
<b>9.</b>	<b>BRANCH DIRECTOR-SEARCH &amp; RESCUE -SP,S/A in State , Dy.SP in Dist. and Dy.SP in Sub-Divisional Level)</b>
1.	Rescue & Relief Branch Director shall work under the supervision of the Operations Section Chief and is responsible for the implementation of IAP as per the assigned role;
2.	Attend planning meetings as required by the Operations Section Chief ;
3.	Review Assignment Lists_for Divisions or Groups under his/her Branch;
4.	Assign specific tasks to Divisions and Groups Supervisors;
5.	Supervise Branch Functions;
6.	Resolve problems reported by subordinated;
7.	Report to Operations Section Chief regarding: <ul style="list-style-type: none"> <li>▪ Modification required if any, in the IAP;</li> <li>▪ Need for additional resources;</li> <li>▪ Availability of surplus resources; and</li> <li>▪ When hazardous situations or significant events occur, etc.</li> </ul>
8	Provide strike team, task force and single resource support to various activated tactical operational areas;
9	Ensure that all team leaders maintain record of all important activities relating to their field operations;
10.	Perform such other duties as instructed by OSC; and
11.	Maintain record of various activities performed.
<b>10.</b>	<b>DIVISION AND GROUP SUPERVISORS -Dy.Sp in State and Dist. and Inspector in Sub-Division level</b>
1.	Responsible for the implementation of the division/group assignment list;
2.	Responsible for the assignment of resources within the Division or Groups under him;
3.	Report on the progress of operations, and the status of resources within the Division or Group;
4.	Circulate organizational / divisional assignment list_to the leaders of the group, strike Team Task Force;
5.	Review assignment and incident activities with subordinates and assign tasks as per situation;
6.	Coordinate activities with adjacent Divisions or Groups;
7.	Submit situation and resources status to BD and OSC;
8.	Report hazardous situations, special occurrences or significant events (e.g., accidents, sickness, deteriorating weather condition, etc) to OSC and BD or immediate supervisor;
9.	Resolve problems within the Division or Groups;

10.	Participate in the Development of plans for next operational period; and
11.	Perform such other duties as instructed by OSC.
<b>11.</b>	<b>STRIKE TEAM OR TASK, FORCE LEADER –Dy SP in State, Inspector in District and sub Inspector in Sub-Division level.</b>
1.	Review assignments with members of his/her team;
2.	Report work progress;
3.	Coordinate activities with adjacent strike teams, task forces and single resources if assigned;
4.	Establish and ensure communication;
5.	Perform such other duties as instructed; and
6.	Maintain record of various activities.
<b>12.</b>	<b>SINGLE RESOURCE LEADER- EE,APWD/AE, APWD/ JE,APWD</b>
1.	Obtain necessary equipments/supplies;
2.	Assess local weather/environmental conditions in job assignment area and inform the in-charge;
3.	keep in contact with his / her supervisor;
4.	Perform such other duties as instructed by his / her supervisor.
<b>13.</b>	<b>SHIPPING BRANCH DIRECTOR ( DIRECTOR SHIPPING SERVICES )</b>
1.	Activate and manage different operations groups; Road, Ship and Air;
2.	Coordinate with the Logistic Section (LS) for required resources, and activate groups of his / her branch;
3.	Coordinate with Shipping, Transport Department and Airport Authority for support as per requirement;
4.	Provide ground support to the Air operations and ensure appropriate security arrangements;
5.	Provide Road transportation support to the Ship and Air group as required;
6.	Ensure safely of all personnel of his branch involved in the response activities;
7.	Report progress of the transportation to the OSC / IC;
8.	Prepare transportation plan as per Incident Action Plan ( IAP );
9.	Determine need for additional resources and place demand accordingly in advance;
10.	Resolve problems of his / her branch;
11.	Ensure that status of hired resources is maintained and are released timely when their need ends;
12.	Maintain record of all performed activities; and

13.	Perform such other duties as instructed by IC / OSC;
14.	<b>GROUP SUPERVISOR (ROAD OPERATION) Dir. Transport In State and AD in District and Sub-Division Level</b>
1.	Ensure transportation of resources by road to the affected site;
2.	Ask for personal support, if required;
3.	Attend planning meeting on the direction of operation section chief;
4.	Determine coordination procedures with various destinations per IAP;
5.	Ensure proper parking locations;
6.	Resolve conflicts of the group, if any;
7.	Update Road operation plans if required and intimate to the higher authority;
8.	In case of accidents, inform the TBD, the local police and provide assistance in investigation, if required;
9.	Ensure that mechanics are available for repair of vehicles and keep them on road. Also ensure adequate availabilities of POL;
10.	Maintain Unit Log of all important activities relating to number of vehicle deployed, source of vehicles; govt. and private, location where vehicles are deployed with resource details, they are carrying, etc.;
11.	Support and coordinate the activated rail operations group, water operations group and air operations group as per requirements; and
12.	Perform such other duties as instructed by Operation Section Chief (OSC) / Transportation branch Director (TBD);
15.	<b>VEHICLE COORDINATOR -Asst. Director (Transport) in all level)</b>
1.	The Coordinator - Vehicle Operations_is primarily responsible for coordinating the road transport needs;
2.	Survey assigned incident area to determine situation and other potential problems in the context of transportation;
3.	Ask for Assistant Coordinator- Vehicle Operations depending on the magnitude and requirement;
4.	Coordinate with Staging Area (s) Manager (SAM) for smooth transportation resources;
5.	Receive assignments, brief drivers, assign missions, supervise vehicle movement and attend to the vehicle maintenance and repair needs;
6.	monitor activities of all assigned vehicle and keep the higher authorities informed;
7.	Report incidents or accidents that occur in road operation to Transportation Branch Director (TBD);
8.	Maintain record of supply of resources to different locations, vehicle movements;
9.	Request <u>security</u> for transportation of relief material if required;
10.	Maintain coordination with loading and unloading points.

<b>16. LOADING/UN-LOADING IN-CHARGE (Air/Ship/Road)( Controller Labour Force or his representative)</b>
1. The Loading / Un-loading-in-charge shall work under the Coordinator;
2. Responsible for the safe operations of loading / un-loading activities;
3. Obtain Operation summary from the group supervisor;
4. Ensure proper organizing in loading areas;
5. Supervise loading and unloading crews and collect equipments if required;
6. Time to Time inform coordinator about the progress of loading / unloading activities;
7. Prepare a loading / Un-loading plan with detail of where resources and destination;
8. Maintain record of performed activities ; and
9. Perform such other duties as instructed by Supervisor (Road, Rail, Water and Air).
<b>17. GROUP SUPERVISOR(SHIPPING OPERATION)(Asst. Director(Shipping) for the State , District and Sub-Division Level)</b>
1. The Coordinator – Shipping Operation is primarily responsible for coordinating all activities relating to transportation of resources by ship / motor boats / country boats etc.);
2. Survey assigned incident area to determine situation and other potential problems;
3. Coordinate with Staging Area Manager (SAM) for smooth transportation of relief materials in case so required;
4. Receive assignments, and supervise shipping movement activities;
5. Monitor continuously all shipping movement for their safety;
6. Ensure proper communication with ships deployed in rescue & relief;
7. Keep records of supplies to different locations, records of ship movements etc;
8. Report incidents or accidents that may occur in ship operation to Transportation Branch Director (TBD); and other designated authorities;
9. Assess requirements of POL etc for shipping operation and ensure their availability;
10. Maintain liaison with road operations; and
11. Perform such other duties as instructed by TBD / OSC.
<b>18. SHIP COORDINATOR (Wharf Superintendents)</b>
1. The Coordinator – Ship Operation is primarily responsible for coordinating all activities relating to transportation of resources by ships / motor boats / country boats etc.);
2. Survey assigned incident area to determine situation and other potential problems;
3. Coordinate with Staging Area Manager (SAM) for smooth transportation of relief materials in case so required;

4.	Receive assignments, and supervise shipping movement activities;
5.	Monitor continuously all shipping for their safety;
6.	Ensure proper communication with ships deployed in rescue & relief;
7.	Keep records of supplies to different locations, records of ship movements etc;
8.	Report incidents or accidents that may occur in shipping operations to Transportation Branch Director (TBD); and other designated authorities;
9.	Assess requirements of POL etc for shipping operation and ensure them availability;
10.	Maintain liaison with road operations; and
11.	Perform such other duties as instructed by TBD / OSC.
<b>19. NODAL OFFICER (AIR OPERATION) under overall responsibility of CSO (Ops)/JOC(PBR), HQ, ANC</b>	
1.	Primarily responsible for the coordination with Various authorities for air operations;
2.	Project the type of Air support required to the appropriate authorities based on the IAP and place the demand at least 24 hours in advance or as quickly as possible;
3.	Inform the IC / OSC about the air movement / landing schedule in their respective areas;
4.	Ensure that relevant Maps of the incident locations are available with all agencies involved in the air operations. This is absolutely necessary to give the correct coordinates etc, of the location where Air support is required;
5.	Determine the suitability of helipad / helibase in coordination with the air force authorities and the Union Territory authorities;
6.	Maintain communication with Traffic Control and the ground support regarding the air movement and other related activities;
7.	Assist the Incident Commander and the Logistic Section Chief in the procurement of required ATF, etc;
8.	Report on Air Operations activities to the Ro; and
9.	Perform such other duties as assigned by Ro.
<b>20. GROUP SUPERVISOR (AIR OPERATION) under overall responsibility of CSO (Ops)/JOC(PBR), HQ, ANC</b>	
1.	The Supervisor – Air Operation is primarily responsible for providing ground support to Air Operations as per the IAP;
2.	Report to the TBD the progress of air operations are available at the concerned with the Nodal Officer, IC, OSC and TBD;
3.	Ensure resources / supplies required for the Air Operations are available at the concerned locations;
4.	Keep appropriate Maps in order to provide correct coordinates to the pilots and other concerned in the Air Operations;
5.	Ask for personnel support, if required;
6.	Ensure re-fueling facilities are available at the landing and takeoff locations;

7.	Ensure that Helibase and Helipad locations are identified and approved by the appropriate authority;
8.	Determine need for assignment of personnel and equipment at each Helibase and Helipad;
9.	Ensure identification and marking of Helibase and Helipad;
10.	Ensure that communication system is in the place for required communication;
11.	Update landing and takeoff schedule of aircrafts / helicopters as informed by nodal officer;
12.	Ensure preparation of the load manifest for proper loading / emplaning;
13.	Ensure that proper packaging and weighing facilities are in place and used for loading of relief materials;
14.	Ensure aircraft rescue firefighting service for Helibase and Helipad security proper light, smoke candles, weighing facilities, wind direction socks, etc, are in place;
15.	Ensure that Unit Log is maintained; and
16.	Perform such other duties as directed by Transportation branch Director (TBD)
<b>21.</b>	<b>HELIBORNE/HELIPADE-IN-CHARGE under overall responsibility of CSO (Ops)/JOC(PBR), HQ, ANC</b>
1.	Primarily responsible for all ground support requirement for helicopters at the location;
2.	Keep appropriate Maps in order to provide correct coordinates to the pilots;
3.	Survey the Helibase / helipad area to determine situation, aircraft hazards and other potential problems;
4.	Coordinate with the ground supervisor for helicopter operation;
5.	Determine and implement ground / air safety requirements and procedures;
6.	Maintain continuous observation of the assigned Helibase / helipad and inform the group supervisor of any unusual happening of hazards that may affect the air operations;
7.	Ensure that all personnel deployed at the Helibase and Helipad are aware of the safety requirement;
8.	Establish ground communication facilities;
9.	Notify supervisor immediately of any delay in helicopter schedule;
10.	Ensure aircraft rescue firefighting service for Helibase and Helipad, and light, smoke candle, weighing facilities, wind direction socks, etc, are in place and properly working;
11.	Ensure proper rest and refreshment and water & sanitation for air crews;
12.	Ensure dust abatement procedures are implemented at Helibase / Helipad;
13.	Inform the supervisor about the mission completion;
14.	Report to the Group Supervisor; and

15.	Perform such other duties as assigned by the group supervisor;
22.	<b><u>PLANNING SECTION CHIEF (PSC) (Dy. Director (DM) in State, AC in District and Tehsildar in Sub-Divisional Level.)</u></b>
1.	Coordinate with the activated Section Chiefs;
2.	Ensure collection , evaluation , and dissemination of information about the incident;
3.	Responsible for preparation of the Incident Action Plan (IAP);
4.	Responsible for ; a) Assessing the current situation, b) Predicting probable course of incident and c) preparing alternative strategies for the operation and control of the incident through Incident Action Plan (IAP);
5.	Coordination with activated sections of IRT(s) for further planning and preparation of IAP;
6.	Utilize IT solution for Pro-active planning, GIS for decision support modeling capabilities for assessing and predicting causalities and for comprehensive response management;
7.	Plan to activate and de-activate IRS organizational positions as appropriate in consultation with IC and OSC;
8.	Determine need for any specialized resources in support of the incident management;
9.	Collect information as necessary on technical matters such as weather, environment, toxicity, etc., from the concerned department/ agencies and keep IC and OSC informed;
10.	Provide periodic predictions on incident potential;
11.	Report to incident commander (IC) of any significant changes that take place in the incident status;
12.	Compile and display incident status information at the incident command post (ICP);
13.	Oversee Preparation and implementation of incident Demobilization Plan;
14.	Incorporate plans regarding Traffic, Medical ,Communication , and site safety into the IAP;
15.	Perform such other duties as directed by IC; and Maintain Unit Log.
23.	<b><u>RESOURCE UNIT LEADER Labor Commissioner/Assistant Labour Commissioner/ Labour Inspector</u></b>
1.	Responsible for maintaining the status of all assigned resources (Primary and support) at an incident site. This may be achieved by overseeing the check – in of all resources, maintaining a status –keeping system indicating current location and status of all resources and display them in ICP;
2.	The resource Unit leader should have a complete inventory of all resources available. She/he shall also have information about availability of all required resources at other location and prepare plan for their mobilization , if required;
3.	Ensure and establish check – in function at various incident locations;
4.	The Resources Unit Leader must update the PSC /IC about the status of resources



	arrived, and dispatched from time to time;
5.	Coordinate with the various activated Branches /Divisions /Groups of Operation Section for status /Utilization of allotted resources;
6.	Ensure quick and proper Utilization of perishable resources;
7.	Perform such other duties as directed by planning section chief (PSC) ; and
8.	Maintain records of various activities performed.
<b>24. CHECK-IN/STATUS RECORDER( Revenue Dept Representative)</b>	
1.	Report to the Resources Unit Leader;
2.	Ensure that all resources to an incident are accounted for at each check –in point;
3.	To function properly, obtain Required work ,materials, including check –in Lists Resource status display boards etc.;
4.	Establish communication With the communication Centre and Ground support Unit of Logistic Section;
5.	Ensure display of signboard So that arriving resources can easily find check- in location (s);
6.	Record check –in information on check - in lists as per the Format;
7.	Transmit check –in information to Resources Unit on regular prearranged schedule or as needed;
8.	Forward completed Check –in Lists to the Resources Unit;
9.	Perform such other duties as directed by planning Section Chief (PSC);and
10.	Maintain records of various activities performed.
<b>25. SITUATION UNIT LEADER (Director of Industries/Asst Director/ IPO)</b>	
1.	Responsible for Collection, Processing and organizing all incident information as soon as possible for analysis;
2.	Prepare future projections of Incident growth, maps of affected site;
3.	Prepare situation and resource status and disseminate on as required basis;
4.	Prepare periodic predictions of situation and keep the PSC /IC informed;
5.	Provide photographic Services and maps to responders, if required;
6.	Attend IAP Meeting with required information /data/ documents , survey of India maps etc; and
7.	Maintain records of various Activities performed.
<b>26. DISPLAY PROCESSOR (DP) Mgr. IT /Asst Manager IT/ Computer Operator</b>	
1.	Responsible for the display of incident status obtained from field observers / strike Team /Task Force , resource status reports, aerial and photographs and other data from technical sources;
2.	Ensure timely completion of display Chart;

3.	Obtain necessary equipment and stationary;
4.	Assist in analyzing and evaluating field reports;
5.	Reports to the situation Unit Leader ;and
6.	Maintain records of various activities performed.
<b>27.</b>	<b>FIELD OBSERVER (FO) Tehsildar, State Revenue Inspector- Districts and Patwari- Sub-Divisional Level)</b>
1.	Report immediately any condition observed which may cause danger and safety hazard to personnel and affected community. This should include determining local weather conditions also;
2.	Gather intelligence that shall lead to accurate predictions;
3.	Report to situation Unit; and
4.	Maintain records or various activities performed.
<b>28.</b>	<b>DOCUMENTATION UNIT LEADER (DUL)( Statistical Officer (DM)/ Senior Investigator(DC Office)/ Junior Investigator</b>
1.	Ensure that all the required forms and stationery are procured and issued to all the activated sections, branches, division, groups and Units;
2.	Responsible for accurate compilation of all information and reports related to the incident;
3.	Review / Scrutinize records / various IRS forms for accuracy and completeness;
4.	Inform appropriate Units of errors or omissions in their documentation and ensure that errors and omission are rectified;
5.	Store files properly for Post- incident analysis and report;
6.	Perform such other duties as directed by PSC ; and
7.	Maintain records of various activities performed.
<b>29.</b>	<b>DEMOBILIZATION UNIT LEADER- (Dy Registrar of Cooperative Societies/ ARCS)</b>
1.	Prepare demobilization Plan;
2.	Instruct all line departments/ NGOs involved in the emergency operation for submission of their de-mobilization plan;
3.	Coordinate with Operations section for collection of information on demobilization of various activated divisions /branches/ staging area, Camps, resources, etc;
4.	Identify surplus resources and send tentative demobilization plan in consultation with PSC and give priority to their demobilization;
5.	Develop incident Check-out functions for all Units in consultation with the line departments / and other stake holders involved;
6.	Plan for logistics and transportation support for demobilization in consultation with logistic Section;
7.	Disseminate demobilization plan at the appropriate time to various stakeholders involved in the response activities;

8.	Ensure that all Sections /Unit/Teams/resource understand their specific demobilization responsibilities and avail demobilization facilities;
9.	Arrange for proper supervision and execution of the incident Demobilization plan;
10	Brief Planning Section Chief (PSC) on the demobilization progress;
11	Request the Planning section Chief (PSC) for additional human resources. If required;
12	Perform such other duties as assigned by Planning Section Chief (PSC) ; and
13	Maintain records of various activities Performed.
<b>30</b>	<b>TECHNICAL SPECIALISTS (TS) (SE / EE/AE APWD )</b>
1.	The technical specialist (s) shall provide technical support to the response management. A data base of Technical Support (TS) shall be prepared in advance at the District, Union Territory, Metropolitan City and Union Territory levels and incorporation in their Disaster Management Plan.
<b>31.</b>	<b>LOGISTICS SECTION CHIEF (Director (Civil Supplies) for State, Dy. Director Civil Supplies for District and Asst Director, Civil Supplies for Sub-Division level)</b>
1.	Coordinate with the activated Section Chiefs;
2.	Responsible for providing logistic and financial support to all response effort ;
3.	Participate in development and implementation of the incident Action Plan (IAP);
4.	Keep RO/ IC informed on related financial issues;
5.	Request for sanction of imprest Fund;
6.	Supervise the activated Units;
7.	Responsible for the safety of the personnel of the section;
8.	Assign work locations and preliminary work tasks to section personnel;
9.	Ensure that plan is developed to meet the logistic requirement of the IAP with the help of Comprehensive Resource Management System;
10.	Brief Branch Directors and Unit Leaders;
11.	Anticipate over all logistic requirement of relief operations and prepare accordingly;
12.	Constantly review the Communication Plan ,Medical Plan and Traffic Plan to meet the changing requirements of the situation;
13.	Assess the requirement of additional resource and take step for their procurement in consultation in the RO/IC;
14.	Provide logistic support for the demobilization Plan as approved by the IC;
15.	Ensure release of Unit resources in conformity with Demobilization Plan;
16.	Ensure that the hiring of the requisitioned resources is properly documented and paid by the finance branch;

17.	Perform such other duties as instructed by RO /IC; and
18.	Maintain Unit Log.
<b>32.</b>	<b>SERVICE BRANCH DIRECTOR (Director Health for State, Medical Superintendent for District and CMO for Sub-Division level)</b>
1.	Work under the supervision of Logistic Section Chief (LSC), and is responsible for the management of all required service support for the incident management.
2.	Manage and supervise various Units of the branch : 1) Communication Unit, 2) Medical Unit,3) Food Unit and 4) any other Unit activated;
3.	Discuss with activated Unit leaders the material and resources required and procure the same through LS;
4.	Ensure proper dispatch of personnel /teams / resources etc;
5.	Prepare assignment list for the Service Branch;
6.	Coordinate the movement and deployment of the various services Units with the operation section;
7.	Keep the Logistic Section Chief (LSC) informed about the progress of service branch from time –to time;
8.	Resolve Service Branch Problems ,if any;
9.	Perform such other duties as directed by incident Commander (IC) /LSC; and
10.	Maintain Unit Log.
<b>33.</b>	<b>COMMUNICATION UNIT LEADER (CUL) Special Secretary (IT) for State, Deputy Manager IT for District and Sub-Divisional Officer for Sub-Division level)</b>
1.	Communication Unit Leader shall work under the direction of the service Branch Director;
2.	Responsible for providing Communication facility as and when required;
3.	Ensure that all communication equipment available is in working conditions and the network is functional;
4.	Supervise Communications Unit activities;
5.	Maintain records of all Communication equipment deployed in the field;
6.	Recover equipment provided by Communication Unit after the incident is over –II should be properly linked with demobilization Plan;
7.	Ensure setting up of a message Centre to receive and transmit radio telephone and other messages from various activated sections, branches; Units and from higher authority and maintain record of it;
8.	In case of Possible failure of a communication network ,prepare a back up plan and execute alternative communication network;
9.	Ask for and ensure adequate staffing support;
10.	Ensure that the communication plan is supporting the IAP;
11.	Demobilize Communications Center in accordance with incident Demobilization Plan ;and

12.	Maintain records of various performed duties.
<b>34.</b>	<b>MEDICAL UNIT LEADER (Medical Superintendent for State/CMO for District and MO for Sub-Division level)</b>
1.	The Medical Unit Leader shall work under the direction of the service Branch;
2.	Responsible for ; a) Development of the Medical Plan and procurement of required resource as per IAP , b) providing medical aid and transportation for victims, and maintaining the record of the same.
3.	Respond to request for medical aid, transportation , and medical supplies of Operations Section;
4.	Ask for more human resources, as and when required to meet the incident objectives;
5.	Mobilize medical personnel as per request of Rescue & Relief Service Branch Director (RRS –BD) for field level support and ensure that they are in the field;
6.	Maintain records of various performed duties and if directed submit report.
<b>35.</b>	<b>FOOD UNIT LEADER (FUL) (Asst Director( CS&amp;CA) /(Asst Director( CS&amp;CA)/ (Asst Director( CS&amp;CA)</b>
1.	The Food Unit Leader shall work under the direction of the Service Branch Director;
2.	Responsible for supplying food to ; a) personnel of IRT (s) like ICP ,camps, Base, Staging Areas, etc., b) Victims at the temporary shelters / relief Camps as directed by OSC /LSC;
3.	Determine food and drinking water requirement and take steps for their procurement;
4.	Supply resources to various activated sections /Branches / Units / groups of IRT as approved by the service Branch Director (SBD);
5.	Maintain an inventory of receipt and dispatch of resources;
6.	Supervise the unit activities;
7.	Perform such other duties as directed by Logistic Section Chief (LSC / Service Branch Director SBD ; and
8.	Maintain record of various performed duties.
<b>36.</b>	<b>SUPPORT BRANCH DIRECTOR (SE, APWD for State, EE, APWD for District and AE, APWD Sub-Division level)</b>
1.	Work under the supervision of LSC, and supervise the function of : a) supply Unit, b) facility Unit and c) Ground Support Unit;
2.	Procure and dispatch required tactical material and resources for operations with the concurrence of the Section Chief;
3.	Participate in Planning meeting of the Logistics Section;
4.	Ensure that assignment list is prepared and circulated to respective Units under Him /her;
5.	Coordinate various activities of support branch;
6.	Keep the Logistic Section Chief (LSC) informed about work progress;

7.	Resolve problems within his /her Units, if any;
8.	Perform such other duties as directed by LSC ;and
9.	Maintain record of various performed duties.
<b>37.</b>	<b>SUPPLY UNIT LEADER (Inspector W&amp;M for State/ Districts and Dy. Tehsildar for Sub-Division level)</b>
1.	Work under the supervision of support Branch Director (Sup.BD);
2.	Responsible for;
	a) Organizing movement of personnel, equipment and supplies.
	b) Receiving and storing safely all supplies required for the incident response.
	c) Maintain inventory of supplies and equipment, and
	d) Organize repair and servicing of non- expenditure supplies and equipment;
3.	Participate in Planning meeting of LS;
4.	Monitor the kind, type and quantity of supplies;
5.	Receiver and respond to requests for personnel , supplies, and equipment from the activated sections /Branches /Units /Groups of the IRS organization;
6.	Ask for human resources for assistance , if needed .These assistants may be deployed for different functional activities such as; i) Resources Ordering ii) Resources receiving and iii) Tool and equipment specialist.
<b>38.</b>	<b>TOOL AND EQUIPMENT SPECIALIST (EE(E&amp;M), APWD for State, AE(E&amp;M),APWD for District and JE(E&amp;M, APWD for Sub-Division Level)</b>
1.	Report to supply Unit Leader;
2.	Responsible for service and repair of all tools & equipments and keep the supply Unit leader informed;
3.	Perform such other duties as directed by Sup. UL; and
4.	Maintain records of various activities performed.
<b>39.</b>	<b>FACILITIES UNIT LEADER (SE(Elec) for State, AE, (Elec) for District for District and Sub-Divisional Level )</b>
1.	Primarily responsible or; a) The layout and activation of incident facilities, e.g., Base, Camp (s), incident Command Post, etc.) Arrange /Provide basic amenities for the responder;
2.	Report to the support Branch Director;
3.	Locate the different facilities as per IAP;
4.	Participate in Planning meeting of the section;
5.	Prepare list for each facilities' and its requirements in coordination with the LSC;
6.	Ask for human support to monitor and manage facilities at Base /Camp etc ;

7.	Perform such other duties as directed by Sup. BD; and
8	Maintain record of various activities performed.
<b>40.</b>	<b>GROUND SUPPORT UNIT LEADER EE(Civil), APWD for State, AE(Civil), APWD for District and JE(Elec) for Sub-Divisional Level)</b>
1.	Work under the supervision of Support Branch Director (Sup.BD);
2.	Provide transportation services for field operations;
3.	In case Air Operations are activated ,organize and provide required ground support;
4.	Provide maintenance and repair service to all the vehicles and related equipment being used for incident management as per proper procedure and keep the concerned line department informed through the Branch Director / Logistic Section Chief;
5.	Development and implementation of the incident Traffic Plan;
6.	Inform Resources Unit about the availability / serviceability of all vehicles and equipment;
7.	Arrange for and activate fueling requirements in consultation with service Branch Director;
8.	Maintain inventory of resources;
9.	Ensure safety measures within jurisdiction;
10.	Perform such other duties as directed by Support Branch Director (Sup.BD); and
11.	Maintain record of various activities performed.
<b>41.</b>	<b>FINANCE BRANCH DIRECTOR (Director, Accounts &amp; Budget) for District, Sr PAO, for District and JAO for Sub-Divisional Level)</b>
1.	The Branch Director shall work under the logistic section Chief;
2.	Attend Planning Meeting;
3.	In accordance with IAP Prepare list of resources to be procured / outsourced, obtain orders of competent authority as per financial rules and take steps for their procurement without procedural delay;
4.	Ensure that time records of hired equipments, personnel and their services are accurately computer as per government norms for payment;
5.	Examine / Scrutinize cost involved in the demobilization Plan and keep the LSC informed;
6.	Ensure that all obligation documents initiated at the incident are properly prepared , verified , completed and signed by appropriate authority;
7.	Brief LSC on all incident –related financial issues needing attention or follow-up;
8.	Perform such other duties as instructed by LSC / IC ;and
9.	Maintain records of various activities performed.
<b>42.</b>	<b>TIME UNIT LEADER (Asst Labour Commissioner for State/ Labour Inspector)</b>

1.	The Time Unit Leader (TUL) is responsible for time recording of hired equipment and personnel;
2.	Ensure that daily personnel and equipment time recording documents are prepared in compliance with government norms;
3.	Maintain separate logs for overtime hours, where ever applicable and ensure hired equipment is Utilized judiciously;
4.	Ensure that all record are correct and complete prior to demobilization;
5.	Brief Finance Branch Director on current problems and recommendations on outstanding issues, and follow –up required;
6.	Maintain records of various activities preformed; and
7.	Ask for support of human resources for assistances;
<b>43.</b>	<b>PROCUREMENT UNIT LEADER-( Conservator of Forest for State , District and Sub-Divisional Level</b>
1.	Responsible for administering all financial matters pertaining to vendor contracts;
2.	Review incident heeds and any special procedures with Finance Branch Director(FBD) ,as needed;
3.	Prepare a list of vendors from whom procurement may need to be done and follow proper procedure;
4.	Ensure al procurements ordered are delivered in time;
5.	Resolve disputes within delegated authority;
6.	Coordinate use of impress funds as required with the Finance Branch Director (FBD);
7.	Complete final processing of al bills arising out of the response management and send documents for payment with approval of IC /LCS and Finance Branch Director (FBD);
8.	Brief Finance Branch Director (FBD) on current problems with recommendations on outstanding issues, and follow –up requirements; and
9.	Maintain records of various activities performed.
<b>44.</b>	<b>COMPENSATIONS/CLAIMS UNIT LEADER (Sr PAO for State and District and AO for Sub-Division Level)</b>
1.	As per DM Act 2005, section 65, 66 provisions for payment of compensation has been made. Compensation has to be paid for requisitioning any premises, services, resources and vehicles for the purpose of disaster response and rescue operations etc.;
2.	The government may also decide to make ex-gratia payments depending upon the magnitude and the destruction/loss. There are some bench marks for quantifying the level of loss in different scenario like flood, drought, etc.;
3.	The IC shall a activate the compensation claims unit to compile the figures for loss of life, properly etc., and prepare all relevant documents for requisition of premises, services, resources and vehicles so that correct and proper payments may be made for such claims . This facilitates release of payments as per Union Territory government procedure and policy;



4.	Coordinate with the Planning section and operations section for collection of information on loss of life properly etc;
5.	Prepare a list of requisitioned premises, services, resources and vehicles, etc. The correct date and time of such requisition should also be maintained;
6.	Follow appropriate procedures for preparation of claims and compensation;
7.	If required ask for additional human resource; and
8.	Maintain records of various activities performed.
<b>45.</b>	<b>COST UNIT LEADER (Jr. PAO for State, Jr. AO for District and Sr. Accountant for Sub-Divisional Level)</b>
1.	The cost Unit Leader is responsible for collecting all cost data, Performing cost effectiveness analysis, and providing cost estimates and cost saving recommendations for the incident;
2.	Collect and record all cost data;
3.	Develop incident cost summaries in consultation with Finance Branch Director;
4.	Prepare resources –Use cost estimate for the Planning Section;
5.	Make Cost- saving recommendations to the Finance Branch Director;
6.	Complete all records prior to demobilization; and
7.	Maintain record of various activities performed.
<b>46.</b>	<b>SCIENCE &amp; TECHNOLOGY DST</b>
1.	Hazard Zonation, Mapping. and a compliance regime , and vulnerability analysis in multi hazard frame work;
2.	Use of GIS, remote sensing and GPS in DM Establishment of technological frame work to create an enabling regulating environment;
3.	Knowledge Management through Technical Specialists;
4.	Establish, upgrade and modernize the forecasting and early warning systems and partnership with World Meteorological Organization, Pacific Warning System and other regional and global institutions.
<b>47.</b>	<b>SOCIAL WELFARE (Director Social Welfare for State, CDPO for District and Mukhya Sevika for Sub-Divisional Level)</b>
1.	Welfare Task Force;
2.	Welfare of Physically Challenged;
3.	Welfare of Senior citizens;
4.	Welfare of Orphans / Widows.
<b>48.</b>	<b>CHIEF CONSERVATOR OF FORESTS (CCF(HQ) for State, DCF for District and ACF for Sub-Divisional Level)</b>
1.	S&T Inputs and Management of Shelters;
2.	Assessment of damage to Flora and fauna;

	3.	Assessment Of Damage To Minor Forest Produce.
49.	<b>PORTBLAIR MUNICIPAL COUNCIL (Secretary, PBMC)</b>	
	1.	Setting up of temporary Relief camps;
	2.	Temporary Shelter Task Force;
	3.	Revision of Municipal Regulations and safe construction practices;
	4.	Corpse Disposal Unit.
50.	<b>CHIEF EXECUTIVE OFFICERS ZILLA PARISHAD - (CEO-ZP /PRI for State, SE, ZP for District and EE/AE for Sub-Division Level</b>	
	1.	Setting up of temporary Relief camps;
	2.	Temporary Shelter Task Force;
	3.	Revision of Building Regulations and safe construction practices;
	4.	Relief supplies ,Water & sanitation
51.	<b>LIVELIHOOD SUPPORT (Director Industries for the State, AD (Industries) for the District and Industries Promotion Officer for Sub-Division Level.</b>	
	1.	Livelihood Support and Capacity Building;
	2.	Re-establishment of Micro & Small Enterprises;
	3.	Assessment of losses and damages to industrial units.
52.	<b>EDUCATION (Director of Education for the State, Asst. DE for the District and AEO for the Sub-Division Level)</b>	
	1.	Disaster Management Education and Capacity Building in Schools under National School Safety Programme of Govt. of India.

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## **Chapter VIII**

### **VILLAGE CONTINGENCY PLANS**

**8.1** The Village Disaster Management Committee (VDMC) and Village Task Forces (VTF) are responsible to update the Village Contingency Plan at least once in six months and to execute disaster mock drills. Any additions and deletion in the Village Contingency Plan, execution of Mock Drill and events on Disaster Management undertaken by the VDMC shall be duly intimated to the Tehsil/ District Control Room/ Emergency Operation Centre. The Village Contingency Plan will comprise of the following:-

- Village Profile
- Social Map
- Disaster Time Line Map
- Risk and Vulnerable Map
- Resources Map
- Mitigation Plan to reduce risks
- Community Response System
- Village Disaster Management Committee
- Role and Responsibilities of Task Forces
- Village contingency Funds
- Mock Drill Plan

Following will be the Community Task Forces:

1. Early Warning and Communication Task Force
2. Search Rescue and Evacuation Task Force
3. First Aid Task Force
4. Psycho Social Counseling Task Force
5. Temporary Shelter Management Task Force
6. Water and Sanitary Task Force
7. Relief Coordination Task Force
8. Damage Assessment Task Force
9. Carcass Disposal Task Force
10. Peace Keeping Task Force

#### **8.1.1 Panchayat Level Disaster Management Committee**

The Pradhan Circle Disaster Management Committee shall consist of the following:

1. Pradhan (Convener) - Chairman
2. Gram Panchayat Up Pradhan
3. Gram Panchayat Secretary
4. Village Level Officials representing Government Departments / Organizations
5. Gram Panchayat Members
6. President / Secretary of Village Youth Clubs / Associations, Mahila Mandals.
7. Organizers of (recurring) Fairs / Festivals / Social Workers
8. Patwari – Member Secretary

**8.1.2** If there is more than one Pradhan Circle in a Gram Panchayat, the Pradhan of such Panchayat shall be the member of the Pradhan Circle which covers the largest Gram Panchayat area. The Up-Pradhan of such Gram Panchayat shall be the member of that Pradhan Circle Disaster Management Committee which covers the second largest area of the Panchayat and Sarpanch of such Gram Panchayat shall be the member of that Pradhan Circle Disaster Management Committee which covers third largest area in such Gram Panchayat. If the Pradhan Circle covers more than one Gram Panchayat, the Pradhans of all such Gram Panchayats shall be the members of the Pradhan Circle Disaster Management Committee.

**Tribal Village Disaster Management Committee**

**8.1.3** The following shall be the composition of Tribal Village Disaster Management Committee.

1. First Captain of the Village (Village Chief) - Convener
2. Second Captain of the Village
3. Third Captain of the Village
4. Head of each "Tuhet" (Joint family)
5. Village Level Officials of the Government Departments / Organizations.
6. Representative of Village Youth Clubs /Associations & Mahila Mandals.
7. Organizers of (recurring) Fairs / Festivals.

**Camp Village Disaster Management Committee**

**8.1.4** Composition of Camps /Village Disaster Management Committee shall be as under :

- i) Senior most Government official Convener
- ii) All other senior Government officials
- iii) Representatives of Village Youth Clubs / Associations / Mahila Mandals.
- iv) Organizers of (recurring) Fairs / Festivals.

**Municipal Area Disaster Management Committee**

**8.1.5** Composition of Municipal Area Disaster Management Committee shall be as under:

- (j) Chairman Municipal Council - Chairman
- (ii) Ward Councilors - Member
- (iii) Secretary Municipal Council - Member
- (iv) Area Tehsildar - Member Secretary
- (iv) Representatives of NGO - Member  
(Who have been registered by DC)
- (vi) Organizers of (recurring) Fairs /Festivals.

**8.1.6** The above Disaster Management Committees shall meet during the first week of October and April every year. The Convener shall intimate exact date and time of the meeting to all members. He shall draw up the minutes and send to all concerned for further necessary action. The action taken shall be reviewed in next meeting of the

Disaster Management Committee.

**8.1.7** The functions will be similar to that of the Sub Division Disaster Management Committee.

**8.1.8** There shall be a Control Room functioning round the clock at the Village level Disaster Management Committee following the occurrence of a Disaster.

**8.1.9** Village Volunteer Task Force

**Panchayat Village Volunteer Task Force**

**8.2.0** There shall be a Voluntary Group of able bodied men and women in each Gram Panchayat Village, Tribal Village, Municipal Ward and Camp Village constituting the Village Volunteer Task Force.

**8.2.1** The members of this Task Force shall be undertaking the Rescue and Relief operations instantaneously in the village following the occurrence of a Disaster in accordance with the Disaster Management Plan.

Each of such groups of Village Volunteers shall have 2-3 teams in it comprising of about 15 members living in immediate neighbourhood led by a Team Leader. The Team Leader is chosen unanimously by the members because of his leadership qualities (including his special or technical knowledge / skills useful in Disaster Management).

**8.2.2** Each Group of 30-50 Volunteers led by the respective Panchayat Member shall also have 3-5 persons as cooks, capable of cooking community food.

**8.2.3** The Gram Panchayat shall maintain a Register of Village Volunteer Task Force group-wise (i.e. each Panchayat Member-wise). The Secretary of the Gram Panchayat shall issue an Identity Badge to each member of the Volunteer Task Force who will wear the same while they are managing Disasters. The Identity Badge shall indicate the name and number of the member of Task Force, name of the Village and Gram Panchayat etc.

**8.2.4** The Panchayat Member shall continue to be the Group leader of the Village Volunteer Task Force even after dissolution of Gram Panchayat and shall handover the leadership to his successor.

**8.2.5** The Convener of the Pradhan Circle Disaster Management Control Room shall report to the concerned Tehsildar and Assistant Commissioner about the outstanding work done by any person in the Disaster Management. The Assistant Commissioner shall forward the same to Deputy Commissioner with his comments.

**Municipal Ward Volunteer Task Force**

**8.2.6** The Councilor of each Ward in the Municipal area shall mobilize a Group of 100-200 Volunteers consisting of able bodied men and women, members of Clubs / Associations, Mahila Mandals etc. and he / she shall be the Group Leader of the same. Such Group shall have 5-10 teams consisting of about 20 members living in

immediate neighbourhood each lead by a Team Leader chosen by the members themselves because of his natural leadership qualities and special or technical knowledge or skill useful in Disaster Management.

The Councilor shall lead the Rescue and Relief Operations instantaneously following the occurrence of a Disaster. The Ward Councilor shall continue to be the Group Leader even after the dissolution of the Municipality. He shall handover the leadership to his successor.

- 8.2.7** The Secretary, PBMC shall maintain a register of the Volunteer Task Force Ward-wise. He shall issue an identity Badge to each member of the Ward Volunteer Task Force who shall wear it while managing the Disaster.

The Secretary, PBMC shall send the names of persons with the details of the officials who have done outstanding work during the disaster to the concerned area Tehsildar and the Assistant Commissioner. The later shall forward the same to Deputy Commissioner with his/her remarks.

#### **Tribal Village Volunteer Task Force**

- 8.2.8** Every head of the Joint Family (Tuhet) shall enlist and maintain a group of 5-10 able bodied men and women. All such groups together shall constitute the Tribal Village Volunteer Task Force to manage the disaster. The village First Captain shall be the Group Leader and shall issue the Identity Badge/Specified Jacket to every member of the Volunteer Force to wear during the management of Disaster.
- 8.2.9** The Village First Captain shall send the names with details of the outstanding work done by the persons in Disaster Management to the concerned area Tehsildar and Assistant Commissioner. The later shall forward the same to Deputy Commissioner with his/her comments.

#### **Camp Village Volunteer Task Force**

- 8.2.10** All able bodies Government Servants /members of Associations / Clubs, Mahila Mandals shall together form Camp Village Volunteer Task Force. The senior most Government Servant in the village shall issue Identity Badge/Specified Jacket to every member of the Task Force. The Camp Village Volunteer Task Force shall have teams consisting of people living in the immediate neighborhood and each team shall be led by a Team Leader. The Team Leader having leadership qualities and special or technical knowledge or skills useful in Disaster Management.
- 8.2.11** The senior most Government Servant shall send the names of the persons with the details of outstanding work done by them in the Disaster Management to the concerned area Tehsildar and Assistant Commissioner. The later shall forward the same to the Deputy Commissioner with their comments.

**Disaster Management Control Rooms**

**8.2.12** The Panchayat Level Circle Disaster Management Control Room shall consist of the Following:

- (i) Pradhan
- (ii) Secretary, Gram Panchayat Pradhan, Gram Panchayat
- (iii) Revenue Inspector/Patwari/ senior most Govt. Official if any from the Panchayat area

**8.2.13** Tribal Village Disaster Management Control Room shall consist of the following:

- (i) First Captain of the village
- (ii) Second Captain of the village
- (iii) Senior most Government Official (if any) for that village.

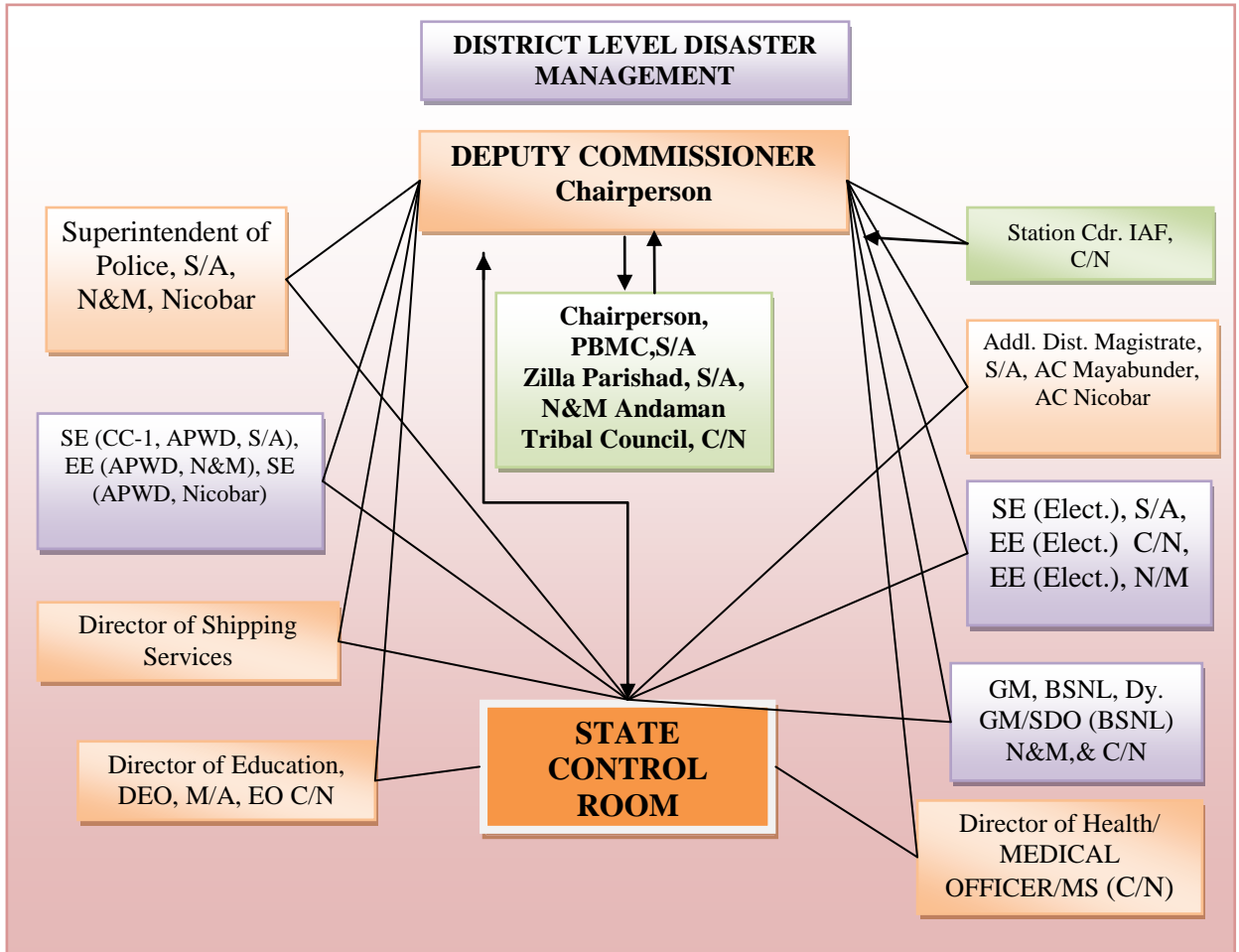
**8.2.14** The Camp Village Disaster Management Control Room shall consist of the three senior most Government Officials of the Camp Village.

**8.2.15** The Municipal Area Disaster Management Control Room shall consist of the following:

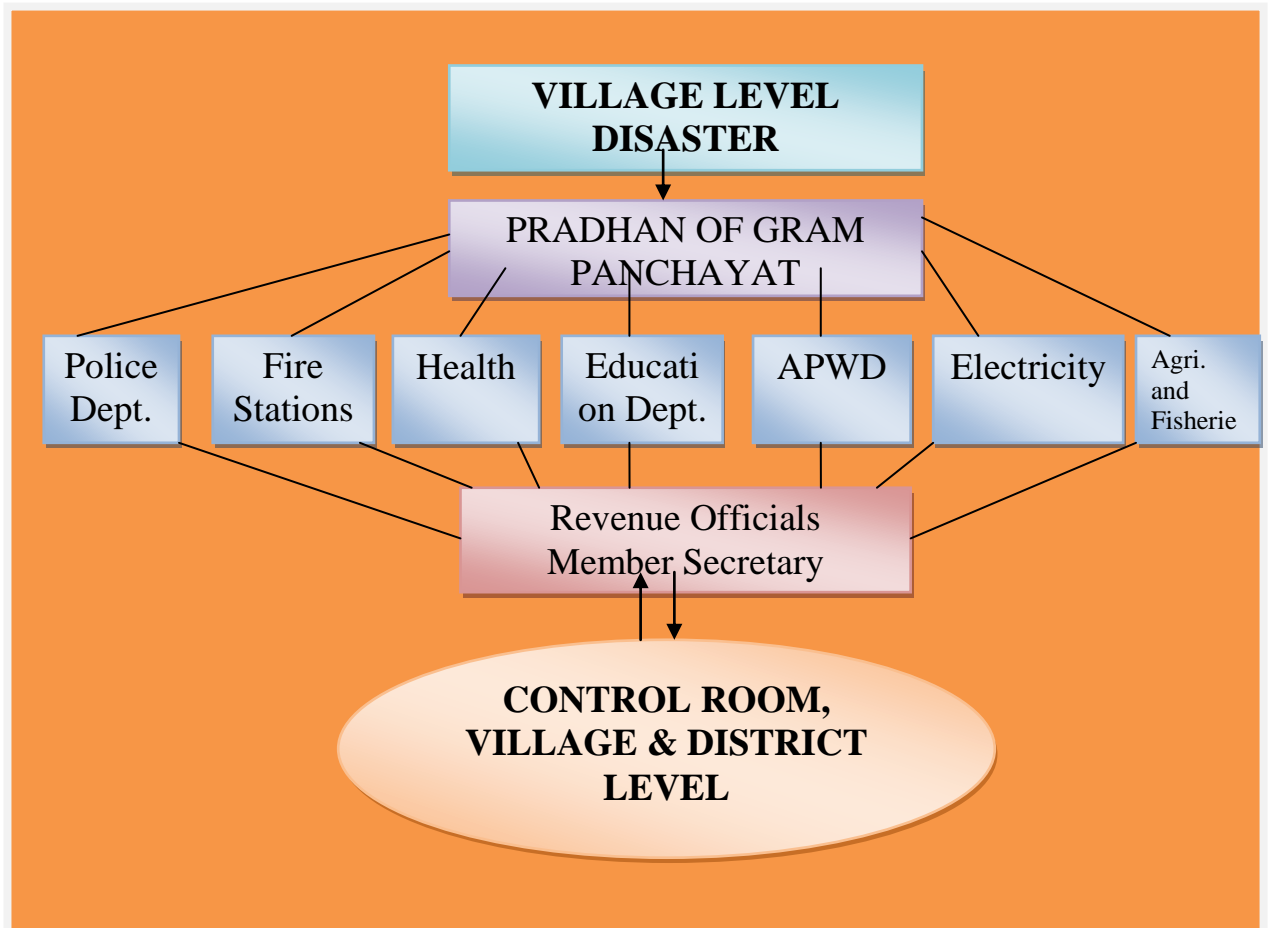
- (i) Chairman, Municipal Council
- (ii) Secretary Municipal Council
- (iii) Tehsildar of the area.

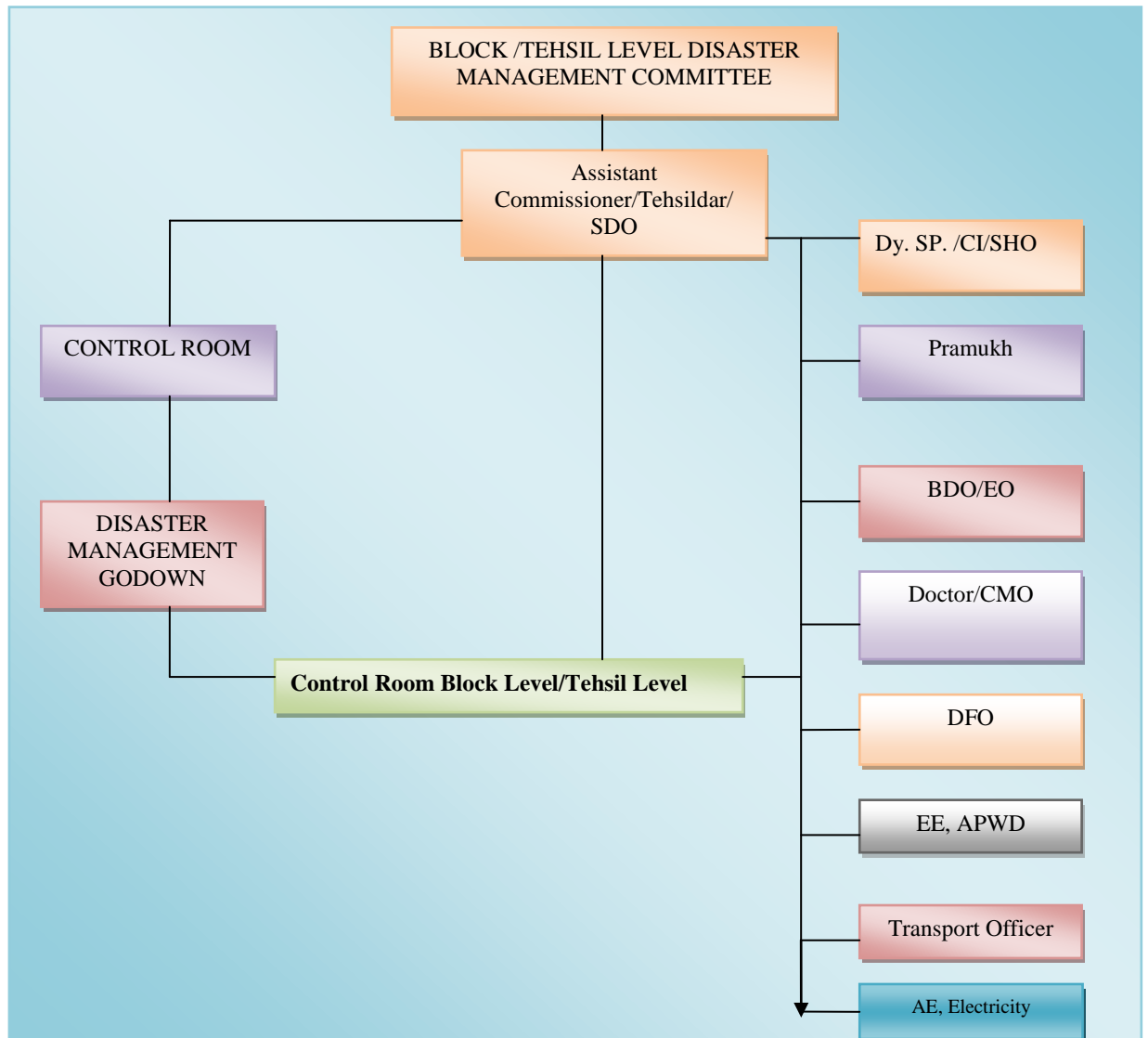
**8.2.16** Functions of these Disaster Management Control Rooms and the returns to be filed will be similar to those indicated for the Subdivision/Tehsil Disaster Management Control Rooms.

**ORGANISATION STRUTURE OF DISTRICT, VILAGE AND BLOCK LEVEL DISASTER MANAGEMENT**









### 8.2.18 The Community Contingency Plan

Who makes the plan?

- The Community:- It has to be made by the inhabitants of the village itself.
- NGOs and Government Officials:-To carry forward the process of discussions and to guide the community. They have a necessary authority and skills to motivate the community.

#### The Stages

- Review and Analysis- Group Discussion
- Situation Analysis- Group Discussion and Social Mapping.
- Hazard Mapping- Social Mapping.
- Risk Mapping- Social Mapping



## Stages of CCP

Activity	Methods	Outputs
Review and analysis of past disaster	Group discussion	Learning from past disaster, Gaps in terms of warning, relief, Rehab. Etc.
Situational Analysis	Mapping	Physical features and demographic details
Hazard/vulnerability analysis	Mapping	People & property at risk, causes and location of hazard prone areas
Resource Identification	Mapping	Identification of existing resources (safe houses, cutting equipments etc.)



## Cont..

Activity	Methods	Outputs
Formation and training of task force	Selection through village meetings	Trained Volunteers (First aid, search and rescue etc.)
Community fund for disaster preparedness	Village meetings	For stock pilling essential items For emergency situations
Mock Drills	Drills	Fine-tuning of DM Plans at Various Levels.
Approval by PRIs	Meeting	The entire process is legitimate

**Review and Analysis- Group Discussion**

- The Community to discuss their experiences in the last few years that disaster hit the village.
- It should revolve around what happened before, after and during the disaster.
- Decide the different ways through which the villages can be better prepared.

**Situational Analysis**

- Demographic description of Villages
- Map the geography and topography of the village.
- Physical locations, surroundings.
- No. of families- men, women, children, castes , disabled, ill, pregnant women, mothers, etc
- Natural Resources- Land, field, forests, trees, tanks, pools, ponds, etc.
- Irrigation facilities, food grain stores, different livelihood activities.

**Hazard Mapping**

- Identify different weather Hazards e.g. floods, quakes, cyclone, land slide etc.
- Also identifies most vulnerable area likely to be damaged.
- Mark it on separate map.

**Opportunity Mapping**

- The Community identifies those resources existing in the village, which will help to reduce risks to life and property.
- Safe Houses, Flood shelters, safe evacuation routes, health and medical facilities.
- Sources of funds, plantation of wind barrier, identification of safeguard to protect the vulnerable.
- Identification of trained volunteers, etc.

**8.2.19 Types and Methods of Community Based Disaster Preparedness (CBDP) Tools**

Sl. No	Tools	Objectives	Achievement
1	Timeline	To learn what are the significant disaster events that occur in the Community	Communities learn that the number of disasters is increasing over the years.
2	Hazard & Resource Mapping	1. To identify areas at risk from specific hazards and the vulnerable members of the community 2. To identify available resources that could be used by community members in disaster risk	Communities will be able to identify their own geographical vulnerability and the impact of their living and come up with indigenous or external mechanism which may help in coping with the disasters.
3	Seasonal Calendar	To learn about seasonal activities, hazards and disasters	It reveals the spread of disasters over the months and would indirectly help in coming out with innovative cropping patters etc.

4	Ranking	To know the priorities of community members or the most significant problems faced by the community.	Would help in streamlining resources as per the priority.
5	Transect	To get a picture of the vulnerability of the community and the resources that are available or maybe available for disaster risk management	Gives first hand information of the village and its vulnerability.
6	Historical Transect	1. To learn about the history of disasters in the community, the factors that led to the disasters and the impact on the environment and people's lives 2. To describe how much natural resources have been affected by disasters and how much more could be remaining	Gives a chronological understanding and how disasters have been addressed by the community themselves in the past and would help in framing future strategies.
7	Matrix Ranking	To determine the hazard that has the most serious impact on the community	Helps to prioritize intervention after looking at the likely severity of the impact
8	Venue Diagram	To identify different individuals, groups and organizations those are supporting community activities and programmes.	Helping in knowing the village at individual level and the importance of greater coordination.

### 8.2.20 TIMELINE

Timeline is a very simple tool that narrates the disaster history and significant events that happened in the community. One column gives the year and the other column lists down the events that took place.

#### Objective

To learn what are the significant disaster events that occur in the Community

#### Sample Key Questions

1. What are the disaster events that happened or happening in the community? When did they happen?
2. What significant events affected the community? When did they happen?

#### How to Facilitate

This is a very effective tool to use while waiting for community members to arrive.

1. A facilitator can begin by asking a few community members about what disasters happened in their community and which year did they occur.
2. The facilitator can initiate writing the answers on a flip chart.
3. As community members are discussing, writing on flip chart can be passed on to a community member who is able to do this.

**Example:**

Date	Event
1994	Normal Flood
1995	Normal Flood, cholera
1996	Flash Flood
1997	Normal Annual Flood
1998	Normal Annual Flood
1999	Cyclone
2000	Big Flood followed by sudden drought
2001	Cyclone
2002	Cyclone
2003	Normal Annual Flood
2004	Tsunami

**8.2.21 HAZARD AND RESOURCE MAP**

Community members know the hazards that confront their communities. For their sake alone, they do not have to draw the hazard map. Hazard maps are made for the benefit of “outsiders” like NGO workers. But hazard and resource mapping is a tool that allows community members to identify graphically the vulnerable members of the community especially the elderly and disabled who are put at risk by hazards like floods. This tool also enables community members to look at their resource base and make an inventory of their capacities.

**Objectives**

1. To identify areas at risk from specific hazards and the vulnerable members of the community
2. To identify available resources that could be used by community members in disaster risk management

**Sample Key Questions**

1. What are the hazards that put the community at risk?
2. Which places/areas in the community are at risk?
3. What community infrastructures or critical facilities are in danger?
4. Who are the people that are most exposed to risk and will likely need assistance?
5. What resources can be found in the community?
6. Who have the least resources in the community (family or community members)?
7. Who have access and control over the available resources?
8. What resources are at risk?
9. Why are they at risk?

## **How to Facilitate**

Mapping is another activity that can be done while waiting for other members of the community to arrive. This activity can always be interrupted any time. If the map is made on a flip chart, this can be fixed on a conspicuous place where community members can add to the map any time they want. Often, community members will just draw the map using sticks or their fingers on the ground. Do not interrupt the process. The note taker will then have to copy the map on his/her notes.

1. The facilitator asks the community members to identify a landmark in the community.
2. Initially, the facilitator puts a mark or a stone to stand for the landmark.
3. The facilitator asks the community members to draw the boundaries of the community.
4. This will be followed by drawing the location of houses, critical facilities and resources in the community.
5. The facilitator asks questions like who have access and control over the resources.
6. Community members will be asked to mark the areas at risk from hazards like drought or flood.
7. After this, community members will identify who are the members of the community, who are most at risk because they are in vulnerable locations and have little resources to prepare for recover from a disaster.

### **8.2.22 SEASONAL CALENDAR**

The seasonal calendar contains a lot of information about seasonal changes and related hazards, diseases, community events and other information related to specific months of the year. Using ten stones (ten being the highest score) indicates degree, severity or extent of the change.

#### **Objective**

To learn about seasonal activities of hazards and disasters.

#### **Key Questions**

1. What are the different seasons in a year?
2. What are the hazards/disasters that occur in the community? When do they happen?
3. When is there scarcity in food supply?
4. What are the common illnesses during rainy season or winter season?

### **How to Facilitate**

1. The facilitator must prepare a calendar on a flip chart before the activity.
2. It is common to start this activity by asking the community members which months are the rainy and summer seasons or when are the planting and harvest seasons.
3. Different community members use different ways to mark the calendar. Some draw straight lines to indicate the months of the rainy and summer seasons. Others use a (✓) or (X) per month to say that these are the cold or the hot months (Still, others use symbols like the sun to indicate summer or rice stalks to indicate harvest season). There are many creative ways people use to express themselves.

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## Chapter IX

### DISASTER MITIGATION

Disaster mitigation measures are those that eliminate or reduce the impacts and risks of hazards through proactive measures taken before an emergency or disaster. The response to disasters yields only temporary relief at a high cost while mitigation, which refers to measures which can be taken to minimize the destructive and disruptive effects of disaster, is better than disaster response as mitigation contributes to lasting safety. Though each type of disaster requires separate mitigation measures, there can be certain mitigation measures common to all disasters. Since these islands are prone to earthquakes, special emphasis is required for earthquake mitigation measures.

**9.1** The State Mitigation Plans are to be prepared by the concerned Departments for disasters in respect of which the Nodal Institutions have been identified and designated as per the table given below.

**9.2**

Sl. No.	Type of Disaster	Disaster Management by	Nodal Ministry
1.	Earthquake	Department of Disaster Management	MHA
2.	Flood	Department of Disaster Management	MHA
3.	Tsunami	Department of Disaster Management	Ministry of Earth Science
4.	Drought, and Pest Attack	Department of Agriculture	Ministry of Agriculture
5.	Landslide	APWD	Ministry of Mines
6.	Forest Fires	Dept of E&F	Ministry of Environment and Forest
7.	Industrial and Chemical Disasters	Dept of E&F	Ministry of Environment and Forest
8.	Biological Disasters	Directorate of Health Services	Ministry of Health & Family Welfare
9.	Aviation Accidents	Directorate of Civil Aviation	Ministry of civil Aviations
10.	Cyclone/ Tornado/ Hurricane	Department of Disaster Management	India TV Meteorological Department under Ministry of Earth Sciences

### **Types of Disaster Mitigation**

Disaster mitigation measures may be structural (e.g. flood dikes) or non-structural (e.g. land uses zoning). Mitigation activities should incorporate the measurement and assessment of the evolving risk environment. Activities may include the creation of comprehensive, pro-active tools that help decide where to focus funding and efforts in risk reduction.

#### **Mitigation Measures:**

- Hazard mapping
- Adoption and enforcement of land use and zoning practices
- Implementing and enforcing building codes
- Flood plain mapping
- Reinforced tornado safe rooms
- Burying of electrical cables to prevent ice build-up
- Raising of homes in flood-prone areas
- Disaster mitigation public awareness programs
- Insurance programs

#### **Measures taken for mitigation of disasters**

**9.1.2** The following mitigation measures have been taken by the A & N Administration

- The State Control Room has been established (24 x 7) round the clock in the Directorate of Disaster Management with the facilities of V-SAT Communication Network, connected with Disaster Management System Server (DMS) from MHA, GOI, VHF (police), Fax (2nos.), Telephone, Broadband (BSNL lines).
- State of art communication network is being established in the State Control Room to monitor incident hazards and disaster situations in the islands with EOCs & Other Control Rooms.
- Coordination and control maintained by the State Control Room with the Control Rooms of PBMC, PMB, DSS, ANC, Electricity, Police and six Emergency Operation Centres at various Islands (Mayabunder, Port Blair, Hut Bay, Car Nicobar, Campbell Bay and Kamorta).
- Mobile search and rescue team consisting of the staff of Police, Fire Service and the staff of Medical Department & APWD and State Disaster Response Force in A&N Islands is being constituted to deal with the various types of disasters.
- While training has been imparted to the selected officers more training Programmes are being planned for field level staff.
- State Disaster Response Force is in the stage of establishment by the Police department.

**Measures taken for mitigation of effects of earthquakes**

**9.1.3** Apart from the measures listed above, the A & N Administration and the agencies under it have taken the following earthquake mitigation measures:

- An Audit committee has to be constituted for monitoring /implementation of the building policy/bye-laws
- The Port Blair Municipal Council has initiated steps (issued notices) for retrofitting of 166 buildings in Port Blair Municipal area which do not conform to the building bye-laws/BIS Codes.
- The Port Blair Municipal Council has suggested amendments in its bye-laws for suitable techno legal regime.

**Measures taken for mitigation of effects of Cyclones**

**9.1.4** Apart from mitigation measures mentioned above certain steps have been taken to mitigate the effects due to cyclones

**Community relief Shelters identified at Port Blair, Rangat & Campbell Bay.**

District	Tehsils	No. of Relief Camps
<b>North &amp; Middle Andaman</b>	Diglipur	13
	Mayabunder	8
	Rangat	14
<b>South Andaman</b>	Ferrargunj	15
	Port Blair	16
	Municipal Area	17
	Little Andaman	4
<b>Nicobar</b>	Car Nicobar	14
	Nancowry	26
	Campbell Bay	13
<b>Total</b>		<b>140</b>

Details of the Relief Godowns, Shelters and Refuge areas in A&N Islands, Open places/Safe Building/Transit Camps are given below:-

**REFUGE AREAS**

**Aberdeen**

1. Gymkhana Ground (Netaji Stadium)
2. Police ground VIP Road/ITF Ground, VIP Road
3. Junglighat School Ground
4. Chandmari Butt, Police Line
5. Haddo Hindi Medium School
6. Junglighat School
7. JNR Mahavidhyalaya
8. Shadipur School

9. Aberdeen School
10. Dignabad School
11. Hindi Shahitya Kala Parishad
12. Tamizar Sangam
13. Govt. Sr. Secondary School, School Line

**Pahargaon**

1. Mini Stadium, Attam Pahad, Dollygunj
2. School Building, Pahargaon
3. School Building, Garacharma
4. Dr. Radhakrishna Institute of Education, Garacharma
5. School Ground, Bathubasti
6. School Building, Dollygunj

**Hut bay**

1. PRO ground, Hut Bay
2. Govt. SSS, Hut Bay
3. Govt. Secondary School, Netaji Nagar
4. Mini Stadium, R.K.Pur
5. Govt. Secondary School, Ravindra Nagar

**Bamboo flat**

1. G.S.S. School, Bamboo flat
2. School Ground, Bamboo flat
3. GSS School, Manarghat
4. School Ground, Manarghat
5. GSS School, Wimberlygunj
6. GMS, Kanyapuram
7. GSS, Mile Tilak
8. Primary School, Hope Town
9. Primary School, North Bay
10. Primary School, Shore Point
11. GSS, Shoal Bay
12. School Ground, Shore Point
13. GSS, Jirkatang
14. MS, Writmyo
15. MS, Stewartgunj
16. School Ground, Shoal Bay 12
17. School Ground, Stewartgunj
18. GS School, Shoal Bay
19. Primary School, Mathura
20. MES School, Azad Nagar
21. School Ground, Azad Nagar
22. Eruka Public School, W/Gunj
23. School Ground, W/Gunj
24. Crescent Public School, W/Gunj
25. Uraka Public School, W/ Gunj
26. Ikra Public School, Wimberlygunj
27. Arabic College, W/gunj

28. JEH, W/gunj
29. JEH ground, W/gunj
30. St. Paul School, W/gunj

#### **Dundas Point Area**

1. School Building, Lal Pahar
2. School Building, Chouldari Middle School
3. School Building Chouldari Primary School
4. School Building, Port Mout
5. School Building, Mithakhari
6. Community Hall, Mithakhari
7. Community Hall, Namunaghar
8. School Building, Namunaghar
9. School Building, Namunaghar quarry
10. School Building, Ograbraj
11. Community Hall, Hathi Tapu
12. Community Hall, Ograbraj
13. School Building, Tushnabad SS School
14. School Building, Tushnabad Primary School
15. Community Hall, Tushnabad
16. School Building, Manpur SS School
17. School Building, Manpur Primary School
18. Community Hall, Collinpur
19. School Building, Herbertabad
20. School Building, Tirur
21. Community Hall, Tirur
22. School Building, Caddle Gunj
23. School Building, Aniket
24. School Building, Ferrargunj
25. Information Centre, Ferrargunj
26. School Building, Saithan Kahari

#### **Kadamtala**

1. Revenue Ground, Kadamtala
2. Community Hall, Kadamtala
3. School Building, O/Katcha
4. Community Hall, Oral Katcha
5. School B building, Kadamtala

#### **Rangat**

1. All the School Buildings
2. Mini Stadium at Rangat
3. Grounds at Nimbutala, Sabari, Bakultala

#### **Mayabunder**

1. Play Ground, GSS M/Bunder

#### **Kalighat**

1. GSSS Kalighat
2. GSS Kishorinagar

3. GSS Ramnagar
4. Panchayat Ground

**Diglipur**

1. Vivekananda Stadium
2. GSSS School, Diglipur
3. Middle School, Subash Gram
4. Tamizar Sangam Hall
5. GSS School, Subash Gram

**Car Nicobar**

1. CWC Ground
2. Open Places at Malacca & Perka Village
3. J.R. Stadium

**Katchal**

1. School Ground
2. GSS, Kapanga

**Nancowry**

1. Machi Basti (Near Sea Shore)
2. INS Kardip Play Ground

**Campbell Bay**

1. GSS School Ground,
2. Army Camp Ground

**RELIEF SHELTERS**

LIST OF RELIEF SHELTERS						
Port Blair						
Sl No	Name of the Villagers comprised in the Tehsil	Identified building for relief camp	Facilities available in the building			
			Electricity	Road Approach	Water	Toilets
1.	Govindnagar	Panchayat Ghar, School	Yes	Yes	Yes	Yes
2.	Junglightat	Rabindra Bangla Vidyalaya	Yes	Yes	Yes	Yes
3.	Aberdeen Village	Model School	Yes	Yes	Yes	Yes
4.	Aberdeen Bazaar		Yes	Yes	Yes	Yes
5.	Phoenix Bay	Delanipur School	Yes	Yes	Yes	Yes
6.	Delanipur	Delanipur School	Yes	Yes	Yes	Yes
7.	Haddo	Community Hall & School	Yes	Yes	Yes	Yes
8.	Goodwill Estate	Nayagaon School	Yes	Yes	Yes	Yes
9.	Carbyn's Cove			Yes	Yes	Yes
10.	Nayagaon			Yes	Yes	Yes
11.	Dudh Line			Yes	Yes	Yes
12.	South Point	South Point School	Yes	Yes	Yes	Yes

13.	Shadipur	Shadipur School	Yes	Yes	Yes	Yes
14.	Dollygunj	Panchayat Ghar, School	Yes	Yes	Yes	Yes
15.	School Line	School Line School	Yes	Yes	Yes	Yes
16.	Lamba Line	Community School	Yes	Yes	Yes	Yes
17.	Minnie Bay	School	Yes	Yes	Yes	Yes
18.	Bimblitan	School	Yes	Yes	Yes	Yes
19.	Teylarabad	School	Yes	Yes	Yes	Yes
20.	Garacharma	School	Yes	Yes	Yes	Yes
21.	Prothrapur	Panchayat Ghar, Bathubasti School	Yes	Yes	Yes	Yes
22.	Austinabad	Prothrapur School	Yes	Yes	Yes	Yes
23.	Brichgunj	School	Yes	Yes	Yes	Yes
24.	Calicut	Community Hall, School	Yes	Yes	Yes	Yes
25.	Beodnabad	Beodnabad School	Yes	Yes	Yes	Yes
26.	Rangachang	Beodnabad School	Yes	Yes	Yes	Yes
27.	Chidiyatapu	Guest House, School	Yes	Yes	Yes	Yes
28.	Rutland	School	Yes	Yes	Yes	Yes
29.	Shyam Nagar	School	Yes	Yes	Yes	Yes
30.	Radhanagar	School, Guest House	Yes	Yes	Yes	Yes
31.	Lakshmanpur	Neil Kendra School	Yes	Yes	Yes	Yes
32.	Ramnagar	Ram Nagar School	Yes	Yes	Yes	Yes
33.	Sitapur		Yes	Yes	Yes	Yes
34.	Sippighat	Panchayat Ghar, School	Yes	Yes	Yes	Yes

<b>Ferrargunj</b>						
SI No	Name of the Villagers comprised in the Tehsil	Identified building for relief camp	Facilities available in the building			
			Elect ricity	Road Approa ch	Wat er	Toilets
1	Caddlegunj	PS Aniket and PS Caddlegunj	Yes	Yes	Yes	Yes
2	Aniket					
3	Stewartgunj	Panchayat Ghar, School	Yes	Yes	Yes	Yes
4	Govindapuram					
5	Manjeri	PS Manjeri	Yes	Yes	Yes	Yes
6	Guptapara	Community Hall, Guptapara	Yes	Yes	Yes	Yes
7	Nayasahar	PS Nayasahar	Yes	Yes	Yes	Yes
8	Mangultan & Part of Guptapara	GSS Manglutan and MS Manglutan	Yes	Yes	Yes	Yes
9	Wandoor (North)	MS Wandoor and Community Hall	Yes	Yes	Yes	Yes
10	Maymyo					
11	Hasmatabad					
12	Wandoor	PS New Wandoor and East Wandoor	Yes	Yes	Yes	Yes
13	Chouldari	AE's Office, Humphry Gunj	Yes	Yes	Yes	Yes
14	Craikabad	GSSS Port Mout and PS Port Mout and Zilla Parishad, Vivekananda School	Yes	Yes	Yes	Yes
15	Badmash pahar		Yes	Yes	Yes	Yes

16	Port Mout	GSSS Port Mout and PS Port Mout and Zilla Parishad, Vivekananda School	Yes	Yes	Yes	Yes
17	Tushnabad	GSS Tushnabad and Community Hall	Yes	Yes	Yes	Yes
18	Hobdipur	PS Hobdipur	Yes	Yes	Yes	Yes
19	Manpur	GSS Manpur and Community Hall, Manpur	Yes	Yes	Yes	Yes
20	Collinpur	PS Collinpur and Community Hall Manpur	Yes	Yes	Yes	Yes
21	Temple Myo	GSS Manpur and Community Hall, Herbertabad	Yes	Yes	Yes	Yes
22	Herbertabad	MS Herbertabad and Community Hall, Herbertabad	Yes	Yes	Yes	Yes
23	Tirur	PS Tirur	Yes	Yes	Yes	Yes
24	Muslim Basthi	MS Ograbraj and Community	Yes	Yes	Yes	Yes
25	Ograbraj	Hall Ograbraj	Yes	Yes	Yes	Yes
26	Mithakhari	PS Mithakhari	Yes	Yes	Yes	Yes
27	Dundas Point	PS Dundas Point	Yes	Yes	Yes	Yes
28	Namunaghar	GSSS Namunaghar	Yes	Yes	Yes	Yes
29	Ferrargunj	GSSS Ferrargunj	Yes	Yes	Yes	Yes
30	Mile Tilak	GSSS Mile Tilak	Yes	Yes	Yes	Yes
31	Jirkatang	MS Jirkatang	Yes	Yes	Yes	Yes
32	North Bay	North Bay Primary School	Yes	Yes	Yes	Yes
33	Mount Harriet	North Bay Primary School	Yes	Yes	Yes	Yes
34	Hope Town	PS Hope Town and Vitala Public school	Yes	Yes	Yes	Yes
35	Bambooflat	Bambooflat School	Yes	Yes	Yes	Yes
36	Shore Point	Shore Point School	Yes	Yes	Yes	Yes
37	Kadakchang	Kanyapuram School	Yes	Yes	Yes	Yes
38	Kanyapuram	Kanyapuram School	Yes	Yes	Yes	Yes
39	Mathura	Govt. PS Mathura	Yes	Yes	Yes	Yes
40	Wimberlygunj	Wimberlygunj School and Panchayat Ghar	Yes	Yes	Yes	Yes
41	Mannarghat	Govt SS Malapuram	Yes	Yes	Yes	Yes
42	Malapuram	Govt SS Malapuram	Yes	Yes	Yes	Yes
43	Wright Myo	Govt SS Malapuram	Yes	Yes	Yes	Yes
44	Shoal Bay	Shoal Bay School	Yes	Yes	Yes	Yes

<b>Little Andaman</b>						
Sl No	Name of the Villagers comprised in the Tehsil	Identified building for relief camp	Facilities available in the building			
			Electricity	Road Approach	Water	Toilets
1	Netaji Nagar	Red Oil Palm Mill Complex	Yes	Yes	Yes	Yes



2	Rama Krishnapur	Ramakrishnapur School, Mini Stadium	Yes	Yes	Yes	Yes
3	Rabindara Nagar					
4	Vivekanandapuram					
5	Hut Bay, Part of Netaji Nagar	GMSS Hut Bay	Yes	Yes	Yes	Yes

<b>Diglipur</b>						
SI No	Name of the Villagers comprised in the Tehsil	Identified building for relief camp	Facilities available in the building			
			Electricity	Road Approach	Water	Toilets
1	Shyam Nagar	M School, P School	Yes	Yes	Yes	Yes
2	Radhanagar	P. School	Yes	Yes	Yes	Yes
3	Swaraj Gram	SS School	Yes	Yes	Yes	Yes
4	Milan Gram	P. School	Yes	Yes	Yes	Yes
5	Lakshmiपुर	M School	Yes	Yes	Yes	Yes
6	Deshabandhugram	P. School	Yes	Yes	Yes	Yes
7	Madhupur	M School, P School	Yes	Yes	Yes	Yes
8	Rabindra Palli	P. School	Yes	Yes	Yes	Yes
9	Krishnapuri					
10	Sita Nagar	M School, P School	Yes	Yes	Yes	Yes
11	Khudirampur	P. School	Yes	Yes	Yes	Yes
12	Diglipur	SS School, M. School, S. School	Yes	Yes	Yes	Yes
13	Subhashgram	SS School, M. School, S. School	Yes	Yes	Yes	Yes
14	Ramakrishnagram	P. School, M. School, Vivekananda School	Yes	Yes	Yes	Yes
15	Vidyasagarpalli	P. School	Yes	Yes	Yes	Yes
16	Keralapuram	S. School	Yes	Yes	Yes	Yes
17	Aerial Bay	P. School	Yes	Yes	Yes	Yes
18	Sagar Dweep	P. School	Yes	By Road & Dinghi	Yes	Yes
19	Durgapur	P. School	Yes	Yes	Yes	Yes
20	Kalipur	P. School	Yes	Yes	Yes	Yes
21	Shibpur	S. School	Yes	Yes	Yes	Yes
22	Kishorinagar	S. School	Yes	Yes	Yes	Yes
23	Mohanpur	S. School, P. School	Yes	Yes	Yes	Yes
24	Paranghara	P. School	Yes	Yes	Yes	Yes
25	Nabagram	M. School, P. School	Yes	Yes	Yes	Yes
26	Madhyamgram	P. School	Yes	By walk	Yes	Yes
27	Nischintapur	P. School	Yes	By walk	Yes	Yes
28	Kalighat	SS School, P. School	Yes	Yes	Yes	Yes
29	Jagannath Dera	P. School	Yes	By Road & Dinghi	Yes	Yes

30	Ramnagar	S. School, P. School	Yes	Yes	Yes	Yes
31	Palion Nallah (Forest Area)	P. School	NA	Yes	NA	Yes
32	Kalapahar (Forest Area)	P. School	NA	Yes	NA	Yes
33	Horibay (Forest Area)	P. School	NA	Yes	NA	Yes
34	Austin II (Forest Area)	P. School	NA	By Road & Walk	Yes	Yes
35	Paschimsagar (Forest Area)	M. School	Yes	Yes	Yes	Yes
36	Talbagan (Forest Area)	P. School	Yes	Yes	Yes	Yes

<b>Diglipur</b>						
SI No	Name of the Villagers comprised in the Tehsil	Identified building for relief camp	Facilities available in the building			
			Electricity	Road Approach	Water	Toilets
1	Mayabunder	GPS Mayabunder	Yes	Yes	Yes	Yes
2	Borang	GPS Borang	No	Yes	Yes	Yes
3	Pokha Dera	GMSS Pokhadera	Yes	Yes	Yes	Yes
4	Rampur	MGGC Mayabunder	Yes	Yes	Yes	Yes
5	Danapur	GPS Dhanapur	Yes	Yes	Yes	Yes
6	Karmatang	GSS Karmatang	Yes	Yes	Yes	Yes
7	Lucknow	GPS Lucknow	Yes	Yes	Yes	Yes
8	Devpur	GSS Webi	Yes	Yes	Yes	Yes
9	Webi		Yes	Yes	Yes	Yes
10	Hansipuri	GPS Hansipuri	Yes	Yes	NA	NA
11	Chainpur	GSS Chainpur	Yes	Yes	Yes	Yes
12	Pudumadurai	GMS Pudumadurai	Yes	Yes	Yes	Yes
13	Tugapur	GMS Tugapur-6, GPS Tugapur-8	Yes	Yes	Yes	Yes
14	Pahalgaon	GSS Pahalgaon	Yes	Yes	Yes	Yes
15	Prafullya Nagar	GSS Govindapur	Yes	Yes	Yes	Yes
16	Govindapur		Yes	Yes	Yes	Yes
17	Paresh Nagar	GPS Kamalpur	Yes	NA	Yes	Yes
18	Hari Nagar	GMS Billiground	Yes	Yes	Yes	Yes
19	Duke Nagar	GPS Laxmi Nallah	Yes	Yes	Yes	Yes
20	Jaipur	GPS Korangnallah	Yes	Yes	Yes	Yes
21	Kamalapur	GPS Pinakinagar	Yes	Yes	Yes	Yes
22	Swadesh Nagar	GPS Pitcher Nallah, GPS Thoraktang	Yes	Yes	Yes	Yes
23	Shantipur	GPS Shantipur	Yes	Yes	Yes	Yes

<b>Rangat</b>						
SI No	Name of the Villagers comprised in the Tehsil	Identified building for relief camp	Facilities available in the building			
			Electricity	Road Approach	Water	Toilets
1	Dharampur	Govt SS School, CFO Nallah	Yes	Yes	Yes	Yes
2	Ramachandranagar					
3	Tiruvanchikkulam					
4	Sivapuram	Shivpuram School	Yes	Yes	Yes	Yes
5	Padmanabhapuram					
6	Panchawati	Govt. PS Panchawati	Yes	Yes	Yes	Yes
7	Amkunj	GSSS Nimbutala	Yes	Yes	Yes	Yes
8	Nimbutala					
9	Rangat	GSSS Rangat	Yes	Yes	Yes	Yes
10	Rampur	GMS Parnashala	Yes	Yes	Yes	Yes
11	Parnasala					
12	Mithila					
13	Sitapur	GSSS Sabari	Yes	Yes	Yes	Yes
14	Sabari					
15	Bharatpur	GPS Sabari	Yes	Yes	Yes	Yes
16	Vishnupur					
17	Long Island					
18	Shyamkund	GSSS Long Island	Yes	Yes	Yes	Yes
19	Bangaon	GPS Shyam Kund	Yes	Yes	Yes	Yes
20	Lakshmanpur					
21	Urmilapur	GPS Lakshmanpur	Yes	Yes	Yes	Yes
22	Kalsi					
23	Shaktigarh					
24	Koushalya Nagar	School	Yes	Yes	Yes	Yes
25	Yeratiljig	GSS Kaushalyanagar	Yes	Yes	Yes	Yes
26	Kadamtala					
27	Shantanu					
28	Uttara	Kadamtala School	Yes	Yes	Yes	Yes
29	Bakultala	Adajig School	Yes	Yes	Yes	Yes
30	Bijoygarh					
31	Udaygarh					
32	Sundargarh	Nilambur School	Yes	Yes	Yes	Yes
33	Kanchargarh					
34	Nilambur					
35	Abhaygarh	Adajig School	Yes	Yes	Yes	Yes
36	Nayagarh					
37	Adajig					
38	Roglachang	Nilambur School	Yes	No Road Connectivity	Yes	Yes
39	Wrafter's Creek					
40	Rajatgarh					

**LIST OF RELIEF GODOWN IDENTIFIED BY THE ADMINISTRATION  
IN SOUTH ANDAMAN.**

**NAME OF THE TEHSIL: PORT BLAIR**

SL NO	NAME OF GRAM PANCHAYAT	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN	PERSONS ENTRUSTED WITH THE RESPONSIBILITY OF RECEIPT & MAINTENANCE OF STOCK	REMARKS
1	GARACHARMA I	G.S.S.S. BHATUBASTI	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
2	GARACHARMA II	G.S.S.S. GARACHARMA	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
3	PROTHRAPUR	G.S.S.S. BHATUBASTI	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
4		G.S.S.S. PROTHRAPUR	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
5	BEODNABAD	G.S.S.S. RANGACHANG	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
6		P.S. CHIDIYATAPU	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
7		P.S. RUT LAND	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
8		FOREST GUEST HOUSE, RUTLAND (WARD NO 3)	FOREST OFFICIALS & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439. dt.29.03.06	
9	BRICHGUNJ	PANCHAYAT BUILDING	PANCHAYAT SECRETARY & GOVT OFFICIALS APPOINTED AS PER O/O NO.439, dt.29.03.06	
10		PANCHAYAT MARKET, CALICUT	PERSONS ENTRUSTED WITH THE RESPONSIBILITY OF RECEIPT & MAINTENANCE OF STOCK	
11	SIPPIGHAT	M.S. SIPPIGHAT	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
12		P.S BIMBLITAN	HEAD MASTER & GOVT.	

			OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
13	DOLLY GUNJ	G.M.S DOLLYGUNJ SCHOOL	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
14	GOVIND NAGAR	PANCHAYAT GHAR	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
15	VIJAYNAGAR	PANCHAYAT HALL	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
16	NEIL KENDRA	PANCHAYAT HALL	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	

**PORT BLAIR MUNICIPAL COUNCIL**

SL NO	NAME OF GRAM PANCHAYAT	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN	PERSONS ENTRUSTED WITH THE RESPONSIBILITY OF RECEIPT & MAINTENANCE OF STOCK	REMARKS
1	JUNGLIGHAT	G.S.S.S. R.B.V	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
2	ABDERDEEN BAZAR	G.S.S.S.MODEL SCHOOL	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
3	ABERDEEN VILLAGE	G.S.S.S. MODEL SCHOOL	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
4	PHOENIX BAY	G.S.S. DELANIPUR SCHOOL	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
5	DELANIPUR	G.S.S.DELANIPUR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
6	BUNIYADABAD	COMMUNITY HALL	REVENUE OFFICER (P BMC) & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
7	HADDO	G.S.S.S. HADDO SCHOOL	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
8	GOODWILL ESTATE	G.M.S. NAYAGAON	HEADMASTER & GOVT. OFFICIALS APPOINTED AS	

			PER O/O NO.439 dt.29.03.06	
9	CORBYN'S COVE	G.M.S. NAYAGAON	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
10	NAYAGAON	G.M.S. NAYAGAON	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
11	DUDH LINE	G.M.S. NAYAGAON	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
12	SOUTH POINT	G.S.S. SOUTH POINT	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
13	SHADIPUR	G.S.S. SHADIPUR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
14	MINNIE BAY	MINNIE BAY	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
15	SCHOOL LINE	G.S.S.S. SCHOOL LINE	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
16	LAMBA LINE	COMMUNITY SCHOOL	JE (PBMC) & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
17	ASTINABAD	G.S.S. PROTHRAPUR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>TOTAL</b>		<b>17</b>		

**NAME OF THE TEHSIL : FERRARGUNJ**

SL NO	NAME OF GRAM PANCHAYAT	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN	PERSONS ENTRUSTED WITH THE RESPONSIBILITY OF RECEIPT & MAINTENANCE OF STOCK	REMARKS
1	GUPTA PARA	G.S.S. MANGLUTAN	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
2	HUMFRY GUNJ	M.S. WANDOOR	HEADMASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
3	CHOULDARY	M.S. CHOULDARY	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	

4	TUSHNABAD	G.S.S. MANPUR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
5	FERRARGUNJ	G.S.S. FERRARGUNJ	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
6	BRINDABAN	P.S. BRINDABAN	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
7	MITHAKHARI	M.S. OGRABRAJ	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
8	NAMUNAGHAR	G.S.S. NAMUNAGHAR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
9	HOPE TOWN	P.S NORTH BAY	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
10	SHORE POINT	G.S.S.S. BAMBOOFLAT	JE (PBMC) & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
11	BAMBOOFLAT	G.S.S.S. BAMBOOFLAT	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
12	STEWARTGUNJ	PANCHAYAT GHAR	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
13	WIMBERLYGUNJ	G.S.S.S. WIMBERLYGUNJ	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
14	MANARGHAT	G.S.S. MALAPURAM	HEADMASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
15	SHOAL BAY	PANCHAYAT GHAR	<b>PANCHAYAT SECRETARY &amp; GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06</b>	

**Total 15**

**NAME OF THE TEHSIL : HUTBAY**

SL NO	NAME OF GRAM PANCHAYAT	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN	PERSONS ENTRUSTED WITH THE RESPONSIBILITY OF RECEIPT & MAINTENANCE OF STOCK	REMARKS
1	NETAJI NAGAR	G.M.S. RED OIL PALM MILL COMPLEX	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
2	R.K.PUR	G.S.S.S.R.K.PUR	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
3	V.K.PUR	MINI STADIUM	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
4	HUT BAY	GMS HUTBAY	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>TO TA L</b>	<b>04</b>	<b>04</b>		

**NAME OF THE TEHSIL : RANGAT**

SL NO	NAME OF GRAM PANCHAYAT	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN	PERSONS ENTRUSTED WITH THE RESPONSIBILITY OF RECEIPT & MAINTENANCE OF STOCK	REMARKS
1	SIVAPURAM	G.S.S.SIVAPURAM	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
2	NIMBUTALA	G.S.S.NIMBUTALA	HEADMASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
3	RANGAT	G.S.S.RANGAT	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
4	PARNASALA	MS PARNASALA	HEAD MASTER & GOVT. OFFICIALS	



			APPOINTED AS PER O/O NO.439 dt.29.03.06	
5	DASRATPUR	PANCHAYAT GHAR	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
6	SABARI	P.S SABARI	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
7	BAKULTALA	G.S.S.S. BAKULTALA	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
8	URMILAPUR	P.S LAKSHMANPUR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
9	KAUSHALYANA GAR	G.S.S KAUSHALYANAG AR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
10	KADAMTALA	G.S.S.S KADAMTALA	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
11	UTTARA	P.S. UTTARA	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
12	SUNDERGARH	G.S.S. ADAJIG	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
13	NILAMBUR	G.S.S.S ORALKATCHA	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
14	LONG ISLAND	G.S.S.S LONG ISLAND	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>TOT AL</b>	<b>14</b>	<b>14</b>		

**NAME OF THE TEHSIL: MAYABUNDER**

SL NO	NAME OF GRAM PANCHAYAT	NAME OF THE BUILDING IDENTIFIED AS RELIEF	PERSONS ENTRUSTED WITH THE RESPONSIBILITY OF	REMARKS
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		<b>GODOWN</b>	<b>RECEIPT &amp; MAINTENANCE OF STOCK</b>	
<b>1</b>	MAYABUNDER	PANCHAYAT BHAVAN	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>2</b>	POKADERA	M S POKADERA	HEADMASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>3</b>	RAMPUR	M G G C MAYABUNDER	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>4</b>	PAHALGAON	G.S.S. PAHALGAON	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>5</b>	CHAINPUR	G.S.S.CHAINPUR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>6</b>	BASANTIPUR	COMMUNITY HALL	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>7</b>	HARI NAGAR	COMMUNITY HALL	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>8</b>	SWADESH NAGAR	P.S PITCHER NALLAH	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>TOTAL</b>	<b>08</b>	<b>08</b>		

**NAME OF THE TEHSIL : DIGLIPUR**

<b>SL NO</b>	<b>NAME OF GRAM PANCHAYAT</b>	<b>NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN</b>	<b>PERSONS ENTRUSTED WITH THE RESPONSIBILITY OF RECEIPT &amp; MAINTENANCE OF</b>	<b>REMARKS</b>

			<b>STOCK</b>	
<b>1</b>	RADHA NAGAR	COMMUNITY HALL	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>2</b>	LAXMIPUR	M.S. LAXMIPUR	HEADMASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>3</b>	MADHUPUR	COMMUNITY HALL	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>4</b>	SITA NAGAR	M.S. SITA NAGAR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>5</b>	SUBHAS GRAM	G.S.S. SUBHAS GRAM	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>6</b>	DIGLIPUR	G.S.S. DIGLIPUR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>7</b>	RAMAKRISHNA GRAM	PANCHAYAT HALL	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>8</b>	KERALAPURAM	PANCHAYAT HALL	PANCHAYAT SECRETARY & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>9</b>	SHIBPUR	G.S.S. SHIBPUR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>10</b>	KISHORI NAGAR	G.S.S. KISHORI NAGAR	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>11</b>	RAM NAGAR	G.S.S. RAMNAGAR	HEAD MASTER & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>12</b>	NABAGRAM	M.S. NABAGRAM	HEAD MASTER & GOVT. OFFICIALS	

			APPOINTED AS PER O/O NO.439 dt.29.03.06	
13	KALIGHAT	G.S.S. KALIGHAT	PRINCIPAL & GOVT. OFFICIALS APPOINTED AS PER O/O NO.439 dt.29.03.06	
<b>TOTAL</b>	<b>13</b>	<b>13</b>		

**CAR NICOBAR ISLAND**

SL NO	NAME OF VILLAGE/PLACE	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN
1	HEAD QUARTER	C.W.C. GROUND
2	TAMALOO	B.J.R. STADIUM
3	TAMALOO	GOVT. MIDDLE SCHOOL, TAMALOO
4	KINYUKA	GOVT. SECONDARY SCHOOL, KINYUKA
5	CHUKCHUCHA	EHL COMPLEX
6	BIG LAPATHY	GOVT. SR. SEC. SCHOOL, BIG LAPATHY
7	BIG LAPATHY	GOVT. PRIMARY SCHOOL, BIG LAPATHY
8	SAWAI	GOVT SR. SEC.SCHOOL, SAWAI
9	KAKANA	GOVT. SEC. SCHOOL, KAKANA
10	BIG LAPATHY	SAI SPORTS COMPLEX
11	ARONG	PLAIN FIELD
12	MUS	GOVT. SEC. SCHOOL, MUS
13	MUS	FOOTBALL GROUND
14	HEAD QUARTER	B.J.R HOSPITAL
	<b>TOTAL</b>	<b>14</b>

**NANCOWRY ISLAND**

SL NO	NAME OF VILLAGE/PLACE	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN
1	CHAMPIN	GOVT. SR.SEC. SCHOOL, CHAMPIN
2	TAPONG	GOVT. PRIMARY SCHOOL, TAPONG
3	HITUI	GOVT. PRIMARY SCHOOL, HITUI
	<b>TOTAL</b>	<b>3</b>

**KAMORTA ISLAND**

SL NO	NAME OF VILLAGE/PLACE	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN
1.	KAMORTA	GOVT. MIDDLE SCHOOL, KAMORTA
2.	CHOTA ENAKA	GOVT. PRIMARY SCHOOL, CHOTA ENAKA
3.	KAKANA	GOVT. MIDDLE SCHOOL, KAKANA
4.	PILPILLOW	GOVT. MIDDLE SCHOOL PILPILLOW
5.	DARING	GOVT. PRIMARY SCHOOL, DARING
6.	MUNAK	GOVT. PRIMARY SCHOOL, MUNAK
7.	VIKAS NAGAR	GOVT. MIDDLE SCHOOL
8.	CHANGUA	GOVT. PRIMARY SCHOOL
	<b>TOTAL</b>	<b>8</b>

**TERESSA ISLAND**

SL NO	NAME OF VILLAGE/PLACE	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN
1.	BENGALI	GOVT. SEC. SCHOOL BENGALI
2.	KALASI	GOVT. PRIMARY SCHOOL, KALASI
3.	CHUKMACHI	GOVT. PRIMARY SCHOOL, CHUKMACHI
4.	ALURONG	GOVT. PRIMARY SCHOOL ALURONG
5.	ENAM	GOVT. PRIMARY SCHOOL ENAM
6.	MINYUK	GOVT. MIDDLE SCHOOL, MINYUK
	<b>TOTAL</b>	<b>6</b>

**CHOWRA ISLAND**

SL NO	NAME OF VILLAGE/PLACE	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN
1.	KUITASUK	GOVT. MIDDLE SCHOOL, KUITASUK
	<b>TOTAL</b>	<b>1</b>

**KATCHAL ISLAND**

SL NO	NAME OF VILLAGE/PLACE	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN
1.	KATCHAL	COMMUNITY CENTRE, KATCHAL
2.	UPPPER KATCHAL	GOVT. MIDDLE SCHOOL, UPPER KATCHAL
3.	MILDERA – II	GOVT. SR. SEC. SCHOOL, MILDERA-II
4.	MILDERA – I	GOVT. MIDDLE SCHOOL, MILDERA-I

5.	E. WALL	GOVT. PRIMARY SCHOOL, E.WALL
6.	MRN	GOVT. PRIMARY SCHOOL, MRN
7.	BEACHDERA	GOVT. PRIMARY SCHOOL, BEACHDERA
8.	JAPAN TIKERY	GOVT. PRIMARY SCHOOL, JAPAN TIKERY
	<b>TOTAL</b>	<b>8</b>

**GREAT NICOBAR**

SL NO	NAME OF VILLAGE/PLACE	NAME OF THE BUILDING IDENTIFIED AS RELIEF GODOWN
1.	CAMPBELL BAY	GOVT. SENIOR SECONDARY SCHOOL, CAMPBELL BAY
2.	CAMPBELL BAY	GOVT. PRIMARY SCHOOL, CAMPBELL BAY
3.	CAMPBELL BAY	COMMUNITY HALL, CAMPBELL BAY
4.	CAMPBELL BAY	GOVT. GUEST HOUSE, APWD, CAMPBELL BAY
5.	CAMPBELL BAY	OFFICE OF THE EXECUTIVE ENGINEER, APWD, CAMPBELL BAY
6.	CAMPBELL BAY	OLD ASSISTANT COMMISSIONER OFFICE, CAMPBELL BAY
7.	CAMPBELL BAY	COAST GUARD SCHOOL, CAMPBELL BAY.
8.	JETTY BAZAR	GOVT. PRIMARY SCHOOL, JETTY BAZAR
9.	GOVIND NAGAR	GOVT. MIDDLE SCHOOL, GOVIND NAGAR
10.	CAMPBELL BAY	NEWLY BUILD POLICE BARRACK, CAMPBELL BAY
11.	GOVIND NAGAR	COMMUNITY HALL, GOVIND NAGAR
12.	JOGINDER NAGAR	INDUSTRIAL COMPLEX, JOGINDER NAGAR
13.	CAMPBELL BAY	SAINIK SARAI, CAMPBELL BAY
	<b>TOTAL</b>	<b>13</b>

**9.1.5** Measures contemplated for mitigation of earthquakes

Due to the vulnerability of these islands to earthquakes special emphasis is contemplated for earthquake mitigation measures as under

**9.1.6** Awareness generation at all levels is being contemplated regarding the vulnerability of the islands to disasters (especially earthquakes) by undertaking the following activities by the Directorate of Disaster Management and or by the District Administration.

- Under IEC (Information, Education and Communication) activities for the preparation of pamphlets, posters covering various aspects of earthquakes, their effects & DO's and DON'Ts to create awareness among the people about vulnerability to earthquakes and infrastructure and essential retrofitting requirements for various types of constructions.
- School Safety guidelines has also been prepared and approved by the Union Territory Disaster Management Executive Committee for its implementation in the Schools under the Guidelines of National School Safety Programme under Disaster Risk Reduction.
- Publicity of do's and don'ts during disaster situation has been undertaken through effective media i.e. Doordarshan, AIR and Leading News Papers by the Directorate of Disaster Management.
- Awareness campaigns thorough mass-meetings, competitions, wall paintings, street plays etc.
- Awareness generation among real estate developers/ builders/ contractors/ associations & practicing architects/ engineers through workshops and orientation programmes.
- Establishment of Technology Demonstration Units for displaying appropriate and cost effective earthquake resistant features involving different associations involved in this line i.e. Engineers Association and Engineers of APWD, PBMC.
- Demonstration of appropriate and cost effective retrofitting techniques for existing buildings by the APWD and PBMC.
- Training and Skill up-gradation of local masons in construction of earthquake resistant units and retrofitting techniques required to be carried out by the Department of Science and Technology.
- Make available relevant information on various codes/guidelines for earthquake resistant design and construction of various types of building on Internet to educate the public in implementing the established guidelines.

#### **9.1.7 Capacity building of institutions will be done by**

- Organizing training programmes for Regulators/Engineers at all levels in earthquake resistant construction and retrofitting
- Orientation of Government/Municipal officers and housing societies towards hazard zonation, risk evaluation and mitigation.

**9.1.8** Efforts will be made regarding adoption and rigorous enforcement of the BIS building codes for Seismic Zone – V. Retrofitting of key buildings (apart from the 166 buildings already surveyed) will be considered

**9.1.9** Disaster Mitigation aspects will be made an essential term of reference for every plan/scheme and designs of primary school buildings will be selected in a way that they can double up as multipurpose shelters.

**9.1.10 Non-governmental Organizations (NGOs) and Voluntary**

**Agencies/Associations.**

The capacity of non-governmental organizations and voluntary agencies to reach out to community groups and their sensitivity to local traditions of the community, gives them an added advantage during disasters. Some of the agencies, both from within and outside the UT, have technical expertise and capabilities which can be brought into managing difficult situations.

During the post-disaster phase, the efforts should be made to enlist partnership of some of the NGOs with relevant expertise, to assist the district administration in the process of relief and rehabilitation.

**9.1.11 Community Participation**

The Disaster Management is expected to ensure and monitor the nature of community participation sought at the disaster site. Identification of agencies to monitor and evaluate various aspects of community participation, their impact on efficiency in operations and in the recovery process, is one of the responsibilities of Union Territory Disaster Management Executive Committee (UTDMEC) during post-disaster evaluation.

**9.1.12 Community participation can be ensured by:**

- Identifying opinion, positioning leaders in the community and voicing administration’s confidence in their capabilities to undertake the tasks;
- Consultations and dialogues expressly indicating the need for assistance to encourage the community and its leaders to come forward;
- Having regular feedback meetings and an open book approach to demonstrate transparency; and
- Involving community in decision making at local levels.

**9.1.13 Community participation would also include:**

- Ø maintaining of security and law and order during evacuation;
- Ø helping in emergency evacuations;
- Ø controlling panic behavior, maintaining orderly movement towards community shelters (safe zones) and taking preventive steps to avoid injuries and accidents;
- Ø organise cultural and recreational activities;
- Ø encouraging self-help;
- Ø contributing labour (loading, unloading, distribution, temporary constructions, salvage and restoration of water supplies, Feeding centres, relief camps, cattle camps etc.); and
- Ø maintaining standards in sanitation and disposal of waste.

Tksajayantksajayantksajayan

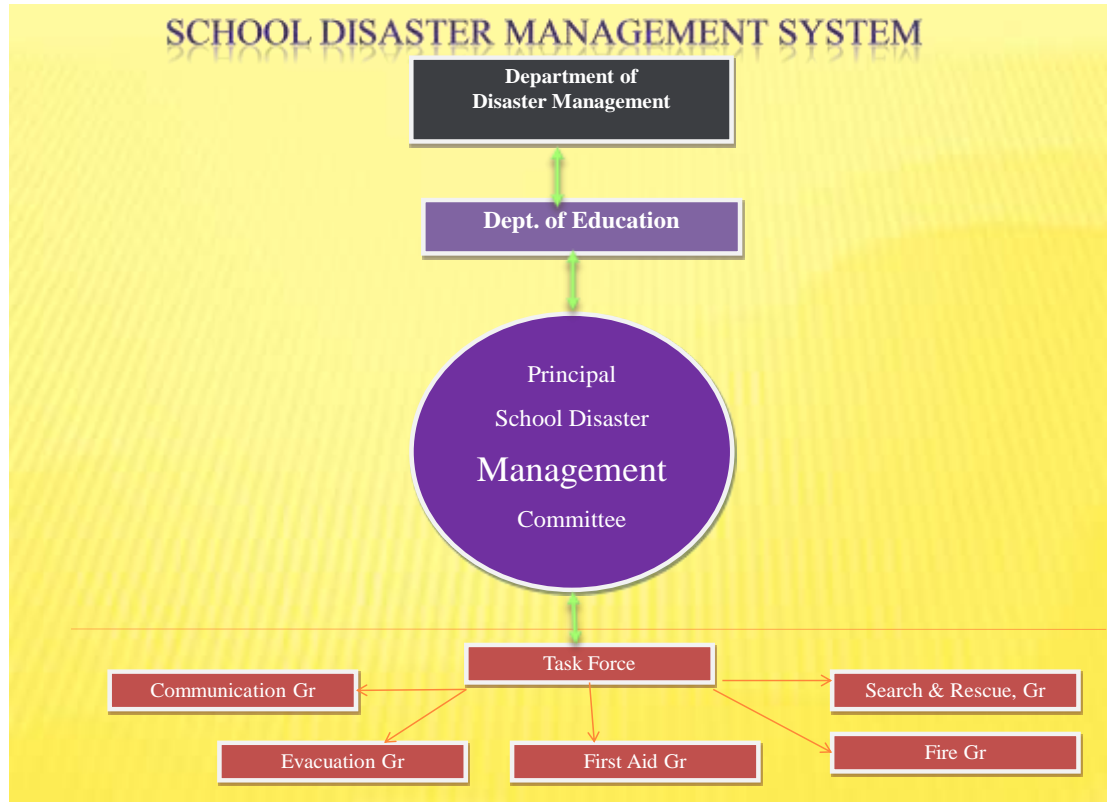


## **Chapter X**

### **PREPAREDNESS PLAN**

- 10.1** While the purpose of disaster prevention is to avoid such situations as far as possible, the purpose of disaster preparedness is to deal with such situations, which cannot be avoided. The important preparedness measures are summarized below:
- 10.1.1** Names and addresses of principal functionaries of all concerned departments at the UT/district level will be kept in the State/District Control Room. The list will be regularly updated.
- 10.1.2** The addresses of all key functionaries of all concerned departments at the state/district will be kept with the principal functionary of the department.
- 10.1.3** List of equipment and stores for rescue and relief operations in each type of disaster and their availability at various places- private and government will be kept in the Control Rooms and with the concerned department at the UT /district level.
- 10.1.4** A list of members of the community / NGOs and their representatives who could be helpful in management of the disaster will also kept in the control room.
- 10.1.5** Advance orders shall be issued regarding manning of the Control Rooms and allocation of duties. Wide publicity shall be given to the setting up of the UT / District Control Room (and the contact phone numbers). Similar control rooms may be activated in the offices of the principal functionaries on the occurrence of a disaster.
- 10.1.6** The Tehsil /Village level Disaster Management Control Rooms shall identify shelters and other facilities near the hazard prone areas for accommodating affected population during/ after a disaster.
- 10.1.7** The Tehsil /Village level Disaster Management Control Rooms shall identify sites near the hazard prone areas for setting up of temporary control rooms for rescue and relief operation.
- 10.1.8** The Assistant Commissioner/ Tehsildar of a subdivision/Tehsil shall devise a coordination mechanism for incoming relief material and teams from outside at their possible places of disembarkation and for deploying them in affected areas in a planned manner.
- 10.1.9** Alternate communication arrangements in case of failure of conventional communication channels shall be identified.

- 10.1.10** The community shall be involved as per guidelines issued as Community Awareness Material under this plan.
- 10.1.11** The services of the specialized team constituted by the Police department for search and rescue shall be utilized for training and simulation exercises of all identified functionaries.
- 10.1.12** Andaman & Nicobar Islands constituting nearly one-fourth of India's coastline are located in a region identified under seismic zone V, corresponding to high incidence of seismic activity. The Islanders are highly vulnerable to Natural Hazards such as Tsunamis, Earthquakes and Cyclones. Due to the geographical spread over 700 kms. in 572 Islands. The inhabitants of these Islands become highly vulnerable.
- 10.1.13** The 2004 Tsunami in Andaman & Nicobar Islands has directly or indirectly affected the school communities. There were heavy losses in terms of educational infrastructure and the education process throughout the Islands. The children community are the best medium of educating the parents and thereby the communities. During any emergency, it is observed that the children pass through the psychological trauma as there are no coping mechanisms. Hence children have the right to be educated through interactive platforms such that they gain knowledge on Disasters and put in practice during emergencies.
- 10.1.14** Almost 120 schools were severely damaged out of 399, and the children were severely affected due to loss of schools. School Safety is one of the important areas of activity of A&N Administration. The programme has been developed to outreach the vulnerable groups within the school premises. The target beneficiaries are the school children and teachers. Children spend a considerable amount of their time in schools and it's imperative to work in school settings. Hence the vulnerability of these children would be addressed through Disaster Risk Reduction activities, both structurally and non-structurally.
- 10.1.15** School Safety Disaster Management Plan formulated in the following pattern by the Directorate of Disaster Management.



**What are the Dangers (Hazards) that may Affect Your School?**

**What is the risk level of each of these dangers?  
(High / Medium / Low / No-risk)**

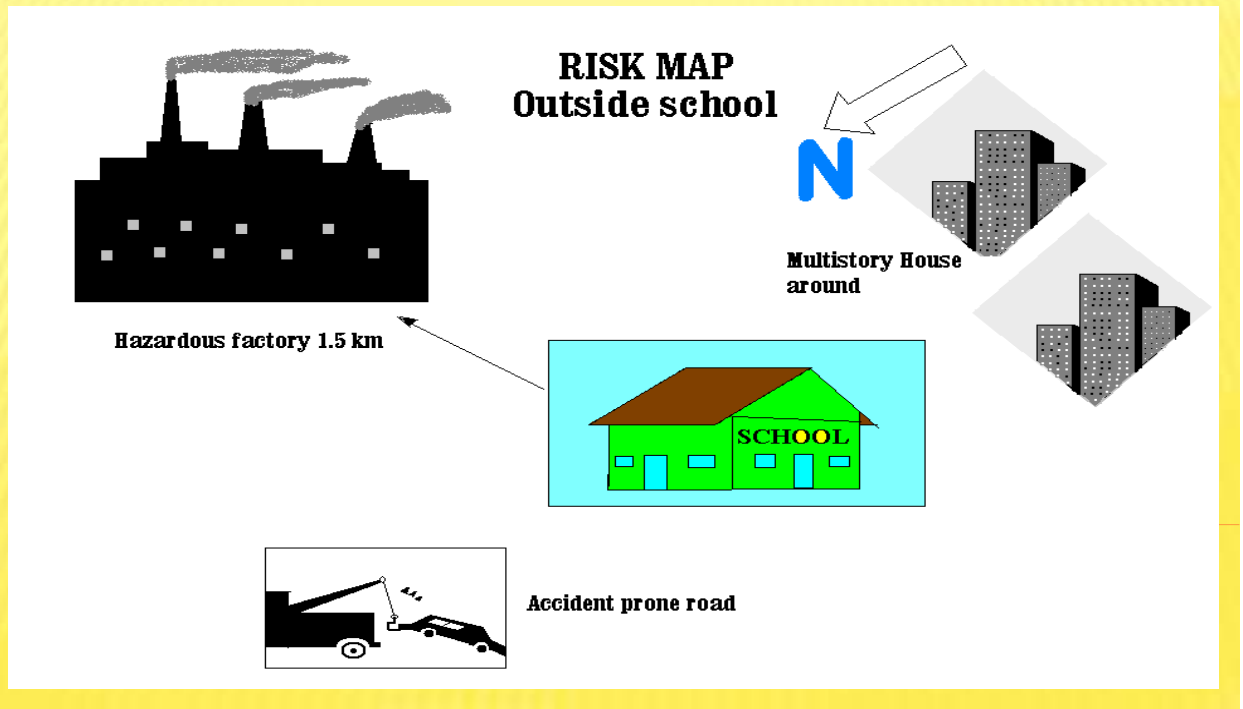
**Details of any disasters that occurred earlier?**

- Cyclone....?
- Earthquake....?
- Flood....?
- Drought....?
- Tornadoes....?
- Landslide....?
- Tsunami....?
- Forest fire....?
- Heat wave....?
- Riots....?
- Terrorist Attack....?
- Chemical & Industrial accidents....?
- Air, Road & Rail accidents....?
- Fire Accidents....?
- Festival Related Disaster....?
- Epidemics....?
- Nuclear disaster....?

**What are the problems existing  
outside Your School?**

- Busy road / accident prone road....?
- Busy market area....?
- Any hazardous factory near by....?
- Low lying flood prone area near by....?
- Residential area / multistorey buildings around...?
- Any other danger...?

## RISK MAP (OUT SIDE THE SCHOOL)



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## **Chapter XI**

### **RESPONSE PLAN**

#### **11.1 RESPONSE STRUCTURE**

In a multi-disaster response plan, the response structure recommended is specific to the type and severity of the disaster, its potential impact on individuals, damage to infrastructure, and disruption of services, environmental effects, economic and social consequences and secondary effects. The document lists the specific needs to combat the possible impacts.

A diagrammatic presentation of disaster specific responses includes the need for updating information, coordination, technical assistance, resource mobilization, control, monitoring and extraordinary arrangements with the various departments and agencies, including NGOs at every stage.

All the HODs of the line department should trigger automatically soon after feel of any disaster towards activation of Emergency Support Function and involve as a tool of machinery of the Administration.

##### **11.1.1 Activation of Control Room**

On receipt of forewarning or information about occurrence of disaster the State Control Room will trigger all the control rooms /EOCs of the Districts and information will be sent to the Chief Secretary, MHA Control Room and C-in-C, A & N Command (as deemed fit) and Heads of Nodal departments.

##### **11.1.2 Evacuation**

**11.1.3** If people have to be evacuated in case of impending floods etc., the following shall be considered: -

- The Disaster Management Control Rooms/EOCs will define area to be evacuated.
- The Disaster Management Control Rooms/EOCs will decide the probable duration of evacuation on the basis of meteorological observations and intimation by the concerned forecasting agencies.

**11.1.4** The evacuating agency shall identify

- (a) Number of people for evacuation, destination of evacuees, lead time available, welfare requirements of evacuees.
- (b) Resources to meet the needs for evacuation viz. manpower, transport, supplies, equipment, communications and security of the evacuated area.
- (c) Availability, capability and durability of the required resources.
- (d) Priorities for evacuation in terms of areas likely to be flooded.
- (e) Decide how to execute evacuation viz.

- Delivery of warning.
- Transport arrangement
- Control and timing of movement
- Fulfill welfare needs.
- Registration of evacuees.

**Pattern of response**

**11.1.5** The general pattern of the response will be:-

- Rescue of human beings from various traps (debris/fire/water/poison/in accessibility)
- Emergency medical care to injured
- Extrication of dead bodies and their disposal
- Rescue of domestic and farm animals and providing veterinary care to them.
- Disposal of dead animals
- Retrieval of family belongings and properties

**11.1.6 Search & Rescue**

On occurrence of disaster at land necessitating search and rescue, the operations will commence at the field level by a broad division of labour in the village to look after different tasks like water supply, catering, power supply, transportation, communication, health etc before help from outside arrives (Self Start Mechanism). The core line departments will simultaneously commence response operations on receipt of information regarding occurrence of disaster (Quick Start Mechanism).

State Disaster Response Force /Specialized search and rescue teams from the Police / Fire department will be pressed into action. Mobile units from APWD & DHS will assist these. The constitution of these teams is described in the SOPs for the departments i.e. Police, APWD and Health.

The Standard Operating Procedures has been formulated by the following departments

1	SOP – 1, State Control Room
2	SOP – 2, A&N Police Department
3	SOP – 3, <b>Nicobar District</b>
4	SOP – 4, Health Services
5	SOP – 5, APWD
6	SOP – 6, Directorate of Shipping Services
7	SOP- 7, Port Management Board
8	SOP – 8, Agriculture Department
9	SOP – 9, IOC Terminal, Haddo
10	SOP -10, Aircraft Disaster (A&N Command)
11	SOP-11, A&N Command

12	SOP-12, Andaman District
13	SOP-13, Civil Supplies & Consumer Affairs
14	SOP-14, Forest Department
15	SOP-15, Dept. of Information and Technology
16.	SOP- 16, Panchayati Raj Institutions
17	SOP- 17, District Control Room , Port Blair

**11.1.7 Feedback**

Feedback from the site/field will be received in the following:

- Report on loss of life and property
- Report on Rescue Operations
- Report on Relief Operations
- Action Taken Report From HODs
- Status report on essential services by HODs
- Deployment of resources
- Summary report at the end of rescue operations
- Summary report at the end of relief operations

The feedback so received shall be sent to the UT Disaster Management Authority/Chief Secretary and A & N Command (as deemed fit).

**11.1.8 Press Note**

Press Notes shall be released to the Print and the Electronic Media for the information of Communities.

**11.1.9 Relief for the affected people**

**11.1.10 Following aspects shall be considered while organizing relief: -**

- Organizing Medical Relief as per SOP for Health Department
- Organizing shelters for population rendered homeless
- Coordinating the relief operations of NGOs and community workers
- Coordinating relief from outside agencies including distribution of relief material.

**11.1.11 Organizing shelters for population rendered homeless: -**

A list of possible relief sites will be compiled in the normal course on receipt of information from the Tehsil/village level Disaster Management Control Rooms. If the building/relief site is not damaged on occurrence of disaster, the relief centre may be setup there. If none of the buildings is found suitable, tents shall be erected

**11.1.12 Monitoring**

The response will be suitably adjusted depending upon the feedback received from the field.



**CHECK LIST FOR RESPONSE DURING A DISASTER**

- Whether arrangements for (a) cordoning off the area and (b) restriction of entry into affected area by public done? (by issuing passes etc)
- Whether search and rescue operations, activation of public shelters, etc. have commenced?
- Whether control rooms have been made functional immediately at District level, block level, village level and site level? (the phone numbers and the names of officers handling the control room should be made public)
- Whether periodic press releases have been arranged?
- Whether liaison with particular army/paramilitary forces (to minimize possibility of looting, ground control) done?
- Whether provision of medical services particularly for the injured (Mobile units if needed) made?
- Whether opening of relief centers & supply of food and other basic requirements done?
- Whether temporary shelters, such as tents, metal sheets made available? Whether distribution of relief supplies, blankets and medicines as needed done?
- Whether restoration of minimum communications network done?
- Whether transport communications restored?
- Whether quick assessment of damage and demarcation of damaged areas according to grade or damage done?
- Whether cordoning off severely damaged structures liable to collapse during aftershocks done?
- Whether temporary shoring of certain precariously standing buildings to avoid collapse and damage to other adjoining buildings done?
- Whether immediate action has been taken to prevent certain chain-reactions from developing such as release of water from the reservoir behind a damaged dam?
- Have steps for prevention of spread disasters been taken?
- Whether the process of gathering information about the extent of damage caused has been done?
- Whether recovery of dead bodies and animal carcasses and their disposal arrangements have been done?
- Whether health surveys - preferably by Village Officials done?
- Whether establishment of hygienic and sanitary conditions in the relief villages (bleaching powder etc.) done?
- Whether distribution of compensation using local people's representatives arranged?

**11.1.13 Plan Evaluation**

The purpose of evaluation of the UTDMP is to determine the adequacy of resources, coordination between various agencies, community participation and partnership with NGOs.

The plan should be updated when shortcomings are observed in organisational structures or when technological changes render it obsolete. The plan can also be updated following reports on drills or exercises carried out.

A post-incident evaluation should be done after the completion of relief and rehabilitation activities, in order to assess the nature of UT intervention and support, adequacy of the organization structure, institutional arrangements, operating procedures, monitoring mechanisms, information tools, equipment and communication systems. Impact studies on the above operations for long-term preventive and mitigation efforts are to be undertaken.

At the community level, evaluation exercises may be undertaken to assess the reactions of the community members at various stages in the disaster management cycle and to understand their perceptions about disaster response.

#### **11.1.14 Plan Update**

The UT DMP is a “living document” and the Secretary (RR) will update it every year. An annual conference for DMP update will be organised by Secretary (RR). All concerned departments and agencies would participate and give recommendations on specific issues.

#### **11.1.15 OPERATING PROCEDURE GUIDELINES AND STANDARDS FOR MONITORING**

“Operating Procedure Guidelines and Standards for Monitoring” include procedures for warning, operating procedures for evacuation, comprehensive operating procedures for the departments as well as standards of services and specifications for relief camps and feeding centres.

#### **11.1.16 Operating Procedures for Warning**

A warning system is essential to indicate the onset of a disaster. This may range from alarms (e.g., for fires) and high range centralized sirens in each Islands (e.g., for earthquake and tsunami) to public announcements through radio, television etc. (e.g., for cyclones, floods) and other traditional modes of communication (e.g. public address system, mega phones, ringing of bells, hoisting of flags).

In most disaster situations, experience has shown that a loss of life and property could be significantly reduced by preparedness measures and appropriate warning systems. The importance of warning systems, therefore, hardly needs any emphasis. However, the opportunity for warning does not exist in all cases. Indiscriminate warnings may result in non-responsiveness of the people. It is, therefore, necessary that with respect to every disaster, a Responsible officer is designated to issue the warnings.

The State Control Room and the District Administration is the prime agency responsible for issuing disaster warnings after taking consent from the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad.

**11.1.17 Important Elements of Warning:**

1. Communities in disaster prone areas are made aware of the warning systems.
2. Alternate warning systems must be kept in readiness in case of technical failures (e.g., power failure).
3. All available warning systems should be used.
  - a. The warnings should, to the extent possible be clear about the severity, the duration and the areas that may be affected.
  - b. Warnings should be conveyed in a simple, direct and non-technical language to incorporate day-to-day usage patterns.
  - c. The do's and don'ts should be clearly communicated to the community to ensure appropriate response.
  - d. Warning statements should not evoke curiosity or panic behavior. This should be in a professional language devoid of emotions.
  - e. Spread of rumors should be controlled.
  - f. All relevant agencies and organizations should be alerted.
  - g. Wherever possible, assistance of community leaders and organized groups should be sought in explaining the threat.
  - h. Once a warning is issued, it should be followed-up by subsequent warnings in order to keep the people informed of the latest situations.
  - i. In the event of a disaster threat passing in all clear signal must be given.

**11.1.18 Operating Procedures for Evacuation:**

Disasters by their very nature will be different and may require evacuation of communities. It is important to understand the nature of threat and the procedures to be adopted. All agencies involved in evacuation must have a common understanding of their roles and responsibilities in order to avoid confusion and panic behavior.

Different situations demand different priorities and hence the responsibility for ordering evacuation is assigned to different agencies.

All evacuations will be ordered only by the Deputy Commissioner, Police Department and Fire Brigade. For appropriate security and law and order evacuation should be undertaken with assistance from community leaders. All evacuations should be reported to Deputy Commissioner or District Superintendent of Police immediately.

**11.1.19 The following steps should be taken for evacuation:**

- a. Shelter sites should be within one hour's walk or 3 miles (5 km) of dwellings.
- b. The evacuation routes should be away from the coastal areas.
- c. Evacuation routes should not include roads likely to be submerged in marshy land but may include pathways
- d. Ensure proper evacuation by seeking community participation.
- e. Families should be encouraged to take along water, food, clothing and emergency supplies.
- f. People should listen to a battery-powered radio and follow local instructions.

- g. If the danger is a chemical release, then people should be instructed to evacuate immediately.

In case of marooned persons, evacuation must be carried out as soon as possible and the persons transferred to transit camps. If evacuation is not possible within 3 hours of the disaster, marooned people must be provided with water, medicines, first-aid and cooked food. Emergency transport for the seriously injured can be arranged through speed boats or helicopters. A senior medical officer should accompany the rescue team along with required medical kits and ensure priority shifting of those seriously injured or requiring immediate medical attention.

### **11.1.20 Operating Procedures for Departments**

Operating procedures for different departments include the Preamble, Planning Assumptions, Normal Time Activity, Action Plan Objective in a Disaster Situation, Activities on Receipt of Warning or Activation of District DMP, Evacuation, Relief and Rehabilitation – Field Office Priorities and Head Office Priorities. These Operating Procedures are given for the following departments: Police, Health Department, Municipal Council, Agriculture Department, Animal Husbandry, Electricity Department, Public Works Department, BSNL, Port Management Board, Director of Civil Supplies, Director of Shipping Services, A&N Command and AIR.

### **11.1.21 INFORMATION AND MONITORING TOOLS**

The institutional framework and the response structure would not be effective unless it is operationalised through information tools and monitoring mechanisms. Such tools define the direction and content of information as also the source. The flow of information calls for accountability and the source provides the authenticity. The Information and Monitoring Tools are given in a different document.

In this context, this section presents information and monitoring tools for agencies during preparedness, alert or warning, activation of plan, damage assessment and relief and recovery stages. The tools are evolved keeping in view the requirements of an effective administrative response, efficiency in decision making, evaluation and assessment of on-going disaster stages and requirements of future preparedness. These tools are also expected to help Administration in identification and reaching out to the most vulnerable and devastated groups.

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## **Chapter XII**

### **REHABILITATION**

**12.1.0** While rescue operations and relief measures take care of the immediate post disaster situation, rehabilitation is a long drawn out measure.

**12.1.1 Rehabilitation involves:-**

- Physical and economic rehabilitation of the affected population.
- Restoration of community services- street lighting, water supply, schools medical services and scavenging.
- Restoration of physical infrastructure-roads, public buildings, community centres etc.
- Restoration of private enterprises including farming activities.
- Restoration of private residential buildings.
- Helping organizing institutional finance in restoration work.
- Medical rehabilitation of people seriously affected by the disasters.
- Psychological rehabilitation of persons and families traumatized by the disaster.

**12.1.2** The village level disaster management Control Rooms shall oversee the rehabilitation operations.

**12.1.3** Concerned departments shall get sanctions and approvals for reconstruction of the damaged facilities. Periodical report will be submitted every month.

**12.1.4** The affected people shall be aided through various schemes of the Govt., banking, co-operative and insurance sectors. The sources of funds for these activities can be Ex- Gratia relief, subsidy, loans, insurance claims, bank credit, family savings and family borrowings.

**12.1.5** Psychological rehabilitation of persons and families traumatized by the disaster shall be arranged through Philanthropic organizations and NGOs. The area Tehsildar shall issue an order to make over the orphans to suitable persons. The surviving people may be advised for suitable action, which may include adoption of children and the old, widow remarriage and revitalization of socio cultural activities.

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## **Chapter XIII**

### **APPRAISAL, DOCUMENTATION AND REPORTING**

#### **A. DOCUMENTATION**

The entire Incident will be documented as per the following:

- I) Incident action plan
  - a) Initial information and assessment of the damage and incident maps etc.
  - b) Assessment of resource required
  - c) Formation of incident objectives and conducting strategies meeting
  - d) Operation briefing
  - e) Implementation of incident action plan
- ii) Incident briefing: - IRS form 001
- iii) Incident status report: IRS form 002
- iv) Unit log (assignment): IRS form 003
- v) Record of performed activities – IRS form 004
- vi) Organization assignment list – IRS form 005
- vii) Incident check-in and deployment list – IRS form 006
- viii) On duty officers list – IRS form 007
- ix) Medical form – IRS form 008
- x) Communication plan – IRS form 009
- xi) Demobilization plan – IRS form 010

#### **B. APPRAISAL**

- 13.1** After the disaster is over and the rescue operations have been undertaken, the field level Disaster Management Control Rooms shall carryout a reappraisal of the plan and send feedback to the Deputy Commissioner. The District Disaster Management Authority shall re-appraise various aspects of the Disaster Management Plan e.g. organizational structure, preventive, mitigation and preparedness measures, standard operating procedures and relevant formats. Suggestions in this regard will be examined and sent to the UT Disaster Management Authority for suitable modification of the Disaster Management Plan.

#### **C. DOCUMENTATION**

- 13.2** Documentation is essential for the future

**13.3** **History**

The details regarding how the disaster started, the trauma and the suffering of the people, remedial action taken in the district shall be recorded for future.

**13.4 Success Stories**

Despite the disasters, there are always successful interventions by the Administration, public and private persons, philanthropists, social welfare organizations, religious institutions etc. The effort of the people to save others life and property may be recognized and the people shall be publicly honored.

**13.5 Reporting**

After the relief operations have ended, a comprehensive report regarding the occurrence of disaster, response and suggested measures will be sent by the District Disaster Management Authority to the UTDMEC/UT Disaster Management Authority.

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## **Chapter XIV**

### **STANDARD OPERATING PROCEDURE**

#### **14.1 STANDARD OPERATING PROCEDURE GUIDELINES AND STANDARDS**

This part on “Operating Procedure Guidelines and Standards for Monitoring” includes:

- a) Procedures for warning
- b) Operating Procedures for evacuation
- c) Comprehensive Operating Procedure Guidelines for the Departments
- d) Relief and recovery
- e) Monitoring relief and rehabilitation
- f) Standard arrangements for transit camps
- g) Relief camps

#### **14.2 STANDARD OPERATING PROCEDURE GUIDELINES FOR WARNING**

**Definition:**

Alert/ warning indicates the onset of a disaster for which a warning system is essential. This system may range from alarms (e.g., for fires), sirens (e.g., for industrial accidents) to public announcements through All India radio, Doordarshan etc. (e.g., for cyclones, floods) and other traditional modes of communication (e.g. beating of drums, ringing of bells, hoisting of flags).

[In most disaster situations, experience has shown that loss of life and property could be significantly reduced due to preparedness measures and appropriate warning systems. The importance of warning systems therefore hardly needs any emphasis. However, not in all cases, the opportunity for warning exists. Indiscriminate warnings may result in non-responsiveness of the people. It is therefore necessary that with respect to every disaster a responsible officer is designated to issue the warnings].

##### **14.2.1 Important Elements of Warning**

The following aspects may be considered for dissemination of warning:

- i) All warning systems and technologies are maintained in working condition and checked regularly.
- ii) Communities in disaster prone areas are made aware of the warning systems.
- iii) Alternate warning systems must be kept in readiness in case of technical failure (e.g., power failure)
- iv) Only the designated officers will issue the warning.
- v) All available warning systems should be used

[Each warning system has a limited reach and multiple warning systems will help in reinforcement]



- vi) The warning should, to the extent possible, be clear about the severity, the time frame, area that may be affected.
- vii) Warning statements should be conveyed in a simple, direct and non-technical language, and incorporate day-to-day usage patterns
- viii) The do's and don'ts should be clearly communicated to the community to ensure appropriate responses
- ix) Warning statements should not evoke curiosity or panic behavior. This should be in a professional language devoid of emotions.
- x) Rumor control mechanisms should be activated.
- xi) All relevant agencies and organisations should be alerted
- xii) Wherever possible, assistance of community leaders and organised groups should be sought in explaining the threat.
- xiii) Once a warning is issued, it should be followed-up by subsequent warnings in order to keep the people informed of the latest situations.
- xiv) In the event of the disaster threat tiding away, an All Clear signal must be given.

### **14.3 STANDARD OPERATING PROCEDURES FOR EVACUATION**

- It is important to understand the nature of threat and the procedures to be adopted.
- All agencies involved in evacuation must have a common understanding of their roles and responsibilities in order to avoid confusion and panic behavior.
- Different situations demand different priorities and hence the responsibility for ordering evacuation is assigned to different agencies.
- All evacuations will be ordered only by the Collector, Police, and Fire Brigade or by the Industries Security Officer.
- For appropriate security and law and order evacuation should be undertaken with assistance from community leaders.
- All evacuations should be reported to Deputy Commissioner or District Superintendent of Police immediately.

#### **14.3.1 Factors to be considered for Evacuation**

##### **14.3.1.1 Planning Assumptions**

- a) Amount of time needed for evacuation will depend on the disaster.
  - b) If the event can be monitored, like a cyclone, the GOM could have a day or two to get ready.
  - c) In other disasters, it is mostly emergency evacuation of people.

##### **14.3.1.2 Factors**

- a) Shelter sites should be within one hour's walk and three miles (5 km) of dwellings.

- b) The evacuation routes should be away from the coast or flood-prone areas.
- c) Evacuation routes should not include roads likely to be submerged, but may include pathways.
- d) Ensure proper evacuation by seeking community participation along the following lines:
  - i) Evacuation should be undertaken with assistance from community leaders and community based organisations (CBOs) for appropriate security and law and order;
  - ii) Care should be taken to see that evacuation routes are not blocked.
  - iii) It is always preferable to encourage the entire family to evacuate together as a unit.
  - iv) In case of inadequate transport or limited time, encourage community for emergency evacuation in the following order:
    - seriously injured and sick
    - children, women and handicapped
    - Old
    - Able-bodied.

[An evacuation plan on a priority basis helps avoid stampede and confusion.]

#### **14.3.2 Emergency Evacuations**

- Families should be encouraged to take along adequate supplies of water, food, clothing and emergency supplies.
- The families should be encouraged to assemble the following disaster supplies kit.
- Adequate supply of water in closed unbreakable containers
- Adequate supply of non-perishable packaged food and dry rations
- A change of clothing and rain gear.
- Blankets and bed sheets, towels
- Buckets, plates, glasses, mugs made of plastic
- Soap, toothbrushes, toothpaste
- A battery-powered radio, torch, lantern, matches
- Cash and jewelry
- Personal medicines

- A list of important family documents including ration card, passport, bank passbook, address/telephone book (of relatives), certificates, driving license, property documents, insurance documents etc.
- Special items including foods for infants, elderly or disabled family members.
- Encourage people to keep fuel in their cars as petrol pumps may be closed during emergencies.
- Ask people to shut off electricity, gas and water at main switches and valves before leaving.
- Ask people to listen to a battery-powered radio and follow local instructions.
- In other cases, advise people to follow these steps:
  - Wear protective clothing
  - Secure their homes. Close and lock doors and windows.
  - Turn off the main water valve and electricity
  - Leave early enough to avoid being trapped.
  - Follow recommended evacuation routes. Shortcuts may be blocked.
  - Not to move or drive into submerged areas.
  - Stay away from downed power lines.
  - Animals may not be allowed in public shelters.
  - Community should set the livestock free
  - If possible, the community may be advised to carry the livestock along

[If the evacuation does not involve transportation by vehicles].

### **14.3.3 Evacuation of Marooned Persons**

In the case of marooned persons, if necessary

- Evacuation must be carried out within the shortest possible time
- The marooned persons must be transferred to transit camps.
- Within the shortest possible time (3 hours of the disaster), marooned people must be provided with
  - water
  - medicines
  - first-aid
  - cooked food

[This can continue for 48 hours after the disaster].

- Emergency transport for the seriously injured by
  - Speed Boats
  - Helicopter
  - Sea Plane

- A senior medical officer should accompany the rescue team along with required medical kit and ensure priority for shifting of those seriously injured or requiring immediate medical attention.
- Water supplied must be in accordance with acceptable standards of potable water. It is the responsibility of medical officer to check the water quality.
- All edible items received from outside has to be checked by the medical officer before its dispatch.
- The procedures for tagging as given in the standards should be followed. [Tagging is a process of prioritizing transfer of injured based on first hand assessment of chance of survival by the medical officer on the disaster site. The identification of patients is done by attaching a tag to each patient, usually color coded to indicate a given degree of injury and the priority for evacuation].
- For food supplies, the standards as given in the “Standards for Food” should be followed.

#### **14.4. STANDARD OPERATING PROCEDURE GUIDELINES AND STANDARDS FOR DEPARTMENTS**

##### **14.4.1 Planning Assumptions**

The standards of services have been adopted from internationally accepted norms and have been at times modified to suit local conditions. Although it is difficult to maintain efficient service standards in a disaster, which presents a fluid and confused situation, all efforts should be made to reach as close to these norms as possible. Some of the standards make a lasting impact on the communities whereas others have an immediate impact in the field situation, e.g. lack of adequate space per person in relief camps can lead to mental health issues and the absence of adequate sanitation facilities can lead to epidemics.

The operating procedures developed for each department refer to standards of services to be delivered and the appropriate checklists for field monitoring. Hence, the standards and checklists go hand in hand with the operating procedures for every department.

These departments include Electricity Dept., Police Dept., Public Health, Dir. of Shipping Services, Port Management Board, Agriculture, Animal Husbandry, APWD, BSNL, Airport Authority, All India Radio, Doordarshan and A&N Command.

#### **14.5. STANDARD OPERATING PROCEDURE GUIDELINES FOR POLICE AND HEALTH DEPT.**

##### **14.5.1 Planning Assumptions**

For effective preparedness, the police department must have a disaster response plan or disaster response procedures clearly defined, in order to avoid confusion, improve efficiency in cost and time

- Operating procedures for mobilizing community participation during various stages of disaster management have been given in section on “Areas of Community Participation”. The department is required to study these and adopt appropriate measures to ensure that community participation is substantial.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercises will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select enthusiastic personnel from different department can be deputed for training regarding preparedness for Disaster.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DMP should be undertaken to improve departmental capacity to respond to a disaster.
- The Health department of the UT should undertake regular camps with the staffs and Doctors of all levels regarding preparedness.

#### **14.5.2 Normal Time Activity**

- Assess preparedness level and report the same as per the format to District Control Room every six months
- Maintain a list of disaster prone areas in the district
- Organise training on hazardous for police officers to facilitate handling hazardous materials
- Designate an area, within police station to be used as public information centre.
- Action Plan Objective in a Disaster Situation
- Maintain Law and Order

#### **14.5.3 Activities on Receipt of Warning or Activation of District DMP**

- Within the affected district/ Sub-division all available personnel will be made available to the District Disaster Manager. If more personnel are required, then out of station officers or those on leave may be recalled.
- All personnel required for disaster management should work under the overall supervision and guidance of District Disaster Manager/District Magistrate.
- Establish radio communications (and assist in precautionary evacuation activities) with Emergency operations centre
- Assistant Commissioner
- District control room and Departmental offices within the division.
- All district level officials of the department would be asked to report to the Deputy Commissioner.
- The Deputy Commissioner to provide “Officer-in-Charge (DM)” or the field staff as the need be, with all needed authorizations with respect to :-
  - Recruiting casual labourers.
  - Procuring locally needed emergency tools and equipment and needed materials.

- Expending funds for emergency needs.
- Arrangements of trucks, transit vehicles for officers engaged in the relief work
- Expenditures for purchase of cutting machines and other equipments for dwellings.
- The Officer-in-Charge (DM) will ensure that all field staff and other officers submit the necessary reports and statement of expenditure in a format as required by Deputy Commissioner
- Review and update precautionary measures and procedures and review with staff, the precautions that have been taken to protect equipment and the post-disaster procedures to be followed
- Fill department vehicles with fuel and park them in a protected area
- Provide guards as needed for supply depots such as cooperative food stores and distribution centres.
- Provide convoys for relief materials.
- Identify anti-social elements and take necessary precautionary measures for confidence building.

#### **14.5.3.1 Evacuation**

- All evacuations will be ordered only by the Deputy Commissioner, Police, Fire Brigade.
- For appropriate security and law and order evacuation should be undertaken with assistance from community leaders.
- All evacuations should be reported to Deputy Commissioner or District Superintendent of Police immediately.

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## Glossary of Terms

<b><i>Incident</i></b>	- A Small Scale events or accidents
<b><i>Hazard</i></b>	- The scale of events bigger than incident that causes Injuries and damages to properties
<b><i>Disaster</i></b>	- The Event causes large scale damages
<b><i>Subduction</i></b>	- The mass of tectonic plates goes beneath the other plate
<b><i>Inundation</i></b>	- Submerge of land with water
<b><i>Vulnerability</i></b>	- Communities/areas/structures likely to damage
<b><i>Risk</i></b>	- Vulnerable area that under threat
<b><i>Mitigation</i></b>	- Action for slowing down the hazard
<b><i>Rupture</i></b>	- Cracks developed alongside the fault line
<b><i>IOTWS</i></b>	- Indian Ocean Tsunami Warning Services
<b><i>GIS Mapping</i></b>	- Geographical Information Services
<b><i>Aftershocks</i></b>	Follow-up earthquakes that occur after the first earthquake and are usually smaller than the first one.
<b><i>Avalanche</i></b>	An event where a mass of snow, rock, and ice falls down a mountain. Usually it refers to a snow avalanche. Sometimes the term snow slide is used to mean a snow avalanche.
<b><i>Blizzard</i></b>	A storm that produces heavy blinding snow, near zero visibility, deep drifts and dangerous wind chill.
<b><i>Disaster</i></b>	An occurrence of a severity and magnitude that normally results in deaths, injuries, and property damage and that cannot be managed through the routine procedures and resources of government. It usually develops suddenly and unexpectedly and requires immediate, coordinated, and effective response by multiple government, voluntary and private sector organizations to meet human needs and speed recovery.
<b><i>Disaster Management</i></b>	A Collective term encompassing all aspects of planning and responding to disasters, including both pre- and post-disaster activities. It may refer to the management of both the risks and consequences of disasters.
<b><i>Dust Storm</i></b>	A strong wind storm that fills the air with thick dust. Visibility can be reduced to 1/2 mile or less.

***Earthquake***

The shaking, rolling or sudden shock of the earth's surface. Earthquakes happen along fault lines in the earth's crust.

***Emergency***

An extraordinary situation where there are serious and immediate threats to human life as a result of disaster, imminent threat of disaster, cumulative process of neglect, civil conflict, environmental degradation and socio-economic conditions.

***Eye***

A name used for the center of a hurricane. It is the point where the storm rotates in a counter-clockwise direction. In the eye of a hurricane, the winds do not blow.

***Fault Lines***

Breaks in the Earth's crust where pressure is created as the two sides of the break rub against each other. This pressure is sometimes released in an earthquake.

***Flash Flood***

A dangerous and sudden flood that threatens lives and property and usually occurs after heavy rain. May also occur after an ice jam breaks up or after a dam breaks.

***Food Security***

Access by all people at all times to enough food for an active, health life, including the requirements of adequate supply, stable supply, and access to the supply (including adequate consumption, adequate income in relation to food prices and access to employment).

***Freezing Drizzle Or (Freezing Rain)***

Rain that freezes when it hits the ground, creating a coating of ice on roads and walkways.

***Funnel Cloud***

A rotating, visible extension of cloud, with the top attached to the cloud but not touching the ground.

***Haboob***

A violent dust storm or sandstorm found in northern Africa, India, or the southwestern United States.

***Hail***

Rain that has been frozen many times on its way to the ground, creating a lumpy ball of ice.

***Hazard***

A rare or extreme natural or human made event that threatens to adversely affect human life, property or activity to the extent of causing disaster.



***Hazard Assessment***

The process of estimating, for defined areas, the probabilities of the occurrence of potentially-damaging phenomena of given magnitudes within a specified period of time.

***Hazard Mapping***

The process of establishing geographically where and to what extent particular phenomena are likely to pose a threat to people, property, infrastructure, and economic activities.

***Heavy Surf***

Large waves breaking on the shore or near the shore caused from storm swells created by a distant storm.

***Human-made Disaster***

Disaster or emergency situation of which the principal, direct causes are identifiable human actions, deliberate or otherwise

***Hurricane***

A dangerous tropical cyclone with winds speeds of 74 mph, or higher. Also known as a typhoon.

***Ice Storm***

Freezing rain that creates a dangerous sheet of ice that is 1/4 inch thick or greater.

***Lightening***

A sudden visible flash of energy and light caused by electrical discharges during a thunderstorm.

***Mitigation***

Mitigation refers to measures, which can be taken to minimize the destructive and disruptive effects of hazards and thus lessen the magnitude of a disaster.

***Preparedness***

Measures to ensure the readiness and ability of a society to forecast and take precautionary measures in advance of an imminent threat, and to respond to and cope with the effects of a disaster by organizing and facilitating timely and effective rescue, relief and appropriate post-disaster assistance.

***Post Disaster Assessment***

Also called damage and needs assessment, it is the process of determining the impact of a disaster or events on a society, the needs for immediate, emergency measures to save and sustain the lives of survivors, and the possibilities for expediting recovery and development.

***Richter Scale***

The scale used by scientists to measure the intensity of an earthquake. It was created by Charles F. Richter in 1935.

***Risk***

The expected losses (lives lost, persons injured, damage to property, and disruption of economic activity or livelihood) caused by a particular phenomenon.

***Risk Assessment***

Also called Risk Analysis or Evaluation, it is a process of determining the nature and scale of losses and damage due to disaster, which can be anticipated in particular areas during a specified period of time.

***Risk Mapping***

The presentation of the results of risk assessment on a map, showing the levels of expected losses, which can be anticipated in specific areas, during a particular time period, as a result of particular disaster hazards and vulnerabilities.

***Severe Thunderstorm***

A thunderstorm that produces either of the following: damaging winds of 58 miles an hour or greater, hail 3/4 of an inch in diameter or larger, or a tornado. Severe Thunder storms can result in the loss of life and property.

***Slow-onset Disasters***

Also called creeping disasters or slow-onset emergencies, these are situations in which the ability of people to sustain their livelihood slowly declined to a point where survival is ultimately jeopardized.

***Storm Swell***

A long, often massive and crestless wave or succession of waves that are caused by hurricanes.

***Sudden-onset Disasters***

Sudden calamities caused by natural phenomena such as earthquakes, floods, tropical storms and volcanic eruptions.

***Technological Disasters***

Situations in which large numbers of people, property, infrastructure, or economic activity are directly and adversely affected by major industrial accidents, severe pollution incidents, nuclear accidents, air crashes, major fires or explosions.

***Tornado***

A wild, rotating column of air, usually attached to a cloud at the top and touching the ground. It nearly always starts off as a funnel cloud and may be accompanied by a loud roaring noise, like a train coming.

***Tropical Disturbance***

A powerful storm that forms over water in the tropics or subtropics and holds its strength for 24 hours or more. As it gains power, it may become a tropical wave, tropical depression, tropical storm, or hurricane.

***Tsunami***

An ocean wave produced by an event at sea, like an earthquake, landslide, or volcanic eruption. These waves may reach enormous size and have been known to travel across entire oceans.

***Vulnerability***

The extent to which an individual, community, sub-group, structure, service, or geographic area is likely to be damaged or disrupted by the impact of a particular disaster hazard.

***Vulnerability Analysis***

The process of estimating the vulnerability to potential disaster hazards of specified elements at risk.

***Waterspout***

A wild, rotating column of air over a body of water, usually attached to a cloud at the top and reaching the water.

***Wind Chill***

An apparent temperature that describes the combined effect of wind and low air temperatures on exposed skin.

*Source: Department of Agriculture and Co-operation, Ministry of Agriculture, Govt. of India (Oct. 2001), Report of High Power Committee on Disaster Management*

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## Explanations

### **Capacity Building**

Capacity Building includes the strategies for establishing the institutions, creating the organisation and training of personnel and coordination of such training as an integrated effort for the effective management of disasters; identification of existing resources and resources to be acquired or created; and the process of acquiring or creating resources for imparting training programmes like the preparation of a training calendar, identification of target trainees, preparation of resource materials, mobilisation of trainers, funds and preparation of a delivery strategy through institutional networks.

### **District Disaster Management Authority (DDMA)**

The DM Act, 2005 envisages the constitution of the District Disaster Management Authority (DDMA) in every district. According to Section 25 of the Act. DDMA shall consist of the Chairperson and such number of other members, not exceeding seven, as may be prescribed by the State Government, and unless the rules otherwise provide, it shall consist of the following, namely:- (a) the Collector or District Magistrate or Deputy Commissioner, as the case may be, of the district who shall be Chairperson, ex officio; (b) the elected representative of the local authority who shall be the co-Chairperson, ex officio: Provided that in the Tribal Areas, as referred to in the Sixth Schedule to the Constitution, the Chief Executive Member of the district council of autonomous district, shall be the co-Chairperson, ex officio; (c) the Chief Executive Officer of the District Authority, ex officio; (d) the Superintendent of Police, ex officio; (e) the Chief Medical Officer of the district, ex officio; (f) not exceeding two other district level officers, to be appointed by the State Government. In any district where zilla parishad exists, the Chairperson thereof shall be the co-Chairperson of the District Authority. The State Government shall appoint an officer not below the rank of Additional Collector or Additional District Magistrate or Additional Deputy Commissioner, as the case may be, of the district to be the Chief Executive Officer of the District Authority to exercise such powers and perform such functions as may be prescribed by the State Government and such other powers and functions as may be delegated to him by the District Authority.

### **Disaster**

Disaster means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or manmade causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or

damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area

### **Disaster Management**

Disaster Management means 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 its severity or consequences; capacity-building; preparedness to deal with any disaster; prompt response to any threatening disaster situation or disaster; assessing the severity or magnitude of effects of any disaster; evacuation, rescue and relief; rehabilitation and reconstruction.

### **Gender**

Gender refers to the array of socially constructed roles and relationships, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to people on a differential basis. Gender is not biologically pre-determined but refers to the economic, social and cultural attributes and opportunities associated with being male or female. Gender is also relational; gender roles and characteristics do not exist in isolation, but are defined in relation to one another and through the demonstration or “doing” of gender in relation to others. Gender attributes and opportunities may be affirmed or challenged (or both) in disaster contexts; gender may also be imposed or inferred in disasters to the disadvantage of individuals whose gender identity is transitional or emergent.

### **Local Authorities**

The term ‘Local Authorities’ in these Guidelines includes panchayati raj institutions, municipalities, a district board, cantonment board, town planning authority or Zilla Parishad or any other body or authority invested by law for rendering essential services or, with the control and management of civic services within a specified local area.

### **Mitigation**

Mitigation means measures aimed at reducing the risk, impact or effects of a disaster or threatening disaster situation.

### **National Disaster Response Force (NDRF)**

The DM Act, 2005 has made the statutory provisions for the constitution of the National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters. According to Section 45 of the Act, the Force has to function under

the general superintendence, direction and control of the NDMA and under the command and supervision of Director General, NDRF. In lieu with the Section 44 (i) of the Act that states NDRF a specialist force, the force is gradually emerging as the most visible and vibrant multi-disciplinary, multi-skilled, high-tech force of the NDMA capable of dealing with all types of natural and man-made disasters. At present, NDRF is constituted of eight battalions, two each from the BSF, CRPF, CISF and ITBP. Each battalion has 18 self-contained specialist search and rescue teams of 45 personnel each including engineers, technicians, electricians, dog squads and medical/paramedics. The total strength of each battalion is approximately 1,149. All the eight battalions are being equipped and trained to combat all natural disasters including four battalions in combating nuclear, biological and chemical disasters. Raising of two more NDRF battalions at Patna in Bihar and Vijayawada in Andhra Pradesh has been approved by the Government and NDMA has initiated necessary actions for the same. In the event of a threatening disaster situation, proactive deployment of these forces will be carried out by NDMA in consultation with state authorities.

### **National Executive Committee (NEC)**

In exercise of the powers conferred by sub-section (3) of section 8 of the Disaster Management Act, 2005 (53 of 2005), the Central Government has constituted a National Executive Committee (NEC) to carry out the various functions assigned to it under the said Act. NEC comprises the Union Home Secretary as the Chairperson, and the Secretaries to the GOI in the Ministries/Departments of Agriculture, Atomic Energy, Defence, Drinking Water Supply, Environment and Forests, Finance (Expenditure), Health, Power, Rural Development, Science and Technology, Space, Telecommunications, Urban Development, Water Resources and the Chief of the Integrated Defence Staff of the Chiefs of Staff Committee as members. Secretaries in the Ministry of External Affairs, Earth Sciences, Human Resource Development, Mines, Shipping, Road Transport & Highways and Secretary, NDMA will be special invitees to the meetings of the NEC.

### **National Disaster Management Authority (NDMA)**

On 23 December 2005, the Government of India enacted the Disaster Management Act, which envisaged the creation of the National Disaster Management Authority (NDMA), headed by the Prime Minister, and State Disaster Management Authorities (SDMAs) headed by respective Chief Ministers, to spearhead and implement a holistic and integrated approach to Disaster Management in India. NDMA has been constituted with the Prime Minister of India as its Chairman, a Vice Chairman with the status of Cabinet Minister, and eight members with the status of Ministers of State. NDMA as the apex body is mandated to lay down the policies, plans and guidelines for DM

to ensure timely and effective response to disasters. Towards this, it has the following responsibilities:-Lay down policies on disaster management ; Approve the National Plan; Approve plans prepared by the Ministries or Departments of the Government of India in accordance with the National Plan; Lay down guidelines to be followed by the State Authorities in drawing up the State Plan; Lay down guidelines to be followed by the different Ministries or 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 policy and plan for DM; Recommend provision of funds for the purpose of mitigation; Provide such support to other countries affected by major disasters as may be determined by the Central Government; Take such other measures for the prevention of disaster, or the mitigation, or preparedness and capacity building for dealing with the threatening disaster situation or disaster as it may consider necessary; Lay down broad policies and guidelines for the functioning of the NIDM.

### **Non-Governmental Organizations (NGOs)**

NGOs are organizations registered under various Indian laws such as the Societies Registration Act, 1860, Section 25(1) of Companies Act, 1956 meant for non-profit companies, or State-specific Public Charitable Trust Acts. NGOs work on a variety of areas like humanitarian assistance, sectoral development interventions and sustainable development. NGOs play important roles in different stages of the Disaster Management Cycle.

### **Preparedness**

Preparedness is the state of readiness to deal with a threatening disaster situation or disaster and the effects thereof.

### **Person with Disabilities (PWD)**

According to the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, "person with disability" means a person suffering from not less than forty per cent of any disability as certified by a medical authority. The Act defines disability as blindness; low vision; leprosy-cured; hearing impairment, locomotors disability; mental retardation; mental illness.

### **State Disaster Management Authority (SDMA)**

The DM Act, 2005 has made the statutory provisions for the constitution of the State Disaster Management Authority (SDMA) at every State for the purpose of DM. According to Section 14 of the Act, SDMA shall consist of the Chairperson and such number of other members, not exceeding nine, as may be prescribed by the State Government and, unless the

rules otherwise provide, the SDMA shall consist of the following members, namely:- (a) the Chief Minister of the State, who shall be Chairperson, ex officio; (b) other members, not exceeding eight, to be nominated by the Chairperson of the State Authority; (c) the Chairperson of the State Executive Committee, ex officio. The Chairperson of the State Authority may designate one of the nominated members to be the Vice- Chairperson of the SDMA. The Chairperson of the State Executive Committee shall be the Chief Executive Officer of the State Authority, ex officio: provided that in the case of a Union territory having Legislative Assembly, except the Union territory of Delhi, the Chief Minister shall be the Chairperson of the Authority established under this section and in case of other Union territories, the Lieutenant Governor or the Administrator shall be the Chairperson of that Authority: provided further that the Lieutenant Governor of the Union territory of Delhi shall be the Chairperson and the Chief Minister thereof shall be the Vice-Chairperson of the SDMA.

### **Seismic Retrofitting**

Seismic retrofitting is the modification of existing structures to make them more resistant to seismic activity, ground motion, or soil failure due to earthquakes. With better understanding of seismic demand on structures and with our recent experiences with large earthquakes in major urban centres, the need of seismic retrofitting is well acknowledged. While current practices of seismic retrofitting are predominantly concerned with structural improvements to reduce the seismic hazard of using the structures, it is equally important to reduce the hazards and losses from non-structural elements. Seismic performance of structures can be greatly enhanced through proper initial design or subsequent modifications.



## Abbreviations

CRZ	:	Coastal Regulation Zone
CRS	:	Cargo Related Services
CBDP	:	Community Based Disaster Preparedness
CCP	:	Community Contingency Plan
DDMA	:	District Disaster Management Authority
DM	:	Disaster Management
DMO	:	Disaster Management Officers
DRR	:	Disaster Risk Reduction
DRM	:	Disaster Resource Management
DMP	:	Disaster Management Plan
DMS	:	Disaster Management Server
EOC	:	Emergency Operation Center
EIA	:	Environmental Impact Assessment
EW	:	Early Warning
GIS	:	Geographic Information System
GPS	:	Ground Positioning System
IRS	:	Incident Response System
IRTs	:	Incident Response Teams
IMD	:	Indian Meteorological Department
INCOIS	:	Indian National Centre for Oceanic Information Services
IOTEWS	:	Indian Ocean Tsunami Early Warning System
IEC	:	Information Education and Communication
INEE	:	International Network for Education in Emergencies
Mw	:	Movement Magnitude Wave
MoA	:	Ministry of Agriculture
MoD	:	Ministry of Defence
MFR	:	Medical First Responder
NIOT	:	National Institute of Ocean Technology
NDMA	:	National Disaster Management Authority
NDRF	:	National Disaster Response Force
NEC	:	National Executive Committee
NIDM	:	National Institute of Disaster Management
PBMC	:	Port Blair Municipal Council

PDS	:	Public Distribution System
PRI	:	Panchayati Raj Institutions
SDRF	:	State Disaster Response Fund
SDRF	:	State Disaster Response Force
SCR	:	State Control Room
SEC	:	State Executive Committee
SHG	:	Self Help Group
SOP	:	Standard Operating Procedures
UTDMA	:	Union Territory Disaster Management Authority
UTDMEC	:	Union Territory Disaster Management Executive Committee
UNDP	:	United Nations Development Programme
VCP	:	Village Contingency Plan
VVTF	:	Village Voluntary Task Force
VHAI	:	Voluntary Health Association of India
WATSAN	:	Water and Sanitation



*Chance favours the prepared mind*

**Save Seconds Save Lives**

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