

# GoI-UNDP Disaster Risk Management Programme 2002-2009

The GoI-UNDP Disaster Risk Management (DRM) Programme envisages accelerating capacity development for disaster reduction at the national level and in some of the most-vulnerable regions in the country through community-based and gender sensitive approaches. It is designed to assist some of the most multi-hazard prone states such as Arunachal Pradesh, Assam, Bihar, Delhi, Gujarat, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Sikkim, Tamil Nadu, Tripura, Uttaranchal, Uttar Pradesh, and West Bengal. The thematic focus being on awareness generation and education, training and capacity building for mitigation and better preparedness in terms of disaster risk management at community, district and state levels, and strengthening of state and district emergency operations centers for accurate and timely dissemination of warning. UNDP has strived to provide specialized support to Ministry of Home Affairs (MHA) to set up the institutional and administrative system for comprehensive disaster risk management.

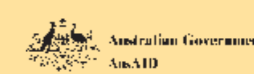
To achieve the programme results, resources required for the DRM Programme in 176 most hazard prone districts of 17 States was US \$41 million over a period of six years (2002-2008). This programme forms the nucleus of a much larger Programme of the Government of India to achieve the overall goal – “Sustainable Reduction in Disaster Risk in the most hazard-prone districts in all the States of India.” The Programme was initiated in 2002 with US\$2 million from Government of India –UNDP Country Cooperation Framework to accelerate capacity building in disaster reduction and recovery activities at the national level and in 28 districts of Bihar, Gujarat and Orissa through community-based preparedness approaches. The Programme was further expanded (phase II) to cover 148 additional most multihazard prone districts spread across 14 selected states.



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**Building PRI capacities for Disaster Preparedness and Management  
- A training Manual.**



## PREFACE

The Community Based Disaster Preparedness (CBDP) approach promotes involvement of the community and strengthening of their capacities for vulnerability reduction through a decentralized planning process. The Panchayati Raj bodies, representative body of the people, is the most appropriate institution from village to the district levels in view of their proximity, universal coverage and enlisting people's participation on an institutionalized basis. Their association has the necessary potential of getting people involved in all possible preventive measures so that the impact of the disasters is mitigated.

It is necessary to sensitize the local communities through them to develop coping mechanism in preparedness and mitigation measures. This document attempts to capture the multiple dimensions of Community Based Disaster Preparedness with the purpose of making it informative and educational across a number of stakeholders. The principal focus in this document lay on relating what the PRI members need to 'know' and 'do' with respect to their role and responsibility in disaster management.

The members of the PRI bodies at all levels are expected to be the primary users of this document, while other sectors like training professionals, field workers, practitioners, journalists and academicians may be able to use it for reference. NGOs working in the area of disaster management, Government agencies associated with aspects of disaster mitigation and development planning, local disaster management teams and committees as well as civil defense training units may also find this document useful.

Keeping in view the long and wide variety of disasters in a country like India, one cannot say that this document covers all aspects, but it certainly deals with the understanding of the more critical ones and takes into account some of the best practices in the country.

Hope the document will be found useful by the intended users.

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## ACKNOWLEDGEMENT

The concept of multi-tier and decentralized approach for the capacity building, a wide range of stakeholders on Disaster Management called for a very systematic approach. Considering this need it was decided to design specific training programs starting with Training of Trainers for the core trainers, where the focus was on enhancing training skills and subject knowledge. Training modules were also designed for PRI members and volunteers. The time frame for the various modules was decided with a balanced approach between learning need and available time. The priority, however, was given to the aspects of preparedness in all the modules.

Ms. Kalika Mahapatra, Programme Associate, UNDP, under the able leadership of Shri P.K. Jena, Assistant. Country Director, Orissa provided the opportunity and necessary guidance at every step to take this project forward. Interactions with Shri Gyanaranjan Dash, Project Coordinator, OSDMA provided a lot of inspiration for putting this document together with a practical approach.

Many writers, thinkers, academicians, trainers and functionaries of a large number of organizations have contributed towards this document out of their vision and experience indirectly through innumerable publications on the subject and directly through the website of UNDP. The references used for this document would indeed run into a long list. We thankfully acknowledge the contributions.

We hope the manual will be found useful to practitioners of Disaster Management. The material, however, will need to be updated progressively to keep it fresh and relevant.

Lalatendu Rath,  
Author



## FOREWORD

Considering the important role that communities play in reducing vulnerabilities and responding to the early recovery phase of any disaster, the disaster management framework of India has identified community-based capacity building as an important element.

Building capabilities of functionaries and community members on the various facets of disaster preparedness and management was one of the major components of the partnership between the Government of India and the United Nations Development Programme's Disaster Risk Management Programme (2002-2009). The programme was implemented under a multi-donor framework funded by AUSAID, DIPECHO, DFID, EU, Government of Japan, UNDP, UNISDR, UN-Trust Fund and USAID.

The programme envisaged people's participation in identifying specific risks and their own existing capacities to cope with risk in the context of multi-hazards. Accordingly, the needs of the vulnerable groups were prioritized and plans were developed for preparedness and response through participation of communities and local self governments.

The programme also developed capabilities of a core group of trainers to cater to the needs of Panchayati Raj Institution (PRI) members in order to further the provisions of the Disaster Management Act (2005) and the Disaster Management Policy that promote involvement of PRIs in disaster management.

This PRI Training Module is a step towards laying a strong foundation to make at risk communities more resilient and proactive when disaster strikes. This would also facilitate institutionalising the efforts taken under the government's and UNDP's Disaster Risk Management Programme through the local government systems.

This training manual will serve as a handy reference for PRIs as well as other organisations working in the field of disaster management in the capacity building of the communities living in high-risk areas.



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## ACRONYMS

<b>ANM</b>	-	Auxiliary Nurse Midwife
<b>AWW</b>	-	Aanganwadi Worker
<b>APL</b>	-	Above Poverty Line
<b>BPL</b>	-	Below Poverty Line
<b>BDO</b>	-	Block Development Officer
<b>CBDP</b>	-	Community Based Disaster Preparedness
<b>CBOs</b>	-	Community Based Organizations
<b>CDMO</b>	-	Contract Development and Manufacturing Organization
<b>CMG</b>	-	Crisis Management Group
<b>CRF</b>	-	Calamity Relief Fund
<b>CWC</b>	-	Central Water Commission
<b>CDVO</b>	-	Chief District Veterinary Officer
<b>CSO</b>	-	Civil Society Organization
<b>DWS</b>	-	Disaster Warning System
<b>DM</b>	-	Disaster Management
<b>DMT</b>	-	Disaster Management Teams
<b>GP</b>	-	Gram Panchayat
<b>GIC</b>	-	General Insurance Corporation
<b>IMD</b>	-	India Meteorological Department
<b>IWDP</b>	-	Integrated Wasteland Development Program
<b>MIS</b>	-	Management Information System
<b>NGO</b>	-	Non-Governmental Organizations
<b>NREGA</b>	-	National Rural Employment Guarantee Act
<b>NUNV</b>	-	National United Nations Volunteers
<b>ORS</b>	-	Oral Rehydration Solution
<b>PRI</b>	-	Panchayati Raj Institutions
<b>PRA</b>	-	Participatory Rural Appraisal
<b>PDS</b>	-	Public Distribution System
<b>PMGSY</b>	-	Prime Minister's Grameen Sadak Yojna
<b>PHC</b>	-	Public Health Commission
<b>R&amp;B</b>	-	Roads & Bridges
<b>RD</b>	-	Rural Development
<b>RTO</b>	-	Road Transport Office
<b>RWS</b>	-	Radio and Wireless System
<b>RWSS</b>	-	Rural Water Supply and Sanitation
<b>RCC</b>	-	Regional Computer Center
<b>SC</b>	-	Scheduled Caste
<b>ST</b>	-	Scheduled Tribe
<b>SGRY</b>	-	Sampoorna Gram Rozgar Yojna
<b>SHG</b>	-	Self Help Group
<b>SOP</b>	-	Standard Operating Procedure
<b>SDMC</b>	-	State Disaster Management Committee
<b>VHF/HF</b>	-	Very High Frequency/High Frequency
<b>VDMC</b>	-	Village Disaster Management Committee
<b>VCA</b>	-	Vulnerability and Capacity Assessment
<b>VLW</b>	-	Village Level Workers
<b>ZP</b>	-	Zila Parishad



CHAPTER

1

**Overview  
Of  
Disasters  
In  
India**





# Chapter 1

## OVERVIEW OF DISASTERS IN INDIA

### Overview of the Chapter

- ▶ Country and Climate
- ▶ History of Disasters in India
- ▶ Anatomy and Types of Disasters
- ▶ Consequences of Disasters
- ▶ Initiatives in Preparedness & Mitigation Measures
- ▶ Forecasting and Warning

### COUNTRY & CLIMATE

India, a large country with a geographical area of 3.28 million sq km, has a tropical and subtropical climate and is bounded in the north by the Himalayan mountain ranges. The wide Indo-Gangetic plain lies between the Himalayas in the north and the Deccan Plateau that occupies most parts of the southern peninsular India. The Western and the Eastern Ghats constitute long mountain ranges, running along the west and the east coast of the peninsula. These Ghats leave narrow stretches of coastal plains along the Arabian Sea on the west and wider plains on the Bay of Bengal coast on the east. The country receives an annual precipitation of 400 million hectare meters, 73 percent of which is received between June and September.

The heavy concentration of rainfall within a span of three months in most of the areas causes heavy run-off and high floods. Non-availability of moisture over most parts of the year, particularly in the arid and semi-arid regions, renders 68 percent of the land-mass vulnerable to drought. The tectonic plates of Indian subcontinent make it vulnerable to frequent disturbances of earthquake.

The Asia Pacific Region faces over 60% of the world's natural disasters. India, on account of its geographical position, climate and geological setting, has had from time immemorial, a fair share of these disasters. There is hardly a year when some part of the country or other does not face the spectra of drought, due to the failure of monsoons in vulnerable areas. One or two cyclones strike the peninsular region of the country every year. Similarly, floods are a regular feature of the eastern India where Himalayan Rivers inundate large parts of its catchments area uprooting people, disrupting livelihood and damaging infrastructure. The fragility of the Himalayan mountain ranges is a continuing source of concern of their high vulnerability to earthquakes, landslides and avalanches. The earthquakes in Maharashtra and Madhya Pradesh have demonstrated that the areas considered comparatively safe earlier are really not so.

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## HISTORY OF DISASTERS IN INDIA

The unique geo-climate conditions of the Indian sub-continent make this region among the most vulnerable to natural disasters in the world. Disasters occur with amazing frequency and while the community at large has adapted itself to these regular occurrences, the economic and social costs continue to mount year after year.

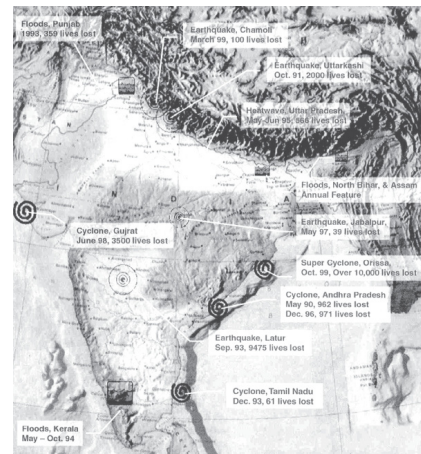
Floods, droughts, cyclones, earthquakes and landslides are regular phenomena in India. Out of the total geographical area of 33 lakh sq. km, about 60% of the landmass is prone to earthquakes of various intensities; over 40 million hectares is prone to floods; about 8% of the total area is prone to cyclones and about 68% of the area is susceptible to drought. Of the 35 States/Union Territories in the country, 22 are disaster prone.

Among all the disasters that occur in the country, river floods are the most frequent and often the most devastating. The cause for flood is chiefly the peculiarities of rainfall in the country, out of the total annual rainfall in the country, 75% is concentrated over short monsoon season of three to four months. As a result there is a heavy discharge from the rivers during this period causing widespread floods. As much as 40 million hectare of land in the country has been identified as flood prone and an average of 18.6 million hectare of land is flooded annually. Floods are caused mainly in the Ganga-Brahmaputra-Meghna basin that carries 40% of the nation's total river flow.

Earthquakes are considered to be one of the most dangerous and destructive natural hazards. The impact of this phenomenon is sudden with little or no warning, making it just impossible to predict or make preparations against damages and collapses of buildings and other man-made structures. About 50-60% of total area of the country is vulnerable to seismic activity of varying intensities.

Drought is a perennial feature in some states of India. About 16% of the country's total area is drought prone and approximately 50 million people are annually affected by droughts. In fact drought is a significant environmental problem too as it is caused by less than average rainfall over a long period of time. In India about 68% of total sown area of the country is drought prone. Most of the drought prone areas identified by Govt. of India lay in the arid, semi arid and sub-humid areas of the country.

India has a very long coast line of 8041 km which is exposed to tropical cyclone arising in the bay of the Bengal and Arabian Sea. The Indian Ocean is one of the six major cyclone —prone regions of the world. In India cyclones occur usually between April and May, and also between October and December. The eastern coast line is more prone to cyclones as about 80% of the total cyclones generated in the region hit there.



### Some of the major events of natural disasters in recent past:

Disasters	Year	Place of Event	Events and Impact
Flood	Sept 1982	Orissa	Severe Floods– Break down of Dalei Ghai
	1993	Punjab	359 lives lost
	May-Oct 1994	Kerala	Severe damages
	Aug 2000	West Bengal	Severe damages
	July 2002	Andhra Pradesh	Severe damages
	July 2001	Orissa	Severe damages
	July 2002	Assam, Bihar & WB	Severe damages
	Aug 2003	Orissa	Severe damages
	July 2008	Bihar	Devastating flood in Kosi river
	Aug 2008	Orissa	Devastating floods in major parts of the state
Cyclone	May 1990	Andhra Pradesh	962 lives lost
	Dec 1993	Tamilnadu,	61 lives lost

Disasters	Year	Place of Event	Events and Impact
	Dec 1996	Andhra Pradesh	971 lives lost
	June 1998	Gujarat,	3500 lives lost
	Oct 1999	Orissa	Super Cyclone, 10000 lives lost
Earthquake	Oct 1991	Uttarkashi,	200 lives lost
	Sept 1993	Latur,	9475 lives lost
	Mar 1995	Chamoli	100 lives lost
	May 1997	Jabalpur,	39 lives lost
	Jan 2001	Gujarat,	more than 20000 lives lost
Heat Wave	May-June 1995	Uttar Pradesh	566 lives lost
	May-June 1998	Orrisa,	2000 lives lost
	May-June 1999	Orrisa,	20 lives lost
Cloud Burst	Aug 2002	Uttranchal	

## ANATOMY AND TYPES OF DISASTERS

### What is a Disaster?

Any sudden, severe, unexpected and fortuitous happening causing great damage to life and/ or property can be described as a calamity or a disaster. Disaster is an impulsive event causing widespread devastation to life and property. The damage caused by disasters is immeasurable and varies with varieties with the geographical location, climate and type of earth surface.

### NATURAL DISASTERS

A natural disaster is an event of nature, which causes sudden disruption to the normal life of a society and causes damage to property and lives, to such an extent that normal social and economic mechanisms available to the society are inadequate to restore normalcy. Viewed in this manner, the majority of natural disasters, which cause widespread damage and disruption in India, are drought, flood, cyclone and earthquakes.

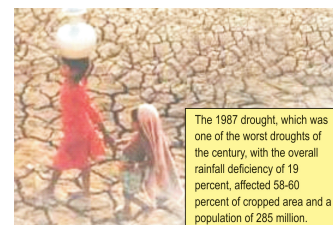
### FLOODS

Of the annual rainfall, 75 percent is concentrated over four months of monsoon (June - September) and as a result almost all the rivers carry heavy discharge during this period. The flood hazards compounded by the problems of sediment deposition, drainage congestion and synchronization of river floods with sea tides in the coastal plains. The rivers originating in the Himalayas also carry a lot of sediment and cause erosion of the banks in the upper reaches and over-topping in the lower segments. The most flood prone areas are the Brahmaputra and the basins in the Indo-Gangetic plains. The other flood prone areas are the north-west region of the west flowing rivers like Narmada and Tapi, the Central India and the Deccan region with major east flowing rivers like Mahanadi, Krishna and Cavery. While the area liable to floods is 40 million hectares, the average area affected by floods annually is about 8 million hectares. The annual average cropped area affected is approximately 3.7 million hectares.



### DROUGHT

As much as 73.7 percent of the annual aggregate precipitation of 400 million hectare metres is received during the south-west Monsoon period, June to September. Due to erratic behaviour of monsoon, both low (less than 750 mm) and medium (750-1125 mm) rainfall regions, which constitute 68 percent of the total areas, are vulnerable to periodical droughts. The analysis of 100 years of rainfall behaviour reveals that the frequency of occurrence of below normal rainfall in arid, semi-arid and sub-humid areas is 54-57 percent, while severe and rare droughts occur once every 8-9 years in arid and semi-arid zones. In semi-arid and arid climatic zones, about 50 percent of the

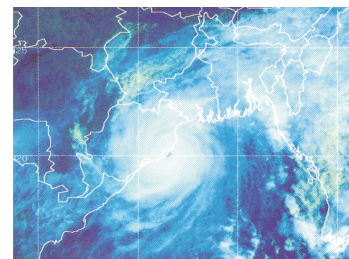


The 1987 drought, which was one of the worst droughts of the century, with the overall rainfall deficiency of 19 percent, affected 58-60 percent of cropped area and a population of 285 million.

severe droughts cover generally 76 percent of the area. In this region, rare droughts of most severe intensity occurred on an average once in 32 years and almost every third year was drought year.

## CYCLONE

India has a long coast line of 8,000 kms. On an average, about five to six tropical cyclones from the Bay of Bengal and Arabian Sea every year, out of which two or three may be severe. There are two distinct cyclone seasons: pre-monsoon (May-June) and post-monsoon (October-November). Analysis of cyclone events during the past 100 years reveals that as against 117 cyclones of varied intensities formed in the Arabian Sea, 442 cyclones were formed in the Bay of Bengal, which proves that it is four times more prone to occurrences of Cyclone compared to the former.



The impact of these cyclones is confined to the coastal districts, the maximum destruction being within 100 km. from the centre of the cyclones and on either side of the storm track. The principal dangers from a cyclone are gales and strong winds, torrential rain and high tidal waves (also known as 'storm surges'). Most casualties are caused by coastal inundation by tidal waves and storm surges. The worst devastation takes place when and where the peak surge occurs at the time of the high tide.

## EARTHQUAKE

Earthquake is a series of underground shock waves and movements on the earth's surface. It is caused by natural processes wresting the earth's crust. It is found where one of the earth's plates is moving against another and building up so much tension that the rock cracks. The sudden cracks and the movement of the rocks send out shock waves (P-Waves and S-Waves) making the ground shake violently. The severity of an earthquake is measured on the Richter scale.

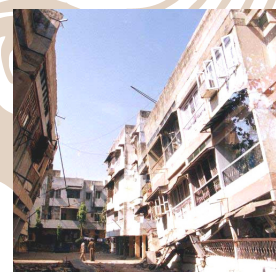


Earthquake Severity	
Richter Magnitudes	Earthquake Effects
Less than 3.5	Generally not felt, but recorded.
3.5-5.4	Often felt, but rarely causes damage.
Under 6.0	At most slight damage to well-designed buildings. Can cause major damage to poorly constructed Buildings over small regions.
6.1-6.9	Can be destructive in areas up to about 100 kilometers across where people live.
7.0-7.9	Major earthquake. Can cause serious damage over larger areas.
8 or greater	Great earthquake. Can cause serious damage in areas several hundred kilometers across.

The Himalayan mountain ranges are considered to be the world's youngest fold mountain ranges. The subterranean Himalayan are, therefore, geologically very active. The Himalayan frontal arc, flanked by the Arakan Yoma belt in the east and the Chaman fault in the west constitute one of the most seismically active regions in the world. Four earthquakes exceeded the magnitude of 8 in the Richter scale in the history of last sixty years; these are the Assam earthquakes of 1950 and 1987, the Kangra earthquake of 1905 and the Bihar-Nepal earthquake of 1935. The peninsular part of India comprises stable continental crust regions which are considered stable as they are far away from the tectonic activity of the boundaries. Although these regions were considered seismically least active, an earthquake that occurred in Latur in Maharashtra on September 30, 1993 of magnitude 6.4 in the Richter scale caused substantial loss of lives and damage to infrastructure.

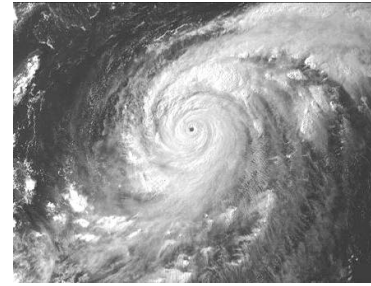
## LANDSLIDES

The Himalayan, the north-east hill ranges and the Western Ghats experience considerable landslide activities of varying intensities. The rocks and the debris carried by the rivers like Kosi originating in the Himalayas cause enormous landslides in the valleys. The seismic activity in the Himalayan region also results in considerable landslide movement. The heavy monsoon rainfall, often in association with cyclonic disturbances, results in Considerable landslide activity on the slopes of the Western Ghats.



## TSUNAMI

A tsunami (pronounced as su-na-mi) is a series of waves created when a body of water, such as an ocean, is rapidly displaced. Earthquakes, mass movements above or below water, some volcanic eruptions and other underwater explosions, landslides, underwater earthquakes, large asteroid impacts and detonation of nuclear weapons at sea all have the potential to generate a tsunami. Due to the immense volumes of water and energy involved, the effects of tsunami can be devastating. Since meteorites are small, they will not generate tsunami.



Some meteorological storm conditions—deep depressions causing cyclones, hurricanes—can generate a storm surge which can be several meters above normal tide levels. This is due to the low atmospheric pressure within the centre of the depression. As these storm surges come ashore the surge can resemble a tsunami, inundating vast areas of land. These are not tsunami. Such a storm surge inundated Burma (Myanmar) in May 2008.

As the tsunami approaches the coast and the waters become shallow, the wave is compressed due to wave shoaling and its forward travel slows below 80 km/h (50 mph). Its wavelength diminishes to less than 20 km (12 miles) and its amplitude grows enormously, producing a distinctly visible wave. Since the wave still has a wavelength on the order of several km (a few miles), the tsunami may take minutes to ramp up to full height, with victims seeing a massive deluge of rising ocean rather than a cataclysmic wall of water. Open bays and coastlines adjacent to very deep water may shape the tsunami further into a step-like wave with a steep breaking front.

There is often no advance warning of an approaching tsunami. However, since earthquakes are often a cause of tsunami, any earthquake occurring near a body of water may generate a tsunami if it occurs at shallow depth, is of moderate or high magnitude, and the water volume and depth is sufficient.

Sensors on the equipment constantly monitor the pressure of the overlying water. A tsunami cannot be prevented or precisely predicted—even if the right magnitude of an earthquake occurs in the right location. Geologists, Oceanographers and Seismologist analyse each earthquake and based upon many factors may or may not issue a tsunami warning. However, there are some warning signs of an impending tsunami, and there are many systems being developed and in use to reduce the damage from tsunami. One of the most important systems that is used and constantly monitored are bottom pressure sensors. These are anchored and attached to buoys.

## AVALANCHES

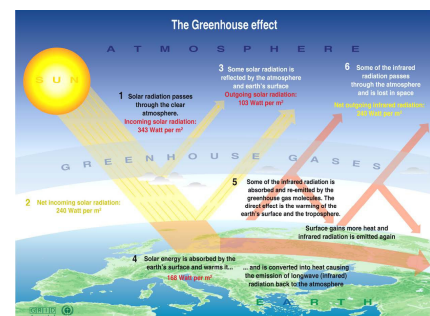
Avalanches constitute a major hazard in the higher reaches of the Himalayas. Heavy loss of life and property has been reported due to avalanches. Parts of the Himalayas receive snowfall round the year and adventure sports are in abundance in such locations. Severe snow avalanches are observed during and after snowfalls in Jammu & Kashmir, Himachal Pradesh and the Hills of Western Uttar Pradesh. The population of about 20,000 in Nubra and Shyok valley and mountaineers and trekkers faces avalanche hazard on account of steep fall of 3000 to 5000 metres over a distance of 10 to 30 kilo metres.

## CLIMATE CHANGE

Climate change is any long-term significant change in the “average weather” of a region or the earth as a whole. Average weather may include average temperature, precipitation and wind patterns. It involves changes in the variability or average state of the atmosphere over durations ranging from decades to millions of years. These changes can be caused by dynamic processes on earth, external forces including variations in sunlight intensity, and more recently by human activities.

Weather is the day-to-day state of the atmosphere, and is a chaotic non-linear dynamical system. On the other hand, climate — the average state of weather — is fairly stable and predictable. Climate includes the average temperature, amount of precipitation, days of sunlight, and other variables that might be measured at any given site. However, there are also changes within the earth's environment that can affect the climate.

In recent usage, especially in the context of environmental policy, the term “climate change” usually refers to changes in modern climate like ‘global



warming'. Climate changes reflect variations within the Earth's atmosphere, processes in other parts of the Earth such as oceans and ice caps, and the effects of human activity. The external factors that can shape climate include such processes as variations in solar radiation, the Earth's orbit, and greenhouse gas concentrations.

Current studies indicate that radiative forcing by greenhouse gases is the primary cause of global warming. Greenhouse gases are also important in understanding Earth's climate history. The greenhouse effect, which is the warming produced as greenhouse gases trap heat, plays a key role in regulating Earth's temperature.

**Global Warming**

Global warming is the slow heating of our earth, until it finally becomes too hot to live on. More and more heat would be trapped in the earth and the temperature of places all over the world will rise.

**Green House Effect**

When the sun's rays enter the earth or escape back to outer space, some of it is reflected and some of the heat energy is absorbed and trapped by the green house gases in the earth's atmosphere. This process of trapping heat is called the green house effect.

**CATEGORY OF CALAMITIES**

Calamities fall into two major categories: 'natural' and 'manmade'. Natural calamities include cyclones, floods, droughts, earthquakes, landslides, volcanic eruptions and forest fires etc. These can be further divided into 'major' and 'minor' disasters. Cyclones, floods, earthquakes, storms, etc. are generally regarded as major catastrophes while droughts, forest fires etc. are considered minor catastrophes, in view of their impact and loss potential.

**In view of this, the disasters can be classified as follows:**

<p><b>Major natural disasters</b></p> <p>Flood Cyclone Drought Earthquake Sunstroke</p>	<p><b>Minor natural disasters</b></p> <p>Cold wave Snowfall Thunderstorm</p>
<p><b>Major man-made disaster</b></p> <p>Setting of fire Epidemic Deforestation Pollution due to prawn culture Chemical Pollution</p>	<p><b>Minor man-made disasters</b></p> <p>Road and train accidents Accidents during festivals Food poisoning Death due to spurious/ excessive drink Industrial disaster/ crisis Rehabilitation Acid rain Riots and War Environmental Pollution</p>

**NATURAL DISASTERS AND THEIR MAIN CHARACTERISTICS**

The disasters can also be categorized under two other methods:

- (i) On the basis of nature and causative factors such as natural and manmade disasters; and
- (ii) Occurrence time such as slow-on setting and quick on setting disasters.

The slow-onset disasters are those which take some time to create their impact and thus provide sufficient response time. The quick-onset disasters occur so quickly that there is very little time to respond and in some cases they just occur without providing any response time. Some of the quick-onset disasters can be predicted and thus forecasting and early warning could be passed on to the people in the threat zone, while in some cases early warning is not possible. Thus the quick-onset disasters can be further divided into two subcategories:

- (i) Those which can be predicted with greater precision and provide some response time; and,
- (ii) Those which cannot be predicted with precision and occur suddenly surprising every one and provide no response time.



Table give below provides the classification of various types of natural disasters.

SLOW ONSET	QUICK ONSET	
	PREDICTABLE	UN-PREDICTABLE OR SUDDEN
Drought	Cyclone	Earthquake
Famine	Flood	Land Slides
	Typhoon	Avalanches
	Heat or cold wave	Tsunami

Keeping in view the nature, type and pattern of occurrence, the approach to and process of managing natural disasters also vary to a great extent. Till recently, the disaster management was limited to Crisis Management or like fire fighting operations. However, now there is greater realization that disaster management should be a broader approach which includes short and long term disaster mitigation activities besides preparedness, risk and relief operations. In other words, disaster management is a process of counter disaster activities which includes short and long term preventive and protective measures to mitigate the effects of disasters and help in better preparedness to mitigate and minimize loses both human and material, caused by the disasters.

## CONSEQUENCES OF DISASTERS

Disasters influence the socio-economic, political, cultural and mental states of the affected area. Generally a disaster completely disturbs the normal day to day life in the concerned area. It negatively influences the emergency systems and the regular life process deteriorates. Fundamental needs like food, shelter, health etc are affected. A large number of lives are lost and affected by various disasters every year. An average annual damage due to various disasters has been conservatively estimated to be around 3000 million rupees. In addition to the direct human costs and economic destruction (of houses, factories, social infrastructure etc.), calamities result in reduction in the level of economic activity, family income, and in the outbreak of diseases as well as increase in social costs, which indirectly affect the economy. It also results in loss of resources as well as slowing down of development programs.

Consequences of calamities, which include ravaged habitations, ruined infrastructure, homelessness and environmental problems put additional pressure on the countries' socioeconomic systems. The aftermath of a calamity is all the more devastating for countries going through period of transaction. Usually, their institutions are fragile and they have little experience in coping with calamities on their own.

The disasters like the super cyclone in Orissa in 1999 and Earthquake in Gujarat in 2001 are in the living memory of the nation. In Orissa super cyclone around 10,000 people lost their lives and the loss to the economy was to the extent of Rs 7000 crores. In Gujarat earthquake the loss of lives was around 19000 and loss to the economy is above 14,000 crores.

Social, economic and health related consequences of natural calamities can be summarized as follows:

Legend:

- Direct Consequences
- Secondary Consequences



S.No.	Consequences	Natural Calamities				
		Earth Quake	Cyclone	Flood	Fire	Drought / Famine
1.	Loss of life	X	X	X	X	
2.	Injury	X	X	X	X	X



S.No.	Consequences	Natural Calamities				
3.	Epidemiological threat		X	X		
4.	Loss of crops		X	X		X
5.	Loss of housing	X	X	X	X	
6.	Damage to infrastructure	X	X	X	X	
7.	Disruption of communications	X	X	X	X	
8.	Disruption of transport	X	X	X	X	
9.	Panic	X	X	X	X	
10.	Looting	X	X	X	X	
11.	Breakdown of social order	X	X	X		
12.	Short-term migrations			X		X
13.	Permanent migration					#
14.	Loss of Industrial production	X	X	X	X	#
15.	Loss of Business	X	X	X	X	#
16.	Disruptions of marketing systems	X	X	X	X	#

## INITIATIVES IN PREPAREDNESS AND MITIGATION MEASURES

### Need for reducing risk

Over the past two decades, there has been an increase in disaster occurrences costing human and economic losses. This is due to the ever increasing vulnerabilities of people to natural disasters. The need is felt to reduce disaster risks by improving capabilities of people and ensuring preparedness, mitigation and response planning processes at various levels. The objective is to look at the entire cycle of disaster management in reducing risk and linking it to developmental planning process. In the past, disasters were viewed as isolated events, responded to by the Governments and various agencies without taking into account the social and economic causes and long term implications of these events. In short, disasters were considered as emergencies.

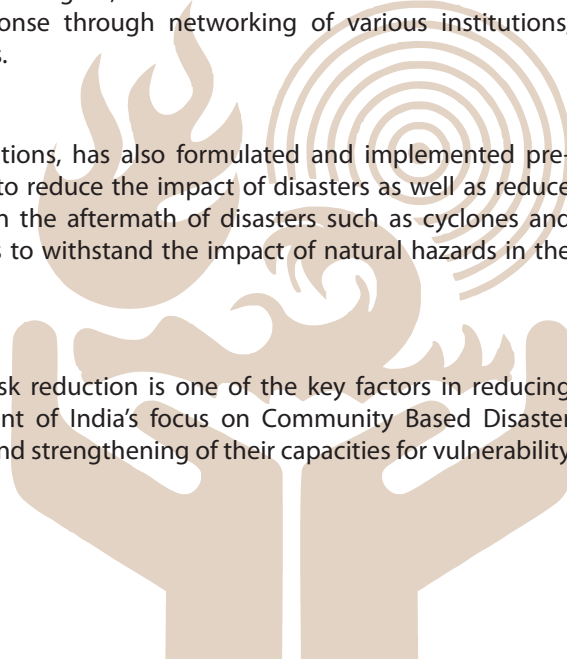
The recent disasters and its socio-economic impact on the country at large, and in particular the communities has underscored the need to adopt a multi dimensional approach involving diverse scientific, engineering, financial and social processes to reduce vulnerability in multi-hazard prone areas. In view of this, the Government of India has brought about a paradigm shift in its approach to disaster management. The change is from “relief and emergency response” to a balanced approach covering all phases of the Disaster Management Cycle. This approach acknowledges disaster management as a part of the development process, and investments in mitigation are perceived to be much more cost effective than relief and rehabilitation expenditure. In this regard, Government of India has taken various initiatives in area of disaster preparedness, mitigation and response through networking of various institutions, institutional capacity building, and policy interventions at all levels.

### Recent Initiatives

India, besides evolving effective post-disaster management operations, has also formulated and implemented pre-disaster mitigation programs and sectoral development programs to reduce the impact of disasters as well as reduce the socio-economic vulnerabilities. The reconstruction programs in the aftermath of disasters such as cyclones and earthquakes are also aimed at building disaster resistant structures to withstand the impact of natural hazards in the future.

## PARTICIPATION OF THE COMMUNITY

Community participation and community ownership in disaster risk reduction is one of the key factors in reducing vulnerabilities of people and minimizing the loss. The Government of India's focus on Community Based Disaster Preparedness (CBDP) approach promotes community involvement and strengthening of their capacities for vulnerability



reduction through decentralised planning process. This document deals with the concept, component and some of the best practices.

## FORECASTING AND WARNING

India have over the years developed, upgraded and modernised the monitoring, forecasting and warning systems to deal with cyclones, floods, droughts and earthquakes.

### CYCLONE

The India Meteorological Department (IMD) is responsible for cyclone tracking and warning to the concerned user agencies. Cyclone tracking is done through INSAT Satellite and 10 cyclone detection radars. Warning is issued to cover ports, fisheries, and aviation departments. The warning system provides for a cyclone alert of 48 hours, and a cyclone warning of 24 hours. There is a special Disaster Warning System (DWS) for dissemination of cyclone warning through INSAT Satellite to designated addresses at isolated places in local languages.



### FLOODS

The Central Water Commission (CWC) has a flood forecasting system covering 62 major rivers in 13 states with 157 stations for transmission of flood warning on real time basis. The forecasts are issued with an accuracy of up to 95 percent. There are also 55 hydro-meteorological stations in the 62 river basins.

VHF/HF wireless communication system is used for data collection with microcomputers at the forecasting centers. Hydrological models are increasingly used for inflow and flood forecasting and the forecasts are communicated to the administrative and the engineering departments for dissemination.

### DROUGHTS

The IMD has divided the entire country into 35 meteorological sub-divisions. It issues weekly bulletins on rainfall indicating normal, excess and deficient levels and also the percentages of departure from the normal. The CWC monitors the levels of 60 major reservoirs with weekly reports of reservoir levels and corresponding capacity for the previous year and the average of the previous 10 years. Similar monitoring of smaller reservoirs by the Irrigation Departments of State Governments give advance warnings of hydrological droughts with below average stream flows, cessation of stream flows and decrease in soil moisture and groundwater levels.

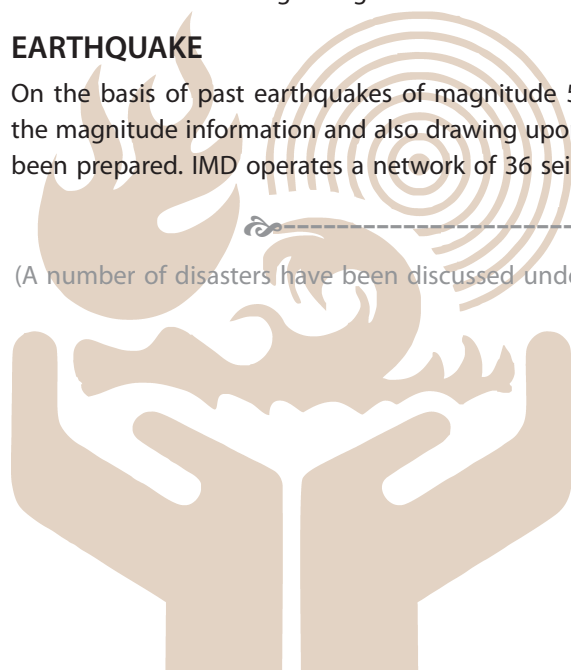


Based on the input from IMD and CWC on the rainfall behaviour and the water levels in the reservoirs respectively and the information on crop situations received from the local sources, the National Crop Weather Watch Group monitors the drought conditions. Remote sensing techniques also used for monitoring drought conditions based on vegetative and moisture index status.

### EARTHQUAKE

On the basis of past earthquakes of magnitude 5 and above and intensities ranging from V to IX superimposed on the magnitude information and also drawing upon tectonic features in the near past, Earthquake Zonation maps have been prepared. IMD operates a network of 36 seismic monitoring stations.

(A number of disasters have been discussed under "Safety Tips for a few Disasters", which is placed in the Annexure)





CHAPTER

2

**Role Of  
Panchayati Raj  
Institution  
In  
Disaster  
Management**



# Chapter 2

## ROLE OF PANCHAYATI RAJ INSTITUTION IN DISASTER MANAGEMENT

### Overview of the Chapter

- ▶ Introduction
- ▶ Modes of Disaster management
- ▶ Role of three-tier PRI bodies in DM
- ▶ Role of Panchayat in Planning and Capacity Building
- ▶ Role of Panchayat in Managing Information
- ▶ General issues related to Disaster Management
- ▶ Issues related to PRI Role in DM
- ▶ Preparedness of the PRI members
- ▶ Financial provisions for Disaster Management

### INTRODUCTION

Disasters like Floods, Cyclones, Droughts and Earthquakes are increasing in India due to environmental degradation, deforestation, increasing population, nuclear explosions and air pollutions, etc. There is also worldwide concern to mitigate the growing incidence of disaster and their toll on human life, property and environment. In India floods affect 11.2 percent of the land and drought account for 28 percent of the land, cyclones along 7516 km vulnerable coastline and earthquakes covering 57 percent of the land are other major disasters that occur quite often.

Natural Disasters cannot be prevented, but their impact on the lives and the socio-economic aspects of the people can be reduced to a considerable extent. In the past, people have countered the effects of the disasters with their own efforts and have overcome the trauma of the calamity. While the Government has the role to help its people in distress, the people themselves have greater responsibility to withstand together to face such eventualities and help the Government to help themselves in this process, rather fully depending on it. No state-level administration will be able to meet the requirements of communities, unless communities come forward to solve their own problems.

### Role of PRI bodies

The PRI is a statutory body elected by the local people through a well defined democratic process with specific responsibilities and duties. The elected members are accountable to the people of the ward, rural community, block and the district.

Keeping the above in view, the PRI, the representative body of the people, is the most appropriate institution from village to the district level in view of its proximity, universal coverage and enlisting people's participation on an institutionalized basis. Their close involvement will go a long way in getting people prepared for countering natural disasters as well as involve them in all possible preventive and protective activities so that the impact of the disasters are mitigated and the people are able to save their lives and property. The PRIs can act as catalysts to social mobilization process and tap the traditional wisdom of the local communities to complement the modern practices in disaster mitigation efforts. Besides PRIs will also provide a base for integration of various concerns of the community with that of the NGOs and CBOs which are engaged in various developmental activities at the grassroots level.

Hence there is a need to define the role of PRIs in Disaster Management and sensitise local communities through them to develop coping mechanism in preparedness and mitigation measures of disaster to minimize its destructive effect on life and property at local level. The proposed national workshop will therefore address the relevant issues relating to role of Panchayats in disaster and providing a forum to discuss and evolve strategies to manage crisis situations effectively by these institutions.



The disaster management cycle requires massive efforts in all its aspects like prevention, mitigation, preparedness, response, restoration, rehabilitation reconstruction work. These include addressing situations like lack of coordination at all levels in the restoration and relief work, non-involvement of the people, over dependency on government, inadequate relief and restoration work, lack of awareness among people regarding potential danger of cyclones and other disasters, lack of knowledge on availability of funds and resources etc., Thus, the entire preparedness with regard to meeting emergencies like cyclone, flood and drought etc., calls for a constructive role and greater commitment on the part of the PRIs.

### Nuapada, Orissa

Driven by draught, a lot of people migrate out of Nuapada district in Orissa for temporary alternate livelihood elsewhere. Shri Sujit Kumar Sahu, a local resident, formed a front called "Makarkheda" and took various initiatives to check this practice with the help of others. His good work earned him a reputation and he was elected as the Sarpanch from Boirbhadi, very near to Nuapada town, during the election held in 2007.

PARDA, a local NGO, which had been working on DRM program in that GP, got in touch with Shri Sahu. As a result of this partnership a long term draught mitigation strategy emerged in the shape of the village DM plan. The problems and issues were analysed threadbare and greater emphasis was laid on implementation of NREGA for the benefit of the migrant poor. A pond was cleaned up and used for pisciculture. A few other long term development activities aimed at stabilizing livelihood were embarked upon under the inspiring leadership of Shri Sahu.

### Need for involving the PRI Bodies

In general, if the local bodies like Panchayats are not consulted for preparedness-planning, relief and rehabilitation work, it leads to absence of transparency and accountability in the mitigation efforts. The whole approach towards rehabilitation work may end up being 'top down' in nature. As the relief and restoration efforts involve investment of hundreds and thousands of crores of rupees, there should be satisfaction of having utilised them properly and efficiently. Activities like distributing immediate relief in the form of money, food grains, medical care, cloths, tents, vessels drinking water and other necessities, activities of restoration, rehabilitation and reconstruction efforts of damaged villages and towns can be implemented better with the involvement of local bodies.

There is a view that local bodies like Panchayats should be encouraged and empowered to manage the local affairs with the available local resources. The elected leaders and officials of Panchayats should be trained to develop capabilities to handle crisis situation in preparedness, warning, rescue, relief, medical assistance, damage assessment, counseling, water and sanitation and rehabilitation operations. It is felt that in biggest disasters the role assigned to Panchayats was meager in handling the problems of various types at the grassroots level.

The 73rd Constitution Amendment (1992) heralded a new phase in the country's quest for a democratic decentralized set-up; more so, in matters pertaining to devolution of powers, functions, functionaries and finances. One of the objectives of Panchayati Raj (PR) is to promote popular participation through an institutional framework. The articles 243(G) of the Constitution visualises Panchayats as institutions of self-government. It subjects to extent of devolution and powers and functions to the will of the state legislatures, it also outlines the role of Panchayats in respect of development, planning and implementation of programs of economic development and social justice. A comprehensive list covering 29 subjects which are mostly related to development has also been provided in the Eleventh Schedule to the constitution.



The success of this depends upon adequate devolution of powers, functions, personnel and finances on these bodies, which is yet to make significant progress. Mostly the disaster activities of restoration, rehabilitation and reconstruction fall within the ambit of these development activities. Hence there is an imperative need to involve local bodies in disaster management.

### How PRI bodies can lead

It must be conceded that wherever it has strong roots, PRI has played a crucial role in mobilizing people in various situations of crisis. However, it is a fact that it is difficult to pre-empt disasters and also to predict their magnitude. But the impact of disasters on people living in vulnerable areas and losses to their property can be minimized by a

pro-active role played by PRIs at the grassroots level. Apart from great organizing skills, it may call for courage and leading from the front.

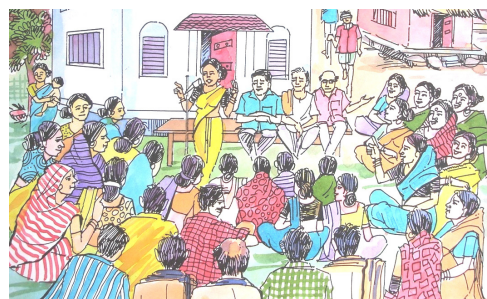
### **Sambalpur, Orissa**

In the wee hours of 19th August 2007, when people were in deep sleep, the Laharanga Nullah of Garposh GP in Bamra block of Sambalpur swelled up due to heavy rain and resulted in a flash flood. As flood water rushed into the houses, Sarpanch, Shri Banthu Nayak raised alarm and organised rescue measures on an emergent footing. He personally ran about from house to house and facilitated evacuation of the people to safer places. His bravery and dedicated effort could save life and property of about 25 families

The PRI members can play a role of leadership in Disaster Management at all stages. Right from the preparatory stage up to the handling of the long term development activities for risk reduction, PRI can lead in several ways. A broad outline may include activities like:

### **Pre-Disaster**

- ▶ Organising awareness campaign and promoting community education on disaster preparedness
- ▶ Articulation of community need for developing preparedness plan through community involvement and Panchayat ownership
- ▶ Identifying the resource gaps both physical and manpower and replenish the same through capacity building
- ▶ Establishing synergy with local agencies including NGOs/ CBOs
- ▶ Dovetailing Risk Reduction into various development programs of national and state governments
- ▶ Encouraging people to insure assets and livestock
- ▶ Establishing convergence with local institutional structures created for implementing education, health, livelihood, social justice and so on.
- ▶ Activating the DM Plans with the participation of the community
- ▶ Formation of Task forces and their capacity building



### **During Disaster**

- ▶ Arranging emergency communication through available resources
- ▶ Evacuation to temporary shelter and running relief camps
- ▶ Supplementing rescue and relief efforts in coordinating different agencies
- ▶ Monitoring of Relief distribution
- ▶ Safe disposal of carcass and arranging safe drinking water and sanitation

### **Post Disaster**

- ▶ Damage assessment particularly assisting in identifying victims for compensation and its distribution
- ▶ Formulating rehabilitation and reconstruction plan of houses and other local infrastructures
- ▶ Enforce minimum specification for safe reconstruction
- ▶ Supervise and monitor long term reconstruction and mitigation projects
- ▶ Mobilising special funds to use disaster resistant construction technology in vulnerable areas

These have been discussed in greater detail in the subsequent chapters in this manual.

## **MODES OF DISASTER MANAGEMENT**

Disaster Management in a broad framework covers all aspects of preventive and protective measures, preparedness and systematic organization of rescue, relief and rehabilitation operations to mitigate the impact of disasters on the human beings and all socio-economic aspects of the disaster-prone areas. The whole process of disaster management can be divided into three broad phases and each phase has a number of inter-related activities:

### **I. Preparedness**



II. Response

III. Rehabilitation and reconstruction

### I. Preparedness Phase

Preparedness for an eventuality of the occurrence of a disaster helps its mitigation to a large extent. Therefore this is a continuous phase, when a number of activities are in place. These could include awareness generation, identification of vulnerable groups, identification of resources and assets, household preparation, formation of various task forces and their capacity building and developing a disaster management plan etc. This needs a sustained effort on the part of the community.

### II. Response Phase

This has two sub-phases;

- ▶ Early-warning and
- ▶ Post-warning.

#### Early- warning:

This phase begins with Early Warning System. In cases where the disasters are predictable, such as Drought, Floods and Cyclone, as soon as there is indication of the on-set of a disaster, early warning is issued to keep people alert. The warnings continue till the actual impact. The interval at which warnings are issued depends on the type of the disaster. In the case of drought, the intervals for warning could be a week to a month but for Floods and Cyclones, it could be just every half-an-hour.

Other activities at this phase include preparation for evacuation, arrangements for food and drinking water, medical support and other basic needs and operationalising all communication and warning systems.

#### Post- warning:

This is perhaps the most crucial phase and needs high alertness. The earlier preparedness helps a lot during this phase in reducing risk and damage and taking mitigation actions. This includes activities like Control room management, shelter management, inter-agency coordination, search, rescue and medical aid, public health measures, sanitation and hygiene, damage assessment, relief distribution, disposal of carcass and mobilization of resources and their optimal utilization.

### III. Rehabilitation and Reconstruction Phase

After the impact of a natural disaster, particularly those which are devastating in nature leave behind a large scale destruction such as loss of lives, damage to houses and properties, crops, livestock and the physical infrastructure. Thus the activities to be attended in this phase are as follows:

- ▶ Provision of temporary shelters for those who have lost their houses completely, till construction of permanent housing is completed.
- ▶ Providing minimum household utility goods for all those who lost every thing.
- ▶ Provision of food and clothing.
- ▶ Making alternate arrangements for drinking water if the existing facility has been completely damaged.
- ▶ Restoration of road, transport, electricity and communication (where minor repairs are needed and temporary arrangements in the case of those need reconstruction, which takes long time).
- ▶ Salvaging the losses incurred due to damage to the crops and plantations.
- ▶ Arrangements for distribution of seeds, fertilizers and other inputs in initiating the process of agricultural activities.
- ▶ De-silting of agricultural fields, irrigation tanks, canals etc.
- ▶ Restoration of health and educational facilities, if the damage is repairable or making temporary alternative arrangements.
- ▶ Distribution of ex-gratia for the dead and compensation for the losses (wherever applicable).

## ROLE OF THE THREE --TIER PRI BODIES IN DISASTER MANAGEMENT

The major role of the Panchayati Raj Bodies in respect of disaster management is in the preparedness planning and



its implementation during the impact and post- impact phase as this is the most crucial period for the people facing the disaster. The village people are the most vulnerable for disasters and therefore the Village Panchayats have to play a major role in association with the higher level bodies of PRIs as well as with the Government agencies.

The involvement of Panchayats is also necessary as this alone can provide quick response and also make people to withstand the threat of the disasters and minimize their dependence on Government response for rescue and relief operation at the time of any crisis. The most important tasks to be performed by the Village, Block and the District Panchayats along with the government machinery at the respective levels during the three phases of disaster management are listed hereunder:

<b>Phase – I</b>			
<b>Tasks to be performed by 3- tier Panchayat bodies for Preparedness planning</b>			
	<b>Gram Panchayats</b>	<b>Block/ Panchayat Samitis</b>	<b>Zilla Parishads</b>
1	Convening meetings of ward members to ensure proper information regarding the warning signals reached the people through all media modes.	Supervise preparedness of the Gram Panchayats.	Before the onset of monsoon (May) and likely periods of cyclone (May- June & Oct-Nov), the District Collector should have a meeting of all District Heads of the Sectoral, Departments and the Members of the Z P for preparedness.
2	Updating information on Civic amenities Population Government and Panchayat properties Housing and cattle/ livestock population	Consolidate village wise information on items listed under GP	All the concerned departments, specially Roads & Buildings, Major and Minor Irrigation, PDS, Communication Police , Revenue Electricity, etc., to take up necessary repair and maintenance and related works for preparedness to counter Flood& Cyclone Disasters.
3	Selection of location for shifting people/ livestock to safer places	Stock taking with respect to <ul style="list-style-type: none"> <li>▶ Primary health Centers, preparedness of medical staff, medicines, etc.</li> <li>▶ Arrangements for transport to assist Gram Panchayats for evacuation</li> <li>▶ Keep Cyclone shelters/ safer buildings like schools in ready condition for temporary shelter for the people</li> <li>▶ Arrangements for establishing relief and rehabilitation centers and materials required thereof</li> <li>▶ Arrangements for supply and storage of food and other items of basic necessities</li> </ul>	To organize 'Task Force' at District, Block and the Village levels.
4	Special arrangements evacuation of handicapped, children and expectant mothers	Engineering staff at the Block I Mandal level should repair drainage/canal/ roads etc.	To identify and enlist NGOs who are useful in extending help during disasters
5	Medical sanitation requirements relief camps	Contacting Ex-army / Security forces personal / volunteers to organize a task force to assist people in emergency	Check the inventories of items required at a short notice for rescue and relief operations during the impact of disasters.

<b>Phase – I</b>			
<b>Tasks to be performed by 3- tier Panchayat bodies for Preparedness planning</b>			
6	Arrangements disconnecting lines during winds/gales	Procure and keep rescue materials including boats ready	At the first warning, call the meeting of the Crisis Management Group and alert all concerned at Block and Village levels.
7	Stocking food grains, drinking water and other necessities	Function as link between the district and village level counter disaster activities	All the members of the Crisis Management Group (CMG) should be asked to keep their personnel in full preparedness, at all levels down the line
8			The District Collector should be the Leader of the CMG and establish a control room which should be managed by senior officers round the clock during the crisis.
<b>PHASE - II</b>			
<b>Tasks to be performed by Panchayats for rescue and relief before and during the impact of disasters</b>			
1	At the on-set warning of a disaster, the Gram Panchayat Leaders, with the help of District and Block Level officers should start preparations for countering Disaster. Establishment of temporary shelters relief camps should start immediately.	With the final warning of cyclone, flood disasters, identify the villages likely to be affected and send teams of Task Forces/ Volunteers to the villages to supervise counter disaster measures.	In the event of on-set of a cyclone / flood disaster monitor the situation, identify the Blocks and villages most likely to be affected and issue warnings at close intervals to all concerned.
2	With the final warning, operations for the evacuation of people and the livestock should start so that all are at safer places before the disaster strikes.	Arrange transport facilities to evacuate people from villages likely to be affected and help GPs to shelter them in temporary relief camps	Activate control room and keep full watch on the situations
3	Along with evacuation of people and livestock, storage of food and water for the people and the livestock should be made.	Arrange for emergency communication facility through Police wireless! Ham Radio, etc.	Arrange emergency communication system with the help of Police Wireless / Ham Radio, etc.
4	The Volunteers and the task forces should be kept in full readiness to take rescue operation at the shortest notice.	Arrange and assist GPs to establish temporary shelters/ relief camps.	Activate CMG and put them on job for assisting Block and Village Panchayats for taking counter disaster measures.
5	Medical and other relief teams from the district and Block may be asked to take position at strategic points and coordinate with the village volunteers / task forces	Arrange for the supply and transport of necessary food and other items to relief camps in adequate quantities	Arrange transport for the evacuation of the people and livestock

<b>Phase - I</b>			
<b>Tasks to be performed by 3- tier Panchayat bodies for Preparedness planning</b>			
6	Veterinary aid teams for taking care of livestock and removal and disposal of carcasses and measures for protecting animals from any probable epidemic	Supervise the rescue and relief activities along with District Level officers.	Arrange for temporary emergency shelters/ relief camps and supply and transport of all essential food and non - food items to relief camps
7	After the impact manage the relief centers to provide food, water, medical aid and other necessary services to the affected people.	Inform the CMG in case specific help for rescue and relief operation is required from the Police and Security forces including Army, Navy and Air Force.	Requisitioning of the assistance of the Armed Forces if the need arises.
8	Disposal of dead bodies and measures to prevent any epidemic with the help of medical teams.	Assist the Armed forces in rescue and relief operations	Monitoring of the rescue and relief operations at the village level
9	Assessment of dead persons, livestock, and damage to houses and properties of individuals, agriculture, etc.	Supervise the rescue and relief operations and coordinate with various agencies like Task forces, NGOs and Volunteers engaged in rescue and relief operations	Assisting the Block and village Panchayats in mobilising task forces/ Volunteers/ NGOs for rescue and relief operations
10	Assessment of the damage to the public properties, infrastructure and community assets.		Maintain minute to minute information on the situation during and immediately after the impact and keep ready to meet any specific emergency
<b>PHASE - III</b>			
<b>Reconstruction and long term planning</b>			
1	Assist in the identification of the victims of the disaster and eligible for various types of compensations and assist in the distribution	Assist in Planning and Implementation of Rehabilitation of affected people; Repair and reconstruction of damaged house, physical infrastructure etc and return to normal economic activities including farming etc	Planning and Implementation of Rehabilitation of affected people, repair and reconstruction of damaged houses, physical infrastructure, etc and return to normal economic activities including farming etc
2	Formulate reconstruction plan for individual houses, community and Govt. buildings, roads and other physical infrastructure within the jurisdiction of the GP with the assistance of the technical departments from block and district levels	Assist GP Panchayats in identification of persons eligible for different types of compensation and its distribution.	Compensation for loss of lives, properties of individuals should also begin
3	Enforce minimum code or specifications for the construction of individual houses, community and Government buildings, roads and other physical infrastructure.	Based on hazard and vulnerability prepare village and block level mitigation plan and consolidate and integrate into block plan	Mapping of hazard and vulnerability should be initiated, if it is not available detailed maps should be prepared for each block and district and should be placed in both district and blocks

<b>Phase – I</b>			
<b>Tasks to be performed by 3- tier Panchayat bodies for Preparedness planning</b>			
4	Help district and block level organizations in organizing awareness camps for management and mitigation of disasters and ensure the participation of the villagers	Assist and execute repair and reconstruction activities	The repair and reconstruction activities should be integrated with a long term mitigation planning so that the quality of the reconstruction and repair is in consonance with the specifications provided for disaster resistant structures
5	Organize village level Task Force/ Volunteers and train them in counter disaster measures.	Assist for enforcing the specified code or specification for the construction of houses and buildings, roads and other physical infrastructure	The long term mitigation plan should integrate normal development plan in such manner that protective and preventive measures against the disasters adhered in the implementation of all development projects under each and every sector
6	Assist block and district level agencies in all activities related to disaster management and mitigation	Assist in the formulation of long term mitigation planning and its integration with the development plan of the block and the district	Special funding should be made available for the construction of physical infrastructure to include disaster resistant technologies particularly in the construction of houses, roads, electric transmission lines, drinking water facilities, culverts, telecommunication, irrigation canals, tanks and reservoirs etc for the sections which are most vulnerable
7	Assist block and district level agencies in the supervision and the monitoring of the reconstruction and development projects within the village	Provide technical assistance to the GP for identifying preventive and protective measures required for countering disasters, planning for them and help in the execution of such projects.	Supervise all construction and development activities
8	Encourage village people to use insurance cover for all their assets/ lives and other aspects. This should be made mandatory for all those who can afford and also take Govt. help for others who can partially / not afford it.	Supervise and monitor all projects implemented by the GPs and block Panchayats relating to reconstruction and long term mitigation of disasters	

## ROLE OF PANCHAYAT IN PLANNING AND CAPACITY BUILDING

Community-based disaster preparedness (CBDP) approaches are increasingly important elements of vulnerability reduction and disaster management strategies. They are associated with a policy trend that values the knowledge and capacities of local people and builds on local resources, including social capital. CBDP may be instrumental not only in formulating local coping and adaptation strategies, but also in situating them within wider development planning.

Sambalpur, Orissa

Chandimal GP in Kuchinda block of Sambalpur district is prone to flood from the river, 'Bheden'. In order to prepare the community for dealing with the disaster, the block administration organised a series of training programs in 2007 for the orientation of VDM teams as well as PRI members, with the help of trainers from ROPE, a local NGO. With the initiatives of the Sarpanch a large number of volunteers including many female volunteers participated in these programs, where gender-mainstreaming was also emphasised. A DM program was developed subsequently

by the community with large participation of women under the guidance of ROPE.

A mock drill was conducted by them, where all villagers participated actively in a mock drill along with the DMT members trained in the block program earlier.

Panchayats have a very important role to play in both preparedness and mitigation in mobilizing and organizing the people as well as facilitate their capacity building. Communities should be motivated to make their own short term and long – term DM plans for Disaster Mitigation for which Panchayat bodies need to lead from the front in building their capacities through regular training in this field. A sustained effort in this direction will not only reduce the dependency of the people on the Govt. but also help mobilize sizeable resources locally to counter disasters and reduce the burden of the Govt. to a great extent.

(Capacity building has been discussed in greater detail in Chapter III)

## ROLE OF PANCHAYAT IN MANAGING INFORMATION

Collection, analysis and dissemination are the three phases of managing information. This would not only help in predicting natural disasters, but also help communities plan their agricultural activities.

### Collection

Authentic information plays a vital role at the time of need like the disasters. Panchayats should make an attempt to collect information from all relevant sources. In addition, they should make an attempt to check its authenticity and validity before passing it on to the community. Some of the sources from which Panchayats could collect information may be Radio, Television, Govt. sources, District Disaster Mitigation Cell and from Newspapers and News Agencies.



### Analysis

Panchayats can form a committee of responsible persons who have access to the sources mentioned above so that they can get the right information at right time. In this respect, some of the senior citizens of the local communities should be made members of this committee, so that they can help in identifying certain local geographical indicators, which would enable people to predict future climatic conditions.

### Dissemination

Panchayat functionaries can disseminate the information to the people in several ways. This can be done through notice boards, radio, TV, telephone, appropriate signals, word of mouth, volunteers of DMT teams as well as through the local NGOs.

## ISSUES IN ROLE OF PRI IN DISASTER PREPAREDNESS AND MANAGEMENT

The role of Panchayats is important in view of their proximity to the local community, universal coverage and enlisting people's participation on an institutionalised basis. It is possible to ensure accountability and transparency through the institution of Gram Sabha.

Hence there is an emphasis to involve Panchayats in Disaster Management and sensitize local communities through them to develop coping mechanism in preparedness and mitigation measures to minimise its destructive effect on life and property at local level. In the event of a disaster all people in its impact zone are affected but the poor and vulnerable (disabled, widow, orphans and children) people suffer the most, as their ability to absorb losses is low. The specific benefits of community participation accrue from involving people in their own development, as can be seen from the following considerations:

- ▶ People can be sources of useful ideas, such as those from indigenous technical knowledge and skills;
- ▶ People can help adopt technical inputs emanating from outside in order to assimilate various innovations which can be more pertinent under local conditions;
- ▶ User groups can set an example to others by testing new knowledge, skills, techniques they have gained, besides institutional interventions formulated by government and;
- ▶ Also, the communities and people can participate in decision-making process with regard to implementation of development schemes, which are pertinent to disaster reduction measures. And thus, people's voices and choices can be more appropriately reflected in development programs and the commitment of the implementing functionaries like leaders, officials and NGOs can be reinforced further.

### A few more issues need to be considered:

- ▶ PRIs need to be trained to evolve a community based disaster preparedness and management plan
- ▶ PRIs need to involve/ elicit the support or cooperation of other existing formal/informal local organisations in the management of disaster relief and rehabilitation activities
- ▶ Based on the mapping of local institutions the PRI need to develop a strategy to orient them on disaster preparedness.
- ▶ In social mobilization process, effort should be made to synergize how the local institutions which are found to be better suited as catalysts, be effectively involved to tap the traditional wisdom of the local communities, to complement the modern practices in the disaster mitigation efforts
- ▶ Given the hierarchical nature of bureaucracy (a component of the delivery system) making the officials exclusively responsible for disaster management may not promote participatory approaches.
- ▶ Therefore, a synergic approach involving elected representatives along with civil society initiatives like NGOs and CBOs, would provide a broad-based framework for disaster reduction and mitigation. How this process can meaningfully be operationalised should be a core issue.
- ▶ Develop community based monitoring system to ensure effective operationalisation of disaster mitigation strategies at local level.
- ▶ Work out partnership mode of participation between PRIs and line departments and other local organisations so that the productivity of the institutional capital (i.e., resources) be maximised and the Disaster Management can be more effective
- ▶ There is a greater need for evolving Management Information System (MIS) to address various components of disaster management (especially planning, preparedness, relief, etc) with the involvement of PRIs. How the networking of local institutions including PRIs and Line Departments should be developed so that MIS can be evolved and utilised with the total participation of the stakeholders.
- ▶ Develop an inclusive approach as far as gender and vulnerability are concerned so that the delivery system is sensitive to the needs of all groups, by involving them in the disaster management and preparedness process.

Keeping in view of the importance of the subject of Disaster Management and the role of various agencies and local bodies, it is felt necessary to delineate the role of different organisations for suggesting improvements in the existing coordination mechanism. This would also facilitate convergence of their efforts for effective implementation of rehabilitation and restoration measures to re-build the economy in the aftermath of a large scale devastation caused by natural disasters.

### PREPAREDNESS OF THE PRI MEMBERS

As already discussed, a disaster brings in a very critical situation in the community. As the leaders of people the PRI members need to take responsibilities and act, for which they need to be prepared with the right kind of knowledge, skill and attitude. The basic three aspects, therefore, are:

- I. What they need to do
- II. What they need to know, and
- III What attitude they must possess

First of all it is necessary to take note of some of their 'must-do' activities.

#### I. What the PRI members need to 'DO'

##### Before a disaster

- ▶ Getting to understand the vulnerability of the area and the people
- ▶ Facilitation of Disaster Management Plans.
- ▶ Resource Mobilization
- ▶ Building Capacity of self as well as Team members
- ▶ Establishing linkages with other stakeholders
- ▶ Involving the DMC and DMTs
- ▶ Involvement of women in DM activities
- ▶ Inclusion of Disaster Management in the agenda of all meetings



## During a disaster

- ▶ Involvement in 'response' activities
- ▶ Monitoring activities at all levels
- ▶ Management of Control Room
- ▶ Disbursement of compensation
- ▶ Maintaining coordination with related agencies

## After a disaster

- ▶ Rehabilitation activities
- ▶ Maintaining social structures and infrastructures
- ▶ Evaluation & Documentation
- ▶ Integrating development programs with mitigation of disasters

## II. What the PRI members need to 'KNOW'

In order to carry out the aforementioned tasks the members need to gain a good knowledge about the following aspects:

- ▶ Concept of DM
- ▶ Approaches to capacity building
- ▶ Their own roles and responsibilities in DM
- ▶ All DM norms/ acts / schemes
- ▶ DMP(Process / operations / follow ups)
- ▶ Preparedness / awareness
- ▶ Technological knowledge / skills
- ▶ Process of coordination
- ▶ Knowing the stake holders
- ▶ DM initiatives taken at all levels
- ▶ Convergence & linkages
- ▶ Leadership skills
- ▶ Methods and approaches to creating dedicated volunteers
- ▶ Code of conduct



## III. What 'ATTITUDE' the PRI members need to display

One's inner attitude towards a task or a person or towards one's own role counts a lot for the successful execution of a responsibility. This aspect is even more vital in a responsibility connected to the public domain like Disaster Management. Some of these attitudes could be enumerated as:

- ▶ Positive disposition towards preparedness activities
- ▶ Cognition of local coping mechanism
- ▶ Political neutrality
- ▶ No blame game and no passing the buck
- ▶ Need-based decision making on stakeholders
- ▶ Gender equity
- ▶ Social service above self
- ▶ Ownership of responsibilities
- ▶ Openness to learning
- ▶ Optimal utilization of resources
- ▶ Prioritization of activities
- ▶ Never-say-die attitude





### **Koraput, Orissa**

Nilakantha Nayak, Sarpanch of Kusumi GP in the Kotpad block of Koraput has led from the front in taking initiatives for preparation of village DM plan by involving the community members. He has formed various DM teams and motivated them to work for the community. Under his leadership they have spread awareness among the people about early warning information and have prepared them for dealing with emergent situations.

### **Some more Guidelines**

Panchayats must adhere to the following principles during relief, rehabilitation and reconstruction activities in order to protect the rights and dignity of each and every victim of a disaster. Relief, they should remember, must be treated as a right rather than as charity.

- ▶ Humanitarian imperatives come first.
- ▶ Aid should be given regardless of race, creed, nationality, caste and religion.
- ▶ Aid priorities must be calculated on the basis of need alone.
- ▶ Aid should not be used for a particular political or religious purpose.
- ▶ Respect must be shown towards culture and customs.
- ▶ Disaster response should build on local capacities.
- ▶ Beneficiaries should be involved in the management of relief programs.
- ▶ Relief must aim at reducing future vulnerability.
- ▶ Honesty, transparency and accountability must be emphasized.
- ▶ The dignity of victims must be respected
- ▶ Attention should be paid to the issue of gender equity.
- ▶ The needs of the children, disabled and stigmatized groups should be addressed on priority.
- ▶ All activities should be guided by the principle of inclusiveness.
- ▶ Coordination amongst various actors, who come forward to support the disaster affected population, should be maintained.

## **FINANCIAL RESOURCES FOR CALAMITY RELIEF**

### **RESOURCES AND FUNDING OF DISASTERS**

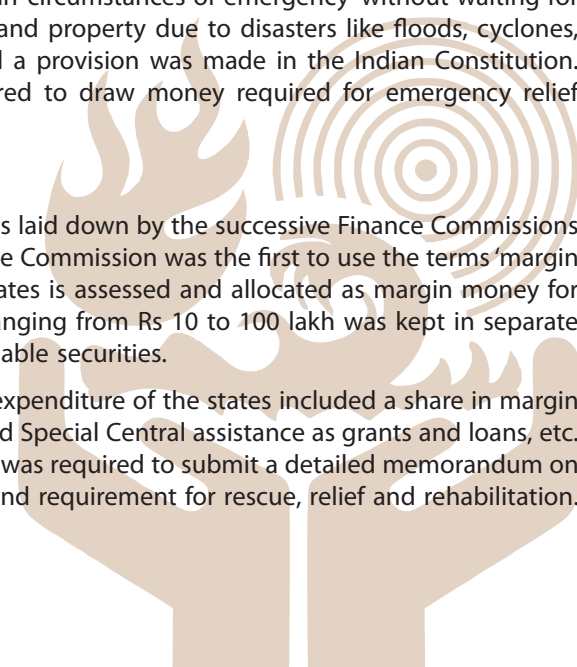
In India, natural disasters of one type or the other continue to strike relentlessly and there is increase in the magnitude, complexity, frequency and economic impact. In the event of natural disasters, the State Governments are responsible for rescue, relief and rehabilitation operations. The Central Government's role is supportive in terms of physical and financial resources and complementary measures. Nevertheless, availability of adequate funds for meeting the expenditure on natural calamities is a very critical requirement.

So far as the practice of providing disaster relief fund is concerned, the guiding principles of disasters relief were framed in 1893 which contained detailed instructions for each phase of calamity, the sources of funds and rates of different items. The District Collectors were authorised to withdraw money in 'circumstances of emergency' without waiting for formal sanction and to spend it on the prevention of loss of life and property due to disasters like floods, cyclones, earthquakes, fires, etc. This practice continued for a long time till a provision was made in the Indian Constitution. Under Treasury Rule (TR) - 27, the District Collector is empowered to draw money required for emergency relief without the formal sanction of the government.

### **Resources for Calamities**

The scheme of funding calamity relief is governed by the guidelines laid down by the successive Finance Commissions constituted under provision of the Constitution. The Second Finance Commission was the first to use the terms 'margin money scheme'. Under the scheme, the revenue needs of each States is assessed and allocated as margin money for meeting the expenditure on natural calamities. A specified sum ranging from Rs 10 to 100 lakh was kept in separate fund and the annual balance was to be invested in readily encashable securities.

The contribution of the Central Government in the calamity relief expenditure of the states included a share in margin money, advance plan assistance in the form of grants and loans, and Special Central assistance as grants and loans, etc. To obtain the Central assistance, the procedure was that each state was required to submit a detailed memorandum on damages to life and property after a particular disaster, and the fund requirement for rescue, relief and rehabilitation.



Subsequently, a team of experts was deputed by the Government of India to visit the affected State. It was observed that the purpose of the visit of the Central team was to put a 'ceiling' on the sum in excess of the 'margin money' rather than to provide an estimate. The contribution of the Centre, however, would be limited to sharing of the difference between the ceiling and the 'margin money'. The quantum of 'margin money' was determined on the basis of State's average expenditure for the past several years on disaster relief.

In point of fact, this arrangement continued up to the Eighth Finance Commission. The Seventh Finance Commission made some changes by including the expenditure on the repair of a disaster damaged public works in the margin money. The Central and State Governments in the ratio of 3:1 shared the excess expenditure. Furthermore, the Eighth Finance Commission increased the quantum of margin money and also included the expenditure on restoration of public works. However, the size of the margin money increased gradually from Rs 6.15 crore per annum (Second Finance Commission) to Rs 240.75 crore per annum (Eighth Finance Commission).

A radical departure was made by the Ninth Finance Commission (NFC) from the existing practice by granting greater autonomy, accountable and responsibility on the States. It created a separate autonomous Calamity Relief Fund (CRF) for each State. While recommending the Constitution of CRF, the Commission observed certain deficiencies in the existing practice. It was pointed out that it was intended to encourage the State to present inflated claims with a view to get higher Central assistance. Moreover, to reduce the procedural delays in sanctioning, releasing and carrying out the actual relief work, the concentrated State could draw funds from CRF as and when the need arose.

The contribution of the Centre and the State was in the ratio of 75:25. The size of the CRF for each State was arrived at on the basis of the average of actual expenditure for the past decade. Most importantly, the change suggested by the NFC was that the entire contribution to the State would be in the form of grants. In addition, the State could withdraw from the CRF on a pro data basis and the unspent amount would roll over into the next plan allocation of the State. The total amount calculated for all States was Rs 804 crore per year.

The Tenth Finance Commission (TFC) favoured the continuation of the scheme of CRF with some modifications. While working out the size of the fund, the Commission took into account the average of the aggregate of ceilings of expenditure for the years 1983-84 to 1989-90 and the amount of CRF for the years 1990-91 to 1992-93. The amount worked out for all States for the period of 1995-2000 was Rs 6304.27 crore. The TFC created an additional fund called National Fund for Calamity Relief (NFCR), in addition to the CRF, with a corpus of Rs 700 crore shared between the Centre and the State Governments in the ratio of 75:25. The NFCR will be operated by the Ministry of Agriculture, Government of India. This fund will be utilised for 'calamity of rare severity'. The Commission, however, did not provide a definition of 'calamity of rare severity', which has created practical problems in declaring a calamity of rare severity.

In accordance with the Terms of Reference, the Eleventh Finance Commission (EFC) has taken a comprehensive view while reviewing the scheme of Calamity Relief Fund (CRF) and made radical recommendations. The EFC has recommended continuation of CRF should be used for making the expenditure for providing immediate relief to the victims of cyclone, drought, earthquake, fire, flood and hailstorm. The Commission has further recommended that the CRF would call for financial assistance to the affected States over and above what is available in the CRF or other plan/non-plan source.

The Commission has suggested for augmenting the resources of the Central Government by recouping through levying a special surcharge on Central Taxes. The amount collected from such surcharge/cess should be kept in a separate fund created in the public account of the Central Government and the Center's contribution would be Rs 500 crore as the initial core amount.

By and large, the recommendations of the EEC on Calamity Relief Expenditure been accepted by the government as per the Action Taken Report of the government.

### **Other Financial Resources for Calamity Relief**

In addition to the outflows from the CRF, substantial budgetary resources are invested annually by both the Central and the State Governments mainly on structural measures (engineering and non-engineering). The State Flood Control Departments and the Central Water Commission also provide funds for structural projects such as dams and reservoirs, dykes and embankment, drainage and river training. Considerable amounts are also spent on publicity on disaster awareness, communications, training and warning systems for floods, cyclones, tidal waves, etc. Data on such budgetary allocation for these purposes are not easily available for estimates.



Besides, after the occurrence of disaster events, remission of land revenues and interest components of agricultural loans are granted, along with the rescheduling of all such loans. These measures are not usually included in the expenditure statements of disaster relief funds.

The Central Government has introduced an Insurance Scheme for Crop Losses during disasters to compensate farmers from the year 1996. This scheme is available to farmers who are availing of crop loans from the Banks, including Cooperative and Seasonal Rural Banks and other Financial Institutions.

Resources are also provided by International Agencies for disaster prevention and mitigation on a project to project basis. The United Nations is at the vanguard among the agencies providing funding for various types of disasters management activities.

However, the integration of Village Disaster Mitigation Plan with the long term development plan of the area can be made possible by tapping funds from following sources:

- ▶ Plan Funds from Sectoral Departments of the State Government
- ▶ Funds available under various centrally sponsored rural development programs/schemes, such as Integrated Wasteland Development Program (IWDP), Sampoorna Gram Rojgar Yojna (SGRY), National Rural Employment Guarantee Act (NREGA), Prime Minister's Grameen Sadak Yojna (PMGSY) and Rural Water Supply and Sanitation Program etc.
- ▶ Local Resource Mobilisation
- ▶ Funding from Central Budget for disaster management.

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(The Calamity Relief Fund or CRF Norms have been placed in the Annexure)



CHAPTER

3

**Community  
Based  
Disaster  
Preparedness  
(CBDP)**



# CHAPTER III

## COMMUNITY BASED DISASTER PREPAREDNESS (CBDP)

### Overview of the chapter

- ▶ Concept of CBDP
- ▶ Community Based Disaster Preparedness – Scope and Activities
- ▶ Process of CBDP
- ▶ Components of CBDP
  - Mapping exercises
  - Disaster management Teams
  - Community Contingency Fund
- ▶ Overall Guideline for developing a CBDP Plan

### THE CONCEPT OF CBDP

#### INTRODUCTION

Increasing frequency and intensity of disasters in India, including some major disasters experienced in the recent past in Orissa and Gujarat, has made people at the highest policy level to realize the gravity of the problem and prompted a change in approach with more emphasis placed on pre-disaster preparedness and mitigation. This entails a corresponding shift in focus away from conventional fire-fighting approach to disaster management towards the local-level initiatives involving a range of stakeholders.

Though the responsibility of Disaster Management is vested with the Central and State governments, it is difficult for them to deal effectively all the aspects of the disaster management according to the needs of the affected people. In many cases, where the disaster affected area and population is large, the reach of the government machinery is not adequate and considerable loss of life and property occurs due to lack of timely response. It has been the experience during recent major disasters that where local communities as well as the local governments took initiative, the process of rescue, relief and rehabilitation was smooth and effective, where as in other areas the Government and Non-government Agencies had to face enormous problems.

The High Powered Committee on Disaster Management has, in its draft policy, stated the importance of the Community Based Disaster Management and the involvement of the local governments, Municipalities and the Panchayati Raj Institutions.

#### INVOLVEMENT OF THE COMMUNITY

In the present day every individual is vulnerable and is threatened by the natural and man made disasters, which are growing in number and variety. In other words, every individual is required to be aware and also have minimum capacity to counter such crisis. This implies that entire population of a settlement or a village forms a community and has to be involved in its safeguard in the event of a crisis which has potential to affect all or majority of them.

While it is not possible to reach every individual to develop his/ her capacity to counter the disasters, it is possible to approach the groups, formal or informal, to achieve the task of creating awareness and developing minimum capacity to cope up with the disaster. In other words, the community based disaster management has to start at community level through the groups of people to reach out to each family level. The first response to the natural hazards comes from immediate neighborhood and spreads into many settlements in the community; while the government and other organizations take some time to reach them.

#### COMMUNITY BASED DISASTER PREPAREDNESS - SCOPE AND ACTIVITIES

The community based disaster preparedness (CBDP) is a process to capacitate communities to prevent, mitigate and cope with disasters effectively. The process is designed, managed and owned by the communities. Others (Government agencies, public and private corporate bodies, NGOs, International agencies / donors etc.) play the role of facilitators.

The Disaster Preparedness process embraces measures that enable governments, communities and individuals to respond rapidly to disaster situations to cope with them effectively. Preparedness includes the formulation of viable

emergency plans, effective warning systems, maintenance of inventories and the training of personnel. It may also embrace search and rescue measures as well as evacuation plans for areas that may be at 'risk' from a recurring disaster. Preparedness planning needs to be supported by appropriate rules and regulations with clear allocation of responsibilities and budgetary provisions.

The PRIs through the institution of Gram Sabha and Village Committee on Disaster Management can establish link with the community, CBOs and other players in the field and facilitate and regulate the activities of the community based disaster preparedness. The PRIs can act as catalyst to social mobilization process and tap the traditional wisdom of the local communities to complement the modern practices in disaster mitigation efforts. There could be committees on disaster management activities at various levels of PRIs. The District Planning Committee and the Disaster Management Committee of the district can integrate the development plan with the Disaster Management plan.



## PROCESS OF CBDP

The process of preparation of CBDP plans through a participatory process, institutionalisation of risk management as well as linking it to the overall developmental planning process could be ensured only with capacity enhancement of the stakeholders.

Simultaneously, there is a need to create large- scale awareness about various options of development process which reduces risks. These cannot be a one-time activity.

In order to ensure ownership by the community and to ensure reflection of local conditions and sensitiveness, preparation of CBDP will have to be through a participatory approach. Community based organizations and the NGOs who have been working with communities are to be identified to facilitate a PRA exercise. The process followed is briefed as follows:

### Awareness Campaign

A massive awareness campaign is necessary to motivate the community in preparation of the disaster management plans. These campaigns are carried out through various means like rallies, street plays, competitions in schools, distribution of IEC materials, wall paintings on do's and don'ts for various hazards, etc. Meetings with key persons of a village such as the village head, health worker, school teachers, elected representatives and members of the youth clubs and women also motivate the villagers to carry forward these plans for a safer living.

### Training of Gram Panchayat / Block Members

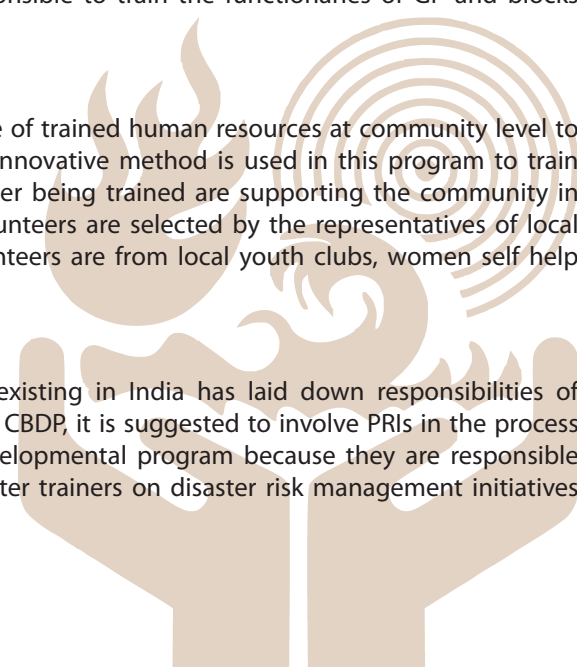
In several states of India, Gram Panchayat is the intermediary administrative unit between block and village level, which has a vital link for disaster management activities. It is the responsibility of the Gram Panchayat Disaster Management Committee to supervise and guide the community in this process. Similarly block is the administrative unit that executes all developmental programs in the rural areas, and has a very good linkage with the upper level of administration. Therefore, both levels of functionaries are very important to ensure risk reduction as a part of the development program. The district level master trainers are responsible to train the functionaries of GP and blocks before initiation of the activities at the village level.

### Identification of Village Volunteers and Training

One of the major objectives of CBDP process is to develop a cadre of trained human resources at community level to carry out all disaster management and mitigation initiatives. An innovative method is used in this program to train at least two persons as disaster management volunteers who, after being trained are supporting the community in development of the village disaster management plan. These volunteers are selected by the representatives of local self-government, block functionaries and CBOs. Most of the volunteers are from local youth clubs, women self help groups or from CBOs and belong to the same community.

### Training of PRI Members

The three tier Panchayati Raj system (peoples' representatives) existing in India has laid down responsibilities of elected local government officials at various levels. To mainstream CBDP, it is suggested to involve PRIs in the process to address the vulnerability reduction initiatives through the developmental program because they are responsible for the local area's development. All PRIs are oriented by the master trainers on disaster risk management initiatives



and encouraged to be involved to reduce the disaster impact. These oriented PRIs would help the trained volunteers and community on disaster preparedness and management. They are vital players in the disaster reduction program and help to sustain the same.

### **Sensitization Meetings at Village & Community Level**

Village sensitisation meetings are organized with help of the representative of local self-Govt, trained volunteers, local NGOs etc. for the implementation of disaster preparedness and mitigation initiatives. In some villages the communities are ready for disaster management planning and other activities in one meeting or in some places they require more efforts.

### **Specialized Training of DMTs**

Each of the DMTs comprises groups of women and men volunteers and is assigned with a specific task to discharge. Specialized training is provided on search and rescue, first aid, trauma counseling and water & sanitation teams for skills up gradation. All DMTs are linked with existing govt. service providers for continuous training. Some of the training institutions have been strengthened for regular training of DMTs at various levels.

### **Women's Participation in Community Based Disaster Preparedness**

Women, children and old age people are the most vulnerable groups in any emergency situation and need special attention and support. While preparing the preparedness and response plan of a village, equal opportunity is given to women groups to participate in the preparedness and mitigation initiatives of the village. Women are encouraged to be the members of shelter management, search & rescue and first aid and water and sanitation DMTs. Special trainings such as swimming, first aid etc. are organized to enhance the skills of women DMTs to perform their duties better during the time of an emergency. In formation of DMC and DMTs, efforts should be made to ensure at least one third membership for women to improve the local level planning and response process.

## **COMPONENTS OF CBDP**

- ▶ Disaster Management Committee
- ▶ Review and analysis of past disasters
- ▶ Seasonality Calendar of disasters
- ▶ Mapping exercises
- ▶ Disaster Mitigation teams(DMTs)
- ▶ Mock Drill
- ▶ Identification of Hazard Specific Mitigation Activities
- ▶ Community Contingency Fund

### **Disaster Management Committee:**

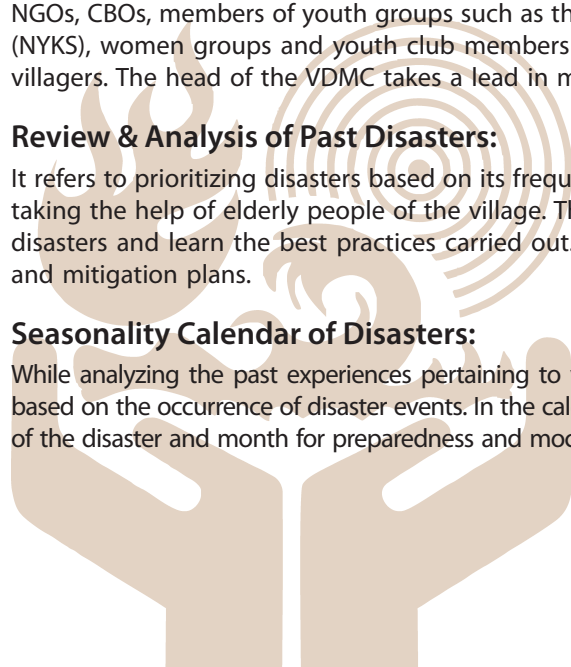
Village Disaster Management Committee (VDMC) is formed in each village and it is responsible for initiating disaster preparedness activities. It consists of local elected representatives, grass root level government - functionaries, local NGOs, CBOs, members of youth groups such as the National Service Scheme (NSS) and Nehru Yuva Kendra Sangathan (NYKS), women groups and youth club members etc. The size of VDMC is based on the population and need of the villagers. The head of the VDMC takes a lead in mobilizing the community for the preparation of the CBDP plans.

### **Review & Analysis of Past Disasters:**

It refers to prioritizing disasters based on its frequency and analysis of the estimated losses. This can be carried out by taking the help of elderly people of the village. The villagers analyze the losses that they had incurred during various disasters and learn the best practices carried out. This is an important activity as it forms the basis for preparedness and mitigation plans.

### **Seasonality Calendar of Disasters:**

While analyzing the past experiences pertaining to various natural disasters, communities develop the seasonality calendar based on the occurrence of disaster events. In the calendar below prepared by the community show the month of occurrence of the disaster and month for preparedness and mock drill.





Disasters	Jan.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep.	Oct	Nov	Dec
Flood												
Cyclone												
Household fire												
Drought												
Forest fire												

### Mapping Exercises:

One of the most important activities of the CBDP is the mapping of risk, vulnerabilities and capacities of the Village by the community itself; because it is a very simple and cost effective tool to collect ground level data. This is done through Participatory Rural Appraisal (PRA) exercise. Before the mapping exercise starts, the community members first discuss among themselves, about the experience of previous disasters they have faced or the disasters they may face in future. It aims to provide a pictorial base to the planning process especially for the semi — literate populace and ensures maximum community involvement across gender, caste and other divides. It has also been found to be very effective in raising awareness among the community and thereby enhancing participation of the community in problem identification. The maps generate awareness among the community about the avenues for smooth evacuation during a disaster. The strategy adopted is to use locally available resources rather than depending on the external agencies for help and support. The villagers/ community members are encouraged to draw the maps on the ground using locally available materials such as stone, sand and various colour powders for different items and indicators. The maps drawn need not be to scale. The types of maps are as follows:



#### Resource map:

Resource mapping focuses on identifying locally available assets and resources that can be utilized for building the capacities of the community during and after disasters. Apart from infrastructure and funds, this could be individuals with specific skills, local institutions and people’s knowledge as all these have the capacity to create awareness and bring about changes in the community. A resource map is therefore not limited to a map depicting the available resources alone, but also its distribution, access and utilisation within the village.

#### Risk and vulnerability map:

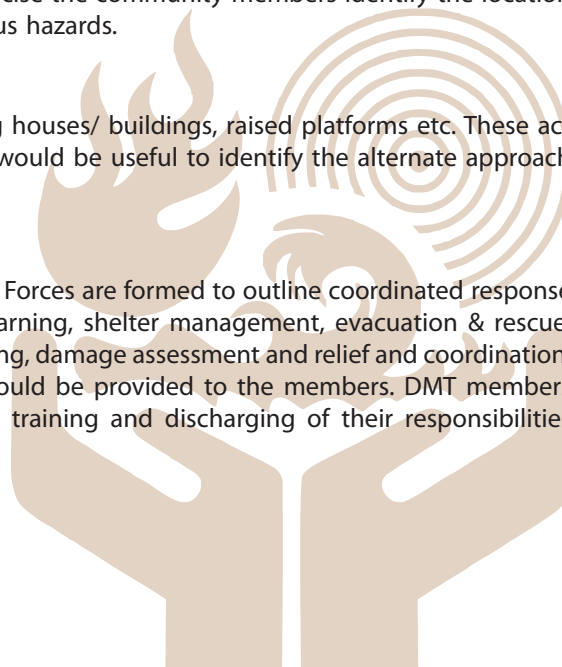
In the vulnerability map the community members have to identify the hazards that the village is prone to and the possible areas that could be affected. They also demarcate the low lying areas, areas near the water bodies such as the sea and river, direction of wind, etc. Through this mapping exercise the community members identify the location of groups at risk and the assets that require protection from various hazards.

#### Safe and alternate route map:

In a similar exercise, the villagers identify safe areas such as strong houses/ buildings, raised platforms etc. These act as a shelter place for the people in the event of an evacuation. It would be useful to identify the alternate approach routes which could be used during the time of an emergency.

#### Disaster Management Teams:

A number of village level Disaster Management Teams (DMTs)/ Task Forces are formed to outline coordinated response during crisis situations. DMTs have sectoral focus such as early warning, shelter management, evacuation & rescue, medical and first aid, water and sanitation, carcass disposal, counseling, damage assessment and relief and coordination. Based on a needs assessment of the teams, specialised training could be provided to the members. DMT members would be linked to the existing service providers for continuous training and discharging of their responsibilities effectively.



### **Nuapada, Orissa**

Satyabadi Mahapatra served for five years from 2002 to 2007 as the Sarpanch of Kothakusanga GP under Nimapada block of Puri in Orissa. The initiatives taken by him during this period for disaster mitigation are indeed very inspiring.

- He facilitated the formation of Disaster Mitigation Teams and arranged their capacity building.
- He not only facilitated the preparation of Village DM plans in all the 10 revenue villages, but also regularly got them updated involving the ward members, VDMC volunteers, SHGs and local NGOs during the occasions of Pallisabha.
- He regularly celebrated the Orissa Disaster Preparedness Day on 29th October every year and used the occasion to hold several activities as well as to generate awareness among the people.
- During the floods of 2003 and 2006 he would reach out to the flood affected people and closely coordinate the rescue and relief activities using the DMT members.

### **Mock Drill:**

Mock drill is an integral part of the village CBDP plan, as it is a preparedness drill to keep the community alert. Keeping this in view, mock drills are organised in all villages to activate the DMTs and modification of the DM plan based on the gaps identified during such exercises. Basically this is a simulation exercise, which if practised several times, would help in improving the cohesiveness of the community during an emergency.

The community's preparedness could be enhanced through mock drill exercise organised once in six months as per the seasonality calendar of natural disaster events that is likely to occur.

### **Identification of Hazard Specific Mitigation Activities :**

While developing the CBDP, the villagers would develop a mitigation plan for each hazard for long term planning. These could be coastal belt plantation, cyclone shelters in cyclone prone areas, improved drainage system in low lying areas, raising the platform of the community hall or school building etc. All mitigation plans would be forwarded to higher authorities for financial provision. It helps the community to minimize the loss, and prevents the impact of various natural disasters. All community mitigation plans are consolidated at Gram Panchayat (GP) level and become the part of the respective GP developmental plan. The mitigation plans would eventually be funded under the on-going development programs in the district, for which the District Magistrate/ Collector is the nodal officer. Disaster management committee at the District level and the State Steering Committee (a mechanism established at the State headquarters level) could play a major role in ensuring this.

### **Community Contingency Fund (CCF):**

Availability of resources for various activities to be carried out at different phases of the cycle is very crucial. To meet this contingency, each household in the village would be motivated to contribute resources which could be in the form of funds and/ or food grains.) is collected and kept as the Community Contingency Fund or village emergency fund. In the annual meeting they decide how to use this fund as per the need and developmental plan of the village.

### **Contingency Fund in a village in Uttarkashi**

In the hills of Uttarkashi people consider disasters as 'Devi Apada'. One of the concerns is that the funds which come under CRF norms for execution of work are enjoyed by a few influential people. Again the victims of disasters get the meager relief at a very late stage and sometimes they don't even know if their village got the money under CRF norms. The procedure for getting relief is also very lengthy and it involves a lot of functionaries from Patwaris to the Higher Officials.

#### **Initiative:**

Keeping this in mind a small initiative was undertaken in the District. Under the training of Disaster Management Intervention Team (DMIT) at the Bhatwari Tehsil the members were motivated to have their own DM fund. An amount of Rs.10/- was collected on the spot from each of the team members. It was decided to open a joint account at Post office or Bank with the Gram Pradhan and Gram Panchayat Vikas Adhikari, known as Panchayat Mantri, as the joint signatories. It was decided that in case there was a need to use this fund, an open meeting of the villagers along with Panchayat representatives would be called and the work to be executed would be discussed and decided there. The minutes of the meeting would be recorded in the Gram Sabha Register.

It was decided to collect Rs.10/- from each and every household of the village against the amount of two bidis a person smokes almost daily spending nearly Rs 11/-. It was also decided that the details of the collection would be displayed in the Panchayat Office to maintain transparency.

**Problem:**

Villagers were not convinced about this idea; they cited that earlier many schemes had been launched in the villages especially the SHGs, where half the amount was deposited by the Govt.; but members did not deposit their contribution regularly.

**Solution:**

The women promptly came forward to solve the problem; they promised that they would save the money from their household budgets and would deposit regularly, as this would be their own fund.

**People’s participation:**

In the village of Didsari of Tehsil Bhatwari the fund was deposited in the Bank as per the agreed plan. The fund was initiated with a modest amount of Rs 60/-; but the total amount swelled to Rs 500/- very soon.

**Path ahead:**

A training program on Disaster management was conducted for the newly elected Panchayat representatives from 21st to 28 December 2008 including the Gram Pradhans and BDC members. When the example of Didsari was shared with them they all felt motivated and promised to follow the path in their respective Gram Sabhas.

Truly said, “A journey of thousand miles starts with a single step.”

## Overall Guideline for developing a CBDP Plan

Following is an overall view at creating a CBDP plan. It takes into account some basic steps to be followed. A set of questions have been suggested at every step, which are expected to lead the initiative logically towards community involvement as well as to arrive at a systematically constructed DM plan.

Sl No.	Activity	Questions to ask
1	Setting aims of the Plan	<ul style="list-style-type: none"> <li>▶ What should be included in the aims and objectives?</li> <li>▶ Who will do it?</li> </ul>
2	Preparing community profile	<ul style="list-style-type: none"> <li>▶ Which parameters are to be mapped in the profile?</li> <li>▶ Are any structured formats available?</li> <li>▶ Who is going to do it?</li> </ul>
3	Assessment of the Community	<ul style="list-style-type: none"> <li>▶ What are the risks and vulnerabilities in the community?</li> <li>▶ What are the weaknesses and strengths?</li> <li>▶ What are the community resources?</li> <li>▶ How to prepare community maps?</li> </ul>
4	Warning Systems	<ul style="list-style-type: none"> <li>▶ What kinds of warning systems are going to be used?</li> <li>▶ Who operates them?</li> <li>▶ Who does what when warnings are received?</li> </ul>
5	Evacuation Procedures	<ul style="list-style-type: none"> <li>▶ Who authorises evacuation and when?</li> <li>▶ What routes are to be followed?</li> <li>▶ Who will look after those people in the community who need special assistance ?</li> </ul>

Sl No.	Activity	Questions to ask
6	Emergency Shelters	<ul style="list-style-type: none"> <li>▶ What buildings have been chosen for this purpose (e.g. shelter home, schools etc)?</li> <li>▶ What equipments are available there and who is responsible for their failsafe operation?</li> <li>▶ Who will manage the shelters and how?</li> </ul>
7	Search and Rescue	<ul style="list-style-type: none"> <li>▶ Who is responsible?</li> <li>▶ What equipment is available and where is it?</li> </ul>
8	Damage/ Needs Assessment—Initial and On-going	<ul style="list-style-type: none"> <li>▶ Who is responsible?</li> <li>▶ How will it be done?</li> <li>▶ Is there a report format available?</li> </ul>
9	Road Cleaning/ Debris Clearing	<ul style="list-style-type: none"> <li>▶ Who is responsible?</li> <li>▶ What equipment is available and where is it?</li> </ul>
10	Communication	<ul style="list-style-type: none"> <li>▶ How will our community be in contact with the outside world after a disaster?</li> <li>▶ What other means are available?</li> </ul>
11	Law and Order/ Security	<ul style="list-style-type: none"> <li>▶ Who is responsible?</li> </ul>
12	Transport	<ul style="list-style-type: none"> <li>▶ Who is responsible for arranging transport in an emergency?</li> <li>▶ What vehicles are available and where are they?</li> <li>▶ What arrangements can be made with the owners before a disaster?</li> </ul>
13	Repair of Community Services (Water, Electricity, Phones)	<ul style="list-style-type: none"> <li>▶ Who is responsible?</li> </ul>
14	Health	<ul style="list-style-type: none"> <li>▶ Who will coordinate First Aid assistance?</li> <li>▶ What clinics, equipment and supplies are available?</li> <li>▶ Who are the trained First Aid personnel in the community and what will be their roles?</li> </ul>
15	Personal Support for thos Affected by Disasters	<ul style="list-style-type: none"> <li>▶ Who has experience of training?</li> <li>▶ Who will coordinate this assistance?</li> </ul>
16	Welfare	<ul style="list-style-type: none"> <li>▶ What will be done to provide shelter, food and clothing for those in need?</li> </ul>
17	Relief Supplies	<ul style="list-style-type: none"> <li>▶ Who will identify the most needy and how will it be done?</li> <li>▶ How can emergency supplies be obtained after a disaster?</li> <li>▶ Who will be responsible for obtaining and distributing them?</li> </ul>
18	Outside Assistance	<ul style="list-style-type: none"> <li>▶ What is available?</li> <li>▶ How are requests made?</li> <li>▶ Who is responsible for making requests?</li> </ul>
19	Testing the Community Plan	<ul style="list-style-type: none"> <li>▶ How will this be done?</li> <li>▶ How will a mock drill be conducted?</li> </ul>
20	Revision and Updating of the Community Plan	<ul style="list-style-type: none"> <li>▶ How often will this be done?</li> <li>▶ How will it be done and who will be involved?</li> </ul>
21	Making the Community Aware of the Plan	<ul style="list-style-type: none"> <li>▶ How will this be done?</li> <li>▶ How will community members give their input to the Plan?</li> <li>▶ Who is responsible?</li> </ul>

Sl No.	Activity	Questions to ask
22	Risk Reduction (Mitigation) Activities	<ul style="list-style-type: none"> <li>▶ How will these be identified?</li> <li>▶ Who will carry out these activities?</li> <li>▶ How will any such programme be funded?</li> </ul>
23	Documents	<ul style="list-style-type: none"> <li>▶ Community maps, VCA details, contact names and addresses, list of people responsible for particular activities, damage/needs assessment report form, etc.</li> </ul>



CHAPTER

4

**Getting  
Prepared  
For  
Disasters**



# Chapter – IV

## GETTING PREPARED FOR DISASTERS

### Overview of the Chapter

Understanding Disaster Preparedness  
Preparedness and Mitigation Measures

### Promotion of a culture of preparedness

Awareness Generation  
Formation of Disaster Management Committee & Teams  
Disaster management Teams at the apex level (Block and District)

### Capacity Building of the teams and the community

- ▶ Training of DMC and DMTs
- ▶ Mock Drill
- ▶ Search and Rescue Operations
- ▶ Understanding warning/ de-warning messages
- ▶ Household preparedness
- ▶ First Aid
- ▶ Handling Communications equipment
- ▶ Trauma Counseling

### Development of Disaster Management Plans

- ▶ DM plans at Panchayat & Gramsabha
- ▶ Components for consideration
- ▶ Key Areas
- ▶ PRA
- ▶ Village Profile analysis
- ▶ Risk assessment
- ▶ Identification of resources and assets
- ▶ Developing village maps for DM
- ▶ Integration of DM in development planning
- ▶ Inter-agency Coordination

### Information management

Activity Calendar for DM preparedness

An overall guideline for DM preparedness

## UNDERSTANDING DISASTER PREPAREDNESS

Preparedness is the means by which anticipated adverse effects of extreme events can be reduced and new opportunities seized. While preparedness represents an advance action based on past experience and anticipated outcomes, coping strategies represent actual measures taken once the event has occurred. However, both the terms sometimes overlap.

When poor people get exposed to disasters, they become vulnerable to income losses and loss of well-being. Poor people respond to the risk exposure through diversification of assets and sources of income and various types of self insurance (buffer stocks, savings) and informal insurance (networks of mutual support), all intended to reduce the risk and soften its impact.

Therefore preparedness is the most important aspect of counter-disaster measures and its absence has a direct bearing on the extent of the damage, loss of lives and property and hardship faced by the people in the event of a calamity. This chapter is devoted to a discussion on the various aspects of disaster preparedness.



Preparedness would broadly consist of the following:

- ▶ General awareness among people about the nature and intensity of the impact and resultant damages, losses and hardship caused by different types of natural calamities.
- ▶ Knowledge of the counter measures required by the local community as well as the assistance available from various Government as well as Non-Government agencies in the event of a natural calamity.
- ▶ Formation and training of Disaster Mitigation Committees and Teams of volunteers
- ▶ Development of Disaster Management Plans
- ▶ Mock drill on search and rescue operations
- ▶ Understanding of warning/ de-warning messages
- ▶ Household preparation
- ▶ First Aid
- ▶ Information management
- ▶ Inter-agency coordination

## PREPAREDNESS AND MITIGATION MEASURES

### Community-based disaster preparedness

(Discussed in Chapter III)

#### Coping Mechanisms

Coping strategies may be understood as how an individual or a community responds to change in environmental or socio economic conditions and its consequences. An approach towards developing a coping mechanism towards disasters would include the following steps:

1. Establish an information base by determining:
  - ▶ What hazards can affect the given area?
  - ▶ Who and what will be most at risk due to the given situation?
  - ▶ What are the main reasons for their vulnerability toward the given hazards?
  - ▶ What resources and capabilities are available for effective response actions during Disaster occurrence.
2. Identify and implement programs on vulnerability reduction and public education and train the vulnerable local population in disaster prone areas.
3. Consider ways to reduce risks associated with local hazard phenomena. Often these may be a combination of traditional and modern methods.
4. Become familiar with how local people engage in disaster preparedness and then design ways to support them with their efforts. Do the same with regard to response preparedness.
5. Mobilise and train volunteers for effective response actions.
6. Plan for the rapid acquisition of necessary relief supplies and equipment for use in emergency situation and maintain stock. Investigate options for the delivery of relief supplies to distant or inaccessible areas.
7. Establish reliable and appropriate communication lines between responsible local authorities and local organisations as well as with the District Authorities. These communication lines are essential for proper coordination of disaster response actions.



## PROMOTION OF A CULTURE OF PREPAREDNESS

Disaster preparedness at its best can be seen as a culture in a society that involves a continuous and integrated process resulting from a wide range of activities and resources rather than just a distinct sectoral activity by itself. It requires the contributions of many different areas—ranging from training and logistics, to health care to institutional development. Viewed from this broad perspective, disaster preparedness encompasses the following objectives:

- ▶ Strengthening community-based disaster preparedness for the community.
- ▶ Increasing the efficiency, effectiveness and impact of disaster emergency response mechanisms at the GP, Block and District levels.
- ▶ Developing activities that are useful for both addressing everyday risks that communities face and for responding to disaster situations—for example, health, first aid or social welfare programs that have components useful for disaster reduction and response.

A sound and systematic approach towards development of a culture of disaster preparedness in a vulnerable society would include a number of steps as described earlier.

## AWARENESS GENERATION

### Generating Community Awareness for Disaster Mitigation

Community disaster awareness initiatives are required to inform and train local populations about how to prepare for natural disasters and emergencies. This can reduce a population's vulnerability to specific hazards. These initiatives need not require large financial outlays; nor do they require the work of a great number of people. What is required is a DM communication strategy that is planned properly and timed well to integrate with other local and community development strategies.

It has been seen that people's interest in disaster preparedness fades away if there is a lapse of a long time between disaster-events. People tend to allocate lesser importance to disasters till they are hit by the next event. Therefore, disaster awareness activities will have the greatest impact only if the aspects of preparedness is kept alive in the public mind; This can be done best if it can be integrated into broader program strategies; such as community health care, drinking water initiative, sanitation concerns such as waste water and solid waste disposal, rural employment guarantee scheme and community based first aid program.

### Communication for awareness generation may generally relate to the following themes:

- ▶ The potential disasters, emergencies and hazards specific to a region, and their effects
- ▶ Low-cost measures local populations can take to prevent and prepare for disasters and emergencies
- ▶ Measures the government and official emergency and disaster managers are taking to prevent, prepare for and respond to disasters
- ▶ Official disaster public warning and information systems, evacuation routes, temporary shelters and how and when this information will be communicated



### The communication may have to contain information on:

- ▶ The human and physical elements that are most vulnerable or most-at-risk
- ▶ Actions to prevent and prepare for a potential disaster
- ▶ Safety and survival actions to take when the disaster is occurring
- ▶ Safety, survival and recovery actions to take after the disaster has occurred
- ▶ Official sources to contact for additional information

## FORMATION OF DISASTER MANAGEMENT COMMITTEE & TEAMS

There is a wide range of tasks that needs to be taken care of before during and after a disaster It is not possible to accomplish the same by a single person or even a small group of persons It is necessary to involve as many members of the community as possible to take up these responsibilities. A clear cut assignment of roles and responsibilities would bring about the required understanding of who is to do what.

### Selection criteria

As far as nomination of volunteers to various committees is concerned, the local community knows who has what skill or capabilities among them; therefore, they know best about the suitability of particular persons for specific responsibilities. However, the following may be considered as a basis of selection of the volunteers. The teams should include:

- ▶ A healthy mix of youth and the elderly
- ▶ Persons with broader outlook and voluntary spirit
- ▶ People having previous experience of disasters
- ▶ Representation from among the vulnerable and marginalized groups
- ▶ Women
- ▶ Persons with special knowledge and skill required in DM activities
- ▶ Persons with good contact in and around the community

## 1. Village Disaster Management Committee (VDMC):

### Role & Responsibilities:

The President would preside over all meetings and be responsible for overall management.

All the Task Force Members would be directly managed by him.

The committee would be responsible for :

- ▶ Developing the Village Disaster Mitigation Plan
- ▶ *Maintaining peace during operations.*
- ▶ Maintaining all accounts of the committee.
- ▶ Keeping contact with Block Administration and other related agencies.
- ▶ Assisting the various team members in performing their responsibilities.
- ▶ Trying to wipe out bottlenecks/ lacunas in the contingency plan.

In addition, the roles and responsibilities of VDMC will include the following:

- ▶ Check the household preparedness before any disaster-situation and teach the villagers to reinforce the roof and wall wind and flood water. Strengthening of safe shelters should be attended to before monsoon season, latest by end of May.
- ▶ Keep some temporary shelter materials in the village for emergency purpose and identify the safe shelter for keeping the evacuees. Coordinate with the owner of the houses for use as safe shelter during the time of the disaster.
- ▶ DMT members should be trained and help the community in the time of emergency. DMT members should watch the situation and keep contact with the villagers for any eventuality.
- ▶ VDMC would have link with GP and Block for information and support in terms of relief and search and rescue.
- ▶ VDMC would ensure the effective functioning of the all DMTs in the villages and update the information in the VDMP and other information.
- ▶ VDMC would have linkages with local PHC for medicine and up gradation of their skill. Help the medical unit for their ongoing work in rural areas. They should ensure the availability of common medicine in the village. They should also ensure that villagers are familiar with the practice of disinfection of flood water and use of ORS.
- ▶ VDMC should ensure necessary preparations by respective DMTs. For example, they should ensure that the Water and sanitation Team establishes linkages with RWSS for bleaching powder, repair of tube wells and tanks.
- ▶ Keep some dry food, either collect from each house hold or purchase from the market. DMT should coordinate with block and gram Panchayat for relief materials. Pre-position of food stock should be ensured in the village by VDMC members along with relief DMT members.
- ▶ Keep all vulnerable groups confident to face the disaster and keep everyone ready for rescue, food, drink and safe shelters.

### Nuapada, Orissa

In order to mitigate drought in the poor villages of the Palsipani block in Nuapada district, the community came forward under the GoI-UNDP Disaster Risk Management Program to prepare a community-based disaster management plan. As part of the initiative the villagers formed teams to support drought mitigation efforts and identified locations for constructing water-harvesting structures. This community-based initiative resulted in bringing "greenery" back to the village.

## 2. Warning Team

### Role & Responsibilities:

#### **Pre Disaster Situation:**

- ▶ Listen to the news and warnings disseminated thru AIR/ DD carefully.
- ▶ Inform VDMC and other Team members.
- ▶ Check Siren, Drum, Cycle, lists, Red Flags and other equipments/ materials required to disseminate warnings in the community well in advance.
- ▶ Recheck and confirm warnings from Block Administration/ PS/ GP Office. Keep contacts over telephone/ VHF with Block Control Room.

#### **During Disaster Situation:**

- ▶ The warning team would warn the houses/ persons those who have been identified as most vulnerable and put red flags on houses, required to be evacuated immediately after the warning.
- ▶ The team would inform the community the velocity/ movement/ direction of the immediate threat so that people can be evacuated as quickly as possible.
- ▶ Keep listening to news

#### **Post Disaster Situation:**

- ▶ The team, before informing community regarding weakening of the threat, would get it checked from, if possible, Block Control Room/ PS and act accordingly.
- ▶ Inform villagers the steps they need to take in the aftermath of a disaster.
- ▶ Inform Block/ GP Control room

## 3. Rescue & Evacuation Team

### Role & Responsibilities:

#### **Pre:**

- ▶ Keep all lists ready. Specially the name of vulnerable people, fishermen, sick and ailing, children and women.
- ▶ Check and keep all equipments/ materials required to evacuate and rescue villagers ready, such as cycle, bullock cart, rickshaw, boats etc. If any shortfall is found, it should immediately be arranged/replaced or repaired.
- ▶ For better transportation, bad roads or block roads should be repaired with the help of responsible Govt agencies.
- ▶ Dwellers of thatched / weak houses may be advised on how to retrofit their houses using locally available resources.
- ▶ Mound to be arranged to evacuate domestic animals with fodder.
- ▶ Farmers/people may be advised to set their domestic animals free.

#### **During:**

- ▶ Warn/prevent fisherman/farmers to venture outside during emergency.
- ▶ Help the evacuees to get in to their respective shelters with minimum belongings.
- ▶ Rush to the spot if any casualty informed, if require take the help of First Aid team
- ▶ Arrange shifting of acute cases to the PHC.
- ▶ Advice evacuees to maintain peace and sanitation during staying in the shelters.
- ▶ Keep vigil not allow any one to go out during fatal time.
- ▶ If possible, try to find out missing persons within the community.

#### **Post:**

- ▶ Try to arrange vehicle/boat to shift acute cases to the nearest hospital
- ▶ Clean roads/garbage in order to establish proper transportation/movement
- ▶ Help the people to go back their homes

- ▶ Establish contact to the out side agencies who would like to help the needy
- ▶ Help other Task Force groups

#### 4. Shelter Management Team

##### Role & Responsibilities:

##### **Pre:**

- ▶ Check well in advance the identified shelters in the community. Emphasis should be given to see whether the doors, windows, electrification, latrine, water tank etc are in order.
- ▶ Arrange dry ration, water, medicines, candle, kerosene, utensils for at least one week, out of village contingency fund.
- ▶ The team would make necessary arrangements to keep proper health and sanitation during their staying.
- ▶ Temporary latrines to be made separately for men and women.
- ▶ Special arrangement should be made for pregnant women and ailing patients.

##### **During:**

- ▶ Ensure that people come to shelters with some food/ water/ candle/ match box and other day to day requirements at least for three days
- ▶ Register the name of the evacuees. If any one found missing inform the Search and Rescue Team immediately
- ▶ Make special arrangements for pregnant women and ailing persons
- ▶ The team should strictly maintain health/ hygiene in the shelter
- ▶ Evacuees may be asked to use their own foodstuff first. Emphasis to be given to given on the use of safe drinking water.
- ▶ Emphasis should be given to maintain peace in the shelters. People should be especially motivated and persuaded not to pay any heed to rumors.
- ▶ The team may arrange activities (Bhajan/ Kirtan etc) to divert the attention of the panicked people.
- ▶ A transistor radio should be in use in order to know the current situation of the possible threat as well as its departure to avoid confusions.

##### **Post:**

- ▶ Provide all kind of support to the people so as to help them go back to their homes
- ▶ Arrange/ collect relief items from other sources to maintain buffer stock
- ▶ Maintain cleanliness inside and outside the shelter
- ▶ Make necessary arrangement to have community feast
- ▶ Make necessary arrangements to repair, if any, shelters immediately after the event is over
- ▶ Support other teams
- ▶ Submit expenditure report, if any, to VDMC

#### 5. Vigilance/ patrolling Team

##### Role & Responsibilities:

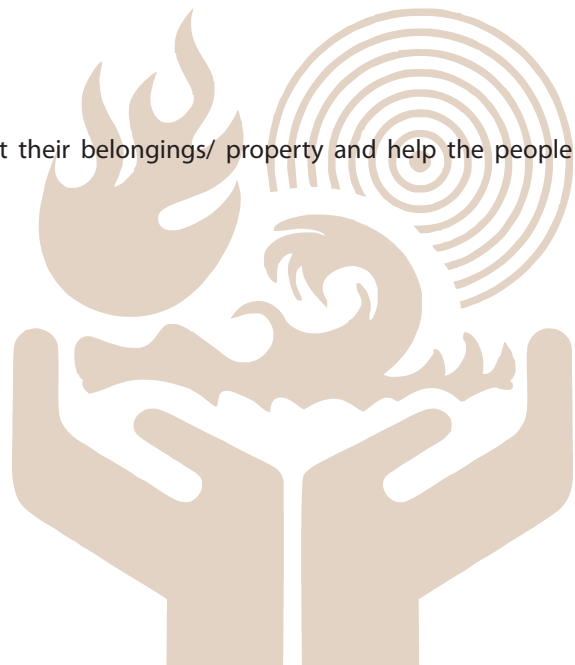
- ▶ Give confidence/ assurance to the people not to worry about their belongings/ property and help the people shift to safer places
- ▶ Taking care of the community property
- ▶ Guard the property of the evacuated people from miscreants

#### 6. Sanitation Team

##### Role & Responsibilities:

##### **Pre:**

- ▶ Collect disinfectants from nearest PHC/ ANM



- ▶ Collect kerosene/petrol/fire wood to destroy decomposed bodies in advance
- ▶ Ensure regular disinfections of tube wells by RWS & S Dept.
- ▶ Take measures to protect water sources from polluting due to flood
- ▶ Arrange/ use lime to purify pond/ well etc
- ▶ Arrange temporary latrines near cyclone shelter with adequate disinfectants
- ▶ Keep the sewerage system clean

**During:**

- ▶ Ensure proper sanitation near shelters
- ▶ Arrange/ ensure evacuees take boiled/purified water for drinking
- ▶ Inform/demonstrate how to use chlorine/halogen tabs for drinking water
- ▶ Use disinfectants in the wells/tube wells
- ▶ Ensure that the water reserved by shelter management team is safe enough to use.

**Post:**

- ▶ Use disinfectants to keep the community out of spreading epidemics
- ▶ Help Rescue Team to clean garbage.
- ▶ Help the Carcass Disposal Team to destroy dead bodies of animals.
- ▶ Use disinfectants in those areas for better hygiene.
- ▶ In case of human dead bodies take the permission of the concerned/ authorized government department.
- ▶ Document and should keep photographs of the deceased person for identification in the future.
- ▶ Make the community aware regarding the use of disinfectants for drinking water and ensure that people follow it.
- ▶ Arrange to keep the sewerage system clean.

**7. First Aid Team**

**Role & Responsibilities:**

**Pre:**

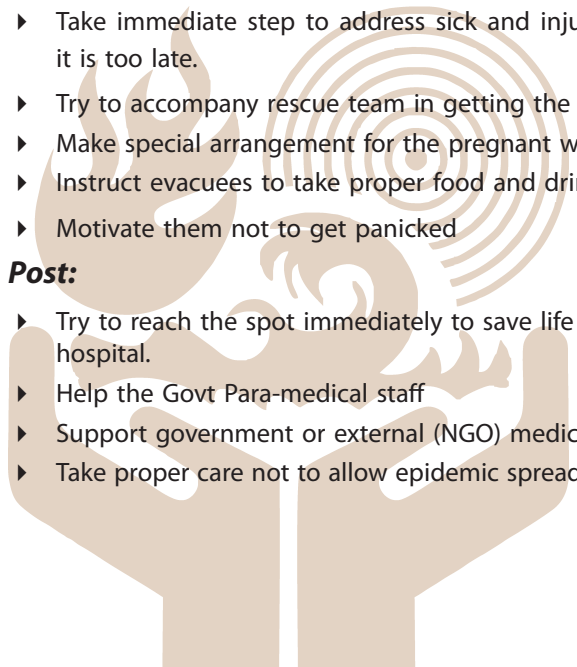
- ▶ Recheck the list of pregnant women, children, ailing, old and disabled and make necessary arrangement
- ▶ Ensure that the First box contains medicines, bandage, plaster, sterilized blade, needle, scissor, chlorine tablets, halogen tablets, pen balm, ointment ,clean cotton, ORS packets, Dettol etc
- ▶ Explain/demonstrate people on how to use disinfectants/water purifier to get purified water and maintain good hygiene
- ▶ Instruct Rescue Team to take special care for the pregnant mother and the sick and ailing

**During:**

- ▶ Take immediate step to address sick and injured. If possible try to shift the victims to the nearest PHC before it is too late.
- ▶ Try to accompany rescue team in getting the victims/ sick and ailing safely to the shelter
- ▶ Make special arrangement for the pregnant women
- ▶ Instruct evacuees to take proper food and drinking water
- ▶ Motivate them not to get panicked

**Post:**

- ▶ Try to reach the spot immediately to save life of a victim and make proper arrangement to shift the patient to a hospital.
- ▶ Help the Govt Para-medical staff
- ▶ Support government or external (NGO) medical team to attend to the patients. Inform about serious cases.
- ▶ Take proper care not to allow epidemic spread inside the community. If noticed, inform Block/ UPHC immediately



with accurate information regarding the number and symptoms of the patients.

## 8. Carcass Disposal Team

### Role & Responsibilities:

- ▶ Arrange fuel, firewood, bleaching powder etc well in advance
- ▶ Select a particular place to cremate decomposed bodies.
- ▶ Collect the dead bodies. Identify them before cremation.
- ▶ For the domestic animals, it is advised to do the cremation with the knowledge of the owner.
- ▶ Record the number of the insured animal. Communicate VAS
- ▶ In case of human dead bodies it is advised to keep record/ photograph and before cremating, the team should inform UPHC- MO/ PS
- ▶ Sprinkle bleaching powder on the areas where the dead bodies were found.



## 9. Damage assessment Team

### Role & Responsibilities:

- ▶ Check all the lists and make necessary updating
- ▶ Make an authentic list of all the damaged lives, domestic animals, houses, boats, family belongings, community infrastructures, trees, livelihood assets etc
- ▶ Support the RI/ Sarapanch/ Govt functionaries to assess the damage
- ▶ Inform NGOs and other charitable organisations to carry out rehabilitation program.
- ▶ Help the families to get compensation without any hassle.

## 10. Counseling Team

### Role & Responsibilities:

- ▶ Help the victims deal with their traumatic situations.
- ▶ Listen patiently the statement / talks made by victims/ families, who have lost their nearest and dearest/ domestic animal/ livelihood and giving them strength and confidence.
- ▶ Inform about the rehabilitation program meant for them by different organizations
- ▶ Inform/ ensure govt. aid for the victims
- ▶ Help them get involved in the post rehabilitation program directly in order to revive them into normal situation.

## 11. Relief Team

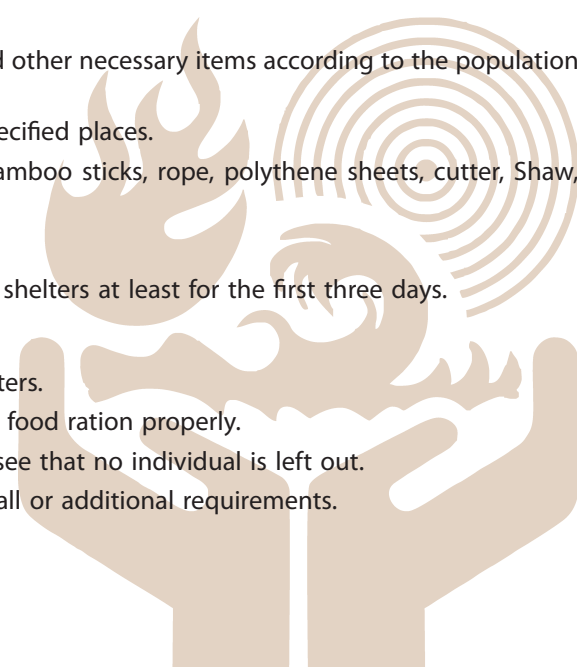
### Role & Responsibilities:

#### **Pre:**

- ▶ Arrange stock of dry food, water, baby food, medicine, fuel and other necessary items according to the population before hand to face any kind of eventuality
- ▶ Support/ help Block functionaries to stock foodstuff in the specified places.
- ▶ Arrange materials for providing temporary shelter, such as bamboo sticks, rope, polythene sheets, cutter, Shaw, straw etc
- ▶ Store fodder and medicines for the domestic animals
- ▶ Estimate and arrange dry food requirements for the specified shelters at least for the first three days.

#### **During:**

- ▶ Store required amount of relief materials in the specified shelters.
- ▶ Make individual family card for the evacuees to distribute dry food ration properly.
- ▶ Distribute the food stuff and proper care should be taken to see that no individual is left out.
- ▶ The team member should inform the leader about any shortfall or additional requirements.



- ▶ Maintain peace.
- ▶ Help Govt/ Non-Govt organisations to distribute relief without any hassle.

**Post:**

- ▶ Arrange Govt/ Non-Govt relief and help them to make proper distribution
- ▶ Give proper beneficiary list to the external relief teams/ organizations
- ▶ Ensure that the Damage Assessment Team make proper report and submit it as quickly as possible to the different organizations to avail adequate benefit to the victims.
- ▶ Arrange food and other assistance for the people who need more support from the community.

**12. Team for Coordination/ Rehabilitation/ Linkages**

**Role & Responsibilities:**

- ▶ Make necessary arrangement to avail compensation from the Government agencies for the victims who have suffered full/ partial damage includes life/ livestock/ livelihood
- ▶ Create atmosphere to carry out Govt/ Non-Govt rehabilitation programs.
- ▶ Support the victims to rebuilt /retrofit their houses
- ▶ Make necessary arrangements including food and temporary shelter for the people who have still not recovered from the damage
- ▶ Organise free kitchen centers
- ▶ Organise/support Government/Non Government organisation to carry out Food For Work programs
- ▶ Inform community about various welfare schemes run by government
- ▶ Help the victims to get insurance compensation

**Assam**

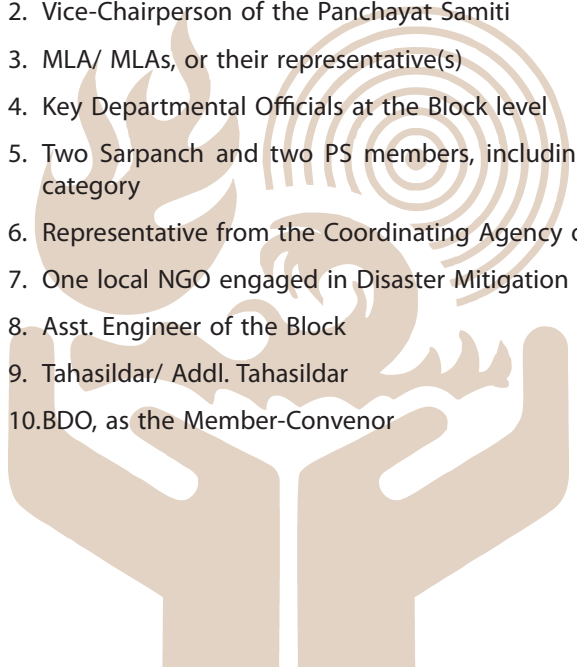
During the 2003 floods in the Dhemaji district of Assam the local community participated in relief and response activities in the affected villages. Relief kits consisting of a tarpaulin, hand pump, utensils and buckets were distributed to individuals and communities. The kits are still made available during a disaster as well as normal times. This initiative supported by the district administration and effective community participation has ensured sustainable community preparedness.

**DISASTER MANAGEMENT TEAMS AT THE APEX LEVELS**

In order to streamline the coordination of multi-level activities, it is necessary to formulate Disaster Management teams at the levels of the Block and the District, usually nominated by suitable body/ authority as per a general guideline suggested as under:

**Block Disaster Management Committee**

1. Chairperson, Panchayat Samiti
2. Vice-Chairperson of the Panchayat Samiti
3. MLA/ MLAs, or their representative(s)
4. Key Departmental Officials at the Block level
5. Two Sarpanch and two PS members, including one woman in each category
6. Representative from the Coordinating Agency of Block NGO cell
7. One local NGO engaged in Disaster Mitigation in Block area
8. Asst. Engineer of the Block
9. Tahasildar/ Addl. Tahasildar
10. BDO, as the Member-Convenor





## District Disaster Management Committee

1. Collector, as the Chairman
2. Chairperson, Zilla Parishad
3. Addl. Dist. Magistrate in-charge of emergency
4. Project Director, DRDA
5. SP
6. Key Dist. level Officers
7. Sub-Collector(s)
8. Representative of District Coordinating Agency of NGOs
9. Two NGOs engaged in Disaster Mitigation activities in the district
10. Dist. Project Officer (NUNV)
11. District Emergency Officer as member-Convenor

## CAPACITY BUILDING OF THE TEAMS AND THE COMMUNITY

Capacity building would mean the facilitation of a target group to acquire a set of pre-designed knowledge, skill and attitude, which would result in their changed behaviour to tide over the identified deficiencies. A systematic approach to capacity building would therefore begin with analyzing the areas of shortfall from desired behaviour of the target group under a certain situation. This analysis would then lead to a designed input which would fulfill that gap resulting in the capacity building of the target group and help them move towards a desired behaviour.

Having formed the various task forces or the DM teams, it is now necessary to enable them fulfill their desired tasks. Quite often people would not know the nature of tasks to be performed by them including their methods and processes. Only their enthusiasm is not enough; they must systematically learn the knowledge and skill required and must develop the right attitude for carrying out the assigned tasks in an effective manner.

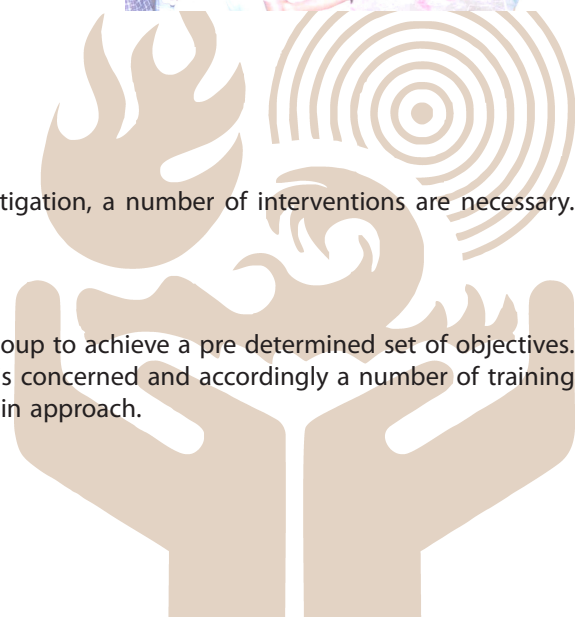
Generally speaking, capacity building may be achieved through various initiatives, either singularly or in combination of the following:

- ▶ Training
- ▶ Talk by experts
- ▶ Observation
- ▶ Discussion
- ▶ Learning from sources like newspaper, TV & Radio
- ▶ Cultural events
- ▶ Friendly interaction
- ▶ Exposure visit
- ▶ Practice or learning by working
- ▶ Demonstrations
- ▶ Understanding and adopting desired behaviour
- ▶ Getting familiar with new technology
- ▶ From experience

In order to build up the capacity of a community for disaster mitigation, a number of interventions are necessary. These are discussed hereunder.

### TRAINING

A training program is a well designed input for a specific target group to achieve a pre determined set of objectives. There are a number of target groups as far as disaster mitigation is concerned and accordingly a number of training programs are also available. However, they have a lot of similarity in approach.



Training programs meant for Disaster Mitigation will include a combination of several inputs. The programs are expected to impart the necessary knowledge, skill and attitudes to the target groups in order to enable them to discharge their assigned responsibilities satisfactorily. The program design would include the following themes:

- ▶ Training of DMC and DMTs on their roles and responsibilities
- ▶ Mock drill on search and rescue operations
- ▶ Understanding warning/ de-warning messages
- ▶ Household preparedness
- ▶ First Aid
- ▶ Handling Communications equipment
- ▶ Trauma Counseling
- ▶ Managing a control room

(Also see Annexures)



## MOCK DRILL

### Public education

Public awareness must be an important part in disaster preparedness. The aim of public awareness programs is to promote an informed, alert and self-reliant community, capable of playing its full part in support of and in co-operation with the agencies and teams responsible for disaster management activities.

An essential part of a disaster preparedness plan is the education of those who may be threatened by a disaster. Although television, radio and printed media can never replace the impact of direct instruction, sensitively designed and disseminated messages can provide a useful supplement to the overall process.

### Rehearsals, simulation training and plan review

The only way to know if a plan can work is to implement it, evaluate it and revise it as appropriate. As the preparedness plan is being developed, and upon completion, it is important to test its major elements by conducting a run-through of a simulation exercise. This may, however, be attempted only after the training of the DM teams is complete, so that an exercise of this nature would give the volunteers an opportunity to practice what they would have learnt in the training program. This will enhance their effectiveness as well as confidence.

Rehearsals or mock drills invariably expose gaps that otherwise remain overlooked. Emergency response rehearsals and trainings test the plan's assumptions and procedures. Mock drills will expose both the strengths and weaknesses in a preparedness plan and they also help review the plan and keep it fresh by following it up with discussions on updating and modifying it with necessary improvements.

Rehearsals might simulate search and rescue operations, first aid provision, response or needs assessment, coordination meetings between major organisational players and population leaders, relief transport and logistics, and many other aspects of an emergency response.

Mock drills are most effective when they are system-wide and engage as many of the disaster response players as possible. Ideally this exercise should include CBOs, Government agencies, NGOs and other groups and organisations that would be involved in a disaster response.



### Bhadrak, Orissa

Tihidi block in Bhadrak district is a flood prone area owing to river Salandi. The first concern of Harekrushna Jena, elected in 2007 as the Sarpanch of Baro GP, was to reduce the disaster risk. For this he undertook a DM planning process, where he involved a wide cross section of people including the ward members, ANM, AWW, VLW, teachers and other local leaders. He took the help of a local NGO, 'Ma Mangala Seva Sanstha'. The village development committee was revitalized and water & sanitation plans also followed in all the five villages.

The exercise was followed up by a training of the task force members. Sri Jena implored the trainers to make sure that all participants were trained perfectly and attained good skill. The resource persons of the NGO cooperated

whole heartedly in the initiative.

Shri Jena did not limit his efforts to his GP alone; he associated with other GPs and helped them in activities like village meetings, preparation of DM plan as well as task force training etc.

He had realized the importance of mock drill, which he had conducted in all five villages. The good results of the same were visible during the next season of floods, when their skill of rescue and evacuation was put to useful test. He kept the task force highly motivated and also managed the relief efficiently.

Subsequent to the flood the rehabilitation activities taken up by Shri Jena were also noteworthy. He mobilized manpower and resources to repair the village roads, cleaning of debris and unwanted vegetation from ponds and cleaning of the school premises etc.

Shri Jena, a tireless young man of 54, believes the mission of his life lay in serving the people.

## Search and Rescue Operations

(Discussed in Chapter V)

### Understanding warning/ de-warning messages

#### Early warning systems

The purpose of early warning systems is to detect, forecast, and when necessary, issue alerts related to impending hazards. In order to fulfill a risk reduction function, however, early warning needs to be supported by information about the actual and potential risks that a hazard poses, as well as the measures people can take to prepare for and mitigate its impacts. Early warning system needs to be communicated in such a way that facilitates decision making and timely action of response organisations and vulnerable groups. Early action information comes from a number of sources: e.g. meteorological offices, Ministries of Health and Agriculture, local and indigenous sources, media sources and increasingly from internet sources.

All too often, those who need to heed early warning alerts have little faith in the warnings. This may be due to a human inclination to ignore what appears inconvenient at the time, to a general misunderstanding of the warning's message or to frustration with yet another false alarm. When developing public early warning systems, planners must account for the public's perceptions of warnings, their experience related to reacting to warnings in the past, and general public beliefs and attitudes regarding disasters and public early warnings.

Even though government is ultimately responsible for issuing timely public warnings, PRI can play a supporting role by helping raise local awareness of the hazards to which a community is exposed and assist local organisations and vulnerable populations with interpreting early warning information and taking appropriate and timely action to minimise loss and damage.



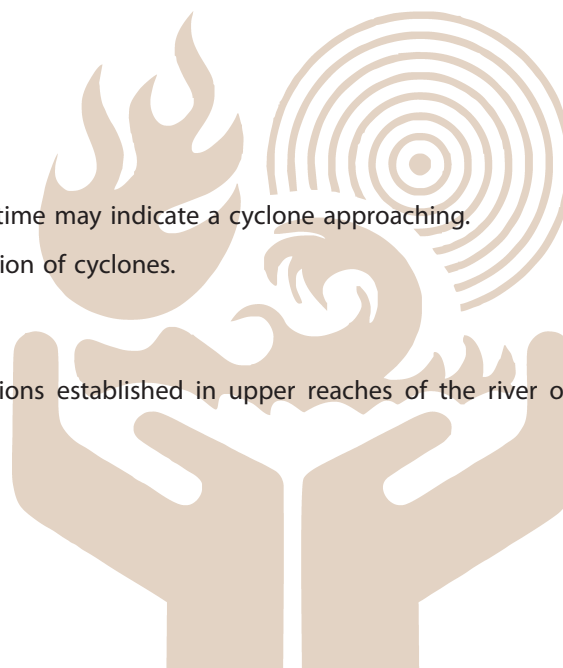
#### Traditional and Modern early warning signs

For Cyclone:

- ▶ The sound like thunder in the sea.
- ▶ The cloud movement towards northern side.
- ▶ Birds in large groups flying from south to north.
- ▶ Barking of dogs without provocation during the day or night time may indicate a cyclone approaching.
- ▶ Modern weather forecasting by satellite can detect the formation of cyclones.

For Floods:

- ▶ Heavy rainfall in the flood prone areas.
- ▶ River flooding can be detected through the monitoring stations established in upper reaches of the river or stream systems.
- ▶ Landslide in the hilly areas.



### Warning forecast of heavy rain and cyclone through Indigenous signs:

- ▶ Flying of black thunder bird
- ▶ Birds moving from sea to land in non-season (East to West)
- ▶ Star inside the circle around moon
- ▶ Lightning in the sea in a horizontal direction
- ▶ The western sky looking red at the time of sunset
- ▶ A black line on the sky from north to west direction



### Developing all communication and warning systems

#### Community early warning system:

- ▶ Formation of Community Emergency Committee and plan.
- ▶ Develop traditional early warning systems to inform the community of likelihood of occurrence of the disaster. The warning signal should be disaster specific.
- ▶ Familiarity of the community with the early warning signs is to be developed prior to the disasters during mock drills and village meetings.
- ▶ Disseminate the warning signals to the community by people who are responsible for the same.
- ▶ Develop radio-based early warning system.
- ▶ Ensure that every one in the community comes to know about the early warning at the earliest possible, without losing time.
- ▶ Inform all necessary agencies with relevant details
- ▶ Inform all DM team members

### The Traditional Warning Communication Tools

- ▶ Various items producing piercing sound are used to propagate a warning in the community. This may include items like the Conch shell, metallic bell, drums and 'Dholak' etc. Flags of different colours or numbers may also be used for different indications.

## Household preparedness

### Introduction

Devastating events such as floods, cyclones, fire cause concern about the degree of emergency preparedness in individual households. As observed, most households do not have a contingency plan for such a situation. Households without children seem to be the least prepared for a disaster. The majority of people do not have a specific place to meet in case of an emergency as has been recommended by government and non government agencies.

### Consequences of major disasters

Disasters affect individuals and households as well as organizations and communities. Some of the most common effects include:

- ▶ A breakdown in communication systems;
- ▶ Injury, illness or death;
- ▶ A decrease in the capability of emergency services to respond;
- ▶ A loss of utility and other community services; and
- ▶ A limited supply of basic provisions such as food, water, fuel and shelter.



### The basic approach to household preparedness

- ▶ Work with your family to plan for emergencies.
- ▶ Practice your responses and be "prepared to stay" or "prepared to go" when the time comes. Remember to stay informed with the latest emergency news.
- ▶ Remember, your efforts now could make all the difference when it counts later.

- ▶ Learn about the basic decisions you and your family should be prepared to make in case of an emergency.

### Three necessary steps

- ▶ Prepare a plan
- ▶ Make an emergency survival kit
- ▶ Be informed

#### Household Emergency Plan:

Household Emergency Plan is the first step in preparing the family for an emergency or disaster. The following is a list of activities that can help:

- ▶ It helps if there is a friend or a relation out of the vulnerable area at a far off place. Not only can the family move there in an emergency, the person may also be the link between family members if they are separated from each other in an emergency.
- ▶ If you have pets or domestic animals, make arrangements for their care. Identify a shelter to which you can take them in case of emergency.
- ▶ Determine the best escape routes from your home.
- ▶ Document important information in a log book stored safely, known to the family members.

#### Preparing a Household Survival Kit

A Household Survival Kit is a necessary part of the Household Emergency Plan. The kit should be well stocked and accessible to all household members. Many of the items on the list are inexpensive and most households already have them. The kit should contain the following:

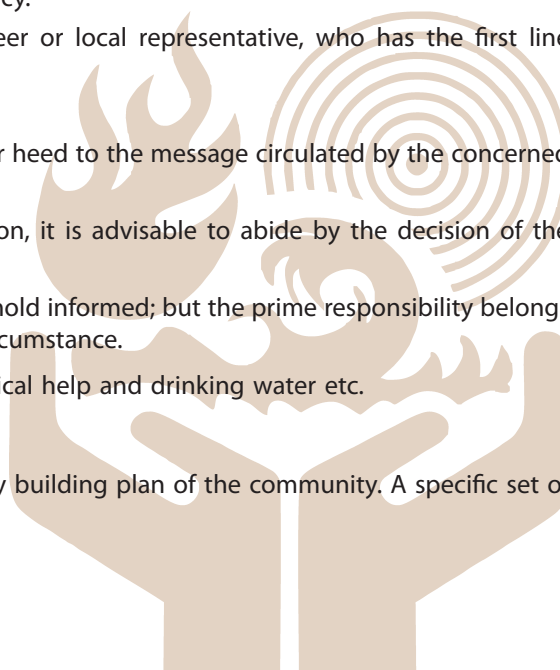
- ▶ Simple bed rolls
- ▶ Candles, matches or a lighter.
- ▶ Some cash
- ▶ Clothing and footwear.
- ▶ First-aid kit and necessary medicines (check expiry dates)
- ▶ Flashlight and batteries (Tape the end of the batteries so they do not rub together and lose energy)
- ▶ Dry food
- ▶ Toiletries such as toothbrushes, toothpaste, towels, soap, comb, brush and sanitary napkins.
- ▶ Drinking water
- ▶ Battery-operated or solar-powered radio, spare batteries, fully charged cell phone and/ or a Ham radio.
- ▶ Playing cards, games and books for entertainment/ self-engagement.
- ▶ Easy-to-carry packing of the kit in case your family needs to evacuate.

#### Be informed

- ▶ The best protection is to know what to do during an emergency.
- ▶ Members of the household must be in touch with a volunteer or local representative, who has the first line information.
- ▶ Households must get familiar with the warning signs.
- ▶ In case of an emergency or warning, members must pay proper heed to the message circulated by the concerned DM team members.
- ▶ Although to 'stay back' or to 'leave home' is a personal decision, it is advisable to abide by the decision of the community.
- ▶ It may be the responsibility of a volunteer to keep every household informed; but the prime responsibility belongs to the household. The same cannot be absolved under any circumstance.
- ▶ The household must learn about the route, shelter, relief, medical help and drinking water etc.

### First Aid

Basic knowledge about First Aid should be included in the capacity building plan of the community. A specific set of



volunteers should be chosen for this and trained thoroughly on the subject.

(Please see Annexure for details)

## Handling Communication Equipments

In situations of disaster communication is of prime importance. A host of electronic instruments are available to fulfill different kinds of needs of communication. With the advent of technology, many improvements are always taking place. However, certain basic instruments are still very useful and the identified volunteers should be trained thoroughly about the use and upkeep of these equipments.

The various equipments used for the purpose of communication include:

- ▶ Telephone
- ▶ Cell phone
- ▶ TV
- ▶ Radio
- ▶ Computer with internet connection
- ▶ LCD projector
- ▶ Overhead projector
- ▶ Microphone
- ▶ Amplifier and speakers
- ▶ VCD player
- ▶ Camera (Still & Video)
- ▶ Tape recorder

## Trauma Counseling

### Psycho-social care of the Disaster affected

As a result of the disasters the life of the affected people gets destabilized to a great extent. They not only lose their beloved family members and their hard earned property, but many lose their livelihood and even mental composure. The affected persons undergo multiple feelings of frustration, anxiety, depression and anger. It is therefore necessary to do the capacity building of identified volunteers/ health personnel in the skill of trauma counseling.

(Please see Annexure for details)

## DEVELOPMENT OF DISASTER MANAGEMENT PLANS

### The Concept

The concept of preparedness planning is very important for those involved in disaster management. During an actual emergency, quick and effective action is required. This action often depends on having made and implemented preparedness plans. If appropriate action is not taken or if the response is delayed, lives may be needlessly lost. In a preliminary plan, even though the details of a disaster remain uncertain, you can identify emergency shelter sites, plan and publicise evacuation routes, identify emergency water sources, determine chains of command and communication procedures, train response personnel and educate people about what to do in case of an emergency. All of these measures will go a long way to improving the quality, timing and effectiveness of the response to a disaster.

Disaster preparedness planning involves identifying organisational resources, determining roles and responsibilities, developing policies and procedures and planning preparedness activities aimed at ensuring timely disaster preparation and effective emergency response. The actual planning process is preliminary in nature and is performed in a state of uncertainty until an actual emergency or disaster occurs. The aim of preparedness planning is to identify assignments and specific activities covering organisational and technical issues to ensure that response systems function successfully in the event of a disaster. The ultimate objective is not to write a plan but to stimulate on-going interaction between parties, which may result in written, usable agreements. The written plan is an instrument, but not the main goal of the planning process.

## Disaster Mitigation Planning at Pali Sabha and Gram Sabha

Pali Sabhas and Gram Sabhas are important instruments in the hands of people, which help them participate in decision-making processes. The sanctity and legitimacy of these bodies can be maintained, if each and every member actively participates in these meetings.

The 73rd and 74th Amendments of the Constitution of India give people of India in rural and urban areas an important role to play in local self governance. All the development programs and the list of beneficiaries get finalized in these two meetings. Panchayats must take care that all the members participate in these two meetings, and that business here is transacted in a transparent manner.

Besides, any activities related to relief, rehabilitation or development initiatives are also finalized at these two meetings. This makes the forum very important as they set the development agenda for the people. Keeping in mind the regularity of occurrence of disasters in some states like Orissa, Andhra Pradesh and Bihar, all the Panchayats must formulate disaster-mitigation plans at the village level, which may then be integrated at the GP level. Some Panchayats have initiated this in the form of micro-planning, where all the villagers have been ranked according to their well-being taking various socio-economic conditions into account. This has been done in a participatory manner, and the list helps one identify poor and vulnerable people who need to be supported.



Initiating such planning processes and documenting of these would facilitate quick implementation of relief, rehabilitation and development programs. The PRA methods can be suitably followed to arrive at a DM plan for the village or the area.

## The components for consideration in the planning process

The components which need attention for a Community Based Disaster Preparedness are as follows:

### Assessment of probable needs

Another aspect of preparedness planning is planning for probable needs during an emergency. Based on previous disasters, planners should compile a list of likely needs and available resources. If planners anticipate a gap between needs and resources, they should identify, in advance, ways to reduce that gap.

### Activating emergency notification and disaster response systems

The plan should define ways to provide the population with emergency warnings. In addition to providing the public with notification of the impending disaster, there must also be a system for initiating a disaster response in case of an emergency. Who and how is early warning being monitored and communicated?

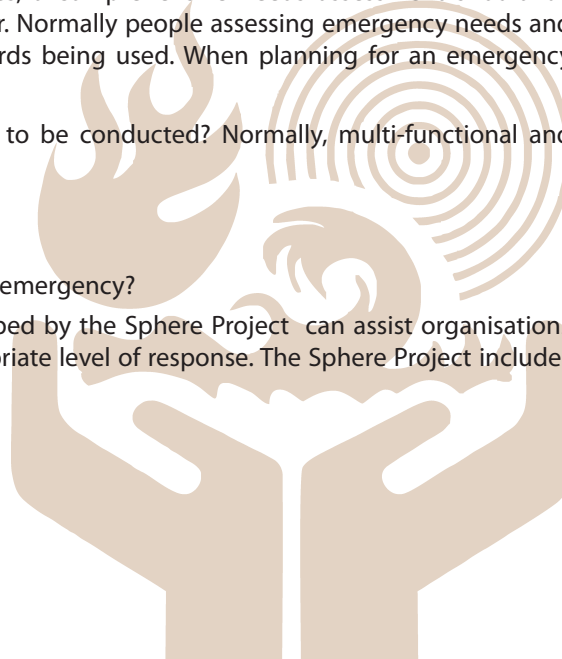
### Emergency needs assessment

Effective response operations are practically impossible without a precise emergency or disaster situation assessment and a thorough evaluation of required humanitarian and other relief. To be effective, assessment work should be well planned and organised before it is carried out. In most cases, a comprehensive needs assessment should be conducted immediately after an emergency and updated thereafter. Normally people assessing emergency needs and damages should receive training and should agree on the standards being used. When planning for an emergency needs assessment, identify:

- ▶ Who is responsible for the assessment and when is it going to be conducted? Normally, multi-functional and multi-sectoral teams should conduct assessments.
- ▶ What information is required at each stage of the emergency?
- ▶ How and where research teams will be formed and trained?
- ▶ What standards are being used to indicate the severity of the emergency?

The minimum humanitarian standards in disaster response developed by the Sphere Project can assist organisations in prioritising information collection needs and planning an appropriate level of response. The Sphere Project includes information on the following sectors:

- ▶ Water supply and sanitation
- ▶ Nutrition



- ▶ Food aid
- ▶ Shelter and site planning
- ▶ Health services

### **Resource mobilisation and allocation**

Responding to an emergency and implementing the preparedness plan will require resources. The preparedness plan, therefore, should consider:

- ▶ What resources are already available and in what quantities?
- ▶ Which staff and volunteers can be shifted over from other programs during times of emergency?
- ▶ What resources will be needed that we don't have?
- ▶ Plans for procuring the resources that are not currently available.

### **Communication between agencies**

Sharing and exchanging information among representatives of various agencies is crucial during emergencies. To ensure clear and effective communication in an emergency the plan should specify how communication will take place and via what mediums (e.g. mail, e-mail, radio, telephone, in person, etc.)

If radio communication will be used, it is important to designate the radio frequency in the preparedness plan. This way, responding agencies will use the correct radio frequencies in the event of an emergency. The plan should also specify who will have (and maintain) the equipment and who will have access to a radio.

### **Rescue and medical assistance for the affected**

Major emergencies and disasters often result in deaths and injuries. The disaster preparedness plan should outline:

- ▶ Who will be responsible for organising search and rescue operations?
- ▶ How to dispose off dead bodies?
- ▶ Who will deliver first aid?
- ▶ What distribution and registration systems will be used?
- ▶ Who will be responsible for medical evacuations and hospitalisation?

## **KEY AREAS**

While planning for DM the following key areas must be kept in view for taking necessary steps in time:

### **Water and sanitation**

Often in an emergency, there is a lack of safe drinking water, which may cause serious health problems. Since people can live without food longer than water, a supply of clean drinking water is a priority in an emergency. Sanitation includes provision of safe water; disposal of human excreta, wastewater and garbage; insect and rodent control; safe food handling; and site drainage. The plan should include provisions for water and sanitation during an emergency.

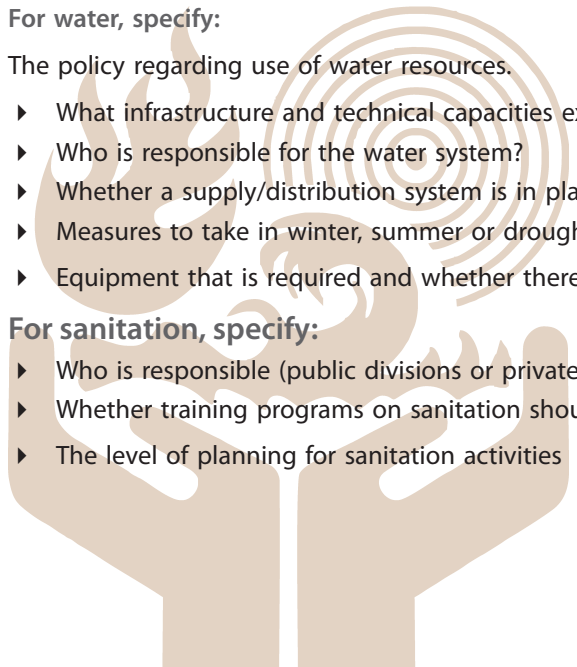
**For water, specify:**

The policy regarding use of water resources.

- ▶ What infrastructure and technical capacities exist?
- ▶ Who is responsible for the water system?
- ▶ Whether a supply/distribution system is in place
- ▶ Measures to take in winter, summer or drought or in case of water source contamination
- ▶ Equipment that is required and whether there is a need for water tanks (if local water sources are not available)

**For sanitation, specify:**

- ▶ Who is responsible (public divisions or private sector)
- ▶ Whether training programs on sanitation should be conducted
- ▶ The level of planning for sanitation activities





## Food and nutrition

Food provision is aimed at meeting the needs of an affected population during an emergency. The preparedness plan should define, calculate and stipulate how food will be provided in emergencies of differing intensities and impacts. During the preparedness stage, the following questions should be answered:

- ▶ Who is responsible for assessment of food supply needs and coordination of this part of the response operation?
- ▶ What food is available locally, in the region, in the country? What are the capacities of and prices in local markets?
- ▶ What foodstuffs traditionally used /acceptable to the population are likely to be affected?
- ▶ What are the caloric requirements for various climates (for example, in cold high mountain climates)?
- ▶ What basic needs should be met for small children?
- ▶ What food distribution systems have been used in the area? How could they be used in an emergency?
- ▶ Will the unaffected population close to the emergency site also be provided with food? (This issue arises when the unaffected population is also exposed and vulnerable, even in normal conditions.)
- ▶ Who is responsible for communications with the government and international food donors (for example, the World Food Program), NGOs and other agencies?
- ▶ What are the food storage requirements? What storage capacities are available?

## Logistics and transport

Emergency response operations require transport of humanitarian aid, personnel and equipment to the disaster site. Therefore, logistics and transport issues are crucial to a successful response. The following aspects of logistics and transport should be considered in planning:

- ▶ Define normal aid delivery routes to anticipated disaster areas and affected populations
- ▶ Define seaports and airports to be used.
- ▶ Determine available storage sites.
- ▶ Specify transportation modes (road, railway, air) and issues such as availability and cost.
- ▶ Define availability of fuel and garages. Clarify limitations.
- ▶ Define and establish cooperation with the government office or ministry responsible for customs clearance on road, sea and airports; reach agreement with appropriate governmental structures to ensure privileged conditions for import of humanitarian aid.
- ▶ Identify the spare parts that may be needed for vehicles; make all preliminary arrangements.
- ▶ Define the probable impact of weather on logistics work
- ▶ Define and conduct training for personnel or divisions responsible for logistics in an emergency.

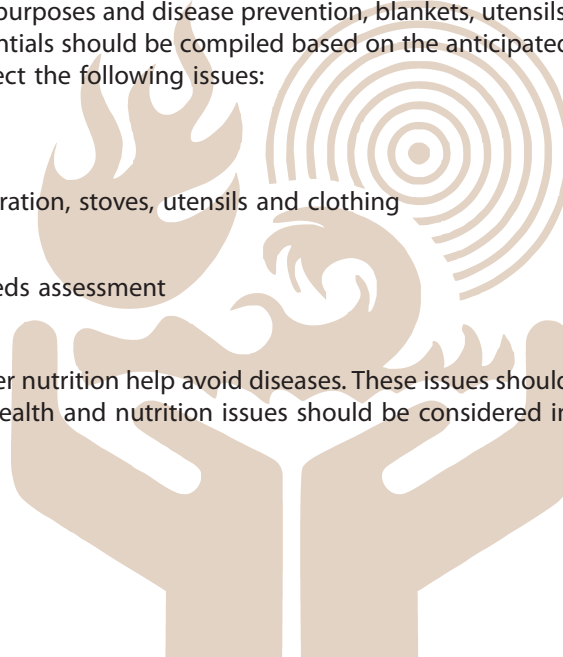
## Other domestic needs

The plan should include details on how basic needs related to shelter, water and food should be met. Other essential items that should be included in the plan include soap for hygiene purposes and disease prevention, blankets, utensils, water tanks, and matches. Since situations may vary, the list of essentials should be compiled based on the anticipated needs of the population likely to be affected. The plan should reflect the following issues:

- ▶ The items that will be needed and available
- ▶ Storage requirements—what are the local storage capacities?
- ▶ Available reserves of blankets, water tanks, fuel for food preparation, stoves, utensils and clothing
- ▶ Whether a distribution system is in place
- ▶ Who is responsible for management of these supplies and needs assessment

## Health and nutrition

Access to safe water, good sanitary condition of dwellings and proper nutrition help avoid diseases. These issues should be addressed before launching medical programs. The following health and nutrition issues should be considered in planning:



- ▶ Who is responsible for health and nutrition needs?
- ▶ What is the local health care structure and how does it function during emergencies?
- ▶ Where can vaccinations for infectious diseases (e.g. measles) be conducted?
- ▶ What are the main supplementary feeding requirements (children, pregnant and lactating women) or special feeding programs that may be necessary?
- ▶ Which governmental or non-governmental agencies are responsible for health care, disease prevention and public health campaigns?
- ▶ Is health protection/ nutrition different in different seasons? In what way? What special measures should be considered during a seasonal emergency?
- ▶ How can the problem of overcrowding be solved? How will the problem reflect on health care before and after an emergency?
- ▶ What measures should be taken for different population groups (children, pregnant women, etc.)?
- ▶ What medication and medical equipment is available? What might be needed? Is an additional supply of these items needed?
- ▶ Are storage capacities available? If not, what should be done?

## Shelter

In some cases urgent shelter provision is needed for those whose houses have been destroyed or are unsafe. Urgent repair work; provision of tents and tarpaulins for temporary shelter; or sheltering homeless people in public buildings, like schools, may be required. The following shelter issues should be considered in planning:

- ▶ Who is responsible for management and needs assessment related to shelter?
- ▶ What is the state policy with regard to sheltering an affected population?
- ▶ Which governmental structure is in charge of coordinating this work?
- ▶ Have sites been identified for possible large-scale emergency shelter needs?
- ▶ How will sites be identified? What difficulties are there related to land ownership? What potential problems may occur with the local community?
- ▶ What difficulties may arise in winter/ summer/ rain?
- ▶ What types of assistance will those who are hosted by relatives or friends need?
- ▶ How will the terrain affect shelter requirements?
- ▶ Are construction materials available locally?
- ▶ Are supplies of tents, construction materials and plastic sheets needed?

## Search and reunification of families

One of the priority tasks in many relief operations is to quickly initiate a search for missing people and reunite lost family members. The family is the basic social unit in most societies and plays a key role in meeting needs and solving community problems. Agencies responsible for search and reunification of families should consider the following issues in their work:

- ▶ Who is responsible for managing search and reunification activities?
- ▶ What methods or approaches will be used to carry out these activities?
- ▶ What communication methods will be used to reunite family members?
- ▶ What other agencies and governmental structures are responsible for these operations?
- ▶ What level of coordination with these structures is required?
- ▶ At which stage of response should search operations be started?
- ▶ How will the affected population learn about this service?
- ▶ Who will work in the search service?
- ▶ What methods and forms are required to make this service more effective (e.g. information/ registration cards, inquiries, etc.)?

## Protection and security

Preparedness plans should identify who is responsible for protection and security. In addition, the plan should identify

the actions to take to ensure the protection of the affected population and their belongings as well as the safety of the emergency responders. Normally, this will be the responsibility of the local law and order authorities.

## PRA- PARTICIPATORY RURAL APPRAISAL

PRA was developed in 1970s and 1980s in response to the perceived problems and issues of the local people in context of developmental need. PRA can be defined as an approach and method for learning about rural life and condition for, with and by the rural people.

This is a tool use to carry out the Village Disaster Management Planning at the community level. It enables local people to make their own appraisal, analysis and plans. It uses group animation and exercise to facilitate information sharing, analysis and sharing among stakeholders.



This tool would help the Gram Panchayat DMC in preparing the Multi-hazard Gram Panchayat Disaster Preparedness and Mitigation Plans.

(Please see Annexure for details on PRA)

## Village Profile analysis

The analysis prior to making the DM plan needs to be done very systematically, for which a few structured formats are suggested hereunder:

### Village Profile:

SI No	Parameter	Details
1	Date of preparation of Community Contingency Plan	
2	Village	
3	Revenue Village	
4	GP	
5	Block	
6	Accessibility/ road connectivity	

### Demographic Details:

#### Households

SC		ST		OBC		GEN		TOTAL		Total Households
APL	BPL	APL	BPL	APL	BPL	APL	BPL	APL	BPL	

#### Population

SC		ST		OBC		GEN		TOTAL	
M	F	M	F	M	F	M	F	M	F

### Topographical Details:

#### Total Geographical area

Agricultural Land	Forest Land	Grazing land

### Availability of Mountain / Mounds/ Kuda:

Sl. No.	Type of High land	Distance from Hamlet/ village	Remarks

### Cropping Pattern

Agriculture seasons	Major crops	Yield rate	Remarks

### Land Holding (No. of Households)

Landless	Marginal farmers	Small Farmers	Big Farmers	Share croppers

### Livelihood details

Type of Occupation	Number of Persons engaged	No. of Households engaged

### Infrastructure

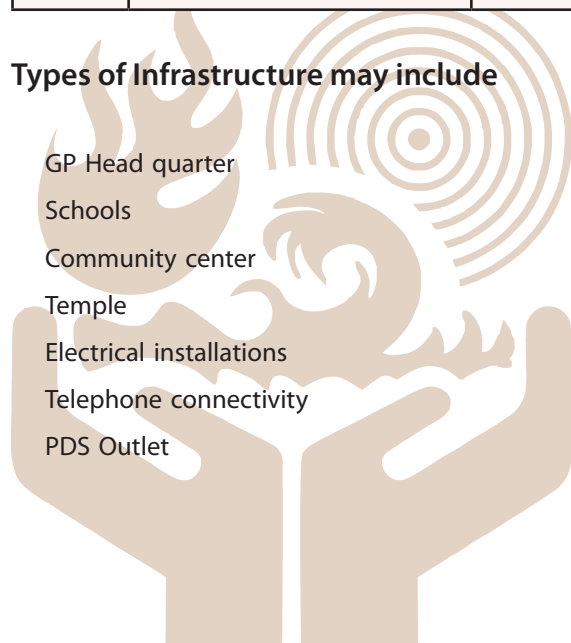
Sl No	Name of the Village	PDS Outlets	Post Offices	Police Station/ Outpost	Pucca Buildings	CHC	PHC	Dispensary	Cyclone Shelters	Educational Institutions				Livestock Centers	Cottage Industries	Industries	Godown/ Stores	Temples (Pucca)
										UP	ME	HS	College					

### Infrastructure Details

Sl. No.	Type of Infrastructure	Yes / No	Distance from a reference point in the village	Type of construction	Tel. No.

### Types of Infrastructure may include

- GP Head quarter
- Schools
- Community center
- Temple
- Electrical installations
- Telephone connectivity
- PDS Outlet



Grocery Shop  
Post Office  
Police Station/ Outpost  
Health Facilities (PHC, Health Sub-Center, ANM, AWW)  
TV/ Radio/ VHF  
Road Connectivity  
Livestock centers

## **Risk / Vulnerability Assessment**

### **Risk/ Vulnerability:**

Human risk or vulnerability is the relative lack of capacity of a person or social group to anticipate, cope with, resist, and recover from the impact of a hazard. Vulnerability has two components: exposure to hazards and difficulty in coping with and recovering from them (due to lack of resources). Since human vulnerability is inversely related to the concept of human capacity, that concept also merits a discussion.

### **Structural or physical vulnerability**

It is the extent to which a structure or service is likely to be damaged or disrupted by a hazard event. A building is said to be vulnerable to earthquake tremors if its construction lacks elements which would resist the effects of such tremors.

### **Factors affecting human vulnerability**

Before developing risk reduction programmes, it is important to understand some of the major factors which make a population vulnerable. These factors include:

- ▶ Poverty
- ▶ Increased population density
- ▶ Rapid urbanisation
- ▶ Changes in way of life
- ▶ Environmental degradation
- ▶ Lack of awareness and information
- ▶ Civil disturbances
- ▶ War

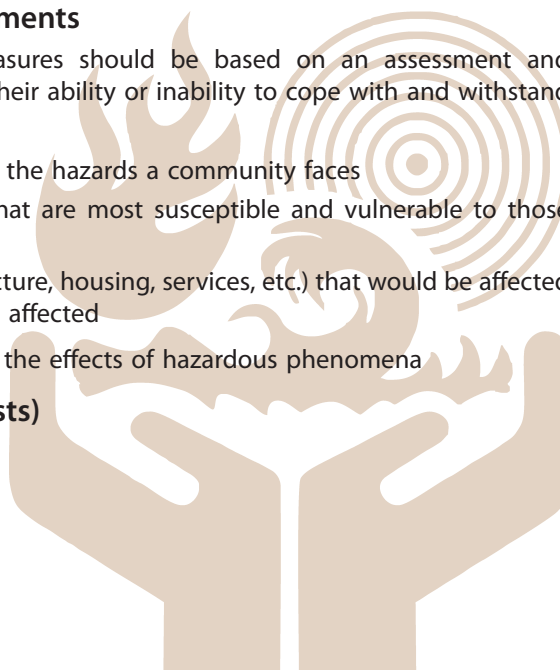
These factors are frequently interrelated. For example, poverty often results in people migrating to urban areas in search of work. Limited resources and opportunities in urban areas result in people settling in unsafe locations and can also produce tensions leading to civil unrest.

### **Approach towards hazard, risk and vulnerability assessments**

All planning and implementation of disaster preparedness measures should be based on an assessment and prioritisation of the hazards and risks that people face, as well as their ability or inability to cope with and withstand the effects of those hazards. This assessment should:

- ▶ Identify the characteristics, frequency and potential severity of the hazards a community faces
- ▶ Identify the particular geographical areas and communities that are most susceptible and vulnerable to those hazards
- ▶ Identify the main sectors of a community (population, infrastructure, housing, services, etc.) that would be affected by a specific type of hazard and anticipate how they might be affected
- ▶ Assess the ability of those sectors to withstand and cope with the effects of hazardous phenomena

### **Hazard analysis by the community (example of check lists)**



### History of Disasters (last 20 years)

Sl No	Hazard type	Year of occurrence	Type of Losses (in %)				
			Human	Bovine	Crop	Houses	Infrastructure

### Seasonality of Hazards

Sl No.	Hazard type	Months			
		Jan- March	Apr- June	July- Sept	Oct- Dec

### Risk assessment by the community

Sl No	Risk Groups	Names

### Risk Prone Infrastructure and Assets

Sl.No	Type of assets/ infrastructure	Nos.	Remarks

### Risk Prone Infrastructure and Assets

Sl.No	Type of assets/ infrastructure	Nos.	Remarks

### Some of the risk prone assets may include:

- ▶ Livestock (Cattle, Poultry birds, Goats/sheep, Animal farms etc)
- ▶ Valuable documents of individual and community ( Educational Certificates/ Photo Identity Card/ PDS Ration Card/ Ban Passbook/ Land records/ Insurance Papers/ Telephone & Electricity Bill/ Bill and Guarantee Cards of Valuable Items etc.)
- ▶ Crop / trees/ orchards/ forest (Paddy, Cereals, Ground Nut, Vegetable/ Mango, Guava, Tick, Bamboo etc)
- ▶ Agricultural implements
- ▶ Modern equipments/ machines (All types of agriculture equipments like Pump sets, Fans, Groundnut Grinder etc)

Who is at risk?	What is at risk?
<ul style="list-style-type: none"> <li>• Elderly people</li> <li>• Disabled people</li> <li>• Children and pregnant women</li> <li>• Sick and ailing people</li> <li>• Widows and single women</li> <li>• Fishermen at sea</li> <li>• Families living near the sea</li> <li>• Shrimp seed farmers</li> <li>• Families living in thatched houses</li> <li>• Other such groups</li> </ul>	<ul style="list-style-type: none"> <li>• Family valuable documents</li> <li>• Houses and weak structure</li> <li>• Cattle and livestock</li> <li>• Livelihood assets such as boats, nets, stores of dry fishes</li> <li>• Pump sets &amp; other installation</li> <li>• Looms and such property</li> <li>• Standing crops, horticulture, trees and plantation</li> <li>• Village water sources to the sea</li> </ul>

### Vulnerability mapping by the community

In this mapping process the Gram Panchayat Disaster Management Committee is to identify various parameters which it finds vulnerable. This may include points like:

- ▶ People who are vulnerable to different kinds of disasters
- ▶ Areas that get inundated with water with different water level
- ▶ Weak embankments
- ▶ Houses and weak structures
- ▶ Standing crops, horticulture trees and plantation
- ▶ Village water Sources
- ▶ Drinking Water Facilities
- ▶ Cluster of households that may get affected by fire
- ▶ Roads



### Who are vulnerable?

- ▶ Old persons unable to walk /move (on his/ her own)
- ▶ Physically and mentally challenged persons
- ▶ Pregnant women
- ▶ Lactating mothers
- ▶ Children under the age of five
- ▶ Single person households



### What is vulnerable?

- ▶ Habitation in low-lying area/ riverbank/ seashore
- ▶ Households living by sea shore/ river bank / creek side
- ▶ Households living in low lying areas usually submerged
- ▶ Weak bridges / embankments – the place where the bridge is weak
- ▶ Weak, narrow, low height and eroded embankments
- ▶ Thatched houses made of mud and straw
- ▶ Roads in the low lying area likely to be submerged / muddy
- ▶ Area having no road link – access is through bunds of cropland
- ▶ Water sources getting affected – tube wells usually submerged (past experience)



### Example of check lists for vulnerability mapping

#### Inhabitants

Sl. No.	Type of house	No. of Households	Remarks

Distance of the village from dangerous risk points:

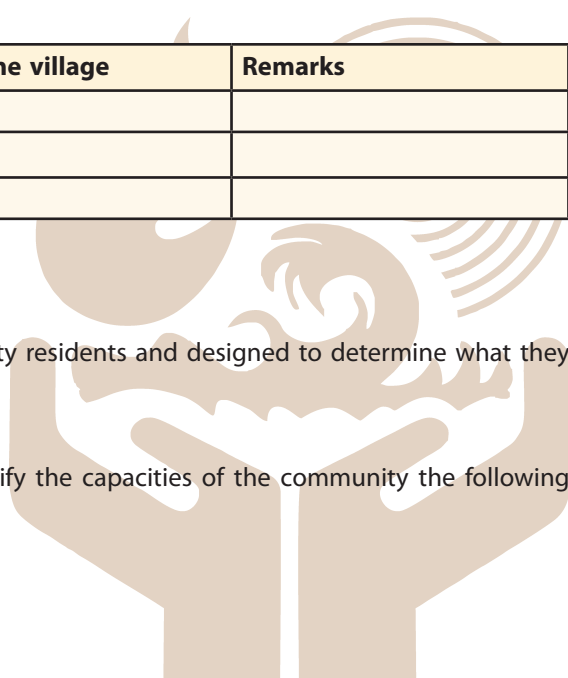
Sl. No.	Danger/risk Points	Distance from the village	Remarks
1.	Sea		
2.	River		
3.	Weak embankments		

#### Identification of resources and assets

#### Assessment of capacity in the community

Capacity Assessment is a participatory process involving community residents and designed to determine what they can do during times of crisis in order that :

- ▶ The destructive effects of a hazard may be reduced, and
- ▶ The sustainability of their livelihood may be secured. To identify the capacities of the community the following



must be discussed:

- ▶ Resources: What resources are available to assist the community at the time of need like for evacuation and transportation, safe shelter, relief, rehabilitation, reconstruction etc.
- ▶ Location: Where are the resources and the capable persons of the community situated?
- ▶ Size: How many capable persons live there and how close together or scattered do they live and what are the capacities of the resources available?
- ▶ Infrastructure: What infrastructures can be available e.g. roads, bridges, Water bodies, boats, power supplies and buildings etc?
- ▶ Community Capabilities: How prepared is the community with its own skills and resources available to cope with, resist and recover from the impact of a hazard.



### Resource mapping by the community

The GP DMC may identify those resources it has directly or indirectly at its disposal, which may be of help during a crisis. These may include several aspects like:

- ▶ Safe shelters (Pucca Houses, Community Centers)
- ▶ Elevated up lands, High Land (mounds)
- ▶ Alternate route for safe evacuation
- ▶ Safe Primary Health Centers
- ▶ Safe drinking water sources
- ▶ Water Bodies
- ▶ Agricultural land
- ▶ Forest and Grazing land
- ▶ Roads
- ▶ Telephones
- ▶ Post Office and other structures
- ▶ School and College buildings
- ▶ Godowns (both Government and Private)
- ▶ Dealers of Dry food, kerosene etc
- ▶ Tent house (Generators, tarpaulins, utensils required in case of community cooking)
- ▶ Anganwadi Centers
- ▶ VHF/ HAM Stations
- ▶ Pump sets & other installations
- ▶ Looms and such properties
- ▶ Industries and factories
- ▶ Livelihood assets such as boats & nets
- ▶ Fire stations, Police stations

### Example of check lists for mapping resources

Identified Safe shelter Places

Sl No.	Type of shelter	Rooms	Capacity	Ownership details	Remarks

### Village Organizations





SI No.	Type of Organization	No. of Members	Remarks

### Resource Inventory

Resource Type	Details	Owner's name	Nos.	Remarks

### Example of Resource Inventory

- ▶ Transportation and Communication (Bullock Cart, Tractor, Trekker, Trolley, Rickshaw, Four wheelers, Two Wheelers, Boat, Important Telephone Numbers )
- ▶ Containers (Tankers, Overhead tankers, Jerry cane, Big vessels)
- ▶ Cleaning/ cutting equipments (Spades, Shovel, Saw, Rope, Knife, Axe etc)
- ▶ Other resources (Gen set, Pump set, Hurricanes, Petromax, ,Gas light, Solar light, Emergency Light)
- ▶ Temporary Shelter (Tents, Tarpaulins, Bamboo, Polythene)

### Alternative/ Safe Routes

SI No.	Name of the route	Remark

### Resource mobilisation

PRI bodies should develop strategies and procedures for mobilising and acquiring emergency funds, supplies and equipment in the event of a disaster. A preparedness plan should spell out the policies for acquisition and disbursement of funds, use of outside equipment and services, and emergency funding strategies. Well before a disaster occurs, PRI bodies should establish procedures for activating the appeals process for requesting funding support from various sources.

### Developing village maps for DM

(Please see PRA in Annexure)

### Integration of DM in development planning

Earlier in this document, it has been stated that disaster preparedness is a goal rather than a specialised programme. Thus, it is the result of many activities across a range of sectors including emergency response, primary health care, institutional development, community-based first aid, and local capacity building. This means that disaster preparedness needs to be treated as a continuous and integrated process involving both relief and development.

Since disaster preparedness depends on shared goals and activities across sectors, it is important that the concept be integrated into all on-going projects like Govt.'s schemes on Health, Education, Drinking water or Sanitation programs and nutrition initiatives. This provides a useful connection between the local initiatives for disaster preparedness and developmental planning at District, State or National level institutional structure and their ongoing service provision activities.

(Discussed in greater detail in Chapter VI)

#### Ralegaon

Ralegaon, located in the drought prone district of Ahmednagar, was facing recurring droughts for many years leading to soil-erosion and scarcity of water. Under the leadership of Anna Hazare, community based water management was initiated. Which resulted in the community's drinking water needs being met? After addressing this problem, the community started working together to mitigate the effects of the drought and eradicate rural poverty through an integrated approach to development.

## Inter-agency Coordination

In the process of formulating and updating specific aims and objectives, The DM Committee should communicate with and coordinate their plans with those of government agencies and non-governmental organisations involved in disaster response. This will improve planning, reduce duplication of efforts, make plans more realistic and increase the overall effectiveness of disaster response.

Through direct coordination, agencies can clearly divide responsibility for different operations and plan their actions accordingly. Similarly, members of different teams may develop necessary contact and coordination with representatives of various external agencies working in the area in similar sectors (e.g. health, shelter, sanitation, first aid, nutrition etc). Joint development and updating of preparedness plans can serve as the basis for coordination among agencies.

A preparedness plan should include a list of names of people and organisations along with their contact numbers and addresses. This should include people responsible for:

- ▶ Activating the response services
- ▶ Managing external relations and aid appeals from other sources, including governmental, international and public funds
- ▶ Communicating with the media
- ▶ Coordinating and liaising with other agencies and services
- ▶ Managing administrative work

When creating a preparedness plan each agency should also identify the activities it will be responsible for and its anticipated level of involvement in the event of an emergency. An agency should also determine where, within the agency, responsibility for each function will reside.

If two groups will perform similar functions, it is important to clarify the distinct and overlapping roles of each. For instance, while Fire brigade and Civil Defence service are responsible for search and rescue operations, an NGO may play an auxiliary role for the same function.

A person with fairly good contact with the Govt. and media sectors should be identified to communicate and share information with the media. Other response team members should refer all communication and public relations issues to this particular person.

## Information management

Disaster preparedness and response depend on gathering, analysing and acting on timely and accurate information before (hazard and early warning information), during (disaster needs assessment) and after disasters (progress of post-disaster recovery). This requires that GP DM planners pre-determine what information they need, how it will be collected, who will collect it, who will analyse it and how it will be integrated into a timely decision-making process.

If the DM teams are to respond to disasters in a timely fashion, they will need to develop procedures and mechanisms for obtaining, analysing and responding to early warning information related to hazard detection, forecasting and alerts.

Once a disaster strikes, the DM teams must conduct initial assessments and take timely steps about critical and immediate life-saving needs. Disaster needs assessments should develop a picture of where people are, what condition they are in, what they are doing, what their needs and resources are, and what services are still available to them. After an initial assessment, more in-depth needs assessments should collect information related to critical sectors and technical areas of concern.

## Activity Calendar for DM Preparedness

A lot of activities are necessary to be planned and followed up closely throughout the year. It is advisable to create a month-wise calendar for all planned activities and share it across the community. It will also keep the teams responsible for those activities in readiness. An example is appended here under:

Month	Activities
January	<ul style="list-style-type: none"> <li>• Talk to all DMT members and checking of preparedness level</li> <li>• Check the household preparedness</li> </ul>

Month	Activities
February	<ul style="list-style-type: none"> <li>• Awareness campaign – on do's and don'ts for various disasters</li> <li>• Discussion in Gram Sabha on various disaster management activities</li> </ul>
March	<ul style="list-style-type: none"> <li>• With help of DMT members checking of drainage system and its maintenance</li> </ul>
April	<ul style="list-style-type: none"> <li>• Preparation for mock drills and coordination with service providers for support during mock drills</li> </ul>
May	<ul style="list-style-type: none"> <li>• Mock drill</li> </ul>
June	<ul style="list-style-type: none"> <li>• Updating of village DM plan</li> </ul>
July	<ul style="list-style-type: none"> <li>• Education on water and sanitation and water born diseases</li> <li>• Supporting women SHGs for stock of food materials</li> </ul>
August	<ul style="list-style-type: none"> <li>• Keeping track on rainfall and flood water and making alert to all DMT members</li> <li>• Checking of safe shelters and coordination with school teachers</li> <li>• Touch with BDO for stock of relief items and polythene</li> </ul>
September	<ul style="list-style-type: none"> <li>• Monitoring the flood situation and keeping in touch with all vulnerable families</li> <li>• Stock piling of dry food and fuel</li> <li>• Touch with service providers and Gram Panchayat and Block</li> <li>• Coordination with NGOs for support</li> </ul>
October	<ul style="list-style-type: none"> <li>• Monitoring the flood situation and keeping in touch with all vulnerable families</li> </ul>
November	<ul style="list-style-type: none"> <li>• Preparation for mock drills and coordination with service providers for support during mock drills</li> </ul>
December	<ul style="list-style-type: none"> <li>• Mock drill and activate the DMTs</li> </ul>



CHAPTER

5

**Responding  
To  
Disasters**



# Chapter-V

## RESPONDING TO DISASTERS (Rescue and Relief)

### Overview of the Chapter

#### Early Warning Response

- ▶ Activating emergency notification and disaster response systems
- ▶ Preparation for Evacuation
- ▶ Arrangements for basic necessities
- ▶ Getting all the teams ready
- ▶ Coordination with various agencies

#### Rescue and Relief Operations

- ▶ Understanding Rescue and Relief operations
- ▶ Role of PRI in key areas of Rescue and Relief
- ▶ Disaster Response at different levels
- ▶ Warning Dissemination
- ▶ Failsafe Communication
- ▶ Rescue Measures
- ▶ Coordination Center/ Control Room Management
- ▶ Relief Storage and Distribution System
- ▶ Shelter Management
- ▶ Emergency Relief and free kitchen operation
- ▶ Household, Village and Shelter level Security
- ▶ Inter-agency Coordination
- ▶ Search & Rescue
- ▶ Public Health Measures
- ▶ First Aid
- ▶ Basic Minimum standards
- ▶ Damage and Needs Assessment
- ▶ Monitoring & Evaluation
- ▶ Documentation

### EARLY WARNING RESPONSE

#### Activating emergency notification and disaster response systems

As soon as the first intimation of a disaster trickles in, the response-plan should be activated. It must start with activation of the warning system thereby providing the population with emergency warnings. In addition to providing the public with notification of the impending disaster, the system for initiating the entire mechanism for disaster response is to be set in motion.

The warning team has to take the lead in everyone involved at the right time. The Coordination Centre must be operationalised to initiate all necessary actions.

#### **“Proactive Sarpanch made the difference in flood response”**

Limbdi taluka is situated 35 km away from Surendranagar district on the NH - 8. Geographically it was very difficult & disaster prone area; some of its part fall in Earthquake zone III & IV, all the 60 villages are affected by both drought and flood. With poor local resources the Taluka is economically and socially vulnerable. Considering the hazard and vulnerability profile of the area, a DRM programme is being implemented in Limbdi Taluka.

Hadala is one of the flood prone villages of Limbdi taluka which is situated 40 km from the Taluka place Limbdi. The area known as "Bhal" and Hadala village situated in a low line area in this region. During monsoon the area receives water from Bhogavo river and Sabarmati river. Due to poor drainage, sometimes the excess water gets stagnated for three to four months. During the monsoon period, Hadala is always cut off from the taluka place. Outside the village, approximately 3 to 4 ft. water flows on causeway and some areas surrounding the village get drowned in waist deep water affecting the normal life of the people.

On 1st July '07 it rained 18" in just five hours in the late night, flooding the entire Limbdi Taluka. Sarpanch Mrs. Jayaben Mer received the message from the Taluka Control Room, Limbdi about the emerging flood situation in Hadala and adjacent villages. Mrs. Jayaben had been well trained in Disaster management in the PRI orientation program. She immediately called a VDMC emergency meeting. She asked the 'Early warning and Communication' team members to disseminate warning through "Bungiyo" dhol (local warning system) and supervised the smooth evacuation of people to the higher lands with the help of S & R DMTs. But everybody was not lucky. At the early morning Mr. Somkumar Shukla (PSO, Limbdi), who coordinated situation from Taluka Control Room, flashed a warning about some people having been trapped in the flood waters.

At 15.00 hrs they received the message that 23 villagers were trapped in flood water in Hadala and Fedra while coming on "Chakda", a local transport vehicle. They immediately passed the message and briefed about situation to local administration at taluka control room. But it was very difficult to reach the spot for rescue work. However, due to the timely communication made by Jayaben and her team the local Administration arranged Helicopter and airlifted 5 people and the remaining 18 people could be rescued by Ahmedabad Municipal Corporation Rescue team.

In this whole critical situation, Mrs. Jayaben (Sarpanch) played a vital role with the help of Trained DMT members and the other elected PRI Members in taking protective action as well as establishing communication between local administration and rescue operation teams.

Finally no casualty occurred and rescue work was completed. Next even the upper reaches of the village was flooded with incessant rainfall. In coordination with the Taluka Control Room, she asked the village community not to venture outside to avoid getting trapped in the flood water. As a result no untoward incident took place. After the flood, they planned and purchased a boat with the village people's contribution for effective flood response.

## Preparation for Evacuation

(Discussed in detail later in this Chapter)

## Arrangement for basic necessities

Action is to be taken forthwith for getting the basic necessities ready to meet the impending crisis. This must include, among other things, arrangements for the following:

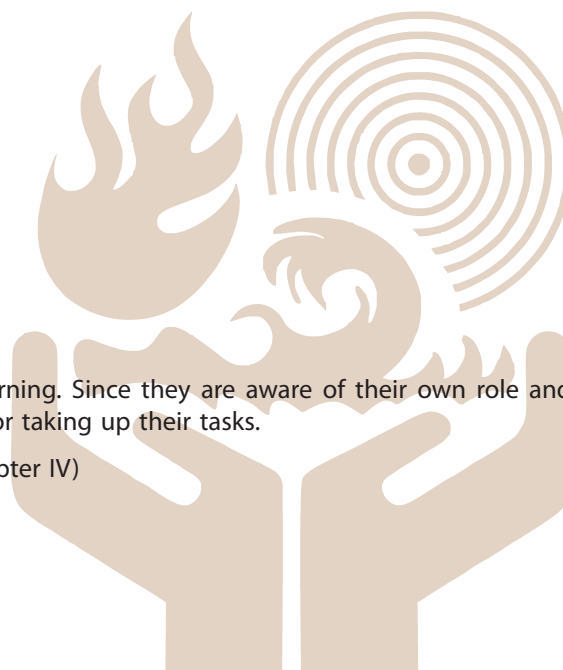
- ▶ Rescue
- ▶ Provisioning for medical care
- ▶ Water and Sanitation
- ▶ Medical Help
- ▶ Logistics and Transport
- ▶ Shelter
- ▶ Protection and security

(Discussed in detail later in this Chapter)

## Getting all the teams ready

All the DM Teams are to be intimated immediately about the warning. Since they are aware of their own role and responsibilities, it is expected that they will take necessary steps for taking up their tasks.

(Their roles and tasks are already described in detail earlier in Chapter IV)



## Coordination with various agencies

Apart from the community, many agencies take part in emergency response operations: CBOs, NGOs, Civil Defence, Fire brigades, Red Cross, international agencies and others. It is possible that several agencies may be performing the same task. For example, an NGO and one of the Govt. departments may all be providing first aid. In this case, clear coordination of activities is required to ensure that the maximum number of people are assisted in the shortest possible time and to unnecessary duplication of services is avoided.

Effective disaster response requires mutual trust and coordination of efforts and resources among the many agencies and people involved in emergency response—including the affected local population and local community based organisations.

In a welfare state, Government assumes the responsibility of rendering relief to people affected by natural calamities. In such times of widespread distress, the entire government machinery is switched on to render relief to people. The major objective of the Govt. is to provide effective support and resources to people in disaster as well as to help develop immediate and long-term support plans for vulnerable people following a disaster.

The revenue department and the Board of Revenue coordinate the activities of all the departments of Govt. and Heads of Departments in regard to relief operations. However, the various departments, which play a role in Disaster mitigation, are:

- ▶ Agriculture Department
- ▶ Panchayat Raj Department
- ▶ Women and Child Development Department
- ▶ Health and Family Welfare Department
- ▶ Veterinary Department
- ▶ Home Department
- ▶ Water Resources Department
- ▶ Planning & Coordination Department
- ▶ Rural Development Department
- ▶ Food and Consumer Welfare Department
- ▶ Revenue Department
- ▶ State Disaster Management Authority

Apart from the above the district administration has a very important and pivotal role to play. It is critical that the District Administration and the functionaries at the Blocks and GP levels clarify their respective roles and responsibilities in disaster preparedness and response and establish necessary communication and coordination mechanisms among themselves.

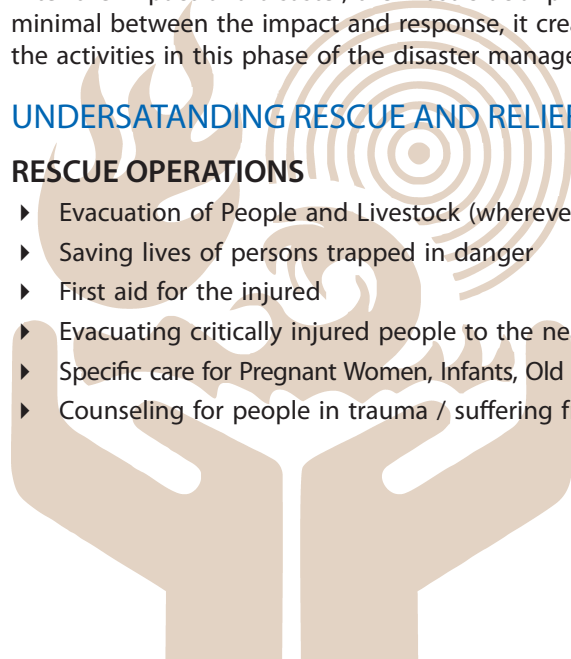
## RESCUE AND RELIEF OPERATIONS

After the impact of a disaster, the most crucial phase is Rescue and Relief operations. Sometimes the time gap being minimal between the impact and response, it creates a great psychological impact on the victims. The importance of the activities in this phase of the disaster management needs to be clearly understood.

### UNDERSTANDING RESCUE AND RELIEF OPERATIONS

#### RESCUE OPERATIONS

- ▶ Evacuation of People and Livestock (wherever possible) to safer places
- ▶ Saving lives of persons trapped in danger
- ▶ First aid for the injured
- ▶ Evacuating critically injured people to the nearest hospitals
- ▶ Specific care for Pregnant Women, Infants, Old and Physically Handicapped
- ▶ Counseling for people in trauma / suffering from Psychosomatic effects





## RELIEF OPERATIONS

- ▶ Organizing Relief Camps
- ▶ Maintaining Adequate and Regular supply of water, food, and items of basic necessities like clothing, medicine, etc.
- ▶ Maintaining Law and Order particularly for protection of the properties of the victims of the disaster as well as safeguard against unsocial/criminal elements
- ▶ Proper sanitary arrangements, safeguard against epidemics
- ▶ Disposal of dead bodies, carcass, etc.
- ▶ Proper assessment of losses, identification of victims and valuation of the damages/ losses
- ▶ Transparency in distribution of relief money and material, priority to the injured, incapacitated and most affected persons/ families



## ROLE OF PRI IN THE KEY AREAS OF RESCUE AND RELIEF OPERATIONS

### Some of the key sectors are

- ▶ Water, Sanitation and Hygiene Promotion
- ▶ Food security, Nutrition and Food Aid
- ▶ Shelter, Settlements and Non-Food Items
- ▶ Health Services

As discussed in the previous chapter, there are a number of actions the PRI bodies have to take in the preparatory phase to make sure that the key sectors are addressed at the time of need during rescue and relief. It is, therefore, necessary to look at each sector of activity and the role of PRI members in them in greater detail.

### 1. Water, Sanitation and Hygiene Promotion

#### Quantity of Water Consumed

- ▶ Certain basic and minimum standards are expected to be maintained. The necessary arrangements are to be made and it should be ensured that:
- ▶ On an average, 15 liters of water are available per person in a household per day for purposes of drinking, cooking and personal hygiene.
- ▶ The distance from any household to the nearest water points should not be more than 500 meters.
- ▶ Queuing time at a water source should not be more than 15 minutes.
- ▶ Water sources and systems are maintained in such a way that appropriate quantities of water are available constantly or on a regular basis.

#### Quality of Water

Water should be potable and of sufficiently good quality for drinking without causing any significant risk to health. It should be ensured that:

- ▶ A sanitary survey indicates a low risk of faecal contamination.
- ▶ People drink water from a protected or treated source in preference to other readily available water sources.
- ▶ Steps are taken to minimize post-delivery contamination.
- ▶ No negative health effect due to short-term use of water contaminated by chemicals is detected.

#### Water use facilities

It should be ensured that:

- ▶ Each household has at least two clean water collecting containers with carrying capacity of 10-20 litres, plus enough clean water storage containers to ensure availability of water in the household always.



- ▶ Water collection and storage containers have narrow necks and for covers, or other safe means of storage, drawing and handling, and demonstrable use.
- ▶ There is at least 250g. of soap available for personal hygiene per person per month.
- ▶ Where communal bathing facilities are necessary, there are sufficient bathing cubicles available, with separate cubicles for males and females, and these are used appropriately and equitably.
- ▶ Where communal laundry facilities are necessary, there is at least one washing basin per 100 people, and private laundering areas are available for women to wash and dry undergarments and sanitary clothes.
- ▶ The participation of all vulnerable groups is actively encouraged in the location and construction of bathing facilities or the use and promotion of suitable alternatives.

### **Panchayat's Role in Water & sanitation**

In the response phase the PRI body has several tasks to ensure safe water and sanitation for the people:

- ❖ Preparing the list of villages having sources of safe drinking water,
- ❖ Raising the platform of tube wells in low-lying areas,
- ❖ Establishing a network of villagers, so that low-lying areas are supplied with drinking water from upland habitations whenever there is a need,
- ❖ Stock-piling of halogen tablets and water purifiers before the rainy and other vulnerable seasons.
- ❖ Preparing and implementing people's plans for water supply.
- ❖ Campaigning for water and sanitation to build the knowledge base of people.
- ❖ Networking with Public Health Engineering Department for the supply of safe drinking water during vulnerable months
- ❖ Construction and maintenance of community toilets.
- ❖ Raising as a group of trained volunteers for the disposal of carcasses and dead bodies.

## **Food security, Nutrition and Food Aid**

### **Food security**

This is to ensure that people have access to adequate and appropriate food and non -food items in a manner that ensures their survival, prevents erosion of assets and upholds their dignity. It should be ensured that,

- ▶ Where people's lives are at risk through lack of food, their immediate food needs are met.
- ▶ In all disaster contexts, measures are taken to support, protect and promote food security. These include preserving productive assets or recovering those lost as a result of disaster.
- ▶ Response measures that protect and support food security are based on sound analysis involving consultation with the disaster-affected community.
- ▶ When a response initiative supports the development of new or alternative livelihood strategies, all groups have access to appropriate support, including necessary knowledge, skills and services.
- ▶ Numbers of beneficiaries are mentioned to determine the level of acceptance and access by different groups in the population and to ensure overall coverage of the affected population without discrimination.

### **Income and Employment**

The following aspects need to be looked into and it is to be ensured, as far as possible, that,

- ▶ Response initiatives providing jobs and income opportunities are technically feasible and all necessary inputs are available on time, where possible.
- ▶ These responses contribute to the food security of others and preserve or restore the environment.
- ▶ The level of remuneration is appropriate, and payments for wage labour are prompt, regular and timely. In situations of acute food in security, payments may be made in advance.
- ▶ Procedures are in place to provide a safe, secure working environment
- ▶ The household management and use of remuneration, grants or loans are understood and seen to be contributing towards the food security of all household members.

## Access to markets

People's safe access to market goods and services as producers, consumers and traders should be protected and promoted.

- ▶ Food security responses are based on local markets and existing economic system.
- ▶ Producers and consumers have economic and physical access to operating markets, which have a regular supply of basic items, including food at affordable prices.
- ▶ Adverse effects of food security initiatives, including food purchases and distribution, on local markets and market suppliers are minimized, where possible.
- ▶ There is increased information on and local awareness of market prices and of how markets function and of the policies that govern these.
- ▶ Basic food items and other essential commodities are available.
- ▶ The negative consequences of extreme seasonal or other abnormal price fluctuations are minimized.

### Panchayat's Role

1. Preparing the list of BPL, disabled and vulnerable people; it should be available with the Panchayat office.
2. Relief committees should be formed at the ward level having all the information about the family size and details of animal stocks.
3. These committees should undertake distribution of food aid and other relief materials.
4. Records should be maintained properly to ensure transparency and accountability.
5. Food for Work program should be carried out to rebuild community infrastructure.
6. Social audits should be carried out in all the villages to make people aware of the relevance of the program and demonstrate the integrity of the implementing agency.
7. Panchayats should take care to rebuild livelihood systems and provide tool-kits as relief material to skilled labourers.
8. Women, children, the disabled and elderly people should be given special preference in terms of ensuring availability of food and other facilities to them.
9. Lives of people must be protected, whether they are capable of doing any work or not.
10. Re-establishing the market network.

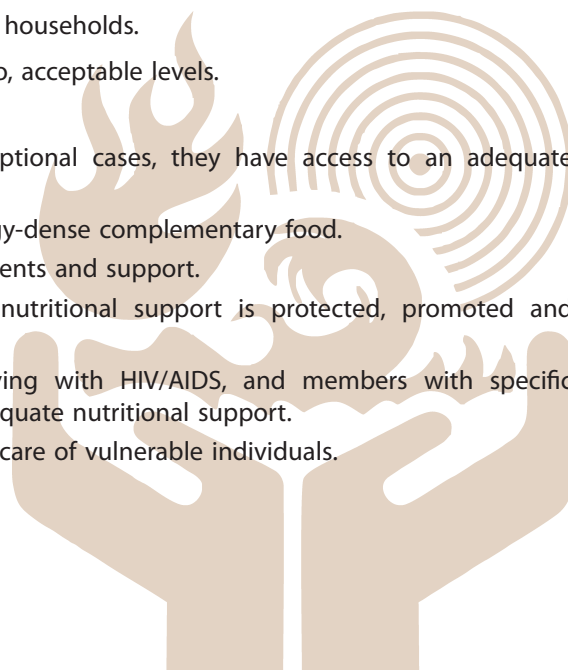
## Nutrition Support

The following needs to be looked into and ensured:

- ▶ There is access to a range of food items - staple, pulses and fat sources - that meet nutritional requirements.
- ▶ There is access to vitamin A & C and iron-rich or fortified food or appropriate supplements.
- ▶ There is access to iodized salt on the part of a majority of the households.
- ▶ Moderate and severe malnutrition are stable at, or declining to, acceptable levels.

### Nutrition to at-risk groups

- ▶ Infants under six months are exclusively breastfed. In exceptional cases, they have access to an adequate amount of an appropriate breast milk substitute.
- ▶ Children aged 6 to 24 months have access to nutritious, energy-dense complementary food.
- ▶ Pregnant and lactating women have access to additional nutrients and support.
- ▶ Older people's access to appropriate nutritious food and nutritional support is protected, promoted and supported.
- ▶ Families with chronically ill members, including people living with HIV/AIDS, and members with specific disabilities have access to appropriate nutritious food and adequate nutritional support.
- ▶ Community-based systems are in place to ensure appropriate care of vulnerable individuals.



### Panchayat's Role

1. A list of the pregnant and lactating women should be available with the Panchayat's office.
2. Awareness about the advantages of breast-feeding should be promoted so that infants are protected in all conditions.
3. Stock-piling and regular distribution of iron and folic tablets through Anganwadi workers during the disaster situation must go on.
4. Eating of greens and other vegetables must be encouraged.

### Shelters and Settlement

The distress of displacement or loss of dwellings needs addressed appropriately. The following steps are envisaged:

#### Strategic Planning

It is to be ensured that:

- ▶ Affected households return to the site of their original dwellings, where possible.
- ▶ Affected households, who cannot return to the site of their original dwellings, settle independently within a host community or with host families, where possible.
- ▶ Affected households, who cannot return to the site of their original dwellings or who cannot settle independently within a host community or with host families, are accommodated in mass shelters or in temporary or self-settled camps.
- ▶ Actual threat from natural hazards including earthquakes, landslides, flooding or high winds are minimised and the area is not prone to distress or significant vector risk.
- ▶ Locations are free of potentially hazardous equipment or material, and existing hazards such as dangerous structures, debris or unstable ground are identified and made safe, or access to these are restricted and guarded.
- ▶ Land and property ownership and/or use rights for buildings or locations are established prior to occupation and permitted use is agreed on.
- ▶ Water and sanitation services, and social facilities including health care, schools and places of worship, are available or can be satisfactorily provided.
- ▶ The transportation infrastructure provides access to the settlement for personal movement and provision of services.
- ▶ Where possible, households can access land markets or services for the continuation or development of livelihood support activities.



#### Physical Planning

It is to be overseen that local physical planning practices are used where possible to promote safe and secure access to the shelters, use of essential services and facilities as well as ensuring privacy.

- ▶ Area or cluster planning by family, the neighborhood or village groups, in other words by existing social networks, contributes to security and enables self-management by the affected population.
- ▶ All members of the affected population have safe access to water, sanitary facilities, health care, solid waste disposal, graveyards and social facilities, including schools, places of worship, meeting points and recreational areas.
- ▶ Temporary planned or self-settled camps are based on a minimum surface area of 45m for each person.
- ▶ The surface topography is used or improved to facilitate water drainage, and the ground conditions are suitable for excavating toilet pits where this is the primary sanitation system.
- ▶ There are roads and pathways to provide safe, secure and all-weather access to the individual dwellings and facilities.

- ▶ Mass shelters have openings to enable required access and emergency evacuation, and these openings are positioned so that access is well supervised and does not pose a security threat to occupants.
- ▶ Vector risks are minimized.

### Covered living space

- ▶ The initial covered floor area per person is at least 3.5 square mts.
- ▶ The covered area enables safe separation between sexes, between different age groups, and between separate families within a given household and ensures privacy.
- ▶ Essential household activities can be carried out within the shelter.
- ▶ Key livelihood support activities are accommodated, where possible.

### Construction

- ▶ Locally sourced materials and labour are used without adversely affecting the local economy or the environment.
- ▶ Locally derived standards of workmanship and materials are achieved.
- ▶ Construction and material specifications mitigate future natural disasters.
- ▶ The type of construction and materials used enable the maintenance and upgrading of individual household shelters using locally available tools and resources.
- ▶ Use of locally available tools and resources in construction and upgradation of individual household shelters.
- ▶ The procurement of materials and labour and the supervision of the construction process should be transparent, accountable and in accordance with internationally accepted bidding, purchasing and administration practices.

### Panchayat's Role

1. Prepare a list of the concrete houses which can be used as shelters during disasters.
2. Maintenance of cyclone shelters / community concrete buildings,
3. Develop a rural building center to encourage low-cost safe housing for the poor and marginalized sections of society.
4. Fair selection of beneficiaries, and implementation of Indira Awas Yojana.
5. Construction of mounds and at least one concrete community building within an easy walking distance to provide shelter to people who are living in thatched houses.

## Health Services

### Prioritizing Health Services

- ▶ The major causes of mortality and morbidity are identified, documented and monitored.
- ▶ Appropriate steps are taken to reduce excess morbidity and mortality.
- ▶ All members of the community including vulnerable groups have access to priority health interventions.
- ▶ Local health authorities and community members participate in the design and implementation of priority health interventions.
- ▶ There is active collaboration with other sectors in the design and implementation of priority health interventions, including water and sanitation, food security, nutrition, shelter and protection.
- ▶ The crude mortality rate (CMR) is maintained at, or reduced to, less than twice the base line rate documented for the population prior to the disaster.



### Supporting Government and Local Health System

- ▶ Representatives of the ministry of health lead the health sector response, whenever possible.
- ▶ Local health facilities are supported and strengthened by the responding agencies.

- ▶ Local health workers are integrated into health services and supported, taking into account the gender and ethnic balance.
- ▶ Health services incorporate or adapt the existing national standards and guidelines of the disaster-affected or host country.

### **Coordination**

- ▶ Coordination mechanisms are established at local and government levels within the health sector and between health and other sectors
- ▶ Specific responsibilities of each health agency are clarified and documented in consultation with the lead health authority to ensure optimal coverage of the population and complementarity of service.
- ▶ Regular health sector coordination meetings for local and external partners at both central and field levels.

## **DISASTER RESPONSE AT DIFFERENT LEVELS**

### **Administrative Response**

The basic responsibility for undertaking rescue, relief and rehabilitation measures in the event of natural disasters is that of the State Governments concerned. The role of the Central Government is supportive, in terms of physical and financial resources and complementary measures in sectors such as transport, warning and inter-state movement of food grains. Relief Manuals and Codes are available for undertaking emergency operations. A broad view of administrative response at national, state and district levels is given below:

#### **National Organisation**

Under the Indian federal system, disaster management is the responsibility of State Governments. However, there is a Crisis Management Group headed by the Cabinet Secretary and consisting of nodal ministers in charge of various types of disasters and supporting ministries in charge of various types of disasters and supporting ministries. For natural disasters, the Ministry of Agriculture is the nodal Ministry and the other Ministries play a supportive role. In the event of a disaster, a multi-disciplinary Central Government team, at the invitation of the affected State, carries out disaster assessment and makes recommendation for assistance.

#### **State Level Organisation**

Disaster preparedness and response in the State is usually delegated to the Relief and Rehabilitation Department or the Department of Revenue. The Crisis Management Group at the State Level is headed by the Chief Secretary of the Government, with participating of all the related agencies.

#### **District Level**

A District Level Co-ordination and Review Committee is constituted and is headed by the Collector as a Chairman with participation of all other related agencies and departments.

#### **National Contingency Action Plan**

A National Contingency Action Plan (CAP) facilitates the launching of relief operations without any delay. This is updated every year. The CAP identifies the initiatives required to be taken by various Central Ministries/Departments in the wake of natural calamities. It sets down the procedure and determines the focal points in the administrative machinery.

At the State level, the State Relief Commissioner (or Secretary, Department of Revenue) directs and controls the relief operations through Collectors or Deputy Commissioners, who are the king-pins of all relief operations, co-ordination, direction and control at the district level.

#### **Arrangements for Financing Relief**

Schemes for financing expenditure on relief and rehabilitation in the wake of natural calamities are governed by the recommendations of Finance Commissions appointed by Government of India after every five years. Under the existing scheme, each State has a corpus funds called Calamity Relief Fund (CRF), administered by a State Level Committee, headed by the Chief Secretary of the State Government. The size of the corpus is determined having regard to the vulnerability of the State to different natural calamities and the magnitude of expenditure normally incurred by the State on relief operations. The corpus is built by annual contributions of the Union Government and

the State Governments concerned in the ratio of 3:1. The States are free to draw upon this corpus for providing relief in the event of any natural calamity. In the event of a major disaster warranting intervention at the national level, a provision exists in the form of Natural Fund for Calamity Relief with the Union Government to supplement the financial resources needed for relief operations.

## RESCUE MEASURES

There are a number of activities at this crucial phase of addressing the disaster. People in the disaster hit areas need to be evacuated and rescued as early as possible. The following activities need attention:

### Warn people

- ▶ Warn the people of risky areas about the impending danger & advise them to leave for safer places.

### Organise Task force members

- ▶ Organize trained taskforce members.
- ▶ Mobilize volunteers.
- ▶ Ensure that mock drills are conducted in all the villages
- ▶ Send task force to marooned and evacuated places with proper instructions.

### Maintain Law and order

- ▶ Arrange deployment of police staff at risk points.
- ▶ Arrange deployment of police for maintaining law and order and peace keeping during evacuation.
- ▶ Arrange for the safety of property of the people.
- ▶ Arrange to maintain law and order at the time of relief distribution.
- ▶ Ensure watch and ward at the shelter centers.



### Organise Evacuation

- ▶ Mobilize people to go to identified / safer shelters
- ▶ Arrange for boats and road transport for evacuation based on the risk assessment.
- ▶ Evacuate people from disaster-struck areas and administer emergent relief.
- ▶ Provide / arrange rescue kit at risk areas.
- ▶ Propagation for evacuation.
- ▶ Send search group to go round and to rescue the left over people in the risk areas.
- ▶ Help the evacuees.

### Maintain coordination

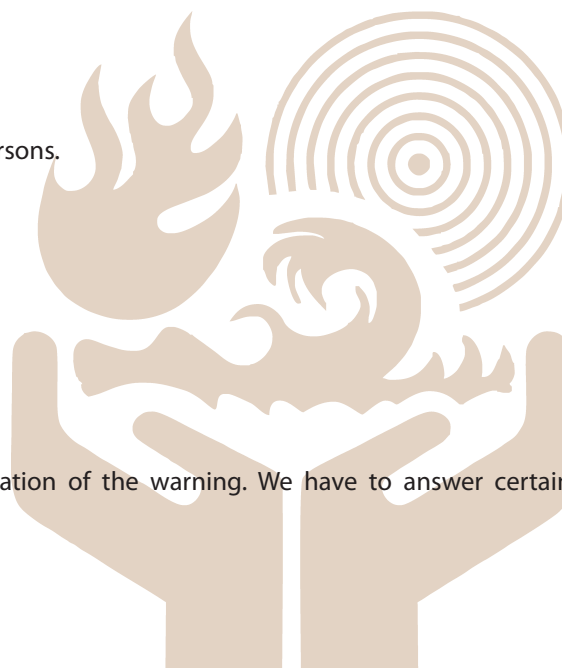
- ▶ Coordinate with Civil Defence/ NGOs / Police for support
- ▶ Maintaining regular linkage with Block and PRIs.
- ▶ Keep close contact with the public as well as the admn.

### Trace out missing persons

- ▶ Engage volunteers and rescue staff to find out the missing persons.
- ▶ Keep record of missing persons.
- ▶ Inform the family members
- ▶ Make arrangement for the safety of property of the people.
- ▶ First Aid
- ▶ Provide medical help.
- ▶ Help the injured to move to hospital.

### Questions regarding Evacuation

The evacuation procedure should follow soon after the dissemination of the warning. We have to answer certain



questions before we take up the evacuation activity:

### **Whom to give priority while evacuating?**

- o People of the identified vulnerable areas / zones.
- o The identified vulnerable persons.

### **Where are the safe places?**

- o The high rise places in the close vicinity identified earlier.
- o The safe shelters are identified.

### **Where do they go, when evacuating?**

- o To the safe places in and outside the village territory as identified and decided earlier.

### **Who will go where?**

- o As decided by the VDMC
- o As per the capacity of the shelters.

### **Where is the cyclone shelter for the people evacuating?**

- o The Village Cyclone shelter.
- o Or, the buildings in the village identified to be used as safe shelters.

### **What is the safe route to reach there?**

- o The safe routes should be identified which can be used for evacuation at the time of pre, during and post disaster situation.

### **What is the movement plan of the people while evacuating?**

- o This needs to be pre-decided keeping in view the convenience of the people.
- o Elderly, children and the women to move first.

### **What are the available logistic arrangements?**

- o Appropriate logistic arrangements must have been done for the evacuees.

### **What arrangements should be done at village level?**

- o Security / watch and ward of the village.
- o People should be updated about the day to day situation of the village.
- o Assessing the damage and the needs and acting accordingly to minimise the loss and further vulnerability.

### **A few more points regarding Rescue and Evacuation**

- ▶ There should be community involvement in the rescue process.
- ▶ The poor, helpless, disabled, old and infirm, children, women, pregnant women should be rescued first from the low lying and marooned pockets.
- ▶ The people to be rescued should be told to lock up their houses and carry safe drinking water and dry food possibly available with them.
- ▶ The entire family should be motivated to evacuate at the time of rescue operation.
- ▶ The rescue team should be well equipped with country boats, powerboats, fiber boats with minimum capacity of rescue load.
- ▶ The rescue team should be equipped with the survival kits like ropes, ladder, rubber tubes etc.
- ▶ NGOs operating in the flood areas and local Govt., officials like Police, Fire service personnel, Block and Tehasil officials and any other young and energetic persons of the area should be included in the rescue team.



- ▶ The rescue teams should be earmarked for particular areas which are most affected by the disaster.
  - ▶ If it is a flood prone area, then the process of selection of the rescue team should be completed before the onset of monsoon and the various shelter centers should be earmarked for respective evacuation.
  - ▶ Immediately after the rescue operation, the rescue team will inform all concerned including the nearby controlling station about of the rescue operation and further action to be taken.
  - ▶ The tent facility should be provided to the evacuated persons on the river embankments and high safer places.
  - ▶ When the normal rescue operation fails, then the army, navy and air forces should be mobilized to come forward for doing the rescue work.
  - ▶ Allotment of rescue group will be diverted one group to each vulnerable area.
- ❖ Before rescue operation;
    - o Selection of sites for the rescue operation should be done.
    - o Tent fixation (Provision of tent & other materials to rescue point)
    - o Keeping a person in charge at the rescue point.
    - o Provision of boat with survival kit for rescue operation.

### Rayagada, Orissa

The villages in Rayagada district participated in the Gol-UNDP Disaster Risk Management Program. Most of the villagers had received training in disaster management (DM), on First Aid, search and rescue techniques, shelter management, counseling and damage assessment. Based on the trainings the villages had DM teams and plans in place. During the July 2006 floods, the DM teams were able to immediately evacuate the affected people and provide them with shelter in a safer location.

## COORDINATION CENTER / CONTROL ROOM MANAGEMENT

Coordination Center or Control room is the nerve-centre of the disaster management activities at the village/ GP level. It has the responsibility of tracking the major events and coordinating and facilitating the decision making process through optimal utilisation of resources. Therefore it needs to be equipped with adequate man power, equipments and materials for proper discharge of assigned responsibilities.

### Standing instruction

Start immediately on receiving disaster warning or information about any other emergency from any source.

### Role of the Coordination Center

To collect information from all possible sources on the impending disaster

To inform disaster management cells regarding the disaster

To identify the distressed people as well as those at risk

To coordinate and cooperate with the NGOs and other Agencies

To interact with other affected areas as well as other Districts and States

To collect information from State and Central Disaster Control Cells

To provide moral as well as physical support to the distressed

### Standard Operational Procedure (SOP)

#### Members of the Coordination Center

Sarpanch (Convenor/ Chairperson)

Panchayat Members (at least two)

Youth members (at least two from each village)

Representatives from school/ college



Ward members  
NGO Representatives  
Local community leaders  
Village Executive officer  
Village Watchman

### **Officer in charge of Coordination Center**

The Coordination Center shall be in overall charge of the Sarpanch. In the absence of the Sarpanch, the Panchayat Executive Officer or the leader of the VDMC shall remain in charge of Coordination Center. The person in charge of Coordination Center shall be personally responsible for implementing the SOP.

The Coordination Center in-charge shall take all decisions as outlined below and sign all reports. He shall not wait for orders from anybody.

### **Assembly in Coordination Center**

The designated villagers and officers shall assemble in the Coordination Center on getting any information from any source about any emergency. Apart from these, any other officer or staffs of the village who gets the information from any source will reach the Coordination Center as soon as possible. The AWW, ANM, and VDMC members shall also come to the CR.

Chairperson of the VDMC will share the information and check the preparedness level in the village. Talk to all DMT members and make them ready for the eventuality.

### **Getting the Coordination Center ready**

Following preparatory steps will be taken up for keeping the Coordination Center functional during emergency.

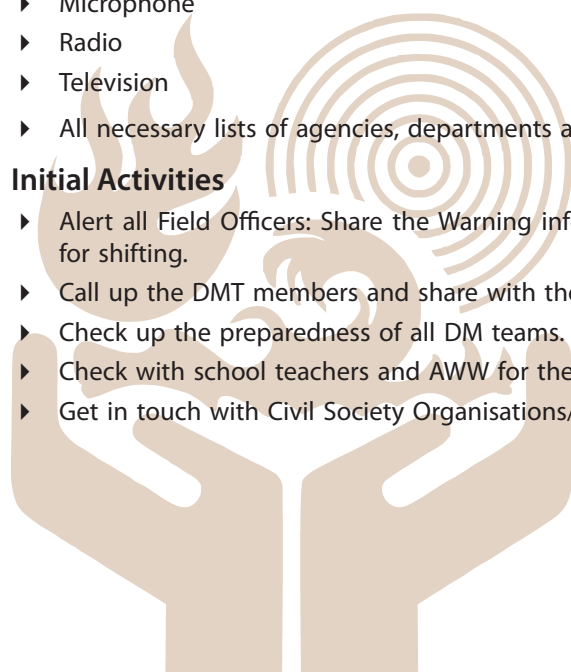
- ▶ Keep Village Response Plan, Resource inventory, Lists of items required for managing disaster, Maps, Registers, Radio, One set of battery, TV, some lights to keep ready for use.
- ▶ Ensure proper functioning of Telephone lines and other equipments in Coordination Center.
- ▶ Keep a Transistor Radio with new batteries ready.
- ▶ In case of flood keep boats ready and make immediate arrangement for functional of the boat.
- ▶ Develop a checklist of all anticipated activities before during and after a disaster

### **Materials / Instruments for the Coordination Center**

- ▶ Wireless Facility
- ▶ Warning system
- ▶ Telephone with STD facility
- ▶ Cell Phone
- ▶ Microphone
- ▶ Radio
- ▶ Television
- ▶ All necessary lists of agencies, departments and volunteers etc.

### **Initial Activities**

- ▶ Alert all Field Officers: Share the Warning information with all vulnerable house holds and request for prepared for shifting.
- ▶ Call up the DMT members and share with them all information.
- ▶ Check up the preparedness of all DM teams.
- ▶ Check with school teachers and AWW for the availability of food grains.
- ▶ Get in touch with Civil Society Organisations/ CBOs for support in food and fund to meet the emergency.



## RELIEF STORAGE AND DISTRIBUTION SYSTEM

### RELIEF STORAGE:

#### Before receiving the Relief materials:

- ▶ Arrange the space for the expected relief materials.
- ▶ Ensure safety and security of the storage materials
- ▶ Clean the space properly

#### On receiving of the Relief Materials:

- ▶ Off load carefully
- ▶ Check the quantity and quality of the relief materials received
- ▶ Store at defined places
- ▶ Update the stock ledger regularly
- ▶ Sign the invoice as against the materials received
- ▶ Proper stock register and bin cards should be maintained to keep the stock account of various commodities

#### Special Attention for storage:

- ▶ Stock control
- ▶ Security
- ▶ Updation of Stock Report
- ▶ Rotation of the old stock in time on First come First serve basis
- ▶ Facilitate easy access to the goods stocked
- ▶ Plan for the future properly
- ▶ Clean the store / warehouse
- ▶ Dispose up spoiled and expired goods after proper authorisation
- ▶ Communicate effectively

## RELIEF DISTRIBUTION

### Identify vulnerable:

Normally considered vulnerable in a disaster affected community are:

- ▶ Elderly persons
- ▶ Sick and handicapped
- ▶ Families headed by separated, divorced or widow woman without any source of income
- ▶ Pregnant and lactating women
- ▶ Children
- ▶ Other factors which help to define people at higher risks from certain threats i.e. proximity and exposure to hazards than others, poverty (BPL card holders) etc.



### Spacious place for distribution

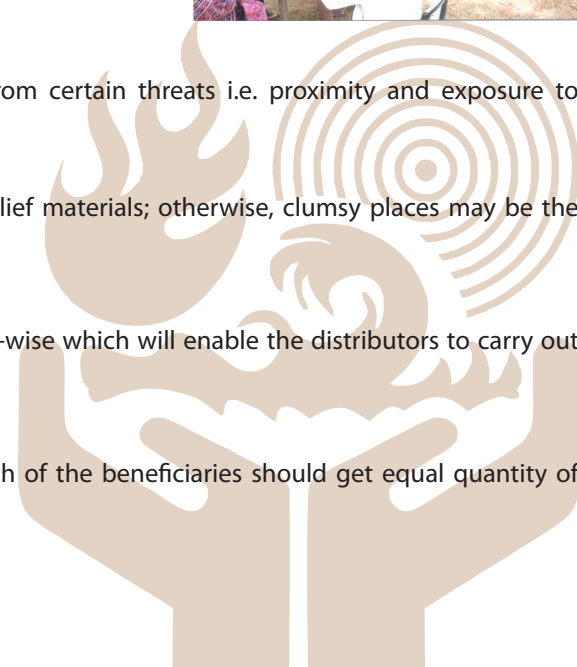
A spacious place should be available for the distribution of the relief materials; otherwise, clumsy places may be the hindrance in quick relief distribution.

### Materials to be put together

The relief materials should be kept together, individual beneficiary-wise which will enable the distributors to carry out the relief operation in a systematic manner.

### Ensure equal quantity for each beneficiary

As per the distribution procedure decided by the community, each of the beneficiaries should get equal quantity of relief materials.



## Registration of the beneficiaries

- ▶ The list of the beneficiaries should be enlisted in a Master Register which will be kept as a document and evidence of the distribution. Allocation of the relief material is made to the families with an average of five members. The food need is further divided in to:
- ▶ Survival food / Emergency ration (Ready to eat).
- ▶ Dry food ration (rice, dal, cooking oil, sugar and salt etc)

## Recording and reporting of the materials distributed

A specific format should be ready and need to be filled-up at the time of distribution of relief materials to ensure proper account and transparency. The format should contain the name of the family head, identification number, materials supplied and signature of the beneficiaries as the confirmation of the distribution. This report need to be provided to the relief supplier as against the materials received.

## Relief Distribution procedure

The appropriate relief distribution system should be decided directly by the beneficiaries and setting it up from the very beginning. It is pertinent to involve the women members to make sure that their specific needs are satisfied. Local customs, traditions and habits must be considered while choosing foods and the cooking practices. Beneficiary involvement in organising and managing the relief distributions contributes to avoiding a number of potential problems during actual distribution of relief materials.

## SHELTER MANAGEMENT

### Basic Arrangements at the shelter

- ▶ Identification of safe houses/ temporary shelter like tents etc.
- ▶ Safe route to reach the safe places.
- ▶ Arrange water at the shelter points
- ▶ Repair the damaged water-stand-posts
- ▶ Arrangement of temporary electrification at shelter points
- ▶ Make record-keeping arrangements at the shelter.
- ▶ Allocate adequate human resources for each shelter.
- ▶ Arrange safe place for animals
- ▶ Check the safety of the shelter; make necessary repair, as required.

### Evacuees

- ▶ Identity card systems for the evacuees.
- ▶ Arrangement of transportation.
- ▶ Keep record and ID cards.
- ▶ Place volunteers to control and maintain discipline
- ▶ Help the evacuees go back to their houses.

### Food, water and Medicine

- ▶ Intimate all evacuees for the shelter with safe route.
- ▶ Arrange food, water and medicine.
- ▶ Disinfect the drinking water sources.
- ▶ Supply dry food & packed water, if necessary.
- ▶ Operate free kitchen for all
- ▶ Replenish food and medicine as per the requirements.

### Sanitation

- ▶ Install temporary latrine.
- ▶ Arrange the basic needs like drinking water & medicine in the safe shelter.



- ▶ Store fodder for animals.
- ▶ Allow animals to go to a safe place.
- ▶ Keep environment clean

### Co-ordination

- ▶ Don't allow any one to go out side.
- ▶ Keep record of all.
- ▶ Sharing of information about the disaster and the impending weather
- ▶ Provide fodder and water to the animal

### Relief

- ▶ Distribute relief at the shelter and keep record.
- ▶ Distribution of polythene, tarpaulin among the needy people.

### Law and order

- ▶ Mobilize the vigilance task force to remain alert.
- ▶ Arrangement of police personnel for safeguard of the members of the shifted family
- ▶ Help the block functionaries for shifting of evacuees in all respect
- ▶ Immediately contact the higher quarters in case of any urgency

## EMERGENCY RELIEF AND FREE KITCHEN OPERATION

### Free Kitchen operation

#### Preparedness

- ▶ Identification of the places for opening of site operation station.
- ▶ Persons selected for running the site.
- ▶ Duty chart for site operations

#### Pre-disaster (after warning)

- ▶ Deployment of persons and materials at the site operations.
- ▶ Arrangement of the shifting of persons after some intervals.
- ▶ Transportation for the site operations.
- ▶ Stock relief materials for distribution.
- ▶ Arrange cooking equipments for free kitchen.
- ▶ Beneficiaries list for free kitchen

#### During disaster

- ▶ Provide dry food, cooked and packed food packets.
- ▶ Relief distribution

#### Post -disaster

- ▶ Start free kitchen immediately.
- ▶ Distribution of dry food.
- ▶ Record keeping of distribution
- ▶ Replenishment of food

#### Task Force

- ▶ Training and awareness of the task forces.
- ▶ Mobilize volunteers.
- ▶ Mobilize volunteers at relief distribution points.



## Relief

- ▶ Mobilize relief from outside
- ▶ Identify the needy people.
- ▶ Supervise proper distribution of relief materials.
- ▶ Maintain law and order during distribution of relief

## Drinking water

- ▶ Arrange water at the shelter points
- ▶ Provide packed drinking water
- ▶ Repair of the damaged water stand posts.
- ▶ Disinfect the drinking water sources.

## Transportation

- ▶ Arrangement and management of transportation logistics
- ▶ Arrange the maximum number of vehicles as per probable need.

## Baby Food

- ▶ Submit indent for supply baby food to BDOs.
- ▶ The baby food requirement is about 100 gms per child per day. This should be assured by BDOs
- ▶ Distribution of baby food at the shelter points

## Cattle feed

- ▶ Submit indent cattle feed to the BDO.
- ▶ Look into the distribution of relief/cattle feed.

## A few other points

- ▶ The Anganwadi workers are to keep a stock of usual medicines to provide to the needy.
- ▶ About 200 ltrs of Kerosene oil should be kept ready during the natural calamity.
- ▶ Tarpaulin & polythenes are to be collected as per allotments to specific villages.
- ▶ Live stock medicines should be stock piled as per projected need.
- ▶ A few relief groups should be constituted with members from VDMC, PRI, NGO, school teachers and VLW keeping in view distribution of relief materials.
- ▶ These relief groups are to quantify relief materials to be distributed as per govt. norms and where no govt. norms are in existence these groups will act as per their best judgment based on the situation.
- ▶ The free kitchen will start functioning by the relief groups with the help of the local people.

### Keonjhar, Orissa

Hatadihi block of Keonjhar is a water-logged area, where panic prevails during the rainy season, especially whenever it rains in the upper catchment area of the river Baitarani. During the flood of August 2007 a number of villages got drowned and got completely isolated from the outer world. All transportation lines were severed; people were in dire need of food and relief. Binod Sahu, the Sarpanch of Sarana GP, took initiatives in addressing the situation. He mobilized local and personal efforts to run a community kitchen for about sixty people. His efforts got a boost when normal relief by Govt. agencies could reach the place.

## HOUSEHOLD, VILLAGE AND SHELTER LEVEL SECURITY

As the people will evacuate from their houses to safe places, it is essential to ensure the safety and security at different levels starting from Household to Shelter level.

### Household / Village Level security:

- ▶ While leaving the house, ensure that each house should be properly locked.
- ▶ Some volunteers should be engaged in watch and ward of the village.
- ▶ The movement plan of the volunteers inside the village should be spelt out clearly and necessary logistic

arrangement should be made for any adverse situations.

- ▶ The mode of communication should be developed earlier for monitoring and better response to any difficulties.

### **Shelter level security:**

- ▶ The women and adolescents should be provided separate room in the shelter.
- ▶ The valuables and the important documents should be kept safely inside the shelter.

### **Legal aspects like Compensation for house damage and deaths**

There is a Govt. provision for compensation in case the house is damaged, which will help the vulnerable house owners in rehabilitating and reconstructing the damaged houses. This should be pursued with the local Tehasildar and Revenue Inspector (RI) of the Dept. of Revenue. The accurate damage assessment report will be helpful during this time.

Likewise, in case of death of the family head, there is also a provision of ex-gratia grant for the family of the deceased irrespective of the status of the family above or below the poverty line. Government declares the Ex-gratia for any of the injured and death cases. Accordingly, following the declaration of the Government, it is the SDMC to take the lead to communicate all proper information to the affected families.

So, it is the responsibility of the VDMC members to provide correct information to the people from the source, regarding these compensations, provisions and ex-gratia after pursuing the matters with concern departments.

### **INSURANCE**

The provision of General Insurance Corporation of India is now applicable to all the assets, livestock and life of any person. Therefore, it is wise to insure all the Assets and Lives under any one of the GIC policy provisions which may help the community in faster recovery and compensate the loss to some extent at the time of disaster.

### **INTER-AGENCY COORDINATION**

(Discussed in detail in Chapter IV)

### **SEARCH, RESCUE & MEDICAL AID**

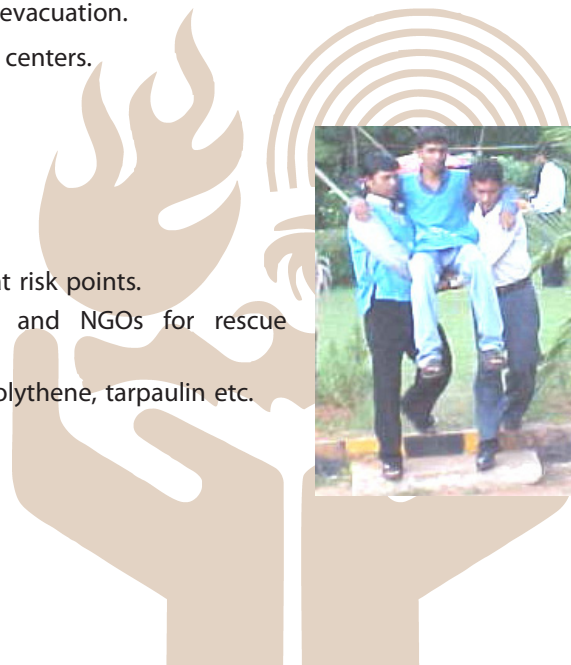
There are different sets of activities and responsibilities at different stages of the disaster to meet the needs of search, rescue and providing medical aid. A lot of coordination of the VDMC members/ PRI members is necessary with various Govt. agencies like the District Administration, Police, Fire Brigade, Tehasildar, R&B, RD, Irrigation, RTO, CDMO/ MO & RWSS etc, as well as the NGOs.

### **During Preparedness Phase**

- ▶ Train members of the identified task force and the volunteers through mock drill for this operation.
- ▶ Ensure the availability of rescue materials.
- ▶ Hold meeting of NCC/ Civil defence/ Guide/ Ex service man/ Police etc for support.
- ▶ Based on the risk assessment arrange boats and transport for evacuation.
- ▶ Prepare an inventory of shelter places and map indicating the centers.
- ▶ Provide/ arrange rescue kits at risk areas.

### **During Pre-disaster phase (After issue of warning)**

- ▶ Arrange deployment of police personnel at risk points.
- ▶ Make arrangements for the safety of property of the people
- ▶ Arrange deployment of fire brigade personnel and resources at risk points.
- ▶ Distribute work amongst the team members, volunteers and NGOs for rescue operation.
- ▶ Make provisions for food stuff, life saving drugs, cattle feed, polythene, tarpaulin etc.
- ▶ Prepare for evacuation.
- ▶ Arrange rescue kits.



- ▶ Arrangement of materials for repair of roads and breaches for post disaster operation.
- ▶ Conduct meeting with the owners of the vehicles.
- ▶ Mobilize volunteers.
- ▶ Arrange for medical help at shelter points.
- ▶ Make proper arrangement of drinking water at shelter places.

### During Disaster

- ▶ Deploy volunteers and resources at shelter points.
- ▶ Help the injured to be transported to hospital.
- ▶ Arrange for guard and rescue at the breach points.
- ▶ Send search group to rescue the left over people in the risk areas.
- ▶ Arrange boats and transport for the people who are stranded.
- ▶ Reach out to people with foodstuff and other essential items.
- ▶ Provide medical help
- ▶ Arrange drinking water at shelter places.



#### Koraput, Orissa

During a situation of acute epidemic during 2007 in the Dasmantpur and Laxmipur blocks of Koraput, where a large number of cases were terminal, volunteers of DRM along with workers of SIVA, a partner NGO rendered very useful service to the community. They generated awareness about community health and spread safety tips. They saved many lives including that of a 2-year old child, who was abandoned by her parents as dead.

In a fire incident during April 2007 in the Bandhugaon block of Koraput, the volunteers rescued life and property of many villagers.

### Post-disaster

- ▶ Find out the missing persons
- ▶ Keep record of missing persons.
- ▶ Inform the family members
- ▶ Provide tarpaulins as and when necessary
- ▶ Help the people to return to their homes
- ▶ Provide vehicle if required for transportation of people to return to their homes.
- ▶ Arrange for payment of ex-gratia to the family of missing persons.
- ▶ Organise immediate repair of roads and breaches for communication and transportation.
- ▶ Provide first aid.
- ▶ Arrange drinking water at shelter places.
- ▶ Organise immediate repair and renovate the affected tube well.

### PUBLIC HEALTH MEASURES

(Please refer to the Annexure for details)

### FIRST AID

(Please refer to the Annexure for details)

### BASIC MINIMUM STANDARDS

(Please refer to the Annexure for details)

### DAMAGE AND NEEDS ASSESSMENT

#### Purpose of Damage and Need Assessment:

It is necessary to undertake 'Damage and Needs Assessment' to save lives, minimize injury, damage and loss, and prevent further secondary hazards. It is also essential to undertake to produce an appropriate and timely assessment



report in order to mount an effective and efficient response.

### **What does an Assessment cover?**

- ▶ Damage Assessment : A situational description, which will cover “what has happened”.
- ▶ Needs Assessment : A statement of what needs to be done and what will be required?

### **Principles of Damage and Needs Assessment:**

- ▶ Needs assessment should provide sound information / database for decision-making.
- ▶ Information needs will vary depending on the event and where the effects are being felt.
- ▶ The assessment formats should facilitate rapid information collection.
- ▶ The primary stakeholders should be involved in the information collection system.
- ▶ Reports should contain a balance between statistics, narratives and tables.
- ▶ The assessment reports should specify how data is to be collected, analyzed and presented.
- ▶ Standard indicators, planning factors and formula should be provided.
- ▶ Standard reporting process and format should be followed.

### **Disaster Assessment**

Disaster Assessment is a critical component of disaster management and must be planned for and systematically conducted throughout the disaster. Disaster assessment is an efficient way in which the immediate and long term needs of affected population can be identified thus enabling to design effective disaster response and rehabilitation programme. Assessment is carried out best when local community members are involved in the process, providing an opportunity for them to participate in designing their own programme utilizing their local resources.

### **Components required for conducting a Disaster Needs Assessment:**

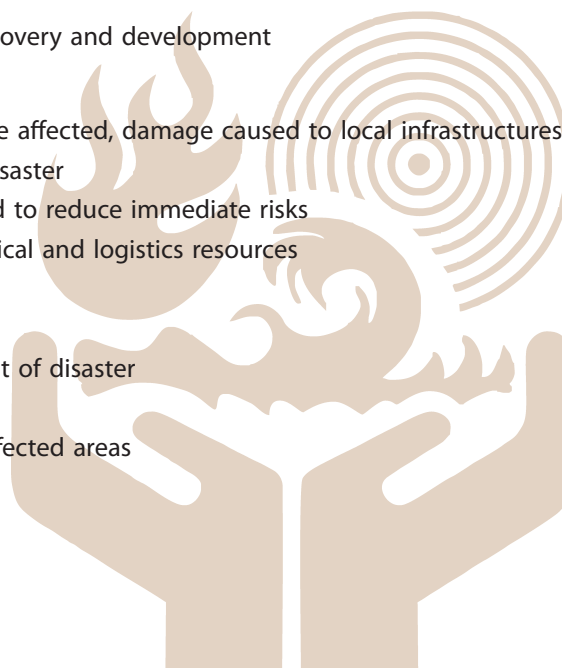
- ▶ People and Resources to collect information
- ▶ Coordination mechanism
- ▶ Baseline data
- ▶ Reporting formats
- ▶ Channels for sending the report
- ▶ Analysis and decision making capability
- ▶ Response capability

### **Community Level Assessment is the process of determining:**

- ▶ The impact of the hazard on a community
- ▶ The needs and priorities for immediate emergency measures to save and sustain the lives of survivors
- ▶ Resources available within the community
- ▶ The possibilities for facilitating and expediting longer-term recovery and development

### **Role of Assessment in Disaster Management:**

- ▶ Confirm the occurrence of the disaster - location, no. of people affected, damage caused to local infrastructures
- ▶ Identify, characterize and quantify populations at risk in the disaster
- ▶ Help to define and prioritize the actions and resources needed to reduce immediate risks
- ▶ Identify local response capacity, including organizational, medical and logistics resources
- ▶ Help anticipate future serious problems
- ▶ Help manage and control the immediate response
- ▶ Action taken by the community in order to minimize the effect of disaster
- ▶ Response of the Government
- ▶ Condition of transport and communication networks in the affected areas
- ▶ Immediate needs - Health, food, shelter, water, sanitation etc.



## The Assessment Process involves:

- ▶ Identifying essential information, immediate needs of the most vulnerable community and the resources available and those required, through;
  - Data Collection
  - Analyzing and interpreting the data
  - Reporting the conclusions, so as to design the disaster response plan & programme

## Relief Actors that Use Assessment Data:

- ▶ Survivors
- ▶ Government Agencies
- ▶ NGOs
- ▶ Media
- ▶ Useful Data Collection Methods:
  - ▶ Local self-assessment
  - ▶ Visual observation
  - ▶ Interviews with community members, authorities, Government officials, NGOs etc. by specialists
  - ▶ Media reports
  - ▶ Review of reports & statistics on health, demography, socio-economics on previous disasters.

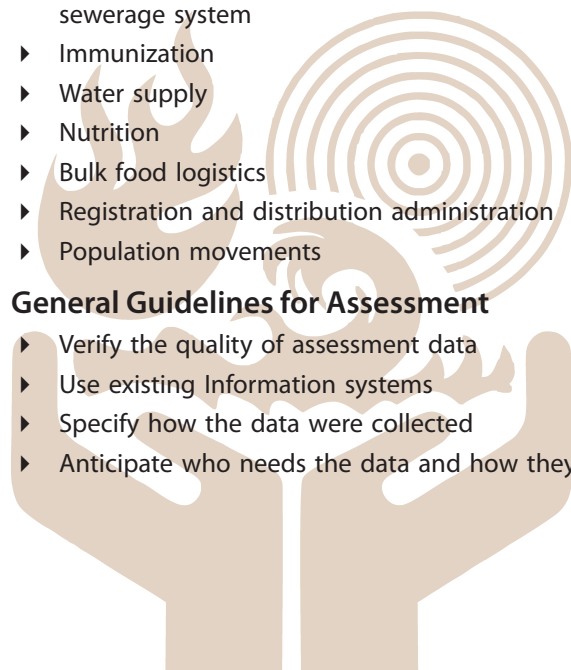
However, estimating accuracy depends on an understanding of data gathering methodologies and their limitations.

## Focus for Assessment:

- ▶ Identify secondary threats
- ▶ Assess damage to Communications system
- ▶ Identify areas from where the information has not been received
- ▶ Establish status of hospitals, clinics and overall treatment capacity in high impact areas
- ▶ Locate isolated and severely affected communities
- ▶ Identify and prioritize areas requiring search and rescue
- ▶ Ensure operation of data assessment centres
- ▶ Determine availability of essential items
- ▶ Identify public health requirements
- ▶ Identify needs for temporary shelters
- ▶ Support local administrative responses
- ▶ Assess the status of “life-line” systems such as communications, water supply, electricity, road networks and sewerage system
- ▶ Immunization
- ▶ Water supply
- ▶ Nutrition
- ▶ Bulk food logistics
- ▶ Registration and distribution administration
- ▶ Population movements

## General Guidelines for Assessment

- ▶ Verify the quality of assessment data
- ▶ Use existing Information systems
- ▶ Specify how the data were collected
- ▶ Anticipate who needs the data and how they will get it



- ▶ Evaluate the accuracy of the collected data
- ▶ Process data quickly while they are still useful
- ▶ Profile for an assessment specialist:
  - Disaster expert
  - Familiar with the affected country
  - Knowledge of the local language
  - Leadership skills
  - Team worker
  - Decision maker
- ▶ Determine location of problems
- ▶ Determine magnitude of problems
- ▶ Determine immediate priorities
- ▶ Assess all critical sectors
- ▶ Identify relationships between sectors
- ▶ Compare findings to “base-line” information
- ▶ Emphasize in all critical areas such as emergency medical and health, search and rescue, damage to lifelines and other public facilities, shelter and housing needs, personal and household need, agriculture and economic needs, as follows:

### **Security**

- ▶ Police station
- ▶ Strength of home guards

### **Health**

- ▶ No of sick people & casualties
- ▶ Types of disease and causes
- ▶ No. of doctors, nurses & trained community health workers available
- ▶ No. of hospitals and Public Health Centres (PHCs)
- ▶ Types of medicines and vaccination available locally and their requirements
- ▶ Condition of health services

### **Govt. and other Organisations**

- ▶ Government support
- ▶ Names of the organisation working in the disaster areas
- ▶ Types of relief & response activities provided by the Govt. and other INGOs and NGOs
- ▶ Strength of trained volunteers

### **Food**

- ▶ Types of food required according to the local custom and diet
- ▶ Sign of severe malnutrition
- ▶ Specialized diet required:

### **Water and Sanitation**

- ▶ Availability of water and its requirements
- ▶ Chlorination of drinking water
- ▶ No of bathroom and conditions
- ▶ Condition of drainage system
- ▶ Solid waste disposal



- ▶ Vector control

### **Shelter**

- ▶ Community hall, temples, open ground, schools and other undamaged infrastructures to provide temporary shelters
- ▶ Capacity and condition of the shelters appropriate to the local weather and custom

### **Program Planning**

- ▶ Budget for three months
- ▶ Action plan for three months

### **Telecommunications**

- ▶ Telephone
- ▶ TV
- ▶ Radio
- ▶ Satellite phone

### **Logistics**

- ▶ Sources
- ▶ Other organization supplies
- ▶ Place for storage

### **Transportation**

- ▶ Port
- ▶ Road
- ▶ Truck
- ▶ Any major bottlenecks e.g. bridges collapsed

## **MONITORING & EVALUATION**

'Monitoring and Evaluation (M&E)' is an approach to assessing the activities and effectiveness of various community-based interventions. Monitoring refers to the continual review or overview of the activities of an initiative and of any improvements in implementation. Evaluation refers to the analytical assessments which determine to what extent the intervention has been effective as measured against preset goals. Community-based initiatives, especially if they receive donor funding, are often required to conduct some M&E.

### **Monitoring**

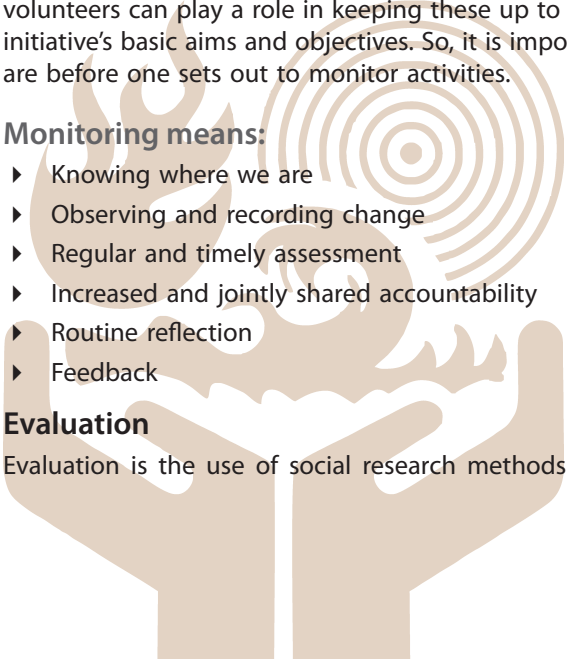
Monitoring is the routine process of data collection and measurement of progress toward program objectives. Designated agencies/ volunteers monitor the activities of an initiative by keeping track of activities. All activities need to be monitored, for which systems need to be put in place to maintain such records. In all initiatives the staff and volunteers can play a role in keeping these up to date. The choice of tools to monitor activities will be guided by the initiative's basic aims and objectives. So, it is important that there is an agreement on what these aims and objectives are before one sets out to monitor activities.

#### **Monitoring means:**

- ▶ Knowing where we are
- ▶ Observing and recording change
- ▶ Regular and timely assessment
- ▶ Increased and jointly shared accountability
- ▶ Routine reflection
- ▶ Feedback

### **Evaluation**

Evaluation is the use of social research methods to systematically investigate a program's effectiveness. Evaluating



an initiative means determining to what extent it has been effective, what impact it has had. Typically evaluation is conducted either prior to beginning an initiative or as an initiative comes to an end. These forms of evaluation are called formative evaluation (at the beginning) and summative evaluation (at the end). Through evaluation it can be specifically seen how changes have occurred that relate to initiative goals, amongst which groups these changes have occurred, and what aspects of an initiative's activities contributed most to these changes.

### Evaluation means:

- ▶ Reflection process on what has occurred
- ▶ Assessment of achievement and impact
- ▶ Learning from experience
- ▶ Valuing change

### Overview of Monitoring and Evaluation Framework

- ▶ Monitoring and evaluation takes place at multiple stages of a program. At each stage we gather different information that comes together to demonstrate how the project or the initiative has been conducted and what has occurred as a result. It is important to identify at the outset how we will gather the information for each level of evaluation.
- ▶ It is also important to keep in mind that some of these stages overlap and can, in different situations, represent different levels. For example, outcome-level data on risk behaviors of target groups can be used to evaluate the effectiveness of a program or set of programs without associating the changes with any single program.

### Comprehensive Monitoring and Evaluation Framework

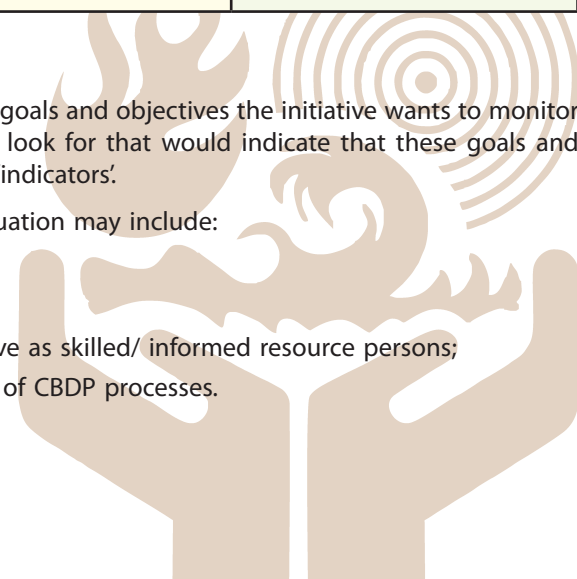
Types of Monitoring and Evaluation:				
Formative Assessments and Research (concept and design)	Monitoring (monitoring inputs, processes, and outputs; assessing service quality)	Evaluation (assessing outcome and Impact)	Cost-Effectiveness Analysis(including sustainability issues)	
Questions Answered by the Different Types of Monitoring and Evaluation:				
Is an intervention needed?	To what extent are planned activities actually realized?	What outcomes are observed?	Should program priorities be changed or expanded?	
Who needs the intervention?	How well are the services provided?	What do the outcomes mean?	To what extent?	
How should the intervention be carried out?		Does the program make a difference?	Should resources be reallocated?	

### Indicators

For a specific M&E activity, it is essential to clearly define what key goals and objectives the initiative wants to monitor and evaluate. Once this is clarified, one can think about what to look for that would indicate that these goals and objectives have been achieved. This involves the development of 'indicators'.

Some of the useful qualitative indicators that can be used in evaluation may include:

- ▶ Increased participation in initiatives and activities;
- ▶ Increased public awareness of the issues to be addressed;
- ▶ Increase in number of people within the community who serve as skilled/ informed resource persons;
- ▶ Extent of women's role in decision-making, and management of CBDP processes.



- ▶ Number and nature of community norms, and legislations developed by community for ensuring safety of community.
- ▶ Existence and active functioning of customs or systems for generating people's contribution for developing common facilities.
- ▶ Increased levels of participation amongst risk groups;
- ▶ Transparent and accountable behaviour vis-a vis decisions and transactions. Ability to be accountable, and make accountable.
- ▶ Instances of positive action taken as a result of activities;
- ▶ Increased level of functioning of basic developmental services in the community – especially health, water, sanitation and education.
- ▶ Ability to negotiate with the Government and to access the available schemes;
- ▶ Ability to manage, plan for, develop, and maintain common property resources, which include public infrastructure;
- ▶ Community ownership of the initiative in terms of increased active voluntary participation in decision-making; and,
- ▶ Community ownership of the initiative in terms of financial contributions (where appropriate).

Some examples of useful quantitative indicators that can be used in monitoring are:

- ▶ Number of teams of volunteers formed
- ▶ Number of trainings held
- ▶ Number of meetings held
- ▶ Number of IEC activities held
- ▶ Number of print materials developed and distributed
- ▶ Amount of budget spent, etc

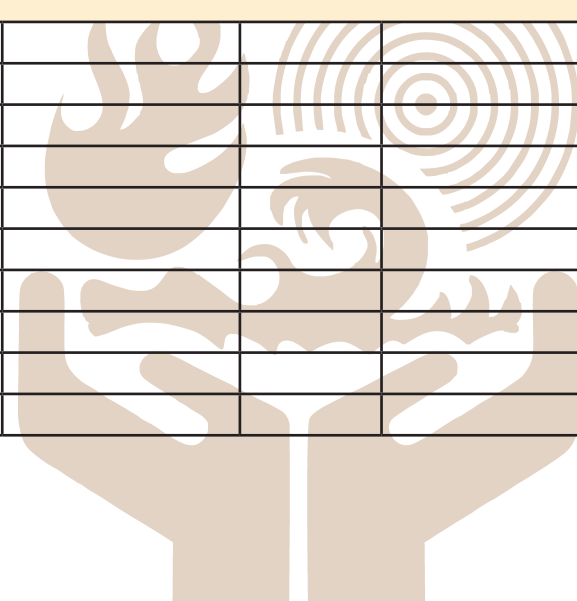
### An useful check list for Monitoring

The following is a useful checklist of major activities covering the three phases. A number of sub-activities are expected to go under each of the major activities. The progress of these activities needs to be closely watched and kept track of with the help of a simple check list as suggested hereunder. More activities/ sub-activities may be suitably added to the list to make it more practical as per the local situation. The sequence of events may be adjusted as per need.

Four stages of progress have been suggested against each activity. Only the dates, on which the respective stages are reached, may be entered in the spaces provided in each row. This will serve as a record of progress, which may be utilised for quantitative and qualitative analysis.

Sl No	Activity	Stage-I	Stage-II	Stage-III	Stage-IV
		Planning for the activity	In first stage of implementation	In good progress	Completed satisfactorily
<b>PREPARATORY PHASE</b> ( Enter the dates of reaching the respective stages )					
1	Discussion in Gram Sabha on DM				
2	Community profile analysis				
3	Risk assessment				
4	Vulnerability assessment				
5	Identification of resources				
6	Preparation of Village DM Plan				
7	Integration with long term development				
8	Formation of DM teams				
9	IEC activities for awareness generation				
10	Training of DM teams				

Sl No	Activity	Stage-I	Stage-II	Stage-III	Stage-IV
		Planning for the activity	In first stage of implementation	In good progress	Completed satisfactorily
11	Arranging materials for respective teams				
12	Installing warning systems				
13	Household preparedness				
14	Conducting mock drill				
15	Evacuation Plan				
16	Getting shelter ready				
17	Water & sanitation arrangements				
18	Getting Coordination Center ready				
19	Maintaining necessary data				
20	Maintaining inter-agency coordination				
21	Updating village DM plan				
<b>RESPONSE PHASE</b>					
1	Getting all DM teams ready				
2	Dissemination of warning				
3	Operationalising coordination center				
4	Arranging all necessary provisions				
5	Evacuation process				
6	Taking search & rescue measures				
7	Mobilising & storage of relief material				
8	Distribution of relief				
9	Managing shelter				
10	Free kitchen operation				
11	Providing security at all points				
12	Providing First Aid				
13	Taking public health measures				
14	Damage and needs assessment				
15	Maintaining inter-agency coordination				
<b>RECONSTRUCTION AND REHABILITATION PHASE</b>					
1	Clearing of debris & silt etc				
2	Return of people to their houses				
3	Provision of temporary shelters				
4	Trauma counseling				
5	Restoration of water & sanitation				
6	Restoration of power, road & transport				
7	Damage assessment				
8	Facilitating compensation process				
9	Rebuilding of houses				
10	Rebuilding of damaged infrastructure				



Sl No	Activity	Stage-I	Stage-II	Stage-III	Stage-IV
		Planning for the activity	In first stage of implementation	In good progress	Completed satisfactorily
11	Restoration of livelihood of people				
12	Post event evaluation				
13	Undertaking long term developments				
14	Coordination with Govt.& other agencies				
15	Documentation				

## DOCUMENTATION

The learning derived from ongoing programs and recent occurrence of events like disasters have a lot to offer for guiding the future interventions. But experience shows that documentation is quite often not accorded the importance it deserves, which results in insufficient documentation.

(Please refer to the Annexure for details)







CHAPTER

6

**Rehabilitstion  
And  
Reconstruction  
After  
Disasters**



# Chapter VI

## REHABILITATION AND RECONSTRUCTION AFTER DISASTERS

### Overview of the Chapter

Introduction

Rehabilitation

- ▶ Responsibility of individuals and families
- ▶ Post event Evaluation
- ▶ Long term rehabilitation

Reconstruction

- ▶ Community role in reconstruction
- ▶ Integrated long term development

### INTRODUCTION

In the post disaster phase, when the impact of the disaster recedes, it is necessary to bring normalcy by repairing and restoring basic services: in cases where damage to the houses has taken place, temporary shelters have to be provided to the affected people and hence arrangements for procurement of shelter material, distribution and erection of shelters at safe places; road and transport; power; communication; supply of drinking water; removing and disposal of carcass, etc.; removing silt, debris, filth, stagnant water, etc., from inhabited areas so that the people can return to their places as early as possible.

Simultaneously, the agricultural and other economic activities, which are the mainstay of the rural people should be put into gear so that people get back to their routine activities as quickly as possible. After these initial arrangements, reconstruction and permanent rehabilitation of the houseless people should start, otherwise they will not only continue to suffer, but also be a long term liability as well as problem to the state.

The important functions to be carried out at this stage are discussed hereunder.



### REHABILITATION

In the post disaster phase, when the impact of the disaster has receded, it is necessary to bring back normalcy by taking a number of necessary actions:

#### Disposal of Carcass

Rotting and undisposed carcasses create unhygienic condition and have to be disposed off immediately. The members of this special task force have to be physically and psychologically tough to carry out this work. Their role and responsibilities have been discussed earlier in Ch V.

#### Counseling

Most victims of cyclone/ floods suffer from trauma, grief and worry about losses to their families and property. Some can cope up with it and some people break down totally. The task of counseling is to identify such people and help them through their grief. The details of their role and responsibilities as well as training required for them have been discussed in the earlier chapter V.



## Damage Assessment

In the pre-cyclone/ flood months information about the individual families, their income, property and assets are to be collected and kept on record. This data is necessary for verification of compensation claims after the disaster. The following assessments are to be made about damages:

- ▶ Lives lost
- ▶ Women and children at risk (Orphans/ destitute/ disabled)
- ▶ Damage and losses to property and assets (Livestock, agriculture, plantation and fishing boats etc.)
- ▶ Damage to infrastructure (Roads, water supply, electricity, markets and distribution networks)



## Helping the compensation process

In a post disaster situation people feel lost and depressed. This is also the time when they need resources to get back to their normal mode of life. They need to be compensated for the losses, for which there are norms and provisions made by the government. But these activities involve certain processes, which may take a little time as well as patience on the part of the affected people. The task group can be very helpful in facilitating the process by:

- ▶ Hastening the Govt. enumeration process to assess the damage.
- ▶ Helping families with the paper work to follow compensation proceedings, especially relating to death certificates, insurance etc.
- ▶ Ensuring that the assessment and concerned papers reach the Govt. department responsible for compensation to ensure timely assistance.

## Relief Measures

(This has been discussed in Chapter V)

### Temporary shelters

In cases where the houses of the people have been damaged beyond habitability, temporary shelters have to be provided to the affected people. Hence arrangements for procurement of shelter material, distribution and erection of shelters at safe places have to be made at the earliest. Task groups, along with volunteers and the community can jointly attend to the task and put up the people there till they can go back to their houses.



## Restoration of Basic Services

### ❖ Road and transport

Roads are the lifeline of a community. All critical activities like bringing in the relief materials, taking up the reconstruction work, organizing health care etc, get seriously affected. Therefore it is one of the priorities to attend to the roads and bring it back to service.

### ❖ Power

Power situation usually gets seriously affected by disasters, thereby slowing down a number of subsequent activities. Life gets destabilized in the process. It is therefore essential to quickly assess the damage and restore power at the earliest.

### ❖ Communication

In the time of critical need like the aftermath of a disaster communication becomes very important for the people as well as the agencies and task groups assisting the process of restoration. Usually the telephone system becomes a casualty and needs to be restored as soon as possible. However, with the advent of mobile telephony, the dependability on base phone has reduced.

### ❖ Drinking water

Water is a very basic need of the people. Drinking water of dependable quality is necessary for day to day life. In a post-disaster situation, when



water sources are quite likely to have been contaminated it can be very dangerous to use it without the required purification. All necessary steps and sanitary precaution should be taken on priority to restore the quality of water in order to make it suitable for drinking and other domestic usage.

#### ❖ **Removing silt, debris, filth & stagnant water**

In post-disaster situation especially of a flood, plenty of silt, debris and filth of all kinds are left over after the water recedes. Besides the accumulated stagnant water at a number of places may take a long time to clear up or dry out. This not only rots the environment, it also becomes the breeding ground for vectors like the mosquitoes, thereby opening the door to various infections. Task groups and the community together should take immediate steps to clear it up and resume an environment of safety.

### **Return of people from camps**

During the post-warning and response phases the people are evacuated as needed and taken to safe places like shelters or temporary relief camps. After the disaster, however, necessary help should be provided to them to go back to their own houses. They would need further help in undertaking necessary repairs to their houses in order to make it habitable again.

### **Restoration of Livelihood**

Disasters destabilize livelihood of people to a great extent. Sometimes people lose everything including their property, cattle and other resources, their mainstay for livelihood. This can be very distressful, especially when they find everything in jeopardy and feel extremely helpless. This situation needs very sensitive handling and the families are to be helped out with constructive hand holding that is acceptable to them. They must be facilitated to find a sustainable foothold for income generation and resumption of a pattern of dependable livelihood. It is necessary to:

- ▶ Help families access financial assistance to begin income generating activities suitable to them.
- ▶ Identify the various support facilities necessary to restart the economic activities of the community; for example;
  - Farmers need basic help like cattle, seeds and manure to resume cultivation.
  - Small shopkeepers need to re-stock their shops.
  - Fishermen need their gear to catch fish and access their market to sell them.
  - Training in new skills to begin new income generating activities (brick-making, RCC cast items, sheet metal work, masonry etc)

### **Rehabilitation of orphaned children and women**

Disasters can be very cruel to people. Instances of an entire family being wiped out leaving behind a small child are not rare. Women lose their husbands, lose their support system and livelihood and are rendered helpless as widows. Society has a role towards such cases and must take steps to rehabilitate them and get them included in the social process.

For the rehabilitation of orphans and widows a community based approach is the best option. Institutional rehabilitation may be considered only as an alternative option. Respective Govt. departments may be approached by the task group for organizing help and facilitation.



### **RESPONSIBILITIES OF INDIVIDUALS AND FAMILIES**

Reconstruction and rehabilitation work of the affected villages will depend to a large extent on the efforts of the action groups. But their success again depends on the support of the villagers themselves. In fact, involvement and participation of the villagers themselves will get far more satisfactory results.

Action groups need to inform the villagers and their families through a series of meetings about the role of the action groups in the post-disaster phase and what the villagers should do to help themselves to recover losses as far as possible. They should encourage the families to:

- ▶ Volunteer to help the action groups in their activities
- ▶ Inform the disposal team about carcasses and bodies in their location

- ▶ Help the counseling team to identify people who need help.
- ▶ Keep the family together and tell them about rehabilitation and reconstruction plans.
- ▶ Start rebuilding houses, if possible so that families can move to their own homes.
- ▶ Keep the land, bank, insurance and other documents handy to authenticate compensation claims.
- ▶ Make thorough checks of property, whereabouts of missing persons and livestock before making claims.
- ▶ Work out what their needs are for rebuilding their homes and livelihoods and discuss it with the action group.
- ▶ Volunteer for reconstruction activities.
- ▶ Try not to make distress sale of cattle and property.



## POST-EVENT EVALUATION

Another opportunity to evaluate the effectiveness of a preparedness plan is after an actual emergency. Based on the actual series of happenings and actions taken during the response phase, VDMC can review their preparedness plans and update them to reflect the reality, opportunities and challenges experienced in the disaster situation. Questions that should be asked during this review include:

- ❖ What caused the most casualties and damages? What, if anything, can the NS do to mitigate or prevent this from happening in the future?
- ❖ What were the main difficulties in getting assistance to needy people? How might the NS improve this in the future?
- ❖ How did the warning system work? What improvements are required?
- ❖ What mistakes did we make? What changes must we make to avoid these changes in the future?
- ❖ What did we do well? How can we guarantee that we will continue to do these things?
- ❖ What supplies were available and which were lacking? How might we compensate for this in the future?
- ❖ What was the level and quality of coordination with the NS and with other external organisations? What additional coordination is required? How might we improve this coordination in the future?
- ❖ What were the strengths and weaknesses of our preparedness plan? How might we modify it or improve it?

## LONG TERM REHABILITATION IN POST DISASTER PHASE

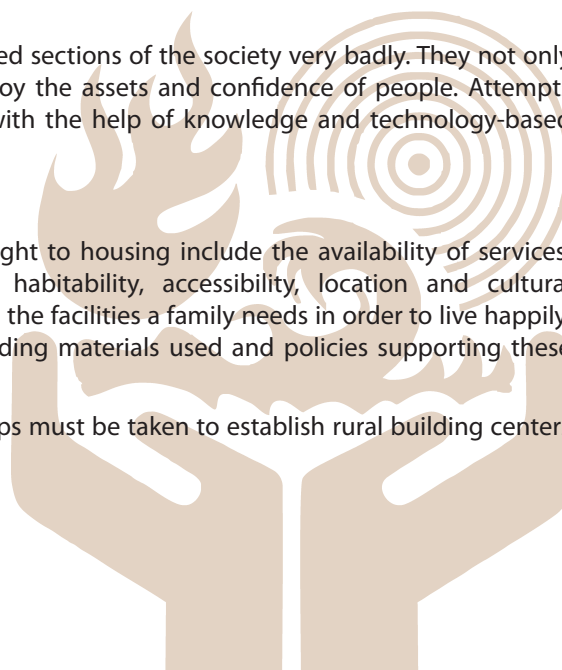
Developing a long-term plan to rehabilitate affected communities is extremely important. The plan should aim at certain policy level changes keeping in mind local knowledge and capacities. It also calls for a time-bound strategy without which the disaster management policy would lead to a dissipation of valuable developmental resources and energies.

The regular occurrence of disasters has hit the poor and marginalized sections of the society very badly. They not only affect the lives and livelihoods of the communities, but also destroy the assets and confidence of people. Attempts should therefore be made to reduce the vulnerability of people with the help of knowledge and technology-based inputs.

### Housing

Everyone has the right to adequate housing. Key aspects of the right to housing include the availability of services, facilities, materials and infrastructure along with affordability, habitability, accessibility, location and cultural appropriateness. The settlements and the habitation should have all the facilities a family needs in order to live happily. In addition to these, the way the houses are constructed, the building materials used and policies supporting these must allow an expression of cultural identity and diversity.

In view of this, a proper housing policy needs to be formulated. Steps must be taken to establish rural building centers through which safe housing can become a reality for the masses.



## Agriculture

Agriculture is the main source of livelihood for the majority of the population in Orissa. Most of the coastal regions are under paddy cultivation, which is highly sensitive to inundation and salinization. Some of the traditional saline resistant varieties are now on the verge of extinction. In view of this, it is essential to preserve and promote the use of such varieties by establishing seed banks at the village level.

The aim here should be a permanent solution instead of dispensing doles and relief. What is required at this moment is diversification of cropping practices and introduction of horticulture so that alternative food stuff is available to people during the crisis period.

## Plantation

The long coastline of Orissa is vulnerable to saline surges during floods and cyclones. The situation has been further aggravated by clearing of mangroves which used to act as natural barrier to saline surges for shrimp cultivation. In addition to this, deforestation has also led to an increase in the runoff of rain water, resulting in floods in western Orissa. Plantation on a large scale would be able to bring about changes desirable in the local climatic conditions.



## Sanitation

The aim of the sanitation program is to promote good personal and environmental hygiene. Community mobilization assumes great importance during disasters as people have to protect their health and make good use of facilities and services provided. Access to toilet, burial of waste, control of vector and solid waste management are some of the key aspects of sanitation programs.

Awareness campaigns on sanitary measures would bring about some changes. Poor sanitary conditions render poor communities vulnerable to diseases affecting in the process the overall wellbeing of the entire population. A lot of money and working days are lost in recovering from the diseases. Poor sanitary conditions repeat themselves and poor communities get sucked into a vicious circle of suffering. This can only be rectified when the entire community is prepared to contribute to the effort directed at maintaining good sanitary conditions.

## Water

Water is essential for life, health and human dignity. In extreme situations, water may not be available in sufficient quantities to meet basic needs, and in these cases supplying enough safe drinking water needed for bare survival is of critical importance. In most cases, the main health problems are caused by poor hygiene due to water scarcity and consumption of contaminated water. People should therefore have equitable access to safe water for drinking purposes and for other personal and domestic uses.

## RECONSTRUCTION

It is necessary to supervise the village recover from the losses in the disaster. The main aim is to facilitate Govt. help to carry on reconstruction activities in the area, including the following:

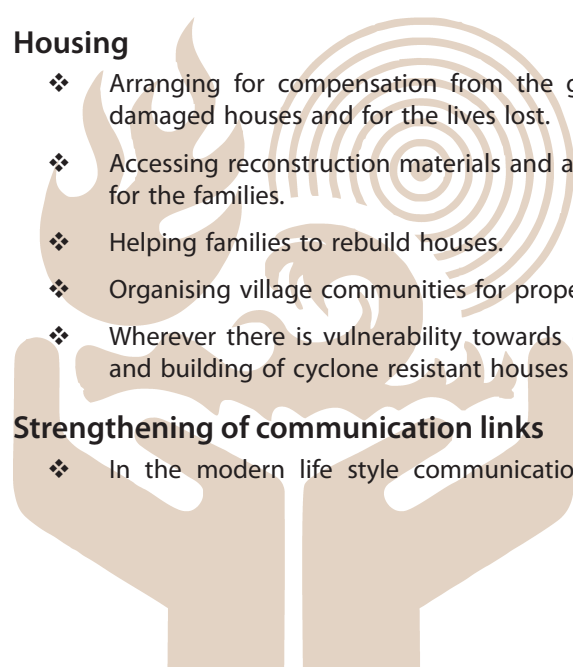
### Housing

- ❖ Arranging for compensation from the government for partially and totally damaged houses and for the lives lost.
- ❖ Accessing reconstruction materials and assistance of the government officials for the families.
- ❖ Helping families to rebuild houses.
- ❖ Organising village communities for proper channelising of 'Food for work'.
- ❖ Wherever there is vulnerability towards cyclone and hurricane, appropriate technology should be adopted and building of cyclone resistant houses should be promoted.



### Strengthening of communication links

- ❖ In the modern life style communication has been assuming a greater role. It has been making great





advancement with the advance of science and technology. A long term view is necessary to install a system that is less vulnerable to disaster and updated with the available technology.

### Rebuilding of damaged infrastructure

The social infrastructure is in jeopardy after a disaster. Many damages are caused to its systems. While a quick repair can put life back into gear, it is, however, necessary to take a closer look at these aspects and rebuild them with a long term view.

- ❖ Roads & bridges
- ❖ Power supply system
- ❖ Telephone lines
- ❖ Drinking water facilities
- ❖ School and other public buildings
- ❖ Construction of permanent disaster-shelters



### Survey & Report

Infrastructural activities may include repair and reconstruction of damaged and other vulnerable structures or undertaking new construction work. Before taking up the work, one has to complete the reconnaissance survey and visual inspection, find the causes of damage, and establish the degree of damage and workout appropriate remedial measures. In the case of new constructions, the feasibility study involving the economic importance of the project, geographical features, measurable and non-measurable benefits, the method of economic appraisal and cost benefit analysis should be completed. Preparation of a Project Report is a pre-requisite for proper evaluation of the project as it ensures timely completion and avoids time and cost over runs.



### Reclamation of silted/ damaged agricultural lands and fish ponds

After the initial recovery, it is necessary to remove the extra deposit of silt and reclaim the agricultural land and get it ready for the next cycle of crops. A specific area should be ear marked for depositing the dug out silt in the outskirts of the village.

Similarly, the fishing ponds will have to be cleaned up by removing the deposit from under the water. The under-bed preparation with the lime spray will have to be done to bring back the fishing pond into shape and to resume the activities of fishery.

### Community Role in Reconstruction

The urgency to rebuild has sometimes resulted in repeating old mistakes. In this respect care must be taken to ensure incremental up gradation of the local technologies and, wherever possible, introduction of corrective measures. The objective of disaster policy is to set in motion processes, which aim at building the capacity of affected people to recover and move ahead. Disaster preparedness and response policies must be an initiative emerging from grassroots and be consolidated at various levels: village, block, district, state and the nation.

It must be a community-based program, having the following features and activities:

- ❖ An active early warning system, supported by an active communication strategy through the mass media, needs to be developed.
- ❖ Identification of all local institutions, their role and responsibilities and the assessment and strengthening of their capacities on rescue and relief.
- ❖ Rapid rescue and relief forces consisting of skilled manpower should be formed and strengthened at the community level.
- ❖ Appropriate technology should be used for construction of flood resistant houses with multipurpose cyclone shelters.



- ❖ Low-cost housing should be promoted.
- ❖ Traditional flood and drought resistant seeds should be used and protected through seed banks and other activities.
- ❖ Grain banks should be introduced to address localized food stress situations.
- ❖ Local materials should be used in building watershed harvesting structures.
- ❖ Shelter beds should be constructed and plantation should be raised.
- ❖ Comprehensive natural resources management and other activities should be taken up.
- ❖ Local CBOs may come forward to conserve the natural resources in a pro-active role, if necessary.

### Dasoli

The Chipko Andolan, supported by Dasoli Gram Swarajya Sangh organised a community movement to prevent the destruction of local forests, in order to mitigate flooding. To stop the process of deforestation, local women formed a circle around trees to prevent contractors from cutting them down. The movement has spread to several districts in the state and averted massive deforestation.

## INTEGRATED LONG -TERM DEVELOPMENT

The rehabilitation and reconstruction phase is a crucial one in which all efforts are made to restore and reconstruct the damaged property and infrastructure and also attempts are made to recover from losses with in minimum possible time and bring the socio-economic life back to normal in the affected areas.

The third phase of the disaster management is mainly devoted to long-term development of the disaster prone areas so that the impact of the hazard could be minimized and the people and all supporting systems in the area are provided a better footing to face the drudgery of future disasters. Thus the activities for the development and better preparedness to face the problem will include the following:

Long term planning for preventive measures such as:

- ❖ Soil conservation and afforestation in river catchments.
- ❖ Planting shelter belts/mangroves in the coastal areas
- ❖ Adopting new cropping pattern to avoid crop loss due to floods and cyclones
- ❖ Introducing policy for preventing human settlement in low-lying areas, relocations of settlements in safer places, encroachment on drains etc.

Long term-Protective Measures would include:

- ❖ Construction of safe houses and shelters in hazard prone areas.
- ❖ Strict implementation of safety-codes in the construction of private and public houses and buildings.
- ❖ Construction of hazard-proof roads, bridges, canals, water reservoirs, drinking water facilities, power transmission lines, telephone cables, rails, etc.
- ❖ Construction of dams, embankments and other physical measures for protection against floods.
- ❖ Improvement in meteorological forecast and flood monitoring system, early — warning system for cyclones, cyclone tracking system, etc.
- ❖ Organizing people to participate in preventive and protective measures as well as in the preparedness for counter - disaster activities.



### Factors to be taken into consideration:

A number of factors need to be taken into account before embarking upon a major development project.

- ❖ Objective of the project
- ❖ Location
- ❖ The expected benefit to life, property, livestock as well as environment Sustainability of the project
- ❖ Involvement of the community
- ❖ Issues of availability and handover of land for the project
- ❖ Cost considerations including community contributions, if any
- ❖ Institutional involvement
- ❖ Capacity building needs



CHAPTER

7

**Convergence,  
Coordination  
And  
Linkages**



# Chapter VII

## CONVERGENCE, CO-ORDINATION AND LINKAGES

### Overview of the Chapter

Need for Coordination

Role of Panchayat in coordination and Linkage

- ❖ Role of the State
- ❖ Coordination with the Govt Departments
- ❖ Role of District Administration
- ❖ State Disaster Mitigation Authority
- ❖ National Disaster Mitigation Authority
- ❖ Coordination with the NGOs and other agencies
- ❖ Functional Coordination with multiple agencies
- ❖ An illustrative model of coordination

Building up and maintaining important Data

Websites related to Disaster Management

### NEED FOR COORDINATION

People's participation is essential for the success of any development initiative. In this regard, participation of individuals as well as civil society organizations is important for responding to disaster situations. To put it more simply, civil society is a medium through which a social contract between the governing institutions and the governed is negotiated and reproduced. This can be done involving people directly at the activities level as well as by bringing about changes at the policy level. Most of the non-governmental organizations will be of great help, if the Panchayats network effectively with these humanitarian organizations.

In addition to this, some of the policy level actions would require good relationship with institutions and with people from various walks of life for building everyday pressure through media, political parties, religious and cultural organizations, NGOs and so on. Over time a sphere of association in society in distinction from the state, involving a network of institutions could be developed. The existence of the same network in national, global, regional and transnational forms can lead to the development of a global culture, ideology and politics.

In this context, it is essential to promote participation of victims themselves including the poor and marginalized sections of the society. This would help lower castes and weaker classes in managing community-based programs and developing leadership quality. Similarly, what is required is a perspective of the 'poor and the marginalized' in influencing decisions, so that the benefits reach them. This can be achieved through leadership and involvement of 'people having lived experiences'.



### ROLE OF PRIs IN COORDINATION AND LINKAGE

Disaster Mitigation can be seen as a series of interconnected activities with a number of agencies in order to achieve a common purpose. This will not only need understanding of every nuance of the task involved, but also planning those activities meticulously and then getting them implemented properly as per plan. This involves pooling together of various kinds of resources and efforts from a large number of people, agencies and organisations both within and outside the Government.

PRI Bodies have a central role to play in this endeavor right through the process of setting targets, planning,

implementation, monitoring and evaluation. It calls for a large effort in team building, where plenty of coordination is required with various agencies for achieving success.

Therefore it is necessary to understand what role state plays and what roles the various agencies within and outside the Govt. play in respect of DM. That would present a perspective as to the process of coordination required with those agencies for implementation of the DM Plan.

## ROLE OF THE STATE

It goes without saying that the primary responsibility of the state is to ensure the well-being of its citizens. This essentially means ensuring that everyone has adequate food, access to quality education, sanitation and basic health services. It also means that the state should guarantee that caring and nurturing activities, which are vital to people's life, are carried out. These are inherent rights of every citizen. The state is the only organization that has extensive resources and the authority to formulate policies and implement them.

Disaster management challenges every state and its development programs. It is also found that the poorest states have very little in terms of institutional capacities to cope with disasters. To reduce vulnerability, a state needs to integrate risk analysis and risk reduction into its development programs, both at macro and micro levels. To prepare for emergencies, a state needs to make available its resources as part of a humanitarian response. However, vulnerability reduction will never be effective without people's participation.

It should be remembered that hazards by themselves are not disasters; they are threats that could trigger off disasters in vulnerable communities. Vulnerability, on the other hand, is that state of being prone to or susceptible to damage and injury, which describes a person or a community's lack of capacity to anticipate, cope with, resist and recover from the impact of the threat. As such, vulnerability mirrors a given society's existing power structure and its social and economic inequities.

## COORDINATION WITH VARIOUS GOVERNMENT DEPARTMENTS IN DM

In a welfare state, Government assumes the responsibility of rendering relief to people affected by natural calamities. In such times of widespread distress, the entire government machinery is switched on to render relief to people.

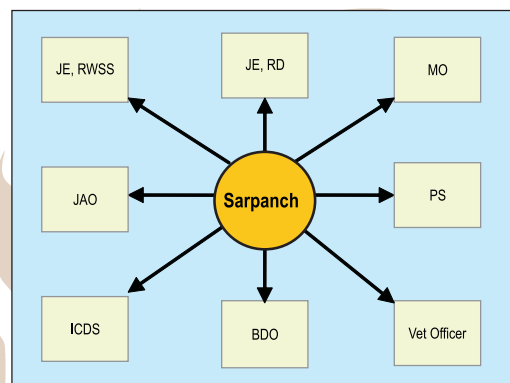
### Major objectives of the Govt.

- ▶ To assist the line dept., Block administration and the community in developing coping skills for disaster management.
- ▶ To provide effective support and resources to people in disaster.
- ▶ To provide an organized, systematic, flexible approach towards dealing with a natural calamity.
- ▶ To disseminate factual information in a timely, accurate and useful manner.
- ▶ To help develop immediate and long-term support plans for vulnerable people following a disaster.
- ▶ Ensuring active participation by Govt., Community, Volunteers and NGOs at all levels making optimal utilization of men, materials and resources at the time of Disaster.

The revenue department and the Board of Revenue coordinate the activities of all the departments of Govt. and Heads of Departments in regard to relief operations. It is therefore necessary to understand the different roles played by various Govt. Departments for Disaster Mitigation.

### Coordinating role of the Sarpanch

As the people's elected representative, a Sarpanch has to coordinate with a number of Government and non- Govt. agencies for getting jobs done. Some of the Govt. functionaries he/ she has to coordinate with is displayed in the diagram.



## ROLE OF DISTRICT ADMINISTRATION

The District Administration also takes all kinds of preparatory steps and keeps in readiness to deal with situations of disasters. In anticipation of seasonal disasters during the year, district administration takes various precautionary measures. Actions like functioning of control room, closure of past breaches in the river and canal embankments, functioning of flood zones, deployment of country boats and power boats at strategic points, making

use of emergency shelters, installation of temporary VHF stations, arrangement for keeping telephone and telegraph lines in order, storage of food stuff, necessary agricultural measures, health measures and veterinary measures etc. are properly planned.

The Govt officials of different departments are apprised of their duties before, during and after the disaster. Particularly BDOs, Tehasildars, Executive Officers of Municipalities, Executive Engineers of Irrigation Depts.,

#### **Dakshina Kannada District**

The District Administration, community and the local NGOs started an initiative to reduce the local communities' vulnerability to disasters. They carried out 'School safety programs' and introduced 'Disaster risk reduction' into the district NSS volunteers training program. Additionally with Nehru Yuva Kendra Sangathan, Home Guards and Civil Defence the community conducted mock drills. These efforts led to increased preparedness within the communities.

C.D.M.O, C.D.V.O. and CSO are instructed to take all precautionary and preparatory measures. They are all required to co-operate with the District Administration in combating the natural calamities.

The Collector shall coordinate relief operations undertaken by civil society organizations, non-government organizations, and voluntary organizations. If some organizations want to distribute food, open midday meal centers, or free kitchens for a certain period they can do so under intimation to the Collector. Government vehicles can be used for relief operations by civil society organizations on requisition. They should meet the cost of POL, but daily hire charges need not be realized from them. Civil society organizations may undertake a long duration program in a distress area selected and approved by the Board of Revenue / Special Relief Commissioner under intimation to Government.

### **STATE DISASTER MITIGATION AUTHORITY**

There is a need for a nodal agency at the state level with a comprehensive mandate to address natural calamities. This agency functions in providing support at the policy level, fund leveraging as well as capacity building.

#### **Orissa**

After the super cyclone in 1999, government, national and international agencies, civil society organizations took up relief and rehabilitation work in the affected areas. The office of the Special Relief Commissioner (SRC), Orissa served as the nodal agency of the government for dealing with natural calamities. In order to provide a sustainable platform to the initiative and maintain a centralized coordination among the various agencies and sectors, Orissa State Disaster Mitigation Authority or OSDMA (later renamed as Orissa State Disaster Management Authority) was set up in the same year with a mandate to plan and implement strategies for monitoring relief operation and rehabilitation programs in the event of the occurrence of natural calamities.

The SDM Authorities in various states, wherever formed, have made their presence felt and have succeeded to a large extent in promoting awareness on disasters through sharing of knowledge, and information and documentation. Several other initiatives such as the preparation of State Disaster Management Policy are worthy of note. The focus of such policy is on total risk management and vulnerability reduction by strengthening the physical infrastructure as well bio-physical, psychological, social and economic status of the people and to make them increasingly disaster resistant as well. However, the agency does not have any direct linkage with the Panchayati Raj Institution.

### **NATIONAL DISASTER MITIGATION AUTHORITY**

The National Disaster Mitigation authority (NDMA), headed by the Prime Minister of India, is the apex body for disaster management in India. The setting up of the NDMA and the creation of an enabling environment for institutional mechanisms at the state and district levels is mandated by the Disaster Management Act 2005. NDMA as the apex body is mandated to lay down the policies, plans and guidelines for disaster management to ensure timely effective response to disasters.

It carries a National Vision 'to build a safer and disaster resilient India by developing a holistic, pro-active, multi-disaster and technology driven strategy for disaster management through collective efforts of all Govt. agencies and non-Governmental organisations'. This will be achieved through a culture of prevention, mitigation and preparedness to generate a prompt and efficient response at the time of disasters. The entire process will center-stage the community and will be provided momentum and sustenance through the collective efforts of all government agencies and non-governmental organisations.



## COORDINATION WITH CIVIL SOCIETY ORGANISATIONS, NGOs & CBOs

A vibrant democratic institution both in formal and informal sector rests on the bedrock of civil society. The other side of the coin is that only an active civil society can ensure a responsible, transparent, corruption-free and efficient local self-government system from the neighbourhood level to village, block and district level to promote rural transformation in an expeditious way.

It is seen that the NGOs mostly operate through the CBOs in the rural areas. Thus there is already a healthy link between them. However, PRIs need to cooperate with the NGOs and CBOs in almost all areas of development including disaster preparedness. NGOs are engaged in information dissemination, awareness creation, social mobilization and capacity building by facilitating of formation and activation of CBOs. They have access to knowledge to information, know-how and technological advancement. In states where they have a powerful base with focused action, there they can play a creative role in enhancing the capability of PRIs. Although sometimes these institutions are observed to be displaying hostilities towards each other due to various reasons, it is to be clearly understood that their positive, constructive and functional interrelation is necessary to facilitate, activate and accelerate the process of development in the locality.

People have the potential and capacity to transform; but they also need a support system and mechanism. For this, Gram Sabha should become a driving force and main focal point for people's involvement in developmental process. It has been amply demonstrated by the experiences of Orissa and Gujrat that the Gram Panchayats have the capacity to participate in disaster management effectively and NGOs can also work in coordination with PRIs at different levels.



While Panchayats can participate in all aspects of disaster management, the CBOs can contribute on different aspects like, forming voluntary task forces for rescue and relief, medical aid, special care of vulnerable people, management of land, forest and water resources and various other preventive and protective measures, which are critical for short term and long term preparedness.

### Gujrat

During the Sabarmati train accident in Baroda and the floods in Surat, communities, Govt. and the local NGOs worked together complementing each other under the facilitation framework laid out under the Gujrat Disaster management Act. GSACS and its partners were actively involved in generating awareness on health and water related issues and AIIMS in New Delhi supported the medical response. The local community efforts resulted in an effective response to the different disasters.

## FUNCTIONAL COORDINATION WITH MULTIPLE AGENCIES

As discussed earlier, PRI institution has a key role to play in disaster mitigation. For this they would be required to reach out to a number of agencies in the community as well as in the Govt., create linkage and maintain a close coordination with them.

A model of maintaining coordination in Search & Rescue is presented hereunder. Similar models need to be worked out for specific activity domains. This would streamline the process of coordination and dispel any chaos.

An illustrative model of coordination (for Search and Rescue)

During Preparedness	During Pre-disaster (after warning)	During The onset of disaster	During Post-disaster	Coordination required with
<ul style="list-style-type: none"> <li>▶ Train volunteers through mock drill for this operation</li> </ul>	<ul style="list-style-type: none"> <li>▶ Deployment of police personnel at risk points.</li> <li>▶ Arrangement for the safety of property of the people</li> </ul>	<ul style="list-style-type: none"> <li>▶ Help the injured to transport to hospital.</li> <li>▶ Guard and rescue at the breach points.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Find out the missing persons</li> <li>▶ Keep record of missing persons.</li> <li>▶ Inform the family members</li> </ul>	<ul style="list-style-type: none"> <li>▶ Police Deptt</li> <li>▶ NGOs</li> <li>▶ DMTs</li> </ul>

During Preparedness	During Pre-disaster (after warning)	During The onset of disaster	During Post-disaster	Coordination required with
<ul style="list-style-type: none"> <li>▶ Ensure the availability of rescue materials</li> </ul>	<ul style="list-style-type: none"> <li>▶ Deployment of fire brigade personnel and resources at risk points.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Search group go around to rescue the left over people in the risk areas.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Find out the missing persons.</li> <li>▶ Inform the family members.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Fire Brigade</li> </ul>
<ul style="list-style-type: none"> <li>▶ Hold meeting of NCC/Civil defence Guide / Ex service man/Police etc for support.</li> <li>▶ Based on the risk assessment arrange boats and transport for evacuation.</li> <li>▶ Prepare an inventory of shelter places and map indicating the centers.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Work distribution amongst the officers and NGOs for rescue operation</li> <li>▶ Propositioning of food stuff, life saving drugs, cattle feed, polythene, tarpaulin etc.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Search group go around to rescue the left over people in the risk areas.</li> <li>▶ Arrangement of boats and transport for the people who are stranded.</li> <li>▶ Reaching out of people with foodstuff and other essential items.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Find out the missing persons.</li> <li>▶ Keep record of missing persons inform the family members.</li> <li>▶ Provide tarpaulins as when necessary and help the people to return to their homes.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Dist Admn.</li> <li>▶ Block Admn.</li> <li>▶ NGOs</li> <li>▶ DMTs</li> </ul>
<ul style="list-style-type: none"> <li>▶ Provide/arrange rescue kit at risk areas.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Deployment of RIs and other supporting staff to assist in rescue operation.</li> <li>▶ Propagation for evacuation.</li> <li>▶ Arrange rescue kits.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Search group go around to rescue the left over people in the risk areas.</li> <li>▶ Arrangement of boats and transport for the people who are stranded.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provide tarpaulins as and when necessary to the block office as per requirement.</li> <li>▶ Keep record of missing persons.</li> <li>▶ Arrange exgratia to the family of missing persons.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Tahasildars</li> <li>▶ NGOs</li> <li>▶ DMTs</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Arrangement of materials for repair of roads and bridges for post disaster operation</li> </ul>		<ul style="list-style-type: none"> <li>▶ Immediate repair of the roads and breaches for communication and transportation.</li> </ul>	<ul style="list-style-type: none"> <li>▶ R&amp;B</li> <li>▶ RD</li> <li>▶ Irrigation Deptt.</li> </ul>
<ul style="list-style-type: none"> <li>▶ Assessment of availability of vehicles</li> </ul>	<ul style="list-style-type: none"> <li>▶ Meeting with the owner of the vehicles</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provision of the required vehicles for evacuation</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provide vehicle if required for transportation of people to return to their homes.</li> </ul>	<ul style="list-style-type: none"> <li>▶ RTO</li> <li>▶ DMT</li> <li>▶ NGO</li> </ul>
<ul style="list-style-type: none"> <li>▶ Train task forces generate and awareness.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Mobilize volunteers.</li> <li>▶ Work distribution among the volunteers.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Help the injured to transport to hospital.</li> <li>▶ Deployment of volunteers and resources at shelter points.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Help people to return to their homes.</li> </ul>	<ul style="list-style-type: none"> <li>▶ NGO</li> <li>▶ Volunteers</li> </ul>

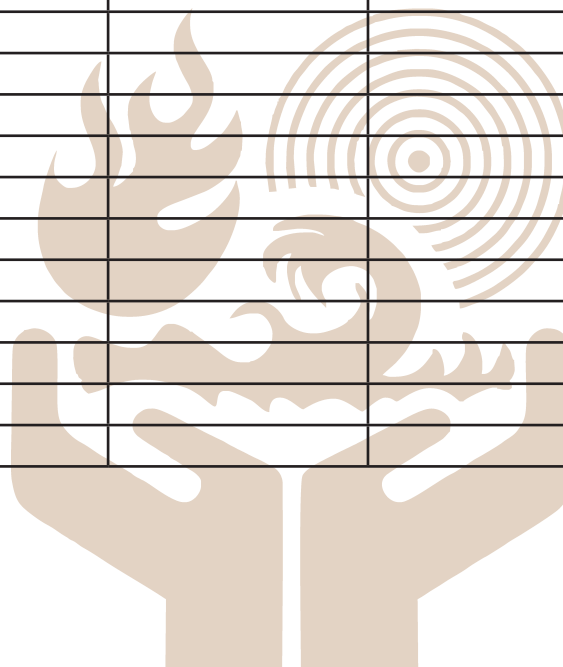
During Preparedness	During Pre-disaster (after warning)	During The onset of disaster	During Post-disaster	Coordination required with
▶ Build awareness on Community Health	▶ Arrangement of medical help at shelter points.	▶ Provide medical help	▶ Provide first aid.	▶ CDMO ▶ MO
▶ Installation of proper water & Sanitation facilities in residences, schools and communities	▶ Arrangement of drinking water at shelter places.	▶ Arrangement of drinking water at shelter places.	▶ Arrangement of drinking water at shelter places. ▶ Immediate repair and renovate the affected tube well.	▶ RWSS

## BUILDING UP & MAINTAINING IMPORTANT DATA IN THE GRAM PANCHAYAT OFFICE

It is therefore necessary for the PRI bodies to maintain contact details of various agencies with them so that appropriate action may be taken at right time. The Panchayat Office should maintain a list of important telephone numbers. Following is a model of maintaining contact numbers of key Govt. executives in the Block, District and State. This may be modified/ corrected as per need.

Important Offices / Persons and Phone Numbers useful in Disaster Management

Name & Designation	Phone Numbers			
	Office	Fax	Residence	Mobile
Collector				
S.P				
A.D.M.				
Sub-Collector				
President, Zilla Parishad				
Project Director, DRDA				
Dist. Emergency Officer				
D.I.P.R.O.				
C.D.M.O.				
C.D.V.O.				
D.A.O.				
C.S.O.				
Fire Officer				
DPO-Panchayat				
DWO				
DSWO				
L.A.O.				
DFO				
CI of Schools				



Name & Designation	Phone Numbers			
	Office	Fax	Residence	Mobile
Agro Industries				
District Planning Officer				
B.D.O.				
Tahasildar				
Addl. SP.				
SDPO				
RI				
Fire Station				
Executive Engineers				
SDO, Telephone				
Banks				
Important offices at the State level				
Chief Minister's Office				
Chief Secretary				
Commissioner cum Secretary				
Principal Secretary				
Minister of Revenue				
Revenue Control Room				
Special Relief Commissioner				
Addl. Relief Comm.				
OSDMA				
Flood Control Room				
Civil Defence				
AIR-Station Director				
Door Darshan Kendra				

### Other details to be maintained

Besides the above the GP office shall be required to maintain a lot of other information. Wider the network, better will be the effectiveness of coordination, especially at critical times. Some other details to be maintained in the GP office may include the following:

List of NGOs and CBOs (a suggested format):

Sl. No.	Name of the NGO	Address	Year of Registration	Block	Contact Person with Designation	Main Activities
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List of Health Institutions and persons

List of VHF Stations

List of High Schools having NCC and of NSS units in nearby Colleges

List of Power Boats and country boats available in the area

List of Home Guards in the area

List of persons trained in First Aid in the area

List of trained Masons and other skilled categories

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(List of Web sites connected to Disaster Management is placed in the Annexure)



CHAPTER

8

**Social  
Inclusiveness  
In  
Disaster  
Management**



# Chapter – VIII

## SOCIAL INCLUSIVENESS IN DISASTER MANAGEMENT

### Overview of the Chapter

- Social inclusiveness
- Understanding Gender
- Gender Approach in Disaster Management
- Immediate response during Disaster Relief Phase
- Mid-term response during recovery phase
- Long term response during reconstruction phase

### SOCIAL INCLUSIVENESS

The social significance of an inclusive approach goes beyond their economic relevance. In a society divided by caste, religion, and ethnicity, equal opportunity of access to “primary goods” such as health, nutrition, and education can create the basis for social mobility and social cohesion. Since it cares about the poorest, this can prove to be an effective vulnerability reduction measure.

States have an obligation to promote, respect and fulfill fundamental human rights of people affected by disasters irrespective of gender, race, caste, class, ethnicity, citizenship, religion, migration and registration status and other factors. Therefore it is imperative that due sensitivity must be displayed towards the relatively more vulnerable groups and their needs and concerns should be addressed on priority in all initiatives taken for disaster management.

In some cultures, caste discrimination is still strong and may prevent relief assistance reaching low caste communities. It would be a prime responsibility of the people’s representatives to see that Government and other aid agencies should implement relief and reconstruction activities without any discrimination based on caste, class, ethnicity, religion, and other factors. Government and aid agencies should ensure that socially marginalised groups like the lower caste people have equal access to relief supplies like food, water, health services, compensation benefits and housing.

In many parts of India Dalits, or the so called untouchables, are denied their basic human rights and face the most terrible forms of deprivation and abuse under normal circumstances. The misery caused by disasters gets further aggravated by the problems of discrimination for the vulnerable groups.

Such vulnerable groups may include:

- ❖ Old persons
- ❖ Pregnant women
- ❖ Lactating mothers
- ❖ Widows
- ❖ Physically and mentally challenged persons
- ❖ Women of all age groups
- ❖ Children
- ❖ Dalits
- ❖ People belonging to minor and marginalized groups

However, experience suggests that the women and children have been the most affected and exploited during the post disaster care in particular. Women seeking shelter during cyclones have been exposed to sexual harassment and assault. Concerns were raised that children misidentified as cyclone ‘orphans’ were trafficked into sex work following the Orissa cyclone and the Gujarat earthquake. Lack of protection from male relatives for widows and other sole women was cited as one of the factors





increasing the rate and fear of sexual assault. Women and child trafficking incidents are rampant during the aftermath of a disaster. Violation of human rights in the shelters and relief camps are a matter of serious concern. Therefore, while discussing about socially inclusive approach in disaster management, there is a dire need to sensitise people about social equity issues, which calls for an extended discussion about gender mainstreaming.

## UNDERSTANDING GENDER

Men and women are different in some ways, and alike in others. Biologically, we all need to eat and to sleep and to breathe, we are all subject to malaria and 'flu, we all need exercise to keep healthy. But there are differences in body forms; and women bear children while men cannot.

In some ways men and women are similar in social terms. Both are sociable - they both like parties; and both want to be valued as individuals, for example. There are however a lot of social differences between men and women in most societies. Girls are usually expected to grow up to be good wives and mothers; this sometimes implies that they are expected to be modest, and to be obedient, to be quiet when men are around. Boys in most societies are supposed to grow up to be the chief breadwinners, and the 'head of the family'. They may be expected to be brave, to take the lead, to speak up. Most of these differences are not innate, but are taught, both directly by the parents and by society in general, through what the child observes. Some things are just considered 'right' for women and 'wrong' for men, and vice versa.

However, these differences are not universal, and they vary greatly from society to society, which tells us that they are not determined by nature, but by the social environment in which we are brought up. Our opinions on what is correct and acceptable behaviour are learned at a very early age and if they are challenged, it can give a very uncomfortable feeling. If one is asked to do something which in one's own society is exclusively done by the other gender, one can feel very foolish or alternatively highly offended.

For example, twenty five years ago men never changed babies' nappies, and would have been horrified if asked to do so. Things have changed a lot however. These days men frequently take over this 'mothering' task, and are often very happy to do so, quite genuinely finding satisfaction in a new, caring relationship with their children. It is not always easy to say what differences are really biological and what are socially learned ones, and there is always room for discussion on this.

All cultures have views on what men and women can and should do and what they are 'naturally' good at and what they are 'intrinsicly' bad at. The interesting thing is that many of these vary from culture to culture - so they cannot be biologically inbuilt!

For example, differences of opinion are expected when we make the following statements:

- ❖ "Men are more logical and rational, women are more emotional"
- ❖ "Women are unstable at certain times, for example during menstruation"
- ❖ "Women have more difficulty in working with numbers than men"
- ❖ "Women are quarrelsome among themselves and don't work well in a group, while men get on with each other better"
- ❖ "Although it is true that women do some work on the farm, the farmer is really a man"
- ❖ "A family really consists of a man who is head of the household, a woman, and their children; families with women in charge are not real families"
- ❖ "Women prefer to have a man to make the decisions for them"
- ❖ "Children suffer if their mother goes to work outside the home"
- ❖ "Men are much less sensitive than women: they don't notice how people are feeling"



Too often we make assumptions about gender differences without really thinking about them. In the exercises that follow, it is important that participants share their findings with a view to showing that many norms vary from culture to culture.

Everyone knows that when the word 'gender' is used in the context of development planning, it is because there is or has been concern about how women are benefiting from development efforts. Is gender then just a new and fashionable term for 'women'?

One of the things that have become apparent is that, for a variety of reasons, it may be better not to try to deal with women's problems in isolation, but to see them in the context of the society in which they live. What women do and can do depends to a considerable extent on social relations and norms, and to understand this better it is necessary to understand not just how women function but also how men do. It is not enough to just study the women: it is the complementarity of men and women; how roles, work, responsibilities and rewards are shared between them, that is important. Agencies and individuals are therefore increasingly of the opinion that a 'gender approach' is necessary in planned development activities. Just as the term 'socioeconomic' implies that we look at differentiations in society, such as those brought about by distribution of wealth or by ethnicity, 'the gender approach' implies that we look at social differences between men and women. Gender, as has already been discussed, refers to culturally determined differences, and as such, gender differences are by no means the same in every society.

## GENDER APPROACH IN DISASTER MANAGEMENT

Gender inequality keeps women at a disadvantage throughout their lives and stifles their development prospects. Illiterate and poorly educated mothers are less able to care for their children. Low education levels and responsibilities for household work prevent women from finding productive employment or participating in public decision making. It is therefore necessary to inculcate gender sensitivity and look at the issues related to women from this point of view.

An attempt has been made here to suggest a practical guideline for the assistance of the Govt. sector as well as the civil society actors in dealing with women who have been affected by disaster. They have been categorized into immediate, mid term and long term responses. However, there could be overlap in the responses and this factor needs to be taken into consideration in implementing the guidelines.



The guidelines are based on the experience of recent disasters. These disasters occurred in vastly different places among different populations, yet they share a common factor: during and afterwards, women and children suffered most. That women are disproportionately affected by disasters is indisputable-yet it continues to be ignored: by governments, and by many non governmental agencies involved in relief and reconstruction efforts. In disaster relief efforts, a rights based approach must be adopted so that women's rights are promoted and safeguarded. Women's socio economic and cultural rights, as well as their civil and political rights are to be ensured at all times.

Gender sensitive disaster management must be based on the fundamental principles:

1. Women's rights are human rights, therefore, relief efforts should not only be based on needs, but on ensuring that women's human rights are protected and promoted.
2. Equality of women and men
3. Non-discrimination against women

The three stages of response i.e., immediate, mid term and long term responses have been taken into consideration in suggesting the following guideline:

### IMMEDIATE RESPONSE DURING DISASTER RELIEF PHASE

#### Identify specific needs of women

Ask the women. Women are the most aware of what family needs are and what immediate responses are needed.

- ❖ Women's reliable and regular access to food and clean water is important because women take care of food and water for children, elderly and the entire family.
- ❖ Special care should be given to pregnant and breastfeeding women and women with young children

- ❖ Include sanitary pads and underwear in relief supplies
- ❖ Provide adequate separate toilets and bathrooms for women
- ❖ Provide regular access to gynecological services by female health workers
- ❖ Ensure women's security and safety
- ❖ Provide adequate shelter and housing
- ❖ Provide psycho-social counseling

Studies show violence against women, including sexual abuse, increases during disasters. However, because of stigma and ostracism related to sexual violence the cases go unreported. Increased alcohol consumption and substance abuse result in increased domestic violence and sexual harassment in camps.

### **Ensure that emergency relief supplies include women's specific requirements**

Ensure women's access to sufficient and adequate food.

Food distribution should be equitable, transparent and respect human dignity.

- ❖ A steady and sufficient flow of food and drinking water should be maintained until disaster affected people are able to restore their livelihoods, as long as it takes.
- ❖ Pregnant and breastfeeding women, widows, elderly, orphaned children and disabled should be provided food aid until their food security has been ensured.
- ❖ Distributed food must be of appropriate quality and fit for human consumption.
- ❖ Basic food aid should include milk and sugar and be provided regularly until families are able to restore food security.
- ❖ Breast milk substitutes should be included in the food aid package for families with infants as in disaster situations under stress and trauma mothers have lactating problems.
- ❖ Consult women about the make up of the 'food basket' or essential food items for distribution.
- ❖ Basic cooking facilities such as cooking utensils, stoves and firewood must be provided.

### **Aid distribution for women should be handled by women.**

The following should be overseen:

Ensure that all disaster affected people have access to adequate shelters.

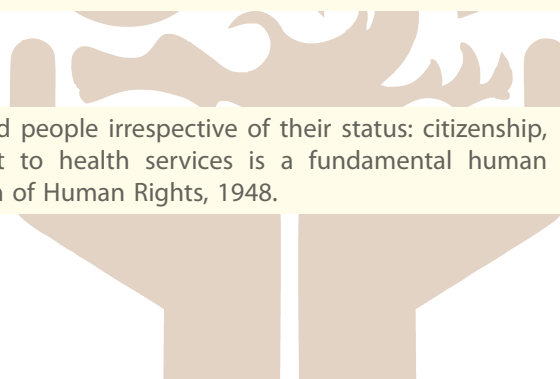
Ensure women's access to adequate toilet and bathing facilities.

- ❖ Include women in aid teams. Women groups need to be at the centre of planning, implementation and management of food aid. There should be minimal involvement of military forces for delivery of goods in the aftermath of disasters.
- ❖ Special efforts must be made to reach out to women as in most societies, women feel too intimidated to collect aid supplies.
- ❖ Women should be encouraged to access aid directly.
- ❖ Aid distribution points should have public toilets, including separate toilets for women, access to drinking water and shaded sitting arrangements.
- ❖ At aid distribution points, separate queues for women should be made, especially in cultures where gender segregation is practiced.

### **Ensure women's access to free health care services.**

Ensure that:

- ❖ Access to health services is granted to all disaster affected people irrespective of their status: citizenship, migration, registration, medical insurance etc. The right to health services is a fundamental human right guaranteed by Article 25 of the Universal Declaration of Human Rights, 1948.



- ❖ Pregnant women and women with young children are identified and provided with free medical post natal and maternity care and additional nutrition for the women and children
- ❖ Women who delivered after a disaster are provided with extra reproductive and child health care and psycho-social counselling as they are more vulnerable due to the stress experienced during the disaster.
- ❖ Necessary vitamins and other supplements are provided to pregnant and lactating mothers.
- ❖ A conducive, sanitary and safe environment is set up for childbirth purposes.
- ❖ Medical assistance is provided to lactating mothers who have lost their babies in disaster and have milk clotting in their breasts.
- ❖ Adequate provision and easy access to different forms of contraception is facilitated as soon as possible.
- ❖ Medical services are offered proactively by health workers through regular visits to camp, shelter and disaster affected communities.
- ❖ Female health workers are included in medical teams servicing camps and affected communities.
- ❖ Female obstetricians and gynaecologists are at hand to take care of maternity and child related health concerns.
- ❖ Children are inoculated against childhood diseases within stipulated time periods
- ❖ Women have access to general health care clinics .
- ❖ Hospitalised women are provided with shelter after they leave hospital and not asked to leave hospital even if they have no place to go. Some of them may be disabled as a result of the disaster.

Ensure security and safety of women and children

Protect women from violence and abuse

Ensure women's access to psycho-social counseling

## MID-TEM RESPONSE DURING RECOVERY PHASE

### Ensure women's participation in management of camps and temporary shelters

Ensure women's equal access to compensation payments and rehabilitation measures

#### Ensure that,

- ❖ Women are elected to camp management teams/ committees.
- ❖ Women are encouraged to participate in camp decision making.
- ❖ Women are consulted in the design and lay out of camps and shelters.
- ❖ Women are not represented by male family members in camp management.
- ❖ Meetings on camp management are held at convenient times for women to attend, not late in the evenings or at night
- ❖ If women traditionally do not come to community meetings, their shelters should be visited to elicit women's views.
- ❖ Conflict solving mechanisms should be set up within the camps to deal with internal conflicts that may arise due to distribution of aid.

Ensure women's access to information on relief and rehabilitation measures

#### Ensure that:

- ❖ Information on relief assistance, including clear procedures on applying for such assistance, is disseminated to all disaster affected people in camps, temporary shelters and those outside camps and temporary shelters, including those in hospitals and remote islands, forests and mountainous areas.

- ❖ Special efforts are made to reach out to women in their shelters within the camps as in some cultures women do not participate in public meetings where information is normally announced.
- ❖ Information is in reader friendly simple language and can be understood by all.
- ❖ Special efforts should be made to disseminate information to illiterate communities.
- ❖ Women officials are involved in the dissemination of information.
- ❖ The dissemination of information which provides information on facilities/ loans/ grants available for women to start on livelihoods such as coir work, pottery, and other small and medium enterprises
- ❖ All information is shared with women who cannot access information easily due to cultural and religious constraints and that assistance to those who failed to apply for assistance due to lack of access to information is provided.

Ensure children's access to education

## LONG TERM RESPONSE DURING RECONSTRUCTION PHASE

To ensure that women's needs are addressed, PRI bodies, Government and other aid agencies should involve women in the consultative and decision making processes, from camp administration and disaster management committees to policy making bodies for reconstruction efforts.

### Include women in the reconstruction process

Ensure women's participation in decision making processes for rehabilitation and reconstruction.



Ensure that reconstruction of houses meets women's and family needs.

Ensure women's equal ownership rights to land, house and property.

Women must be at the heart of all recovery and reconstruction processes. For decades, they have been the lifeline of their communities, leading survival systems and mutual aid networks, including among the internally displaced and refugee communities. Women are not just victims, they are survivors, and they need to be part of the solution. The reweaving of the social fabric of life is the foundation for reconstruction and a necessary part of the healing process. It is women, in their families and their communities, who are playing this role.

### Ensure equal opportunity of livelihood for women:

Ensure that women get opportunities to earn livelihood for themselves and their families.

- ❖ In post-disaster rehabilitation and reconstruction, employment and income generation assistance for women must facilitate their food security, women's access to natural resources and poverty alleviation at the community level.
- ❖ Reconstruction programs must have a special focus on women's economic empowerment and offer them income generating opportunities. In disaster situations, women who lost their husbands/ breadwinners face difficulties accessing income generating assistance because the existing opportunities normally target men.

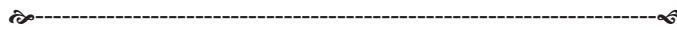
### Raise Women's awareness of their human rights :

Mobilise and empower women to advocate for their human rights.

Women's groups should use post disaster reconstruction processes to break the old patriarchal norms and educate women about their human rights: from right to have national identity cards, separate bank accounts to land and property rights.



- ❖ Support human rights awareness education programs for women within the camps and in their homes if it is not possible to meet elsewhere convenient to women
- ❖ Provide women with necessary skills to face new challenges as heads of households subsequent to male family members' death, disappearance or incapacitation.
- ❖ Provide male family members with the necessary skills to take on new responsibilities of child care due to the death, disappearance or incapacitation of female family members
- ❖ Support young female orphans with advice on looking after themselves due to death of parents or adult family members.
- ❖ Awareness programs must emphasise that forced marriage of girls under the age of eighteen is illegal and attracts penalties.
- ❖ Support ongoing gender awareness programs for camp officials and security personnel.





# SESSION PLAN

FOR THE

**5 - Day ToT  
Module**

ON

**Disaster  
Management**

**For The Core Trainers**





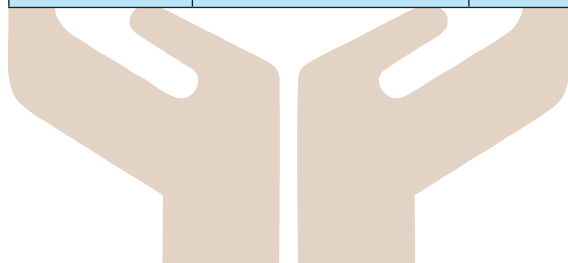
Day: 1	Session: 1	Introduction & Training Objectives	Duration:2.00	
<p>Session Objectives:</p> <p>To establish a non-threatening learning atmosphere in the training program</p> <p>To facilitate a round of introductions for familiarizing the participants with each other</p> <p>To facilitate the formulation of some norms or ground rules for the program</p> <p>To facilitate sharing of expectations of the participants from the program</p> <p>To assess the initial knowledge base of the participants through a 'Pre-test' questionnaire</p> <p>To introduce the objectives of the training program to the participants</p>				
Time	Activities	Coverage	Methodology	Materials
5minutes	Opening of the program and welcoming the participants	None	Process of opening and welcome followed by self introduction of the facilitator/ facilitators	A pre-written Welcome message
5minutes			A general statement about the program	
30minutes	Ice Breaker	None	Playing the opening game G-1, "Matching the Description"	Adequate number of sheets of the game
15minutes	Introductions		Facilitating a round of self-introductions	Guiding points on the board
5minutes	To form the Norms of the program	None	Plenary discussion	Flip chart papers Marker pens
15minutes	To share participants' expectations from the program	None	Sharing of expectations through color cards and summarizing the same by Delphi method	Colored cards Sketch pens Board pins
15minutes	To conduct a 'Pre-test'		Administration of a questionnaire	Pre-test questionnaire
20minutes	To familiarise the participants with the objectives of the training program	Training Objectives	Power point presentation and discussion on the Program objectives	LCD projector PP-1 HO-1
<b>10m</b>	<b>B R E A K   F O R   T E A</b>			
Details of Group work	None			
Games	<p>G-1: 'Matching the description' is an ice-breaker game, which uses a work sheet with 25 particular descriptions about people. There are an equal number of grids drawn on it. Participants are required to interact with each other to find out who matches which description and then take the signature of the person who fits that description on that particular grid.</p> <p>Time for introduction to the game:5min/ group activity: 15min/ wrap up: 10 min.</p>			
Power points	PP-1: Program objectives			
Hand outs	HO-1 : Program Objectives			

Day: 1	Session: 1	Introduction & Training Objectives	Duration:2.00
Task for participants	To go through the program objectives and come up with any questions for clarification		
Reading reference	None		
Any other point	<p>Session should be fast paced and the atmosphere should be friendly, filled with a lot of laughter. Program objectives may also be placed earlier in the participants' folders.</p> <p>For writing down their expectations, the participants may be told to use only one expectation per card.</p> <p>Expectation cards may be spread on the floor for Delphi method and later put up on a board for references.</p>		

Day: 1	Session: 2	Overview of Disasters	Duration:1.30	
<p>Session Objectives:</p> <p>To understand about various disasters</p> <p>Types of disasters</p> <p>History of major disasters</p> <p>Forecasting and Warning1</p>				
Time	Learning Goals	Coverage	Methodology	Materials
30minutes	Understanding disasters	Recapitulating the experiences of a disasters	Group work (GW-1) followed by presentations Discussions in plenary	Flip Chart Paper Marker pens
10minutes		Consequences of a disaster	Exploration in plenary Lecture method	LCD projector PP-2
10minutes	Types of disasters Introductions	Natural disasters	Plenary Lecture method	PP-2
10minutes		Man-made disasters	Do	Do
10minutes	History of major disasters	Major disasters in India during the last decade	Plenary Lecture method	PP-2
10minutes		Focusing on major disasters in the state during the last decade	Exploration in plenary Lecture method	PP-2
10minutes	Forecasting & warning	Forecasting & warning in major disasters	Lecture method	PP-2
10minutes		Codes of warning		
<b>1Hr</b>	<b>B R E A K   F O R   L U N C H</b>			
Details of Group work	<p>GW-1: The participants may be divided into groups and given the topic for discussion "Remembering a disaster". They may bring out as many dimensions and details they like about any disaster they remember or, have the experience of.</p> <p>Time: Introduction:5min., Group work: 10min., Presentations: 10min., Discussions: 5min.</p>			
Power points	PP-2: Covering the related aspects of "Overview of Disasters in India"			

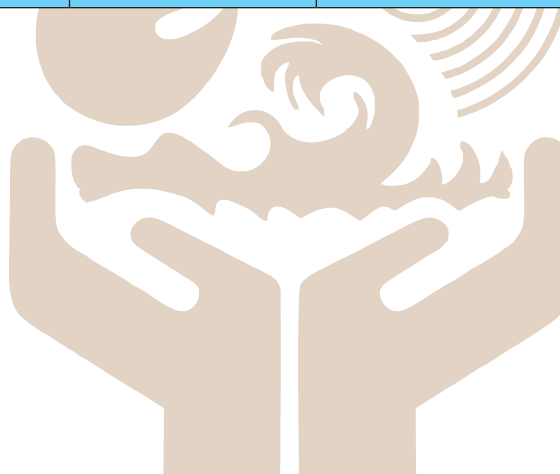
Day: 1	Session: 2	Overview of Disasters	Duration:1.30
Hand outs	None		
Task for participants	Gather more facts and figures about disasters from various sources.		
Reading reference	Resource Book, Chapter: I Available literature from various sources Internet		
Any other point	The facilitator may prepare one Power point presentation (PP-2) for the whole session Before showing the PP, the facilitator may ask relevant questions to probe the awareness of the participants as well as to raise their level of interest towards the point of discussion. The session needs rather fast handling of the subject, without too much scope for participatory deliberations If time permits, a short film on 'Disasters' may be shown in the beginning, followed by a quick discussion		

Day: 1	Session: 3	Need of Capacity Building in Disaster Preparedness and Mitigation	Duration:1.30	
Session Objectives:				
To understand the need of capacity building of the community for Disaster Preparedness				
To understand the approach to achieve the above				
To understand the crucial role of PRI bodies in the overall scheme				
To understand their own role as the core trainers				
Time	Learning Goals	Coverage	Methodology	Materials
20minutes	Need of capacity building of the community for Disaster Preparedness	Vulnerability Analysis	Group work (GW-2) followed by presentations Discussions in plenary	Flip Chart Paper Marker pens
10minutes		Need for reducing risk	Lecture method	Own notes
10minutes		Participation of the Community	Exploration in plenary Lecture method	Do
5minutes	The approach to Capacity Building to achieve the above	Preparing the Community towards Disaster Preparedness	Plenary Lecture method	Do
15minutes		Concept of Capacity Building Identification of Capacity Gaps	Exploration in plenary Lecture method	PP-3 HO-2
10minutes		Strategy for Capacity building of the Community	Do	Notes HO-2
10minutes	Role of PRI bodies in the overall scheme	Role of PRI bodies in Capacity Building	Exploration in plenary Lecture method	PP-3



Day: 1	Session: 3	Need of Capacity Building in Disaster Preparedness and Mitigation		Duration:1.30
5minutes	Role of the Core Trainers	Who are the Core Trainers? What is their role and responsibility?	Lecture method	PP-2
10minutes		Knowledge-Skill-Attitude needed to perform	Exploration in plenary Lecture method	PP-3
<b>10m</b>	<b>B R E A K F O R T E A</b>			
Details of Group work	<p>GW-2: The participants may be divided into different groups this time groups and given the topic for discussion "Who are at risk during a disaster?". They may be asked to bring out as many points as they like and make very brief presentations group-wise without repeating the points already made by previous groups.</p> <p>Time: Introduction:2m, Group work: 10m, Presentations: 5m, Discussions: 3m</p>			
Power points	PP-3: Covering the aspects : Concept of capacity Building, Role of PRI Bodies in Capacity Building, Knowledge-skill and attitude needed by the Core Trainers to perform their role			
Hand outs	HO-2: The three tier concept of capacity building can be represented in a diagram with explanations. The role and responsibility of each category of trainers should also be mentioned in brief.			
Task for participants	To reflect upon the contents of the hand-out and come up with any further suggestions.			
Reading reference	Resource Book, Chapters: I & II Available literature from various sources Internet			
Any other point	<p>The facilitator may prepare one Power point presentation (PP-3) as per suggestions given.</p> <p>The content of the session is largely open ended and it is possible to accommodate a fair amount of interaction. It is advisable to gather points from the participants before showing the Power point for enhancing their ownership of the program.</p> <p>The hand out may be distributed at the time of discussion about the 'strategy of capacity building' and can be referred to subsequently.</p> <p>The resource person may prepare necessary notes on the suggested points to guide the plenary.</p>			

Day: 1	Session: 4	Training cycle, Participatory Training & Role of the Trainer		Duration:1.30
<p>Session Objectives:</p> <p>To understand the elements of the 'Training Cycle'</p> <p>To understand the principles of participatory training</p>				
Time	Learning Goals	Coverage	Methodology	Materials



Day: 1	Session: 4	Training cycle, Participatory Training & Role of the Trainer		Duration:1.30
10minutes	Elements of the Training Cycle	Concept of the training cycle and its components	Lecture method	Flip Chart Paper Marker pens
5minutes		The Target Group	Do	PP-4
10minutes		Training Need Assessment	Do	Do
5minutes		Training Design	Do	Do
10minutes		Session Planning	Do	Do
10minutes		Dissemination of training	Do	Do
5minutes		Evaluation of training	Do	Do
5minutes	Principles of participatory training	Significance of participation for the community	Exploration in plenary Lecture method	Own notes
10minutes		How adults learn	Lecture method	PP-5
10minutes		Teacher-centered vs. Learner-centered learning	Do	Do
10minutes		Participatory training	Do	Do HO-3
B R E A K F O R T H E D A Y				
Details of Group work	None			
Power points	PP-4: Elements of the training cycle PP-5: How adults learn, Andragogy vs Pedagogy, Trainer centered vs learner centered learning, participatory trg			
Hand outs	O-3: Trainer centered vs learner centered learning, Principles of participatory trg.			
Task for participants	To reflect upon the contents of the hand-out and come up with any further ideas.			
Reading reference	Resource Book, Chapters: II & III Available literature from various sources Internet			
Any other points	<p>The facilitator may prepare one Power point presentation (PP-3) as per suggestions given.</p> <p>The content of the session is largely open ended and it is possible to accommodate a fair amount of interaction. It is advisable to gather points from the participants before showing the Power point for enhancing their ownership of the program.</p> <p>The hand out may be distributed at the time of discussion about the 'strategy of capacity building' and can be referred to subsequently.</p> <p>The resource person may prepare necessary notes on the suggested points to guide the plenary.</p> <p>A quick recap of the major learning points should be done before closing the day.</p>			

Day: 2	Session: 1	Current initiatives in Disaster Risk Reduction	Duration: 1.00
<b>Session Objectives:</b>			
To understand recent initiatives in preparedness and mitigation measures for various disasters in the country			
Time	Learning Goals	Coverage	Methodology
			Materials

Day: 2	Session: 1	Current initiatives in Disaster Risk Reduction		Duration: 1.00
5minutes	Recent initiatives in the mitigation measures of disasters in the country	Understanding the approach towards mitigation measures	Explorations in plenary	Notes
35minutes		Initiatives in mitigation of flood situations	GW-3 Presentations Lecture method	Flip chart paper Marker pens PP-5
5minutes		Initiatives in mitigation of drought situations	Lecture	PP-5
5minutes		Cyclone		PP-5
10minutes		Earthquake & other situations	Do	PP-5
10minutes	B R E A K F O R T E A			
Details of Group work	<p>GW-3: Groups may go for a discussion on "As the District Collector, what mitigation measures would you take for flood in your flood prone area?" Ask the groups to make presentations taking care not to allow repetitions. After a brief wrap up, explain the points using PP-5.</p> <p>Time: GD-15m, presentations and wrap up-10m, explaining about mitigation measures of flood-10m.</p>			
Power points	PP-5: The aspects of preparation for mitigation of flood in a flood prone district Recent Initiatives for mitigation of flood, drought, cyclone, earthquake and other disasters			
Hand outs	None			
Task for participants	None			
Reading reference	Resource Book, Chapters: I , IV & IX Available literature from various sources Internet			
Any other points	<p>The day should start with a quick recap of the major learning points of the previous day; a detailed report of all proceedings is indeed not necessary.</p> <p>This session needs sharp management of time, because the content is rather heavy and time available only 60 m.</p> <p>The group activity may take up longer time unless controlled properly.</p> <p>Many details on the subject are available in a number of places in the Resource book.</p> <p>The power point may be prepared keeping in mind that the time is rather limited.</p>			

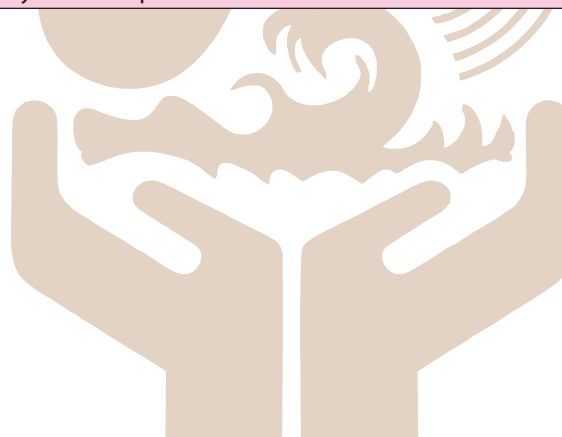
Day: 2	Session: 2	Role of PRI bodies in Disaster Mitigation		Duration: 2.00
<p>Session Objectives:</p> <p>To understand the role of PRI bodies in disaster mitigation</p> <p>To get an overall view of the Acts and Provisions in relation to DM</p> <p>To gain idea about the Govt. deptts connected to DM and their role and responsibilities.</p>				
Time	Learning Goals	Coverage	Methodology	Materials

Day: 2	Session: 2	Role of PRI bodies in Disaster Mitigation		Duration: 2.00
15minutes	Role of the PRI bodies in DM	Pivotal role of PRI in development	Small Group Discussion in the plenary Lecture method	LCD Projector PP-6
10minutes		Role of 3-tier PRI bodies in DM	Lecture method	
5minutes		Issues related to the role of PRI	Do	
30minutes	The basic roles of PRI	A Game on Role set of PRI	Game G-2	4 Title Cards 60 Activity cards PP-6 HO-4
5minutes		Role of PRI in Planning	Lecture method	
5minutes		In building capacities of the community	Do	
5minutes		In managing resources	Do	
5minutes		In maintaining coordination and linkages	Do	
5minutes	Acts and Provisions in connection with DM	The Disaster Management Act 2005	Lecture method	LCD Projector PP-7
5minutes		The State Relief Code ( for Orissa)	Do	
5minutes		Financial Provisions for DM	Do	
10minutes		Devolution of power to PRI	Do	
5minutes	Roles and responsibilities of the Govt. Deptts. In DM	Govt Departments connected to DM	Do	LCD Projector PP-8
5minutes		Roles and responsibilities of the Govt. Deptts.	Do	
5minutes		Role of the CEOs	Do	
1 Hr	B R E A K   F O R   L U N C H			
Details of Group work	Small groups of 3 or 4 neighboring participants may be asked to discuss "What role do the PRI bodies play in the development of the community?" Each group may gather 5 to 6 points quickly and share in the plenary. A list may be prepared on the board. This will be summed up in PP-6.			





Day: 2	Session: 2	Role of PRI bodies in Disaster Mitigation	Duration: 2.00
Games	<p>G-2: After a brief introduction about the roles PRI bodies are expected to play, 4 groups may be formed and each group leader is to be handed over a title card. These titles are: 'Planning', 'Capacity Building', 'Managing Resources' and 'Maintaining Coordination and Linkages'.</p> <p>They are to be told that there are 15 activities connected to each of these titles, each activity written down on a separate card, thus making a total of 60 cards. 15 appropriate cards are to be arranged in proper order under each title. However, the cards are now jumbled up and their order is not known to us. The groups are expected to help out in arranging the cards for us.</p> <p>Then out of a pack of 60 cards, 15 cards at random are to be handed over to each group, distributing them one by one to each member within the group, like it is done in case of playing cards. The members are not to show their cards to each other. They may, however, discuss what they have got. The group may then jointly decide upon which activity they need and which they do not, with respect to the title they hold. Groups now have to get rid of the cards which do not fit into their title and collect from others the appropriate cards to make up a list of 15 activities fitting to their title. They can exchange only equal number of cards with any other group. They are then expected to prioritise the activities in the best possible order and declare that they have completed the task. The faster group wins.</p> <p>(The list of 60 activities is in the Annexure. The cards are to be prepared and kept ready in advance)</p>		
Power points	<p>PP-6: Role of PRI bodies in local development, Role of the 3-tier PRI bodies in DM- a comparative picture, The basic roles of PRI in DM, including points other than the four already mentioned.</p> <p>PP-7: Acts and Provisions in connection with DM</p> <p>PP-8: The Govt. Deptts. and their roles in DM</p>		
Hand outs	HO-4: The Role set of the PRI body for DM		
Task for participants	To familiarize themselves with the relevant chapters in the Resource book		
Reading reference	Resource Book, Chapters: II& III Available study material from various sources Internet		
Any other points	<p>The basic objective of this session is to familiarize the participants with the Roles of PRI bodies for DM. The Acts &amp; Provisions and the Govt. Deptts need not be dealt in detail; these can be found in the Resource book.</p> <p>The Game G-2 should be followed up with a quick discussion on the learning derived from the exercise.</p> <p>A short film may be shown, if time permits. The film should be followed up with a fruitful discussion to draw learning points.</p> <p>The resource person may sense the level of enthusiasm among the participants and may decide to go for a quick energizer once in a while during the program at appropriate points.</p> <p>Time allocations for the sub-points have been indicated for a general guidance of the resource person. However, if time is exceeded at some point, the same should be made up appropriately at another point, without compromising on the quality of the input.</p>		



Day: 2	Session: 3	'Before-During & After' phases of the Disasters	Duration: 2.00		
<b>Session Objectives:</b>					
To understand the three phases of a disaster; namely, 'Before'-'During' and 'After'					
To learn about 'Preparedness activities'					
To learn about activities of the 'Response' phase					
To learn about the activities of the 'rehabilitation and Reconstruction' phase.					
Time	Learning Goals	Coverage	Methodology	Materials	
20minutes	The phases of a disaster	The advent of a disaster	Case study	Sufficient no. of copies of the Case Study	
10minutes		The pre-disaster situation	Lecture		PP-9
		Situation during a disaster	Do		
		After the disaster	Do		
5minutes	Activities during the Pre-warning phase of Preparedness	Culture of Preparedness	Explorations in plenary Brainstorming	Notes	
10minutes		DM Planning	Exploration in plenary Lecture method	LCD projector PP-9 Flip chart papers Marker pens  PP-9	
30minutes		Awareness Generation	Group Work GW-4 Summing up with Lecture method		
5minutes		Disaster Mitigation Teams	Lecture method		
10minutes		Mock Drills, First Aid and Search & Rescue tips	Do		
10minutes		Activities during the Post-warning phase	Dissemination of Warning		Lecture method
	Preparation for Evacuation		Do		
	Arrangements for food, drinking water & medical support		Do		
	Coordination and other activities		Do		
10minutes	Activities during the Response phase	Management of the Control room	Lecture method	PP-9	
		Shelter management	Lecture method		
		Search, rescue and medical aid	Do		
		Sanitation and hygiene	Do		
		Coordination and other activities	Do		
10minutes	Activities during the Rehabilitation and reconstruction phase	Rehabilitation activities	Do	PP-9 HO-5	
		Reconstruction activities	Do		
10 minutes	B R E A K   F O R   T E A				
Details of Group work	GW-4: Groups to be formed and asked to deliberate on the issue "What would be your strategy to generate awareness among the people regarding community preparedness for disasters?" Time: GD-15min, presentations-10min, wrap up with PP-9 -10min				

Day: 2	Session: 3	'Before-During & After' phases of the Disasters	Duration: 2.00
Games	None		
Power points	PP-9: Activities in the three phases of DM as per the session plan		
Hand outs	HO-5: A brief list of activities in the three phases of disaster mitigation measures		
Task for participants	The participants may be asked to prepare small skits and songs etc on awareness generation and present it the next morning in the plenary		
Reading reference	Resource Book, Chapters: V, VI & VII Available study material from various sources Internet		
Any other points	<p>An appropriate Case study to show the activities of a PRI member during the onset of a disaster is to be administered, followed by a brief discussion to draw learning points.</p> <p>Time permitting, a short film on a relevant subject may be shown and learning points drawn from it with a quick discussion.</p> <p>Learning points are always to be enlisted on the board for the interested participants to note down.</p> <p>The hand out HO-5 may be given at the end along with a quick recap of the entire session.</p>		

Day: 2	Session: 4	The process of CBDP	Duration: 1 .00	
<b>Session Objectives:</b>				
To understand the concept and components of Community Based Disaster Preparedness				
To understand the processes and activities involved in CBDP				
Time	Learning Goals	Coverage	Methodology	Materials
10minutes	The components	The concept of CBDP	Lecture method	LCD Projector PP-10
5minutes		Components of CBDP	Do	
5minutes		Status of CBDP in India	Do	
10minutes	Process of CBDP	Processes involved in CBDP	Do	PP-10 HO-6
5minutes	Scope of activities	Mapping exercises	Do	PP-10
10minutes		DM Teams and their roles	Do	
5minutes		Capacity building	Do	
5minutes		Creating and managing community funds	Do	
5minutes		Linkages between PRI- CBOs- NGOs	Do	
B R E A K   F O R   T H E   D A Y				
Details of Group work	None			
Games	None			
Power points	PP-10: Deetails of CBDP as per Session Plan			
Hand outs	HO-6: Process of BDP...(the flow sheet)			
Task for participants	None			

<b>Day: 2</b>	<b>Session: 4</b>	<b>The process of CBDP</b>	<b>Duration: 1 .00</b>
Reading reference	Resource Book, Chapter: IV Available study material from various sources Internet		
Any other points	This is basically a session of knowledge-inputs; it has to go at a fast pace.Participants are to be led into the Resource book during the session One energizer may be used half way through the session A recap for the day should be done before closing for the day		

<b>Day: 3</b>	<b>Session: 1</b>	<b>Basic PRA Techniques for Planning of CBDP</b>	<b>Duration: 2.00</b>	
<b>Session Objectives:</b>				
To understand the approach to creating a village plan for DM To learn about Participatory Rural Appraisal To gain familiarity with a few basic tools of PRA				
Time	Learning Goals	Coverage	Methodology	Materials
20minutes	The Village Plan for DM	Understanding what is a village plan	Short film on Vill. Plan Discussion in plenary	Short film on Village Planning PP-11
10minutes		Components of a village plan	Lecture method	
5minutes	Participatory Rural Appraisal	PRA as a process	Do	PP-11
5minutes		Applications and uses of PRA	Do	
5minutes		Benefits	Do	
5minutes		Basic principles and approaches	Do	
5minutes		PRA as a tool for DM planning	Do	
5minutes	Overview of basic tools and techniques of PRA	Overall techniques of PRA	Do	Models of various methods Digital images of mapping process PP-11
10minutes		Maps and Models	Showing images Lecture	
15minutes		Transect Walk	Take a walk Discussion Lecture method	
5minutes		Venn Diagram	Lecture method	
5minutes		Time line	Do	
5minutes		Seasonality Calendar	Do	
5minutes		Ranking and Scoring	Do	PP-11 HO-6
5minutes		Participatory Problem Analysis and other tools	Do	
10minutes	Overcoming the challenges	Mistakes, Challenges and Tips for the users	Do	PP-11
10minutes	B R E A K F O R T E A			
Details of Group work	None			

Day: 3	Session: 1	Basic PRA Techniques for Planning of CBDP	Duration: 2.00
Games	None		
Power points	PP-11: The PRA process, Basic principles and approaches to PRA, Tools of PRA, Challenges and tips		
Hand outs	HO-6: Principles and practice of PRA for DM		
Task for participants	To go through the Hand out and raise points for discussion at an appropriate time		
Reading reference	Resource Book, Chapter: X Available study material from various sources Internet		
Any other points	<p>Film show must follow brief discussion on what the participants have seen and learnt.</p> <p>A short transect walk of 10minutes may be undertaken in the surrounding area of the venue with a certain purpose like say, 'to study the sanitation in and around the place', or any other subject convenient to all.</p> <p>During the transect walk participants may be encouraged to collect a few short interviews on the chosen purpose with persons available near the venue.</p> <p>Suitable photographs or digital images may be arranged in advance for show and discussion.</p> <p>The tools are to be explained in brief.</p> <p>For better understanding, PP-11 should include pictures or models showing the use of some toolsof PRA like the Venn diagram, Seasonality analysis, Time line or Ranking and Scoring etc.</p> <p>A brainstorming may be done in the plenary to think of points on 'Use of PRA for DM'.</p>		

Day: 3	Session: 2	Designing a Training Module for PRI bodies	Duration: 1.30	
<b>Session Objectives:</b>				
To understand the principles of training design and session planning				
To do the need assessment of the target group, in this case the PRI bodies				
To develop skill for designing a training module for the target group				
To develop skill for designing the sessions for the above training module				
Time	Learning Goals	Coverage	Methodology	Materials
5minutes	Training design and session planning	Recap of Day-1, Session-4	Lecture method	HO-7
5minutes		Format for session design	Show a format and explain	
10minutes	Designing a training program on DM for PRI members	Assessing the learning need of the target group	Exploring in plenary Lecture method	Notes
		Sequencing& prioritising the topics and sub topics		
		Finalising the duration of the training program		
		Setting objectives of the training program	Showing them a few training objectives Brain storming	Notes HO-7

Day: 3	Session: 2	Designing a Training Module for PRI bodies		Duration: 1.30
70minutes	Working out a training design along with session plan in a chart	Drawing the format of the chart	Group Work GW-6	Large brown papers Marker pens Long scales
		Writing down the topics and sub-topics with time frame		
		Deciding upon methodology, materials, tools and resource persons etc	Group presentations Discussions	
		Presentation of training designs		
1 Hr	B R E A K F O R L U N C H			
Details of Group work	<p>GW-6: The groups may be formed on the basis of geographical proximity of participants for better sharing. The groups will discuss and prepare the Training design as explained. After this they shall present their group charts.</p> <p>Time: Gr. work - 50min, presentations - 10min, discussions – 5min</p>			
Games	None			
Power points	None			
Hand outs	<p>HO-7: The format for Session Planning, which may be enlarged on the brown paper by the groups.</p> <p>Training objectives of the PRI training program</p>			
Task for participants	To assess the availability of resource materials for the various sessions they design.			
Reading reference	<p>Various chapters of the Resource Book</p> <p>“Every Trainer’s Handbook” by Devendra Agochiya</p> <p>Available study material from various sources</p> <p>Internet</p>			
Any other points	<p>It has to be impressed upon the participants that the designs they make are going to be used by them for field training.</p> <p>While discussing about the possible duration of the program, see if the participants find a 4-days’ period reasonable, striking a balance between their ‘learning need’ and ‘availability’.</p> <p>The participants are expected to have a number of questions during their session planning exercise. They will need technical help at this point.</p> <p>The groups will need constant follow up and should be told to speed up. They should start writing down the chart as they begin to discuss.</p> <p>They are to be reminded about the variety of training methods and tools they are going to use.</p> <p>The charts should be displayed properly for all to see during the lunch break.</p>			

Day: 3	Session: 3	Finalisation of the PRI Module and the Tool Kit		Duration: 1.30
<b>Session Objectives:</b>				
To finalise and adopt a training module for the sensitisation of PRI members				
To finalise the training methods and tools for the final module				
To clarify any doubts in the minds of the participants about the finalized module				
Time	Learning Goals	Coverage	Methodology	Materials

Day: 3	Session: 3	Finalisation of the PRI Module and the Tool Kit		Duration: 1.30
30minutes	Presentation of a pre-designed 3-Day module by the facilitator	Rationale of the pre-designed module	Interactions in plenary	PP-13
		Presentation of the module	Lecture method	
		Discussion on resource materials	Interaction	
		Discussion about the salient features	Do	
20minutes	Training methods and materials used in the proposed module	Training methods used so far in the current training program	Do	PP-13
		Training methods used in the proposed module	Lecture	
		Clarifications		
40minutes	Training tool kit proposed to be used in the module	Short films	Demonstration and explanation on how to use the same	Short films as available on relevant topics
		Flip book on Search and rescue	Do	As available
		Flip book on Mock Drill	Do	Do
		Booklet on First Aid	Do	Do
		Posters on Community Health, Gender sensitisation, Shelter management and Disaster precautions etc	Do	Do
		Information booklet on Power devolution to PRI	Do	Do
		Information booklet on some important Govt. schemes	Do	Do
		Structured formats for conducting mock PRA	Do	Pre-designed formats
Clarifications		HO-7		
10minutes	B R E A K F O R T E A			
Details of Group work	None			
Games	None			
Power points	PP-13: The pre-designed 4-Day Module on sensitisation of PRI members on DM			
Hand outs	HO-7: The 4-Day Module and the list of the Tool Kit			
Task for participants	To go through the module, compare it with the one they had designed and to come up with any suggestions for improvement. Familiarise themselves with the tool kit Go through the contents of the flip books and information booklets			
Reading reference	None			

Day: 3	Session: 3	Finalisation of the PRI Module and the Tool Kit	Duration: 1.30
Any other points	<p>The idea of a pre-designed module may have to be discussed tactfully, but getting at a common module would necessarily have to converge on something like this. Therefore this pre-designed module is an attempt at saving time.</p> <p>It is advisable to pretest the proposed module with a live audience in advance, before bringing it up in the program.</p> <p>The different elements of the tool kit will have to be arranged and kept ready for demonstration. The demo is meant to give the participants a grasp of the tool kit. They are to be told how to use the same during the actual training program that they are going to handle later.</p> <p>They are to be told that they are going to practice the use of these tools the very next day during the practical sessions.</p>		

Day: 3	Session: 4	Facilitation Skill for the 4-day Module	Duration: 1.30	
<b>Session Objectives:</b>				
To understand the techniques of making a presentation				
To develop the skill of preparing for making a presentation				
To understand individual roles for the next day's exercise				
Time	Learning Goals	Coverage	Methodology	Materials
15minutes	Preparing for making a presentation	Planning for a presentation	Lecture with demonstration	PP-14
		Keeping the needed materials ready		
		Ensuring the basic minimum logistics		
30minutes	Facilitating the sessions	Creating and maintaining a participative environment	Do	PP-14
		Using the training methods properly		
		Some basic points for making a presentation		
		Managing time		
		Asking and answering questions		
15minutes	Some useful tips	Getting along with people	Do	PP-14 HO-8
		Body Language		
		Dealing with problem situations		
		Training in village environment		
30minutes	Discussion on the next day's practical work	Grouping of participants	Discussion	PP-13 Flip chart paper Marker pen
		Division of sessions among participants	Discussion and keeping on record	
		Tips on preparation	Lecture method	
		Setting the ground rules	Discussion	
		Arrangement of feed back	Do	



Day: 3	Session: 4	Facilitation Skill for the 4-day Module	Duration: 1.30
BREAK FOR THE DAY			
Details of Group work	None		
Games	None		
Power points	PP-14: Techniques of making a presentation		
Hand outs	HO-8: Making an effective presentation		
Task for participants	To prepare for their respective sessions for the next day		
Reading reference	"Delivering Effective Training" by T.W. Goad "Introduction to Training" by Penny Hackett "Every Trainer's Handbook" by Devendra Agochiya "Basic Training for Trainers: A Handbook for new Trainers" by Gary Kroehnert Available study material from various sources Internet		
Any other points	The participants are to be clearly told who is going to handle which session Time plan for the presentations is to be decided The methodology and use of tools in respective sessions is also to be decided The new trainers must avail the opportunity to gain practice The presenters will get a feed back both from other participants as well as the facilitator. If a video camera can be arranged, same can also be viewed for self analysis. Urge them to prepare well for the next day's performance and bring about an atmosphere of healthy competition among them. Tool kit, planned to be used on the next day, should be handed over to them at this point of time.		

Day: 4	Session: 1	Presentations by participants and Feedback	Duration: 2.00
<b>Session Objectives:</b>			
To allow the participants to gain practice on presentation skill To cover a few important sessions of the 4-day PRI training program To come up with practical problems with a view to solving them To give the participants a constructive feed back for improving upon their performance as facilitators			
Time	Learning Goals	Coverage	Methodology
30minutes	Setting the ground rules	Recap of learning points as well as individual assignments fixed on the previous day	Interactions Reference to flip chart
		Timing of presentations	Interactions Lecture
		Role of observers	
		Feedback system	
			Materials
			Recorded chart  Video Camera with Cameraman TV set

Day: 4	Session: 1	Presentations by participants and Feedback		Duration: 2.00
30minutes	Presentation-1 by participants	Presentation either individually or in small group	Observation Noting down	Materials as need for the presentation
15minutes	Feedback	Feedback from participants	Facilitation	Own notes
		Feedback from the presenter(s)	Facilitation	
		Feedback from facilitator(s)	From own notes	
30minutes	Presentation-2 by participants	Presentation either individually or in small group	Observation Noting down	Materials as need for the presentation
15minutes	Feedback	Feedback from participants	Facilitation	Own notes
		Feedback from the presenter(s)	Facilitation	
		Feedback from facilitator(s)	From own notes	
10minutes	B R E A K      F O R      T E A			
Details of Group work	None			
Games	None			
Power points	None			
Hand outs	None			
Task for participants	To make good quality presentations Participate in the feedback in a constructive manner			
Reading reference	None			
Any other points	<p>Before beginning the presentations state that during the presentations the other participants will have three roles to play:</p> <ul style="list-style-type: none"> <li>o First, they shall behave like the target group (PRI members) and react or put questions accordingly without obstructing the proceedings.</li> <li>o Secondly, they will act as observers and present their observations objectively in brief. For this they may have to make notes during others' presentations.</li> <li>o Third, as learners they will all try to learn from the whole exercise.</li> </ul> <p>Before taking feedback from participants suggest that they must first share the good points of the presenter and then come to what could have been done better and improvements necessary. Tell them to be specific and not judgmental.</p> <p>The Cameraman is to be instructed to cover the various aspects of each presentation. This may include- The introduction, Body language, Eye contact, Use of materials, Reaction of participants and the conclusion.</p> <p>Video feedback may be seen by the participants in play-cum-fast forward mode to save time.</p> <p>More presentations may be accommodated depending on time taken on presentations and feedback</p> <p>Facilitator may create own structured format for noting down observations and giving feedback</p>			

Day: 4	Session: 2	Presentations by participants and Feedback		Duration: 1.30
<b>Session Objectives:</b>				
To allow the participants to gain practice on presentation skill				
To cover a few important sessions of the 4-day PRI training program				
To come up with practical problems with a view to solving them				
To give the participants a constructive feed back for improving upon their performance as facilitators				
Time	Learning Goals	Coverage	Methodology	Materials
30minutes	Presentation-3 by participants	Presentation either individually or in small group	Observation Noting down	Materials as need for the presentation
15minutes	Feedback	Feedback from participants	Facilitation	Own notes
		Feedback from the presenter(s)	Facilitation	
		Feedback from facilitator(s)	From own notes	
30minutes	Presentation-4 by participants	Presentation either individually or in small group	Observation Noting down	Materials as need for the presentation
15minutes	Feedback	Feedback from participants	Facilitation	Own notes
		Feedback from the presenter(s)	Facilitation	
		Feedback from facilitator(s)	From own notes	
10minutes	B R E A K   F O R   T E A			
Details of Group work	None			
Games	None			
Power points	None			
Hand outs	None			
Task for participants	To make good quality presentations Participate in the feedback in a constructive manner			
Reading reference	None			
Any other points	Video feedback may be seen by the participants in play-cum-fast forward mode to save time. More presentations may be accommodated depending on time taken on presentations and feedback			

Day: 4	Session: 3	Presentations by participants and Feedback		Duration: 1.30
<b>Session Objectives:</b>				
To allow the participants to gain practice on presentation skill				
To cover a few important sessions of the 4-day PRI training program				
To come up with practical problems with a view to solving them				
To give the participants a constructive feed back for improving upon their performance as facilitators				
Time	Learning Goals	Coverage	Methodology	Materials
30minutes	Presentation-3 by participants	Presentation either individually or in small group	Observation Noting down	Materials as need for the presentation

Day: 4	Session: 3	Presentations by participants and Feedback		Duration: 1.30
15minutes	Feedback	Feedback from participants	Facilitation	Own notes
		Feedback from the presenter(s)	Facilitation	
		Feedback from facilitator(s)	From own notes	
30minutes	Presentation-4 by participants	Presentation either individually or in small group	Observation Noting down	Materials as need for the presentation
15minutes	Feedback	Feedback from participants	Facilitation	Own notes
		Feedback from the presenter(s)	Facilitation	
		Feedback from facilitator(s)	From own notes	
B R E A K   F O R   T H E   D A Y				
Details of Group work	None			
Games	None			
Power points	None			
Hand outs	None			
Task for participants	To make good quality presentations Participate in the feedback in a constructive manner			
Reading reference	None			
Any other points	<p>Video feedback may be seen by the participants in play-cum-fast forward mode to save time.</p> <p>More presentations may be accommodated depending on time taken on presentations and feedback</p> <p>If all participants could not get an opportunity to make presentations, then tell them to practice on their own in front of co-participants later in the evening.</p> <p>Alternately, after every one gets a hang of the presentations, an additional venue may be managed to run parallel presentations; that will give opportunity to more participants, But the facilitator needs to be on the toes to monitor both the places.</p> <p>A recap of major learning points should be made before closing</p>			

## DAY-5

Day: 5	Session: 1	Soft Skills		Duration: 2.00
<p>Session Objectives:</p> <p>To understand the various skills needed by the PRI members to enhance their performance</p> <p>To gain sensitivity about Gender awareness and the role of women in DM</p> <p>To appreciate the effectiveness of good communication</p> <p>To understand the approach to voluntarism</p>				
Time	Learning Goals	Coverage	Methodology	Materials
5minutes	Skills needed by PRI members to enhance performance	Skills in dealing with people	Brainstorming Lecture method	

Day: 5	Session: 1	Soft Skills		Duration: 2.00
10minutes	Communication	Understanding basics of Communication	Lecture method Game G-3	PP-15 HO-8
10minutes		Communication Strategy for Community Awareness on DM	Lecture	
5minutes		Mediums of Communication	Brainstorming Lecture	
15minutes	Gender Awareness	Understanding basics of gender sensitivity	Lecture method Questionnaire	PP-16 HO-9
10minutes		Gender approach in DM	Lecture	
15minutes	Voluntarism	Meaning of Voluntarism	Interactions Lecture	PP-17 HO-10
		Voluntarism in DM	Lecture	
10minutes	Other skills	Leadership	Lecture method	PP-18
20minutes		Interpersonal Effectiveness	Role Play RP-1	Role Set
10minutes		Monitoring & Evaluation	Lecture	HO-11
10minutes		Documentation	Do	
10minutes	B R E A K F O R T E A			
Details of Group work	None			
Games	<p>G-3: It's a relay game where participants pass on a given message through whispering in the neighbour's ear. The message is usually found distorted at the end of the game with the conclusion that proper communication means proper listening, understanding and conveying. It is usually followed by a short presentation on developing good listening skills.</p> <p>Time: approx. 10m</p>			
Role Play	<p>RP-1: Role play will involve three characters...a rather ill behaved PRI representative, a village volunteer, a well behaved PRI representative. In the first part an unpleasant repercussion takes place between the first two around the theme of a village mapping process chiefly because of the overbearing nature of the PRI member. In the second part the PRI representative behaves with understanding and cooperation with the volunteer. The difference is visible in the desired activity taking place. The details of the roles are to be made up on the spot. Alternately, a 'role-set' may be pre-written for the purpose. The role play is to be followed up with discussions on learning points. Additional points may be discussed using PP-18.</p> <p>Time : Approx. 10m</p>			
Power points	PP-15: Elements of communication, Communication strategy in DM, IEC in DM,			
Hand outs	HO-8: Communication HO-9: Gender Awareness HO-10: Voluntarism HO-11: Leadership, Interpersonal Effectiveness, Monitoring & Evaluation, Documentation			
Task for participants	To study the Hand outs and plan for their inclusion in the PRI training module			
Reading reference	Resource Book, Chapter: X Available study material from various sources Internet			

Day: 5	Session: 1	Soft Skills	Duration: 2.00
Any other points	<p>The idea behind this session is to give the participants an overview of some of the soft skills that will have to be transferred to their target group of PRI members.</p> <p>Since time is extremely limited to get into any detailed explorations, only a brief explanation on the aspects will have to be settled for. The participants may, however, find details from the handouts as well as other available literature.</p> <p>For the 'Distortion exercise' a simple message of some two lines may be given to the first person at one end, which should be relayed onwards by word of mouth. The same may be compared to the final version coming out at the other end.</p> <p>Suitable persons may be chosen from among the participants for an effective role play.</p>		

Day: 5	Session: 2	Experience Sharing & Open Session	Duration: 1.30	
<b>Session Objectives:</b>				
To interact with an invited person of long experience in the field of DM				
To clarify any unresolved issues				
Time	Learning Goals	Coverage	Methodology	Materials
5minutes	To listen to a person of wider knowledge and experience in the field of DM	Introduction about the invited person/ persons	Talk	
45minutes		Talk by the invited person/ persons	Interactions	
20minutes	Interactions	Question and answer session with the invited person	Do	
20minutes	Clarification of unresolved issues	Discussion on unresolved issues	Do	
1 Hr	B R E A K   F O R   L U N C H			
Details of Group work	None			
Games	Do			
Power points	Do			
Hand outs	None, unless the invited person brings in any handout.			
Task for participants	To raise necessary issues			
Reading reference	None			
Any other points	<p>The invited person/ persons will have to be introduced to the participants, for which his/ her bio data should be prepared in advance.</p> <p>The facilitator may have to act as the moderator during the interactions. The session will need careful facilitation so as to give adequate space to the speaker on one hand and not to overshoot the time on the other.</p> <p>Participants' concerns are to be taken care of with sensitivity.</p>			

Day: 5	Session: 3	Action Planning and Program Evaluation	Duration: 1.00	
<b>Session Objectives:</b>				
To prepare an action plan for further growth as a trainer as well as for taking up training assignments To evaluate the training program in a structured format				
Time	Learning Goals	Coverage	Methodology	Materials
20minutes	To set individual action plan for further learning	Action plan for self-development as a trainer	Analysis of the task and filling up of the given format	Structured format
10minutes	To set action plan for conducting training programs for PRI members	Deciding upon parameters like location, time frame, resource materials, other help and support required, etc	Analysis of the task and filling up of the given format	Structured format
30minutes	Program Evaluation	Evaluation of the 5-Day program for its effectiveness	Analysis of the task and filling up of the given format	Structured format
10minutes	B R E A K   F O R   T E A			
Details of Group work	None			
Games	None			
Power points	None			
Hand outs	Structured formats for filling up by participants.			
Task for participants	To analyse the given format and respond to it.			
Reading reference	None			
Any other points	Explain that there are two formats to be filled, one of which can be carried back by the participants. Explain the formats one by one and distribute. Allocate time. Collect. Clarify any points raised by the participants.			

Day: 5	Session: 4	Valediction and Closing of the Program	Duration: 0.45	
<b>Session Objectives:</b>				
To facilitate a sharing of feelings by the participants To request the guest ( if any) to share a thought To distribute any certificates, photographs or souvenirs Closing remarks by the facilitator/ s To declare the program as closed				
Time	Learning Goals	Coverage	Methodology	Materials
15minutes	Sharing Action Plans	The general trend of further learning points	Quick summary by Facilitator/ s	Filled up formats
15minutes	Personal reflections on the program	Sharing of personal reflections on the program by the participants	Verbal sharing by Volunteers	Filled up formats

Day: 5	Session: 4	Valediction and Closing of the Program		Duration: 0.45
5minutes	Distribution of Certificates	Distribution		Certificates Photographs HO-9
15minutes	Address by Guest		Talk	
10minutes	Closing remarks by facilitator/ s	Meeting Program Objectives Points in the Parking Lot Networking  Periodic program review  Thanking participants for their active participation and feed back  Wishing them good luck	Talk	
E N D O F P R G R A M				
Details of Group work	None			
Games	None			
Power points	None			
Hand outs	HO-9: Addresses of participants and facilitator/ s			
Task for participants	To fulfill what they have committed			
Reading reference	As already suggested			
Any other points	<p>The Certificates are to be made ready earlier with due signatures.</p> <p>Photographs, if any, can be given out along with the certificates.</p> <p>A list of addresses of all the participants and facilitators shall be kept ready for sharing at this time.</p> <p>The facilitator shall ask if all the program objectives have been met. If any point is in the Parking Lot, it can be discussed at this time.</p> <p>Stress should be laid on further strengthening of knowledge, skill and attitude as a trainer.</p> <p>A possibility of forming a network of the trainers may be discussed and a convener may be nominated.</p> <p>After running the program for a few cycles, it will need to be reviewed and updated. A tentative date for the same may be agreed upon.</p>			



E N D O F P R O G R A M



