

Capacity Development

An Overview

Effective disaster management requires trained manpower to deal with complex situations effectively and speedily to reduce the impact of disaster on human life and property. It is necessary to continuously undertake measures to build capacity amongst those who are handling disaster prevention, mitigation, preparedness, response, reconstruction and also creating awareness amongst people. Therefore, capacity building needs to encompass all resources available within a community, society and organisation to reduce the level of risk or the effects of a disaster.

Definition

UNDP describes 'capacity building' as the creation of an enabling environment with appropriate policy and legal frameworks, institutional development, including community participation (of women in particular), human resource development and strengthening of managerial systems. It adds that capacity building is a long-term, continuing process, in which all stakeholders participate (ministries, local authorities, non-governmental organisations and water user association's professional associations, academics and others). Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity may also be described as capability.

Capacity building is much more than training and includes the following:

- Human resource development, the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively,
- Organisational development, the elaboration of management structures, processes and procedures, not only within organisations but also the management of relationships between the different organisations and sectors (public, private and community),
- Institutional and legal framework development, making legal and regulatory changes to enable organisations, institutions and agencies at all levels and in all sectors to enhance their capacities.

Following are considered as vital components of the capacity development:

- I. **Training:** It is a learning process that involves the acquisition of knowledge, sharpening of skills, concepts, rules, or change of attitude and behavior to enhance the performance of individuals associated with different departments and institutions.
- II. **Education:** Amidst changes of the past decades, school education sector, the most discussed topic of national importance, is planning for more contextual, practical and application oriented curriculum for students at different levels of

schooling.

- III. **Research:** Research is an organised and systematic way of finding answers to questions. Systematic because there are certain things in the research process which are always done in order to get most accurate result.
- IV. **Awareness:** Awareness is generally defined as knowledge created through interaction between an agent and its environment. It cannot be simply referred to as “knowing what is going on.” This concept of awareness involves state of knowledge as well as dynamic processes of perception and action.

Approach

The National Policy on Disaster Management (NPDM) describes its approach to capacity development. A strategic approach to capacity development can be addressed effectively only with the active and enthusiastic participation of the stakeholders. This process comprises of awareness generation, education, training, research and development (R&D) etc. It further addresses to put in place an appropriate institutional framework, management systems and allocation of resources for efficient prevention and handling of disasters. The approach to capacity development includes-

- According priority to training for developing community based DM systems for their specific needs in view of the regional diversities and multi-hazard vulnerabilities,
- Conceptualisation of community based DM systems at the national level through a consultative process involving the States and other stakeholders with the state and local level authorities in charge of implementation,
- Identification of knowledge-based institutions with proven performance,
- Promotion of International and Regional cooperation,
- Adoption of traditional and global best practices and technologies,
- Laying emphasis on table-top exercises, simulations, mock drills and development of skills to test the plans,
- Capacity analysis of different disaster responder groups at State, District, and local levels.

NPDM has further elaborated on national priorities, institutional capacity development, training of communities, professional technical education, DM education in schools, training of artisans, training of other groups and licensing and certification. Besides NPDM guidelines issued by NDMA also lay emphasis on capacity development.

Capacity development in India: A realistic National Capacity Development Programme, commensurate with the intensity and extent of the hazard in India needs to be evolved and implemented, keeping in view the available resources. This

programme of resource enhancement should encompass all institutions, organizations and individuals that have a role in any part of the disaster management cycle.

Capacity gaps in disaster management: To mitigate the impact of disasters, there is a need to work collectively through multidimensional channels combining the efforts, resources and expertise of the government, non- governmental organisations and civil societies. Managing such incidents holistically is a highly specialised and skilled job which cannot be approached in an ad hoc manner. Disaster Management comprises of multi sectoral issues and accordingly calls for all sectors that play pivotal role in managing exigencies to develop their human resource capacity accordingly. There seems to exist a wide gap in the knowledge, skill, and attitude of the disaster managers for efficiently managing emergency situations particularly at local and state level where according to one study made by NIDM, Capacity-Risk ratio is remarkably low. To bridge this gap, it is important to have specific capacity development plans and strategies.

Target group: In the field of capacity development, priority is to be given to training of DM officials, functionaries, trainers and elected representatives and community representatives. Due importance requires to be given to DM training and orientation of professionals like doctors, engineers and architects apart from those engaged in response and relief. DM training further requires to be included in curricula of educational institutions at all levels of schooling and should include practical instructions as well.

Realizing the importance of Capacity Development of stakeholders in Disaster Management, NIDM has been given the task of preparing National Human Resource and Capacity Development plan, which is at the advanced stage of its formulation. The first draft has been prepared and presented before the MHA. NIDM is finalizing the plan after holding the discussion with MHA on its first draft.

Institutions for Capacity Development

National Institute of Disaster Management (NIDM)

Background: In the backdrop of the International Decade for Natural Disaster Reduction (IDNDR), a National Centre for Disaster Management was established at IIPA in 1995. The Centre was upgraded and designated as the National Institute of Disaster Management (NIDM) on 16th October 2003 and it has now achieved the status of a statutory organization under the National Disaster Management Act, 2005. Section 42 of the Disaster Management Act, 2005 entrusts the institute with various responsibilities, namely to develop training modules, undertake research and documentation in disaster management, organize training programmes, undertake and organize study courses, conferences, lectures and seminars to promote and institutionalize disaster management, undertake and provide for publication of journals, research papers and books. Located centrally at the Indraprastha Estate on the Mahatma Gandhi Road, within the campus of the IIPA, the institute is equipped

with state-of-the-art facilities of training and research on disaster management. It has training and conference halls, well stocked library, GIS laboratory, computer centre, and video conferencing facility. The institute also provides boarding and lodging facilities for participants during its programmes.

Training Programmes of NIDM: The different formats in which training is imparted by NIDM include:

- I. **Face-to-face training:** NIDM conducts both in campus and off-campus training programmes. In-campus programmes are conducted in the premises of the Institute while the off-campus programmes are conducted mostly in state capitals, at the premises of the Administrative Training Institutes. It conducts as many as 92 training programmes on diversified themes of disaster management, with many new programmes added continually. The participants of these programmes are usually middle and senior level government officers nominated by the state governments and concerned ministries and departments of the Government of India. The programmes constitute class room lectures and presentations, field visits, group exercises, panel discussions etc. It does not charge any course fees. Boarding and lodging arrangements are also made free of charge. During the year 2010-11, the institute has conducted 84 training programmes, which have been attended by 2142 participants.
- II. **Web- based training:** In collaboration with World Bank Institute, Washington, the Institute conducts on-line training programmes on basic and specialised subjects on disaster management. The courses are open to all interested persons with a token charge of ` 1500 for the basic course of one and half months and ` 1000 for specialised courses of one month duration to cover the cost of reading materials, postage etc. Every participant is expected to take part in on-line discussions. The successful candidates are awarded certificates signed jointly by the NIDM and WBI. In 2010-11, three online training programmes on Comprehensive Disaster Risk Management Framework and four specialised online programmes on Community Based Disaster Risk Management, Climate Change and Disaster Management, Risk Sensitive Land Use Planning and Safe Cities have been organized. A total of over 438 participants attended these online courses. The Institute has also started the process of customisation of eight modules to Indian context.
- III. **Satellite based training:** The Institute has collaborated with Administrative Training Institutes, Bhopal and Mysore to conduct satellite based training programmes through the ISRO community centres that have satellite based one-way video and two-way audio communication system. More than hundred centres join the programme simultaneously in which thousands of grassroots level functionaries take part. The Institute is extending

the programmes in number of other states where similar facilities have been seen set up.

- IV. **Self study courses:** The Institute is in the process of launching web based training courses on various themes such as basics of disaster management, earthquake, flood, cyclone, disaster management for civil defence volunteers, public health workers, school children and community preparedness, which anyone from anywhere at any time can log on. The aim of such courses is to create interest and raise the level of awareness of people regarding disaster management and in some cases supplement the existing class room based training programmes.
- V. **India Disaster Management Congress:** NIDM has taken the lead in organizing the India Disaster Management Congress (IDMC) on the pattern of India Science Congress to bring together scientists, scholars and practitioners from diverse disciplines on the same platform. The first such Congress was held in November 2006 which was inaugurated by Hon'ble Prime Minister of India. The Institute organized the Second India Disaster Management Congress in November 2009. The congress had twenty six thematic sessions around twelve different thematic clusters where over 300 technical papers were presented. Hon'ble Shri APJ Abdul Kalam, Former President of India graced the occasion and delivered the valedictory address.
- VI. **Capacity Building Programme for Engineers and Architects in Earthquake Risk Management:** Ministry of Home Affairs initiated this twin programmes for capacity building of engineers (National Programme for Capacity Building of Engineers in Earthquake Risk Management) and architects (National Programme for Capacity Building of Architects in Earthquake Risk Management) at the cost of `12.36 and `4.51 crore respectively in earthquake risk management. The programme which started in 2004-05 was implemented till 2008 by the MHA and has subsequently been transferred to the NIDM for implementation with effect from 01.4.2008.

National Disaster Management Authority

NDMA undertakes several initiatives in the process of capacity development. Few of them are illustrated as follows:

Mock Exercises: NDMA undertakes mock exercises in vulnerable districts and industries on various types of natural and man-made disasters to help the state governments and district administration in reviewing the adequacy and efficacy of the state and district level Disaster Management Plans and to identify gaps in resources and systems. So far NDMA has conducted nearly 211 mock exercises including 90 similar exercises in schools. During the Commonwealth Games, similar exercises were under taken through coordinated conferences, table top exercises

and the mock exercises on both natural and man-made disasters at different competition and practice venues and at accommodation areas of players and accompanying officials. Altogether, 55 such exercises were conducted at different venues of the Commonwealth Games including the Games Village.

Mock Exercises on School Safety: Mock exercises in schools are conducted to empower the schools to face the disasters squarely before the specialist response is affected. Details are given in the Table 1.1.

Table 1.1: Mock Exercises conducted by NDMA from 1.4.2009 to 31.3.2010

Sl. No.	Disaster	State/s	States where Mock exercises conducted
1.	Earthquake	Uttarakhand, Arunachal Pradesh, Meghalaya, Delhi, Himachal Pradesh, Mizoram, Nagaland, A&N Islands, J&K	11
2.	Cyclone	Gujarat	01
3.	Floods	Tamil Nadu, Bihar, Chhattisgarh, Maharashtra	04
4.	Urban Fire	Haryana, Karnataka, J&K and Sikkim	04
5.	Chemical (Industrial)	Karnataka, Tamil Nadu, Goa, Pubjab, Maharashtra, Madhya Pradesh, Gujarat	09
6.	Terrorist related	Delhi	05
		Total	39

Table Top Exercise: Table Top Exercises are also carried out to elicit the responses of the participants in simulated scenarios. These scenarios cover the entire gamut of the disaster management cycle.

Training of Panchayati Raj Institutions (PRIs): Capacity Building of PRIs is extremely important as they are the local authorities at the grassroots levels. For the PRIs in addition to their scheme based capacity building funds, the NDMA has undertaken a capacity building project in partnership with IGNOU and eleven states, the details of which are given in the Table 1.2.

Table: 1.2: Capacity building of PRIs: Capacity Building Project (in Partnership with IGNOU) and States

• States	11
• Districts	55
• Training of PRI/ ULB Representatives.	12,375
• Training of Government Functionaries.	4,125
• Total persons trained	16,500.

Training in SIRDs and NIRD for PRIs is under active planning – with the Ministry of Panchayati Raj. UNDP in association with the NIRD has also developed a training module in disaster management for the PRIs.

Awareness Campaigns: NDMA has launched a number of public awareness campaigns through electronic and print media. The focus is on building an appropriate

environment for DM and creating a high level of impact on the target audience.

- (a) **Audio Visual Campaigns:** The publicity campaigns were run through radio and video spots on AIR, Doordarshan, private TV channels like general entertainment channels, new channels and regional channels, FM radio channels through DAVP and National Film Development Corporation.
- (b) **Earthquake Awareness Campaign:** Four Videos in 35mm and four audio spots were produced for conducting an earthquake awareness campaign across the states/ UTs prone to earthquakes.
- (c) **Cyclone Awareness Campaign:** Three videos in 35 mm and three audio spots were produced in Hindi and regional languages for conducting cyclone awareness campaigns across the States/ UTs prone to cyclones.
- (d) **Flood Awareness Campaign:** Four videos in 35 mm and four audio spots were produced for conducting flood awareness (Awareness programme through cycle rally - Patna) campaigns across the states/ UTs prone to floods.
- (e) **Information, Education and Communication (IEC) Activities:** Financial assistance of `2.33 crores has been released to 19 states/ UTs for awareness generation IEC activities like making posters, leaflets, hoardings, wall paintings, video/ audio spots, etc.

Awareness Campaign through cycle rally at Patna



Disaster Management Centres in the States

The Government of India through NIDM supports a four member faculty and two support staff besides the programme expenses of the Disaster Management Centres of the Administrative Training Institutes or other nodal institutes nominated by the states under a Central Sector Non-Plan Scheme (2007-12). Thirty one such centres (Table 1.3) have been set up throughout the country, one in each state and two each in Assam and U.P. The training programmes of the centres and NIDM are developed through a consultative process at the Annual Training Conference attended by the Relief Commissioners of the states, Director Generals of the ATIs, and representatives of the concerned nodal ministries and departments of the Government of India. Every centre has to conduct a minimum of 25 training programmes and train at least 490 participants annually. Together the centres train more than 35000 cutting edge functionaries of the government. The training calendar of NIDM may be visited at website '<http://nidm.gov.in>'.

Table 1.3: Disaster Management Centers in the State

Sl. No.	State	Location	Name of the Institute	Acronyms
1.	Andhra Pradesh	Hyderabad	AMR-Andhra Pradesh Academy of Rural Development	AMR-APARD
2.	Arunachal Pradesh	Itanagar	Administrative Training Institute	ATI
3.	Assam	Guwahati	Assam Administrative Staff College	AASC
4.	Assam	Tezpur	Tezpur University, Tezpur, NAPAAM	NAPAAM
5.	Bihar	Patna	Bihar Institute of Public Administration & Rural Development	BIPA&RD
6.	Chhattisgarh	Raipur	Chhattisgarh State Institute Academy of Administration	CSIAA
7.	Delhi	New Delhi	Directorate of Training, Union Territory Civil Services	DOT
8.	Goa	St. Inze, Panji	Fire Institute	FI
9.	Gujarat	Gandhinagar	Gujarat Institute of Disaster Management	GIDM
10.	Haryana	Chandigarh	Haryana Institute of Public Administration	HIPA
11.	Himachal Pradesh	Shimla	Himachal Pradesh Institute of Public Administration	HPIPA
12.	Jammu & Kashmir	Srinagar	J&K Institute of Management, Public Administration and Rural Development	J&K IMPARD
13.	Jharkhand	Ranchi	Shri Krishna Institute of Public Administration	SKIPA
14.	Karnataka	Mysore	Administrative Training Institute	ATI
15.	Kerala	Thiruvananthapuram	Institute of Land Management	ILM

16.	Madhya Pradesh	Bhopal	Disaster Management Institute	DMI
17.	Maharashtra	Pune	Yashwantrao Chavan Academy of Development Administration	YASHADA
18.	Manipur	Imphal	State Academy of Training	SAT
19.	Meghalaya	Shillong	Meghalaya State Administration Training Institute	ATI
20.	Mizoram	Aizawal	Administrative Training Institute	ATI
21.	Nagaland	Kohima	Administrative Training Institute	ATI
22.	Orissa	Bhubaneswar	Gopabandhu Academy of Administration	GAA
23.	Punjab	Chandigarh	Mahatma Gandhi State Inst. of Public Administration	MGSIPA
24.	Rajasthan	Jaipur	Harish Chandra Mathur Rajasthan Institute of Public Administration	HCMRIPA
25.	Sikkim	Gangtok	G.B. Pant Institute of Himalayan Environment & Development	GBPIHED
26.	Tamil Nadu	Chennai	Anna Institute of Management	AIM
27.	Tripura	Agartala	State Institute of Public Administration & Rural Development	SIPARD
28.	Uttar Pradesh	Lucknow	Uttar Pradesh Academy of Administration & Management	UPAAM
*29.	Uttar Pradesh	Lucknow	Deen Dayal Upadhyaya State Institute of Rural Development	DDUSIRD
30.	Uttarakhand	Nanital	Uttarakhand Academy of Administration	UAOA
31.	West Bengal	Kolkata	Administrative Training Institute	ATI

** Approved as Additional Centre in U.P.*

Additional DM Centres in the States: Additional centres in 11 states namely, Andhra Pradesh, Bihar, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal and Orissa have been approved in principle by the Government of India. These centres are in the process of being set up in consultation with the concerned states, except that of UP, which has already been set-up

Centres of Excellence: The Government of India has further approved setting up of six centres of excellence on specific areas of disaster management (Table 1.4). These centres will conduct research; develop resources and network with related institutions at national, regional and international levels.

Table 1.4: Centres of Excellence

Name of Institution	Specific Types of Disaster
YASHADA, Pune	Drought
DMI, Bhopal	Industrial & Chemical Disasters
AASC, Guwahati	Earthquake
ATI, Kolkata	Flood
MCR HRDI, Hyderabad	Cyclone
UAOA, Nainital	Landslide

Training of the National Disaster Response Force (NDRF)

There are four training institutes of Central Para Military Forces (CPMFs), (Table 1.5) which impart training to NDRF battalions, namely:

Table 1.5: Location of Training centres

Institute	Acronyms	CAPE	Place
National Industrial Security Academy	NISA	CISF	Hyderabad
Basic Training Centre	BTC	ITBP	Bhanu, Chandigarh
Central Training College -II	CTC-II	CRPF	Coimbatore
BSF Insitute of Disaster Response	BIDR	BIDR	Tekanpur, Gwalior

Besides these institutions, eight battalion level training institutes in NDRF for imparting training to personnel of NDRF are functional.

The NDRF personnel are also trained by other specialized institutes in the country. The details of courses being conducted for the NDRF personnel are given in Table 1.6.

Table 1.6: Details of the Courses for NDRF

Basic courses	Advanced courses
<ul style="list-style-type: none"> Basic training course for 1st responders of NDRF Bn, NBC basic course, MFR/ CSSR, flood rescue, deep diving, basic mountaineering search and rescue, Heli- slithering. 	<ul style="list-style-type: none"> Practical training on radiological emergency, ToT on radiological emergency, management of industrial and chemical disaster, radiation safety officer course and radiological and nuclear emergency course, radiological and nuclear emergency, chemical and biological emergencies course, urban search and rescue, advance course in CSSR, ToT refresher in MFR/CSSR, ToT in MFR and CSSR, earthquake disaster response, management of dead bodies, capsule course on NBC emergencies, TOT in NBC emergency, MOT in NBC, MOT in MFR/CSSR,



Basic courses	Advanced courses
	<ul style="list-style-type: none"> MOT in chemical and biological emergencies, auxiliary fire fighting, basic life support, industrial disaster management, incident management and command system, training programme on DM for NDRF commanders, rock climbing and slithering, refresher deep diving, training of doctors in DM.

The status of the training of the NDRF personnel till 2009-10 is given in the following Table 1.7.

Table 1.7: Status of Training

Training	Training Partners	No.
CBRN	College of Military Engineering, Pune DRDE, Gwalior Singapore Civil Defence Academy	3,456
Heli-Borne Training	Indian Air Force Base at Nahan, Guwahati, Agra & Bangalore	4,200
Natural Disasters	INSARAG (UNOCHA)Trg. Standard USAID: PEER Programme Under INDO-SWISS Collaboration for Training (INSWIT) , Swiss Development Corporation (SDC) Safety Solutions Inc., Ocala, Florida (USA)	6,021
Water Rescue	Life Saving Society, Kolkata Sea Explorer Institute, Kolkata	5,120
Foreign Trained	Various Courses	61

Programme for Enhancement of Emergency Response (PEER): Trainers of Central Industrial Security Force (CISF) and Indo-Tibetan Border Police (ITBP) are trained under the PEER programme. Now they are engaged in conducting courses at their respective training centers i.e. National Industrial Security Academy (NISA) of CISF at Hyderabad and Basic Training Centre (BTC) of ITBP at Bhanu (Haryana), which have been designated as national level training institutes for search and rescue training. In addition, the personnel of BSF and CRPF have also been trained under the PEER programme at NISA, Hyderabad, BTC, Bhanu and BIDR, Tekanpur. Gradually all the four constituents/ components of Central Armed Police Forces of NDRF have been duly involved for getting their personnel on deputation to NDRF trained under this programme.

The programme is expected to facilitate parallel preparations by all the battalions of NDRF reorganised for natural disasters. The last PEER Country Planning meet was held at NDMA, New Delhi from 1-2 February 2010. PEER Regional Planning meeting was recently held at Manila from 29th to 1st April 2011

Stages of PEER training in India: India has been a PEER partner since 1998. It was also the first Country to institutionalize PEER courses in designated PEER training institutions. The programme has been held in the following stages-

- PEER Stage -1 1998 TO 2003
- PEER Stage -2 2003 TO 2009
- PEER Stage -3 2009 TO 2014

PEER MFR and CSSR Graduates in India: The numbers of Graduates and Instructors have been shown in the following diagram developed under the programme, till February 2011.

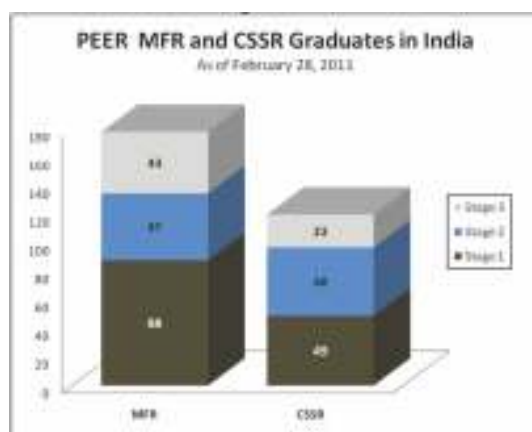


Fig.1.1

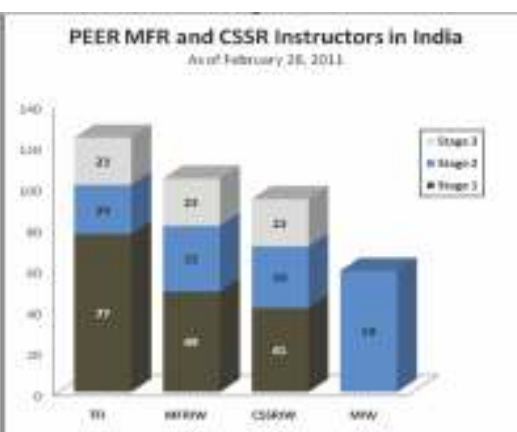


Fig.1.2

Trainer Developed by Instructors, trained under PEER: Table 1.8 shows the PEER training of instructors who in turn have developed trainer

Table 1.8: Trainer developed by PEER instructors

Organisation	Institute	Location	Trainers Developed
BSF	BSF Institute Of Disaster Response (BIDR)	Tekanpur	213
CRPF	Central Training College (CTC)	Coimbatore	86
CISF	National Industrial Security Academy (NISA)	Hyderabad	376
ITBP	National Institute for Training in Search, rescue & Disaster Response (NITSRDR)	Bhanu	71

MFR & CSSR Responders Developed by Instructors Trained under PEER: Similarly these instructors have been used for developing the responder. The outcome may be seen in the Table 1.9.

Table 1.9: Responders developed by PEER Instructor

Sl. No.	Organisation	Institute	Location	Responders Developed
1	BSF	BSF Institute Of Disaster Response (BIDR)	Tekanpur	1386
2	CRPF	Central Training College (CTC)	Coimbatore	1288
3	CISF	National Industrial Security Academy (NISA)	Hyderabad	2244
4	ITBP	National Institute for Training in Search, Rescue & Disaster Response (NITSRDR)	Bhanu	2297

Capacity Development of community by NDRF: The state-wise list of community capacity building and public awareness conducted by NDRF Bns (2006-10) are given in the Table 1.10.

Table 1.10: State-wise list of Community Capacity Development & Public Awareness

S.No.	State	Number of Beneficiaries
1.	Gujarat	147,018
2.	North-Eastern states	93,349
3.	Maharashtra	82,735
4.	Rajasthan	79,524
5.	Bihar	74,095
6.	Karnataka	31,809
7.	Haryana	31,349
8.	West Bengal	21,086
9.	Kerala	18,363
10.	Tamil Nadu	16,110
11.	Uttar Pradesh	14,490
12.	Uttarakhand	9,946
13.	Madhya Pradesh	9,550
14.	Himachal Pradesh	7,440
15.	Punjab	7,060
16.	Andhra Pradesh	6,345
17.	Other states	5,412
	Total	655,681

Incident Response System (IRS)

The incident response system is a standardized method of managing disasters, which is flexible and adaptable to suit any scale of natural as well as manmade emergency/incidents.

It has common terminology, organisational flexibility, specialised training, unity and chain of command and well rehearsed coordination mechanism. The system provides specialist incident management teams with an incident commander trained in different aspects of incident management such as logistic, operations, planning, safety, media management etc.

A revised roadmap for training and institutionalisation of IRS in India has been prepared and is under consideration of MHA. The proposed roadmap envisages to increase the strength National Core Group to include all concerned national level training institutes, RTI's and ATI's; expansion of trained State Master Trainers, organising training programmes for Core Group Trainers, State Master Trainers, training of members of national, state and district headquarters and IC teams. The total period for implementation of the revised road map has been estimated at 30 months with a financial outlay of ₹24.495 crore. The amount for its implementation is proposed to be met from the Capacity Building Grant of the states and Non-Plan fund of MHA.

National Civil Defence College (NCDC), Nagpur

The first Disaster Management Training Institution of the country was founded on 29th April 1957 at Nagpur as the Central Emergency Relief Training Institute (CERTI) to support the Emergency Relief Organization of the Government of India. This institute organised advanced and specialist training for revenue officials responsible for Disaster Relief Operations against any natural or manmade disaster. CERTI was renamed as National Civil Defence College on 1st April 1968.

Training programmes conducted by NCDC aim to train:

- Volunteers of Civil Defence about the aspects of civil defence so that they could further be trained for specialised jobs in various service in civil defence,
- Local volunteers in Civil Defence Wardens Service, duties before, during and after air raid,
- Staff of control and sub control centres except telephone and wireless operators,
- CD and Home Guards volunteers enrolled as ICO and wardens who have completed the CD Basic Course at a local level,

- Civil Defence Volunteers in basic rescue techniques
- All CD & HG volunteers in category-1A towns against NBC warfare,
- All CD volunteers for specialised jobs for various CD services,
- Civil Defence and Home Guards officers, volunteers and teachers of various, educational institutions to act as an training instructors at the local level,
- Civil Defence and Home Guards volunteers in advance fire fighting,
- Officers and volunteers of Civil Defence/ Home Guards to enable them to detect identify and report any unexploded bomb in the area,
- Civil Defence officers/ personnel in the science of NBC, warfare, possible ways and means of protection against the same and preparation of plan against nuclear threat,
- Civil Defence and Home Guards volunteer's officers and officials and members of rescue service in Disaster Management and relief during disasters,
- Civil Defence instructor's volunteers and Industrial Officers of various categorised towns and important industries in Civil Defence plan.

Various courses conducted by NCDC are given below in Table 1.11

Table 1.11: Courses conducted by NCDC

Category	Courses
General	Civil Defence Programmes
	Civil Defence Instructors (Foundation)
	Training of Trainers (TOT) in Civil Defence
	Disaster Management for Senior Executives from Government & Industries
	TOT in Disaster Psycho-social Intervention (TDPSI)
	Communication for CD Trainers
Response	Unexploded Bombs and Explosive Safety
	Auxiliary Fire Fighting
	Incident Management & Command System
	Flood and Cyclone Disaster Response
	Earthquake Disaster Response
	Advance Search and Response
	Collapse Structures Search & Location
	Emergency Response to Rail Transport Accidents
	Chemical Disaster First Responder

	Amateur Radio Communication for Responders
Mitigation	Training of Trainers (TOT) in Radiological & Nuclear Emergencies
	Disaster Management Programmes
	Civil Defence & Disaster Management
	Industrial Disaster Management
Medical	Emergency Medical Response Programmes
	Basic Life Support

The college has been upgraded to one of the main Centers for Disaster Management Training and a nodal center for Radiological, Nuclear, Biological and Chemical Emergency Response Training. It has also been recognised as a premier training establishment in Chemical Disaster Response Training by the Ministry of Environment & Forests. Its up-gradation into 'institution of excellence' at a national level to train a professional cadre of trainers for Disaster Response & Recovery Management is in the final stages of completion and will involve a total cost of ` 18.95 crore.

The activity wise progress of Centrally sponsored schemes of Revamping of Civil Defence as on March 2011 is given in the Box 1.1.

Emergency Medical Response training demonstrated by the NCDC



Box 1.1: Status of Programme of Civil Defence as on March 2011

Activities	Details of activities	Present progress
	Upgrading of Physical Infrastructure - ` 60 lakh, Procurement of equipments - ` 35 lakh and Transport - ` 11 lakh	Renovation/ upgradadtion of physical infrastructure and the process for procurement of equipments commenced in 9 states viz Assam, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Rajasthan, Karnataka, Maharashtra & West Bengal.
Creation of New Training Institutes in 10 States	Creation of Physical Infrastructure - ` 146 lakh, Procurement of equipments - ` 35 lakh and Transport - ` 11 lakh	Physical possession of land taken in Bihar, Chattisgarh and Kerala, land earmarked in Arunachal Pradesh, land being identified in Jharkhand, Orissa, Tamil Nadu and Uttarakhand, no action taken by Chandigarh.
-	-	States have identified the location for physical infrastructures in 100 MHDs.
Pilot project for involving Civil Defence in internal security matters in 40 towns	To train 214 Master Trainers at NCDC, Nagpur and 4280 Trainers in different states.	Training of 214 master trainers completed and 4018 CD volunteers have so far been trained.
	`	44 camps in Maharashtra, Goa and Assam were conducted and Firm commitment has been received from 06 state namely Assam (` 8 lakh), Gujarat (` 12 lakh), Karnataka (` 4 lakh), Orissa (` 4 lakh), Punjab (` 12 lakh) and Rajasthan (` 8 lakh) for contribution of matching fund on basis of 50 :50 between the Central Government and State Governments
Re-orinetation of Civil Defence from a town-centric to district specific approach (100 district to be covered)	` 4 crore to be released to states with a view to spread the CD activities over the entire district.	Activity being initiated in 2011-12.
Publicity and Awareness	` 3 crore to be partly utilized by States/ UTs and DGCD	A video spot (30 seconds) on CD activities was aired on various TV channels during 16th December 2010 to 25th December 2010 and the process making of documentary film on Civil Defence in progress.

National Fire Service College (NFSC), Nagpur

The National Fire Service College was established in 1956 as a sub-ordinate establishment of Ministry of Home Affairs with the aim of providing training to the Fire Officers of the country in advanced techniques of fire fighting and rescue, creating uniformity in the Fire Service organisations and their management across the country. The college initially offered only one course and subsequently additional courses were added to meet the growing need of training in the fire services of the country. The college has so far trained 15197 Fire Officers in the country.

Courses: Following courses are conducted by the college:

- Sub- Officers' course,
- Station Officer and Instructors course ,
- Divisional Officers' course.

The course enrollment capacity is variable and depends on the requirement of Fire Brigades in the country. The faculty includes Senior Fire Officers of various public and private sector undertakings, state government, Municipal Corporation, Fire Brigades, Port Trust, Air Port Authority and they impart comprehensive training on various aspects of fire prevention and fire protection.

Training Programmes: The training programmes aim to-

- Impart advanced level of training in Fire and Engineering and Fire Service Management for the supervisory level officers of the fire services of the country,
- Provide elementary knowledge needed for protection of life and property from fires and other natural disasters and to familiarise the trainee officers with the different fire fighting organisations,
- Train the fire service personnel who are in charge of the fire station or likely to hold independent charge of fire station to look after the fire prevention and protection in the station jurisdiction and impart training in the theory and practice of the fire prevention and modern fire protection methods.

Upgradation of NFSC: A scheme under non-plan head for Upgradation of National Fire

Service College Nagpur has been launched in June 2010 for a period of three years at an outlay of ` 205 crore. The objective is to enhance the capacity of the National Fire Service College to meet the requirements of specialised professional training in all aspects, namely, fire prevention, fire protection, fire fighting, rescue, specialised emergency response in the event of disaster and also for research documentation and consultancy requirements in the field. The main components of the scheme are as follows:

- (i) Construction of technical and non-technical buildings at a cost of ` 146.80 crore to be carried out by CPWD,

- (ii) Procurement of equipments including training aids and laboratory items at an estimated cost of ` 58.20 crore.

Efforts of other Ministries in Capacity Development Programme on DM:

Ministry of Human Resource Development:

As an effort to mainstream disaster management concerns into the education curricula, NDMA has taken the initiative in conjunction with the Ministry of Human Resource Development, to ensure that DM curriculum forms part of the course curriculum in undergraduate science and humanities courses and medical, engineering, architecture courses besides in school education. It will also focus on the training of teachers and faculties in disaster management. Sarva Siksha Abhiyaan (SSA) will also include the concerns of disaster resilience in their adult literacy curriculum.

The topics on Disaster Management aim to:

- I. Acquaint students about various disasters that India is vulnerable to and the hazard maps to enable them to visualize these vulnerabilities,
- II. Introduce a few key concepts in disaster management in simple terms, to orient them to the words used in media discussions, analysis etc. when a disaster strikes,
- III. Introduce the concept of being prepared for disaster through simple do-s and don'ts that school children can imbibe and spread to families and community,
- IV. Develop interest in the subject through interactive activities in the classroom so that the student seeks more information on disaster.

Syllabus of different classes from VIIIth to XIth The Central Board of Secondary Education has taken the initiative of including disaster management topics as frontline curriculum in the subject of social science with effect from 2003-2004 in class VIIIth and extended it to class IXth and Xth in subsequent years. It was extended to class XI in 2005-2006 in the subjects of sociology and geography.

DM syllabus is being introduced in universities. Pune, Madras, IGNOU, and Indraprastha and many other Universities has already started such courses and it is in the process of getting introduced in Symbiosis, Pune

NDMA has undertaken to get such courses introduced in undergraduate course. A

module has been provided to UGC similarly for introducing such courses in technical institutes. Modules have been provided to AICTE in course of Engineering and architect. ICAR has introduced a DM module for its courses in Agriculture and Veterinary

Organisation of training programme: With the financial and technical support from Ministry of Home Affairs and the UNDP under the GOI_UNDP DRM programme (2002-2009), the Central Board of Secondary Education was able to successfully complete two master trainers programmes across the country during the year 2003-2006. These training programme helped the teachers to successfully transect the subject in the class room. Demonstrations were carried out on first aid, search and rescue, evacuation etc by the health department, fire services etc. An impact study on disaster management textbooks was conducted by CBSE in July, 2006 with the purpose of updating the textual material by incorporating recent developments and obtaining feedback from the teacher and students., Feedback questionnaires were sent to 180 schools all over the country. The information received from schools was analyzed with the purpose of reviewing and updating the existing text books.

Ministry of Panchayati Raj & Rural Development

NDMA has advised the Ministry of Panchayati Raj and Rural Development to address the concerns of disaster management in the training of representatives of the Panchayati Raj Institutions and local bodies. The Ministry of Panchayati Raj has also issued a letter N-11012/35/2007-P&J Vol III dated 1.9.2010 in this regard. Accordingly, all the ongoing and future projects of this ministry should incorporate disaster resilient features into them. States efforts' towards training of Panchayati Raj functionaries and district level officials has been initiated in 11 states in association with IGNOU. Altogether 4,125 government functionaries and 12,375 PRI/ ULB representatives are targeted to be trained in disaster management under this project.

Mock drills in the schools by NDRF



Conclusions

Disaster management requires trained human resources to deal with complex situation effectively to mitigate the impact of disaster on human life and property. Capacity Development is an integral process of knowledge and skill building. Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity Development is much more than training and it includes human resource development, equipping individual with understanding, skills and access to information, knowledge and training that enables him to perform effectively.

National Policy on Disaster Management (NPDM) describes its approach to capacity development. NPDM further elaborates on National priorities, institutional capacity development, training communities, professional technical education, DM education in school, training to artisan and training to other group. Capacity development has focused on training of the DM officials, functionaries, trainers, elected representatives and community representatives. Various institutions like, NDMA, NIDM, NCDC, NFSC and ministries have developed the capacity development programme for disaster management.

The details included in this chapter are only illustrative and not exhaustive. Capacity Development strategies are now being mainstreamed in most of the ministries and Government department at National, State and District level to equip the DM personal and community with advance knowledge and skill in disaster management. It is expected that once the National Human Resource and Capacity Development Plan is adopted, it will help in mainstreaming the capacity development in different activities of the ministries of Government of India concerned, state government and other stakeholders.