



ANNUAL REPORT

2012-13



NATIONAL DISASTER MANAGEMENT AUTHORITY (NDMA)
Government of India
NDMA Bhawan, A-1, Safdarjung Enclave,
New Delhi - 110 029

National Disaster Management Authority

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Abbreviations

AEC	Atomic Energy Commission
AERB	Atomic Energy Regulatory Board
AES	Acute Encephalitis Syndrome
AIIMS	All India Institute of Medical Sciences
ANM	Auxiliary Nurse & Mid wife
ARC	Administrative Reforms Commission
ARMVs	Accident Relief Medical Vans
ASHA	Accredited Social Health Activist
ATCN	Advanced Trauma Care for Nurse
ATLAS	Advanced Trauma Life Support
AWW	Anganwadi Workers
BANISS	Dr. Babasaheb Ambedkar National Institute of Social Science
BARC	Bhabha Atomic Research Centre
CBDM	Community Based Disaster Management
CBDRM	Community Based Disaster Risk Management
CBOs	Community Based Organizations
CBRN	Chemical, Biological, Radiological and Nuclear
CBT	Capacity Building & Training
CCEA	Cabinet Committee on Economic Affairs
CD	Civil Defence
CDM	Chemical Disaster Management
CII	Confederation of Indian Industry
CME	College of Military Engineering
CPMFs	Central Para Military Forces
CRF	Calamity Relief Fund
CSCs	Community Service Centres
CSIR-NGRI	Council of Scientific & Industrial Research- National Geophysical Research Institute
CSSR	Collapsed Structure Search and Rescue

DDMAs	District Disaster Management Authorities
DM	Disaster Management
DPR	Detailed Project Report
DRDE	Defence Research Development Establishment
DRDO	Defence Research Development Organization
DRR	Disaster Risk Reduction
EFC	Expenditure Finance Committee
EOC	Emergency Operation Centre
ERCs	Emergency Response Centres
EW	Early Warning
FFTPs	Face to Face Training Programmes
FICCI	Federation of Indian Chambers of Commerce and Industry
GIS	Geographic Information System
GoI	Government of India
GPS	Global Positioning System
GSDMA	Gujarat State Disaster Management Authority
HAZCHEM	Hazardous Chemical
HFA	Hyogo Framework for Action
HPC	High Powered Committee
IAN	Integrated Ambulance Network
IAS	Indian Administrative Service
ICP	Incident Command Post
IEC	Information, Education and Communication
IGNOU	Indira Gandhi National Open University
IIT	Indian Institute of Technology
IITF	India International Trade Fare
IMC	Inter Ministerial Committee
IMD	India Meteorological Department
INSARAG	International Search and Rescue Advisory Group
INTACH	Indian National Trust for Art and Cultural Heritage
IRS	Incident Response System
IRT	Incident Response Team
IT	Information Technology
IUAC	Inter University Accelerator Centre
JE	Japanese Encephalitis
JNU	Jawaharlal Nehru University
LBSNAA	Lal Bahadur Shastri National Academy of Administration

MAH	Major Accident Hazard
MFR	Medical First Responder
MHA	Ministry of Home Affairs
MISP	Minimum Initial Service Package
MoD	Ministry of Defence
MoHRD	Ministry of Human Resource Development
MoU	Memorandum of Understanding
MPCS	Multi-Purpose Cyclone Shelter
MPMCM	Medical Preparedness and Mass Casualty Management
NACO	National AIDS Control Organization
NCCF	National Calamity Contingency Fund
NCMC	National Crisis Management Committee
NCR	National Capital Region
NCRMP	National Cyclone Risk Mitigation Project
NDCI	National Disaster Communication Infrastructure
NDCN	National Disaster Communication Network
NDMA	National Disaster Management Authority
NDMP	National Disaster Management Plan
NDRF	National Disaster Response Force
NEC	National Executive Committee
NERMP	National Earthquake Risk Mitigation Project
NFRMP	National Flood Risk Mitigation Project
NGOs	Non-Governmental Organizations
NIDM	National Institute of Disaster Management
NIMHANS	National Institute of Mental Health and Neuro Sciences
NLRMP	National Landslide Risk Mitigation Project
NPDM	National Policy on Disaster Management
NSA	National Security Advisor
OFC	Optical Fiber Cable
PHC	Parliament House Complex
PIB	Public Investment Board
PPP	Public Private Partnership
PRI	Panchayati Raj Institutions
PSSMHS	Psycho-Social Support and Mental Health Services
PTSD	Post-Traumatic Stress Disorder
R&D	Research and Development
RFP	Request for Proposal

RH	Reproductive Health
S&T	Science and Technology
SDMA	State Disaster Management Authority
SDMPs	State Disaster Management Plans
SDRF	State Disaster Response Force
SEC	State Executive Committee
TIFAC	Technology Information, Forecasting and Assessment Council
ULBs	Urban Local Bodies
UMHP	Urban Mental Health Programme
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
UTs	Union Territories
WHO	World Health Organization

1

Introduction

Vulnerability Profile

1.1 India is vulnerable, in varying degrees, to a large number of disasters. More than 58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity; over 49 million hectares of its land is prone to floods and river erosion; close to 5,700 kms, out of the 7,516 kms long coastline is prone to cyclones and tsunamis; 68% of cultivable area is vulnerable to droughts; and, hilly areas are at risk from landslides and avalanches. Moreover, India is also vulnerable to Chemical, Biological, Radiological and Nuclear (CBRN) emergencies and other man-made disasters. The Radiological accident at Mayapuri, New Delhi and Cloud Burst at Leh are grim reminders of the vulnerabilities of the country to such disasters.

1.2 Disaster risks in India are further compounded by increasing vulnerabilities related to changing demographic and socio economic conditions, unplanned urbanization, development within high-risk zones, environmental degradation, climate change, geological hazards, epidemics and pandemics. Clearly, all these factors contribute to disasters that seriously threaten India's economy, its population and sustainable development.

Genesis of NDMA

1.3 The Government of India (GoI), in recognition of the importance of Disaster Management (DM) as a national priority, had set up a High Powered Committee (HPC) in August 1999 and also a National Committee on Disaster Management in 2001, after the Gujarat Earthquake to make recommendations on the preparation of DM Plans and to suggest effective mitigation mechanisms. However, after the Indian Ocean Tsunami, the GoI took a defining step in the legislative history of the country, through an Act of Parliament, by creating the National Disaster

Management Authority (NDMA), headed by the Prime Minister, to spearhead and implement a holistic and integrated approach to DM in India.

Constitution of NDMA

1.4 NDMA was constituted on 30th May, 2005 by an executive order of the GoI. Subsequently, the DMA Act, 2005 was enacted on 23rd December, 2005 and the Authority was notified on 27th September, 2006 under the provisions of the DM Act, 2005.

Composition of NDMA

1.5 The NDMA is headed by the Hon'ble Prime Minister, and the Vice Chairman of the NDMA, Shri M Shashidhar Reddy, MLA along with eight other Members. The Vice Chairperson of the Authority has the status of a Union Cabinet Minister and the Members of the Authority have the status of Union Ministers of State.

1.6 Following are the current Members of NDMA (with date of assumption of charge):

- a) Shri M Shashidhar Reddy – 05 October 2005.
- b) Shri B Bhattacharjee – 21 August 2006.
- c) Shri J K Sinha – 18 April 2007.
- d) Maj Gen (Dr) J K Bansal – 06 October 2010.
- e) Shri T Nandakumar – 08 October 2010.
- f) Dr. Muzaffar Ahmad – 10 December 2010.
- g) Shri K M Singh – 14 December 2011.
- h) Prof Harsh K Gupta – 23 December 2011.
- i) Shri Vinod K Duggal – 22 June 2012.

Overview

1.7 In the years gone by, the NDMA has been able to establish an institutional mechanism for DM at the national level to usher in a paradigm shift from a relief centric to a holistic

approach, laying greater emphasis on prevention, preparedness and mitigation. One of the important achievements of NDMA has been the release of guidelines covering disaster specific, thematic and cross cutting issues. The approach of NDMA has been of transition, from linear and incremental improvements to regime of structural reforms and systemic changes. NDMA has functioned more as a facilitator rather than being an authority, thereby, extending its support to other stakeholders to create an enabling environment for strengthening resilience in the country. The NDMA has also provided a much needed impetus to establish National Disaster

Response Force (NDRF), a truly specialist force for disaster response and has accorded highest priority to ensure that it is trained and equipped as per international standards.

Responsibilities of Members of NDMA

1.8 The disaster specific domains have been assigned to the Members of the NDMA on the basis of their expertise in the subject. The Vice Chairman and Members of the NDMA are supported by the subject Specialists and Senior Research Officers to perform their functions. These domains are:

Sl. No.	Name of the Member	Domains	States
1.	Shri B. Bhattacharjee	i) Nuclear & Radiological Emergencies ii) Forecasting & Early Warning, GIS iii) IT and Communications iv) Microzonation v) Global Warming and Climate Change	i) West Bengal ii) Odisha iii) Andaman & Nicobar Islands
2.	Shri K.M. Singh	i) NDRF ii) SDRF	i) North East States including ii) Sikkim
3.	Shri T. Nandakumar	i) National Policy & Plans ii) Drought iii) Risk Transfer (Insurance) iv) Disaster Risk Reduction v) Coordination with U.N. Agencies (other international / bilateral agencies) vi) New Initiatives	i) Bihar ii) Jharkhand iii) Kerala iv) Lakshadweep
4.	Maj. Gen. (Dr.) J. K. Bansal (Retd)	i) CBRN (Terrorism aspects) ii) Psycho-Social Care	i) Madhya Pradesh ii) Rajasthan iii) Chhattisgarh

Sl. No.	Name of the Member	Domains	States
5.	Dr. Muzaffar Ahmad	<ul style="list-style-type: none"> i) Medical Preparedness ii) Chemical Industrial Disaster Management iii) Community Based Disaster Management (CBDM) iv) NGOs 	<ul style="list-style-type: none"> i) Jammu&Kashmir ii) Andhra Pradesh iii) Tamil Nadu iv) Puducherry
6.	Prof Harsh K Gupta	<ul style="list-style-type: none"> i) Earthquakes and ii) Tsunami 	<ul style="list-style-type: none"> i) Uttar Pradesh ii) Maharashtra iii) Goa
7.	Shri J.K. Sinha	<ul style="list-style-type: none"> i) Civil Defence ii) Fire Services iii) Incident Command System iv) NCC, NSS, NYKS v) Mock Drills/ Exercises 	<ul style="list-style-type: none"> i) Karnataka ii) Gujarat iii) Dadra Nagar Haveli iv) Daman & Diu
8.	Shri V.K. Duggal	<ul style="list-style-type: none"> i) Floods ii) Cyclone iii) Urban Flooding iv) Landslides & Avalanches v) NIDM vi) Awareness Generation & Media 	<ul style="list-style-type: none"> i) Delhi National Capital Region (NCR) ii) Himachal Pradesh iii) Uttarakhand iv) Punjab v) Haryana vi) Chandigarh Union Territory (UT)

NDMA Secretariat

1.9 The organizational structure of the NDMA was approved by the Union Cabinet in May 2008. The Secretariat is headed by a Secretary with five Joint Secretaries/Advisors including one Financial Advisor. There are ten Joint Advisors (Director/ Deputy Secretary level) and fourteen Assistant Advisors (Under Secretary

level) along with supporting officers and staff. Disaster being a specialized subject, it has also been ensured that expertise of specialists is available on contractual basis. The organization is also supported by a number of Senior Research Officers. The detailed organization of the NDMA Secretariat is being described in a separate chapter, *Administration and Finance*.

2

Functions and Objectives

Functions of NDMA

2.1 The NDMA, as the apex body for DM in India, has the responsibility of laying down the policies, plans and guidelines for DM for ensuring timely and effective response to disasters. Its statutory functions include the responsibility to:

- a) lay down policies on DM;
- b) approve the national plan and the plans prepared by the ministries/departments of the GoI in accordance with the national plan;
- c) lay down guidelines to be followed by the state authorities in drawing up the state plan;
- d) lay down guidelines to be followed by different ministries/ departments of the GoI for the purpose of integrating the measures for prevention of disaster or the mitigation of its effects in their development plans and projects;
- e) coordinate the enforcement and implementation of the policy and plan for DM;
- f) recommend provision of funds for the purpose of mitigation;
- g) provide such support to other countries affected by major disasters as may be determined by the central government;
- h) take such other measures for the prevention of disaster, or the mitigation, or preparedness and capacity building for dealing with threatening disaster situation or disaster as it may consider necessary;
- i) lay down broad policies and guidelines for the functioning of the National Institute of Disaster Management (NIDM);
- j) exercise general superintendence, direction and control of the NDRF, constituted under the Act, for the purpose of a specialist response to a threatening disaster situation;
- k) authorize the concerned department or authority to make emergency procurement of provisions or materials for rescue and relief in threatening disaster situation or disaster;
- l) recommend guidelines for the minimum standards of relief to be provided to the persons affected by disasters.

2.2 The NDMA is mandated to deal with all types of disasters, natural or man-made. However, emergencies including those requiring close involvement of the security forces and/ or intelligence agencies such as terrorism (counter-insurgency), law and order situation, serial bomb blasts, hijacking, air accidents, CBRN weapon systems, mine disasters, ports and harbour emergencies, forest fires, oil field fires and oil spills, will continue to be handled by the extant mechanism, i.e., National Crisis Management Committee (NCMC).

2.3 NDMA shall, however, formulate guidelines and facilitate training and preparedness activities in respect of CBRN emergencies. Cross cutting themes like medical preparedness, psycho-social care and trauma, community based disaster preparedness, information & communication technology, training, preparedness, awareness generation etc. for natural and man-made disasters will also engage the NDMA in partnership with the stakeholders concerned. Resources available with the DM authorities at all levels, which are capable of discharging emergency support functions, will be made available to the nodal Ministries/ Agencies dealing with the emergencies at times of impending disaster/ disasters.

Vision of NDMA

2.4 Flowing from the mandate of NDMA and the National Policy on Disaster Management, 2009 the vision is:

“To build a safe and disaster resilient India by developing a holistic, proactive, multi-disaster oriented and technology driven strategy through a culture of prevention, mitigation, preparedness and response”.

Objectives of National Policy on Disaster Management (NPDM), 2009

2.5 The objectives of the NPDM are:

- a) Promoting a culture of prevention, preparedness and resilience at all levels through knowledge, innovation and education.
- b) Encouraging mitigation measures based on technology, traditional wisdom and environmental sustainability.
- c) Mainstreaming disaster management into the developmental planning process.
- d) Establishing institutional and techno-legal frameworks to create an enabling regulatory environment and a compliance regime.
- e) Ensuring efficient mechanism for identification, assessment and monitoring of disaster risks.
- f) Developing contemporary forecasting and early warning systems backed by responsive and fail-safe communication with information technology support.
- g) Ensuring efficient response and relief with a caring approach towards the needs of the vulnerable sections of the society.
- h) Undertaking reconstruction as an opportunity to build disaster resilient structures and habitat for ensuring safer living.
- i) Promoting a productive and proactive partnership with the media for disaster management.

3

Landmark Events

Introduction

3.1 The activities of the NDMA which drew national and international attention are given in succeeding paragraphs. These particularly pertain to significant activities of the NDMA during the year, responses to major disasters, achievements and visits of various dignitaries.

3rd World Ministerial Conference on Disaster Reduction, Japan

3.2 Shri M. Shashidhar Reddy, Vice Chairman, NDMA, Government of India lead the Indian Delegation to the World Ministerial Conference on Disaster Reduction in Tohoku, Japan on 3rd and 4th July, 2012. The conference was organized by the Ministry of Foreign Affairs, Government of Japan with the following objectives:

- ◆ To share experiences of and lessons learned from recent large-scale natural disasters including Great East Japan Earthquake.
- ◆ To conduct discussions at ministerial level on the major themes related to disaster risk reduction in order to build resilient societies.
- ◆ To support discussions on establishing post-Hyogo Framework for Action (HFA) in the third World Conference in Disaster Reduction in 2015 (which Japan has announced its intention to host).

3.3 The conference was held in that part of Japan which was completely devastated after the Great East Japan Earthquake on 11th March, 2011 followed by a Tsunami.

8th Formation Day of NDMA

3.4 The NDMA observed its 8th Formation Day on 28th September, 2012 at Vigyan Bhavan, New Delhi. In the inaugural session, Shri M. Shashidhar Reddy, Vice Chairman, NDMA highlighted the

contribution made by the Authority over the years and the importance of paying equal attention to preparation and mitigation along with response. Shri Pawan Kumar Bansal, Union Minister of Water Resources and Parliamentary Affairs, the Chief Guest for the function mentioned that there is a close relationship between the Ministry of Water Resources and the NDMA including all the technical agencies like India Meteorological Department, Central Water Commission, etc. He appreciated the work that has been accomplished by the Authority till now and gave his best wishes for its future endeavors.

3.5 Shri Mullapally Ramachandran, Minister of State in the Ministry of Home Affairs, Guest of Honor for the event, mentioned in detail about the importance of disaster risk reduction measures into development plans and for building the capacity and resilience of the country. He complimented NDMA on the commendable work done so far and appreciated the efforts of NDRF during various operations.

3.6 After the inaugural session, three technical sessions on flood, tsunami and cyclone disasters followed. A panel of experts made presentations which were chaired by subject Members of NDMA. This was followed by an interactive session with the participants. Discussions took place on the gaps that needed urgent attention and critical issues were identified, that needed to be addressed in future.

3.7 Senior Officers of Government of India, Chief Secretaries/Secretaries DM of the State Governments, NDRF, NIDM, United Nations (UN) Agencies and other technical agencies participated in the event.

Participation by NDMA in 32nd India International Trade Fair, 2012

3.8 NDMA participated in the 32nd India International Trade Fair (IITF), 2012 from 14th to 27th November, 2012 at Pragati Maidan, New Delhi to bring awareness among general public, students and various stakeholders about managing different kinds of disasters.

3.9 The Authority put up an interesting information pavilion in Hall No. 6 at IITF to create awareness on the activities of the three organisations – NDMA, NDRF and NIDM that are engaged in the task of disaster management. Shri M. Shashidhar Reddy, Vice Chairman, NDMA inaugurated the NDMA pavilion on 14th November, 2012. Materials on disaster management were distributed to the visiting public on managing various kinds of disasters, along with continuous audio visual presentations at the NDMA pavilion. About one lakh people visited the pavilion and commended this initiative of awareness generation among the masses by NDMA.

3.10 NDMA pavilion at the IITF 2012 was awarded with special commendation medal for excellence in display on 27 November 2012 by Dr. D. Purandeswari, Minister of State for Commerce and Industry.



Shri P. G. Dhar Chakraborty, Secretary, NDMA receiving award from Dr. D. Purandeswari, Minister of State for Commerce and Industry

8th Raising Day of National Disaster Response Force

3.11 NDRF celebrated its 8th Raising Day on 22nd January, 2013 at Digberia, Madhyamgram, in West Bengal. His Excellency, Shri M K Narayanan, the Governor of West Bengal was the Chief Guest

for the NDRF Raising Day. Shri M. Shashidhar Reddy, Vice Chairman, NDMA was the Guest of Honour. His Excellency Shri M K Narayanan, Governor of West Bengal applauded the work done by the NDRF in the country in a most challenging and professional manner in his address. He also gave the President Police Medal for Distinguished Service and President Police Medal for Meritorious Service to the officials of NDRF, Civil Defence and Fire Services on the occasion.

3.12 On this occasion of 8th Raising Day, Members and Senior Officials of NDMA, NDRF HQ Delhi, senior officials of Civil Defence, Senior State officials from Jharkhand, Sikkim & West Bengal were also present. Dr. P M Nair, IPS, Director General NDRF apprised the capability and preparedness of NDRF to the audience.

India – Japan Cooperation on Disaster Preparedness and People's Network

3.13 Coordination amongst all stakeholders is the key for disaster management. The World Bank in its report, published after the Great East Japan Earthquake, also highlighted this issue and pointed out the lack of coordination amongst all stakeholders post the Great East Japan Earthquake of 11th March 2011, which triggered unprecedented tsunami and nuclear emergency in the Tohoku region of Japan. Keeping this in mind, a conference 'India – Japan Cooperation on Disaster Preparedness and People's Network', was held on 05th March, 2013 at Constitution Club of India. Shri M. Shashidhar Reddy, Vice Chairman, NDMA inaugurated this conference. The theme of the Conference was "Indian Footprint in Japan's Earthquake/ Tsunami Aftermath – The Untold Story". It was primarily to felicitate the 46 member team of NDRF, under the leadership of Commandant Alok Avasthy, who were deployed in Japan post triple disaster for the first ever foreign operation.

3.14 Shri M Shashidhar Reddy, Vice Chairman, NDMA and Dr. Kiyoshi Kurokawa, Chairman, the Fukushima Nuclear Accident Investigation Commission, appointed by the National Parliament of Japan felicitated this team at the function. On this occasion, Shri Reddy expressed his heartiest congratulations

to each and every member of the team for their successful rescue and relief operations in Japan.

3.15 Mr. Tamaki Tsukada, Minister, Embassy of Japan, New Delhi praised and expressed his gratitude to the personnel of National Disaster Response Force and promised for a healthy relation with India. Prof. D. P. Tripathi, Member of Parliament and Member, Parliamentary Committee on External Affairs also congratulated the personnel of the NDRF. Shri K M Singh, Member, NDMA and Shri Alok Avasthy and other officials from NDMA and Embassy of Japan were also present during the inaugural session.

NDMA Initiative on Japanese Encephalitis (JE)/ Acute Encephalitis Syndrome (AES)

Social Mobilization Campaign for Prevention and Control of JE/ AES in Uttar Pradesh

3.16 Uttar Pradesh is the state which has borne the maximum disease burden in terms of cases of JE / AES in India in the recent past. One of the recommendations made at the workshop organized by NDMA on flood management in August 2011 at Gorakhpur, was to undertake concerted action for JE/AES Prevention and Control in the state of UP.

3.17 NDMA has taken several initiatives to deal with this problem of JE/AES in Eastern Uttar Pradesh. This included the launching of Social Mobilization Campaign with the slogan "**Har Parivar Ladega Aapada se**" to cover 15 districts in four divisions namely Gorakhpur, Basti, Azamgarh, and Devipattan. The multi-pronged strategy adopted for the Campaign was to train Medical and Health Officers at the district level, who in turn trained the health workers at the block level, followed by sensitization and awareness generation at the household level by reinforcing simple do's and don'ts on better sanitation and hygiene; as well as advocacy with the State Government Health Machinery on preventive and surveillance measures leading to early reporting of cases and increase in immunization coverage in the affected districts. The Information, Education and Communication (IEC) material for Social Mobilization Campaign was developed by NDMA in consultation with technical organizations like World Health Organization (WHO) and United

Nations International Children's Emergency Fund (UNICEF).The campaign was successfully implemented between November 2011 and May 2012 and resulted in significant reporting of cases, thereby strengthening surveillance mechanisms across the targeted areas in the state; as well as led to creation of 4000 Master trainers, 1 lakh grass-root health workers trained by Master Trainers and reached out to more than 1 Crore households through door to door campaigning. The campaign was extended to 7 more districts in the month of March 2013. Meanwhile, Prime Minister of India constituted a Group of Ministers to suggest measures /recommendations to evolve a national programme for prevention and control of JE/AES which resulted into approval of a Rs 4,038-crore comprehensive multi-pronged plan for prevention and control of JE/AES in the country targeting 60 districts of 5 endemic states, under the 12th Five Year Plan by the Cabinet in the month of October 2012. The State has requested NDMA to repeat the campaign in 22 of the most affected districts, for which planning at NDMA is under process. Feedback received from this model of the Campaign designed and implemented by NDMA was extremely positive, not only in terms of early detection of cases and reduction in the number of deaths due to JE/AES but increased awareness and sensitization at the Community level and the State Administration addressing the issue in a more proactive manner.

3.18 As a part of this campaign, 4000 master trainers at block level and one lakh trainers consisting of health workers like Auxiliary Nurse & Midwife (ANMs), Accredited Social Health Activist (ASHA), State Health Workers besides Anganwadi Workers (AWW) and teachers have been trained. These people ultimately reached out to every household in these districts to raise public awareness about measures to be taken by people to help themselves for control and prevention of JE/AES.

Minimum Initial Service Package (MISP) - Addressing Reproductive Health Needs in Crisis/ disaster situations

3.19 Recognizing the gravity of risks posed by natural and man - made disasters especially amongst the most disadvantaged and vulnerable groups like women and adolescents, NDMA has

launched efforts to address issues pertaining to Reproductive Health (RH) in crisis situations/emergencies in India. NDMA in collaboration with United Nations Population Fund (UNFPA) is in the process of integrating the concept of MISP in Emergencies at the state and district level health and disaster management planning process.

3.20 MISP aims at enhancing the capacities of disaster managers to effectively prevent and respond to RH/Sexual health needs in humanitarian settings. The process of integration of MISP in the Health and DM Plans has got initiated in the states of Bihar and Odisha with the policy level advocacy meetings in both the states and orientations at the district level. Goa is the first state to have incorporated MISP in their Health and Disaster Management Plans and it is hoped that in due course all the states after receiving the necessary training will have MISP integrated within the National Health Mission.

3.21 The work on capacity building on MISP in Disaster Situations began with NDMA holding 2 National Capacity Development Workshops to train master trainers from Government functionaries from all states in 2011, followed by undertaking the process of adaptation of the Global MISP Facilitator Manual in 2012, to Indian context to facilitate capacity development in various states of India. A team of national experts assisted in the adaptation process which underwent review by representatives from Ministry of Health and Family Welfare, National AIDS Control Organization (NACO), All India Institute of Medical Sciences, National Institute of Health and Family Welfare and National Institute of Disaster Management at a Joint Review Workshop.

3.22 Advocacy meetings for launch of MISP were held with the State Govt. of Odisha on 22nd May, 2012, Patna on 25th June, 2012 and Goa on 20th & 21st December, 2012 which were attended by the Chief Secretary, Senior Officials of State, Dr. Muzaffar Ahmad, Member NDMA and JS, NDMA.

Multi State Earthquake Preparedness

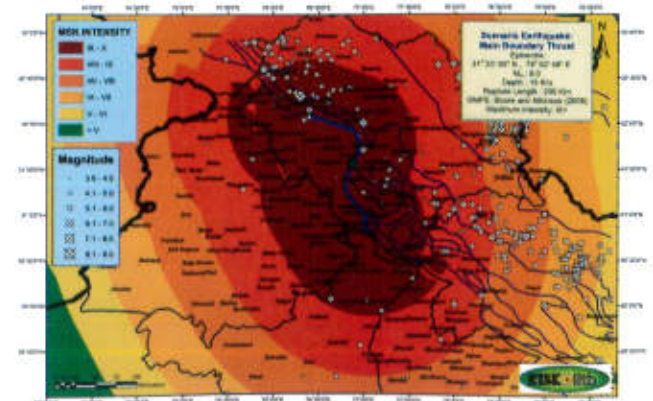
Mw 8 Mandi Earthquake Scenario: Multi State Exercise and Awareness Campaign

3.23 The Himalayan belt, extending from Kashmir to Arunachal Pradesh, has been seismically a very active region. During a short span of 53 years

between 1897 and 1950, four great earthquakes, (Shillong 1897; Kangra 1905; Bihar-Nepal 1934 and Assam 1950) exceeding magnitude 8 occurred in the region causing vast devastation. However, no such earthquake has occurred since 1950.

3.24 Studies indicate that enough strains have accumulated to generate magnitude 8 or larger earthquakes in the Himalayan region. Unfortunately, where and when such an earthquake would occur is not known. A group of Russian scientists have developed an algorithm for long-term earthquake forecast, which employs retroactive analysis of dynamics in seismicity preceding the great 8+ earthquakes globally. Based on this algorithm, which is acclaimed to have 70% success, scientists have identified an area in Himachal Pradesh as a possible site for an M 8 or larger earthquake that may occur any time by the end of 2016. This prediction underlines the necessity of preparing a proper mitigation and action plan.

3.25 In order to assess the current preparedness of the administration to deal with such a situation, and spread awareness about the importance of mitigation measures, NDMA undertook a project, 'Mw 8 Mandi Earthquake Scenario: Multi State Exercise and Awareness Campaign'. The aim of the project was to provide a scientific understanding on the consequences of a large earthquake in three North-West Indian States and the UT of Chandigarh. The objectives of the exercise were to understand the extent of area likely to be affected due to such an earthquake, the direct and indirect consequences of the earthquake on communities, buildings, critical facilities, lifeline infrastructure (such as transportation, communications, power, water supply etc.), industrial facilities and to



Earthquake scenario

assess impact of such an incidence on the preparedness and functioning of various government functionaries, departments and the stakeholders.

3.26 The scenario development project was approved in December 2011 with a budget of ₹ 1.30 crore. Indian Institute of Technology (IIT)-Bombay and IIT-Madras undertook preparation of a hypothetical earthquake scenario for the project. The states of Punjab, Haryana and Himachal Pradesh along with the Chandigarh UT actively participated in activities of the project.

3.27 For launch of the project, high-level meetings comprising of the Vice Chairman, NDMA, Shri M. Shashidhar Reddy were held with the Chief Ministers of the three States and the Administrator of Chandigarh UT. The capacity building activities included training of engineers, architects and concerned staff from various state government departments on Rapid Visual Screening of buildings and water tanks. Training on Incident Response System was followed by table-top exercises and mock drills. Sensitization workshops were conducted for the schoolchildren and state officials. An extensive media plan was prepared and executed in partnership with the states and Chandigarh UT, which was financed and technically supported by NDMA to help generate mass awareness on earthquake hazard and safety measures. Print media, electronic media, radio spots, rallies, nukkad natak, carnivals, hoardings and posters etc. were used to create awareness. Prominent Indian cricketer Yuvraj Singh, Olympic Gold medallist Abhinav Bindra and Olympic Silver medalist Vijay Kumar joined the awareness campaign as goodwill ambassadors for Chandigarh, Punjab and Himachal Pradesh respectively.



3.28 A major activity undertaken in the Project was the conduct of Multi-State Mega Mock Exercise in the tri-city of Chandigarh, Panchkula & Mohali and in Shimla on 13 February, 2013, wherein the response mechanism and inter and intra-departmental coordination of these states and Chandigarh UT was evaluated.

3.29 The 'Mw 8 Mandi Earthquake Scenario: Multi State Exercise and Awareness Campaign' was a pioneering project aimed at preparing the region to synergise their resources for better disaster preparedness to face a high magnitude earthquake. The effort included creation of a pool of engineers and generating awareness amongst them on the use of RVS technique and its application for vulnerability assessment of the built environment. Key state officials were given training on the mechanism of Incident Response System (IRS) and notified on the need for developing streamlined organisational structures to deal with emergencies. The project highlighted the need for:

- ◆ An updated State and District Disaster Management Plan.
- ◆ A comprehensive resource inventory covering human resources, technical resources and military resources.
- ◆ Optimum utilization of technology.
- ◆ Mainstreaming of risk reduction in development planning.
- ◆ Planning programme to advice/guide homebuilders in earthquake resistant building techniques.
- ◆ Adherence to building by-laws and development of community infrastructure including schools, health units, etc. to high hazard resilient standards so that these could be used as community emergency shelters in a disaster situation.



3.30 The project highlighted the urgent requirement of setting-up of state-of-art Emergency Operation Centres (EOC) equipped with well-trained man-power, both at the State and District levels. It generated awareness amongst the community and brought forward strengths and weakness in disaster management and the need for enhanced planning. Also, it promoted a culture of preparedness for disaster management.

Workshop on Urban Earthquake Risk Reduction at Kashmir University

3.31 NDMA conducted a joint workshop in collaboration with the Ministry of Earth Sciences and University of Kashmir on Urban Earthquake Risk Reduction at Srinagar from 13th-15th October 2012. A number of eminent speakers from across the country were brought to the University of Kashmir by NDMA, to impart training on topics of earthquake risk mitigation and vulnerability of Jammu & Kashmir, during the workshop.

3.32 The Workshop attracted large participation of people from the state. More than 300 participants from state government agencies, academia and the civil society attended the technical sessions.



Children witnessing live demo by NDRF

3.33 Over 2000 school children along with teachers participated in the half-day session. Two thematic movies; 'Earthquakes and essentials of Safety' by Council for Scientific & Industrial Research – National Geophysical Research Institute (CSIR-NGRI) and 'Earthquake: Nature's Fury' by Technology Information, Forecasting and Assessment Council (TIFAC) Ministry of Science and Technology, were showcased. The enthusiasm and inquisitiveness of the children was commendable. The movies were followed by a question-answer session. The children were given a live demonstration on life saving skills by NDRF.

3.34 The three-day workshop session provided information on:

- ◆ The science behind the Earth's behaviour wherein the efforts put by the engineering and scientific community together to gain more and more information on earthquake science was discussed.
- ◆ The importance of education and knowledge in building better infrastructure through small interventions based on the knowledge gained through classroom studies or workshop.
- ◆ Programmes and efforts of J&K government towards disaster risk reduction.
- ◆ Vulnerability of the J&K State to earthquakes and measures to be adopted to reduce its impact.
- ◆ Need for technology with proper licensing mechanism for engineers and architects.
- ◆ Need for creation of a conducive environment to ensure safety through techno-legal and techno-financial regimes.
- ◆ Reinstating traditional building systems along with modern technology for earthquake resistant construction.
- ◆ Importance and benefits of strong Global Positioning System (GPS) and seismological network.
- ◆ Plans of CSIR-NGRI to establish a strong GPS and seismological network in the Jammu and Kashmir region to help understand the status of seismicity, strain accumulation, probable region and size of the next great earthquake in the region.
- ◆ Hospital preparedness and case studies.

3.35 The workshop concluded with a panel discussion on the 'way ahead' to be better prepared for dealing with earthquakes in Jammu and Kashmir.

EAS –India Workshop 2012

3.36 In an inter-connected world, disaster in one country could seriously impact many other countries - countries do not suffer in isolation. Disasters do not recognize political boundaries, as was witnessed during the Kashmir Earthquake in 2005 when the impact was felt not only in Kashmir but also across the border, in Pakistan

occupied Kashmir and Afghanistan, said Shri M Shashidhar Reddy, Vice Chairman, National Disaster Management Authority in his keynote address during the inaugural session of "EAS – India Workshop 2012: Building a Regional Framework for Earthquake Risk Management" at Hotel Ashok, New Delhi today on 8 November 2012. The East Asia Summit (EAS) is a forum held annually by leaders of, initially, 16 countries in the East Asian region. Membership expanded to 18 countries

including the United States and Russia at the Sixth EAS in 2011.

3.37 Union Home Minister Shri Sushil Kumar Shinde inaugurated this two day Workshop and wished that the knowledge sharing and brain storming during technical sessions would lead to build a regional framework for Earthquake Risk Management.

4

Policy, Plans and Guidelines

National Policy on Disaster Management (NPDM)

4.1 NPDM (released on 18 January 2010) portrays a paradigm shift from erstwhile 'Response-Centric' approach to the holistic management of disasters with emphasis on Prevention, Preparedness and Mitigation. The Policy document has been evolved in a participatory process taking on board relevant suggestions and recommendations of different stakeholders.

Highlights of the National Policy on Disaster Management

4.2 The NPDM has endeavored to capture, in its essence, the vigorously enabling environment, which has put in place through an Act of Parliament. It heralds the onset of a different approach in dealing with disasters that have, in the past, taken a heavy toll of lives and properties and crippled the economic base of communities. It also illustrates realization of the fact that disasters not only cause a setback to economic and developmental growth, but also seriously affect the national security environment.

4.3 The central theme of this Policy document is the belief that a disaster resilient community, duly empowered by a newly created disaster management structure, working in cohesion multi-sectorally, will help realize the national vision. A holistic and integrated approach will be evolved towards disaster management with emphasis on building strategic partnerships at various levels. The themes underpinning the NPDM are:

- i) CBDM, including last mile integration of the policy, plans and execution.
- ii) Capacity development in all spheres.
- iii) Consolidation of past initiatives and best practices.

iv) Cooperation with agencies at National and International levels.

v) Multi-sectoral synergy.

4.4 This policy document also encompasses institutional, legal and financial arrangements; disaster prevention, mitigation and preparedness, techno-legal regime; response, relief and rehabilitation, reconstruction and recovery, capacity development, knowledge management and research and development. It also focuses on the areas where action is needed and the institutional mechanism through which such action can be channelized.

4.5 The NPDM also aims to bring in transparency and accountability in all aspects of disaster management through involvement of community, community based organizations, Panchayati Raj Institutions (PRIs), local bodies and civil society. National Policy on Disaster Management is the mother/master document on which the guidelines and plans at the National, State and District levels will be based.

National Disaster Management Plan (NDMP)

4.6 Section 11 of DM Act, 2005 provides that, 'There shall be drawn up a plan for Disaster Management for the whole of the Country to be called National Plan. The National Plan shall be prepared by the National Executive Committee (NEC) having regard to the National Policy and in consultation with the State Governments and expert bodies or organizations in the field of Disaster Management to be approved by the National Authority'. After discussions with the NDMA and the NEC, it was decided that the National Plan would comprise of three volumes as under:

- ◆ The National Response Plan spanning all the Central Ministries/ Departments and related

agencies covering all types of disasters would be prepared by the MHA. An Inter-Ministerial Central Team has already been formed by the NEC in the MHA to prepare this Plan.

- ◆ Mitigation and Preparedness Plan to be prepared by the various Central Ministries and Departments and other agencies covering specific disasters.
- ◆ The National Human Resource and Capacity Building Plan are to be prepared by National Institute of Disaster Management, addressing the Training and Capacity Building needs of several sectoral/ thematic disciplines.

4.7 Guidelines and formats for formulation of these plans were deliberated upon in the NDMA and forwarded to the Ministry of Home Affairs (MHA), concerned Ministries/ Departments and the NIDM.

State Disaster Management Authorities (SDMA)

4.8 The State Governments are in the process of setting up the State and District Disaster Management Authorities. The provisions of the DM Act, 2005 relevant to the States/ UTs have been in force w.e.f 01 August 2007. All 28

States and 7 Union Territories are reported to have constituted SDMAs as per the provisions of the DM Act, 2005. In some of the States constitution of the District Disaster Management Authorities (DDMAs) have not been completed.

State Disaster Management Plans (SDMPs)

4.9 A Disaster Management Plan is required to be prepared by each State/ UT in terms of Section 23 of the DM Act, 2005. The State Plan shall be prepared by the State Executive Committee (SEC), in regard with the guidelines laid down by the NDMA, and after consultation with local authorities, district authorities and the people's representatives as the SEC may deem fit. The State Plan shall be approved by the SDMA. It shall be reviewed and updated annually. The NDMA issued the guidelines for preparation of State Disaster Management Plans in July 2007 in accordance with the Section 6 (2) (d) of the DM Act, 2005. Taking a proactive action, NDMA devised a "Scheme for Preparation of Disaster Management Plans" to provide financial support during financial year 2009-2010 to States/ UTs to enable them for preparation of their Disaster Management Plans indicated as below:

Category I (Assistance of ₹ 10,62,500/-)	Category II (Assistance of ₹ 8,62,500/-)
Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Gujarat, Himachal Pradesh, Jammu & Kashmir, Kerala, Karnataka, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Sikkim, Tamil Nadu, Uttarakhand, Haryana, Uttar Pradesh, West Bengal, Delhi, Andaman & Nicobar, Puducherry	Chhattisgarh, Goa, Jharkhand, Madhya Pradesh, Punjab, Rajasthan, Tripura, Chandigarh, Daman & Diu, Dadra & Nagar Haveli, Lakshadweep

4.10 NDMA has been regularly following up with States/ UTs and has been offering advice through regular workshops, review meetings and

video conferences on preparation of SDMPs. The States/ UTs are in different stages of preparation of plans.

Status of SDMP

Category	Status of SDMP	Name of the States / UTs
A	Final SDMP	States 1. Arunachal Pradesh 2. Assam 3. Goa 4. Gujarat 5. Himachal Pradesh 6. Nagaland 7. West Bengal
B	Draft SDMP	States 1. Andhra Pradesh 2. Chhattisgarh 3. Jharkhand 4. Karnataka 5. Mizoram 6. Punjab 7. Rajasthan 8. Sikkim 9. Tamil Nadu 10. Tripura 11. Uttar Pradesh
C	Not prepared	States 1. Bihar 2. Haryana 3. Jammu & Kashmir 4. Kerala 5. Madhya Pradesh 6. Maharashtra 7. Manipur 8. Meghalaya 9. Orissa 10. Uttarakhand
		UTs 11. A & N Island 12. Chandigarh 13. Dadra & Nagar Haveli 14. Daman & Diu 15. Delhi 16. Lakshadweep 17. Puducherry

Guidelines

4.11 In order to translate the objectives into plans, the NDMA adopted a mission-mode approach involving a number of initiatives with the help of various institutions (administrative, academic, scientific and technical) operating at the national, state and local levels. As a policy, the central ministries, departments and states, have been involved in evolving the guidelines, besides all other stakeholders. These guidelines, based on specific disasters and themes (such as capacity development and public awareness) will provide the basis of preparation of plans. Preparation of these Guidelines took a minimum 12 to 18 months, depending upon the complexity of the subject. The approach to formulation of guidelines comprised a 'nine-step' participatory and consultative process with stakeholders as shown in figure 4.1.

4.12 The process comprises:

- ◆ A quick review of the studies conducted, disaster-wise, of the actions/steps taken so far by various agencies, including the Central Ministries, States, Scientific and Technical Institutions etc.
- ◆ Identification of the residual agenda in terms of operational, administrative, financial and legal issues.
- ◆ Drawing up of a roadmap to the destination duly indicating milestones to facilitate easy monitoring.
- ◆ In terms of goals and objectives, screening down the destination to be attained, in short as well as long term, duly prioritized as vital, essential and desirable.
- ◆ Four important questions were to be answered: i.e. What is to be done?, how it is to be done?, who will do it?, and by when?
- ◆ Putting in place an institutional mechanism that oversees the operationalization of this roadmap.

PROGRESS OF PREPARATION OF GUIDELINES

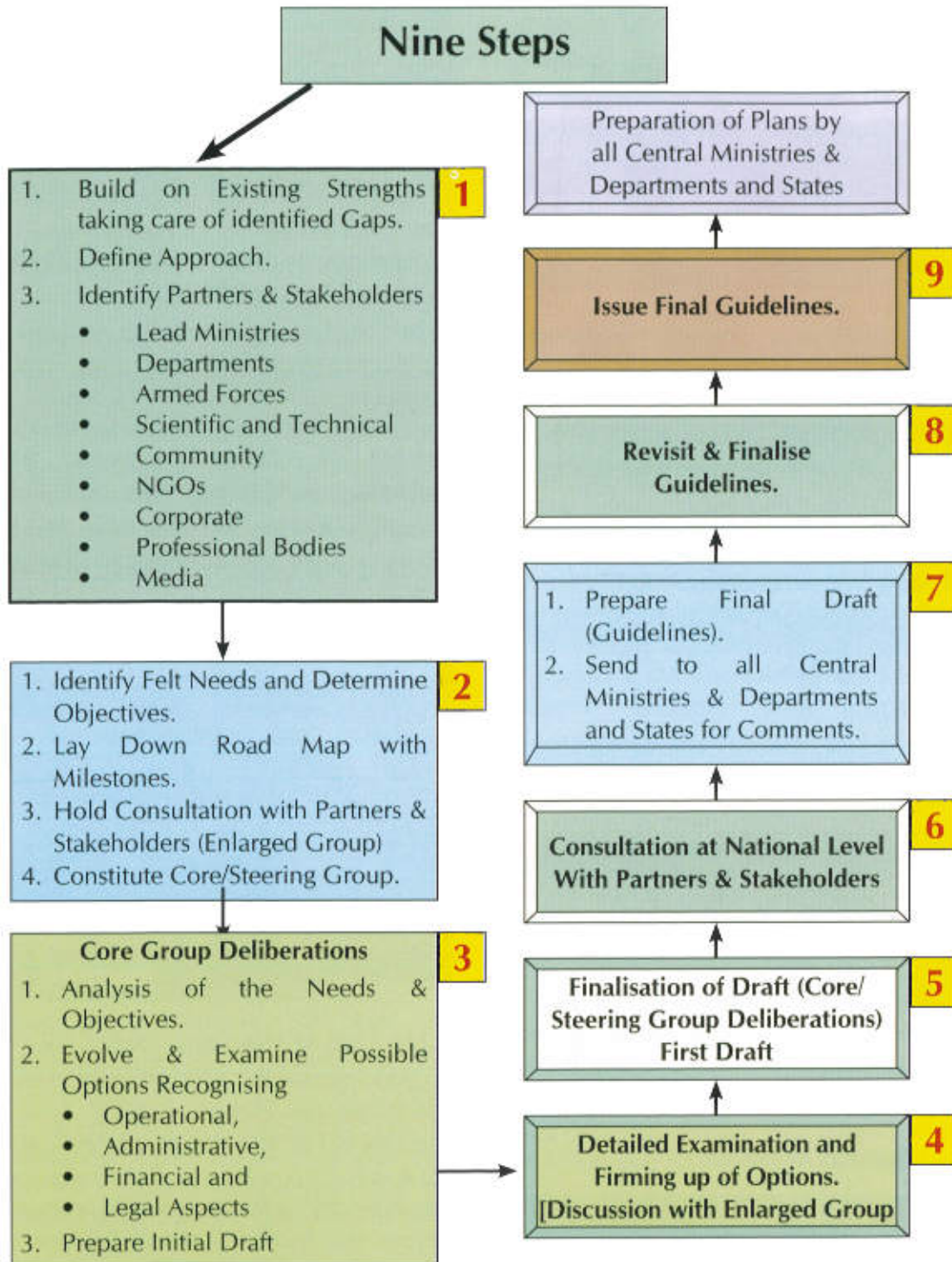


Figure 4.1

4.13 Following guidelines and reports have been released during the previous years by the NDMA –

List of DM Guidelines Issued by NDMA

Sl. No.	Description
1.	Earthquakes
2.	Tsunamis
3.	Cyclones
4.	Flood
5.	Urban Flooding
6.	Drought
7.	Landslide
8.	Nuclear and Radiological Emergencies
9.	Chemical Disaster (Industrial)
10.	Chemical (Terrorism) Disaster
11.	Medical Preparedness and Mass Casualty Management
12.	Biological Disaster
13.	Psycho-Social Support
14.	Formulation of State DM Plans
15.	Incident Response System
16.	National Disaster Management Information and Communication System
17.	Scaling, Type of Equipment and Training of Fire Services.

List of other Reports available

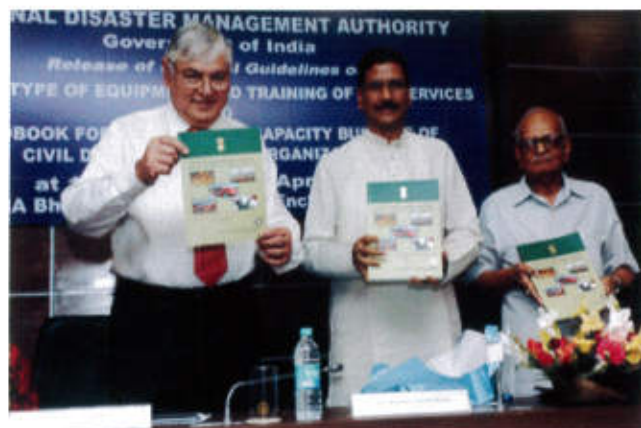
Sl. No.	Description
1.	Revamping of Civil Defence
2.	NIDM's Functioning
3.	Pandemic Preparedness Beyond Health
4.	Strengthening of safety and security for transportation of POL tankers
5.	Threats to Municipal Water Supply and Water Reservoir's

6.	Management of Dead in the Aftermath of Disaster
7.	Training Regime for Disaster Response
8.	Hand Book for Training and Capacity Building of Civil Defence and Sister Organizations: Part I & II

Guidelines and other Reports Prepared and Released During 2012-13

4.14 Following guidelines and reports have been released during the period under report by the NDMA:

Release of National Disaster Management Guidelines on Scaling, Type of Equipment and Training of Fire Services and Handbook for Training and Capacity Building of Civil Defence and Sister Organizations.



4.15 Shri M Shashidhar Reddy, Vice Chairman, NDMA released the National Disaster Management Guidelines on Scaling, Type of Equipment and Training of Fire Services on 13 April, 2012. At this occasion, he pointed out that as per the Standing Fire Advisory Committee, on the basis of laid down norms, our country has a deficiency of 97.54% in terms of fire stations, 80.04% in terms of Fire Fighting and Rescue Vehicles and 96.28 % in terms of Fire Personnel, causing great concern to everyone. The guidelines cover various aspects of revamping the fire services in the country in terms of scaling, type of equipment and training of fire services. The states will benefit from the mentioned efforts made by NDMA. Besides the National Disaster Management Guidelines on Scaling, Type of Equipment and Training of

Fire Services, Shri Reddy also released the Hand Book for Training and Capacity Building of Civil Defence and Sister Organizations.

4.16 Taking note of these deficiencies, NDMA had made a forceful plea to the 13th Finance Commission for allocation of funds to revitalize the fire services. Responding to this the Finance Commission has allotted Grants in Aid specifically to the states, which had made specific proposals before it. Besides this, the 13th Finance Commission has doubled the Grant to local bodies compared to the allocation made by the 12th Finance Commission. About ₹ 15,000 Crores are allotted, out of a total of ₹ 23,000 Crores as a direct grant and the balance of about ₹ 8,000 Crores as a performance grant, to be made available subject to compliance with eight conditions. One of them is to put in place a Fire Hazard Response and Mitigation Plan for their respective jurisdictions by all Municipal Corporations with a population of more than 10 lakhs.

Preparation of National Policy Guidelines on Hospital Safety

4.17 Incidents such as the Collapse of Civil Hospital in Bhuj Earthquake (2001), Terrorist Attack at the Ahmedabad Civil Hospital (2008), Collapse of Leh Civil Hospital during Leh Cloudburst (2010), and Fire at AMRI Hospital Kolkata (2011,) which witnessed a large number of death and disabilities have brought into focus not only the vulnerability of our hospitals to disasters/emergency situations but also the lack of adequate capacities, planning and preparedness. NDMA therefore is currently engaged in developing National Policy Guidelines for Hospital Safety. The broad objective is to prepare policy guidelines on hospital safety and preparedness to deal with on-site emergencies; identification of gaps; reviewing the existing codes and other legal provisions and recommending steps for better monitoring and supervision of all safety parameters within such settings.

Formulation of National Guidelines on Minimum Standards for Disaster Relief

4.18 Provision of safe food, clean water, proper hygiene & sanitation during disaster relief is of

paramount importance for good health of the disaster victims and to avoid any epidemic. A brainstorming meeting of experts was held for formulation of National Guidelines on Minimum Standard of Water, Food, Medical Cover, Hygiene Sanitation and Shelters for Disaster Relief. Special provision for widows and orphans was also discussed in view of their specific problems & vulnerability. The meeting was attended by experts from Ministry of Health, Ministry of Women and Child, National Institute of Nutrition, National Institute of Mental Health and Neuro Science (NIMHANS), National Commission for Protection of Child Rights, Jawaharlal Nehru University (JNU), Ministry of Defence, Defence Food Research Lab, DGAFMS, SOS Children's' village, UNICEF, Sphere India and other organizations working in this field. A draft has been circulated through email to all experts for their inputs. Inputs will be incorporated in the document for further deliberation and finalization.

National Policy Guidelines on Community Based Disaster Risk Reduction and Management

4.19 NDMA recognizes that it would be pertinent to invest in efforts with respect to strengthening Community Risk Resilience at all levels, in order to adequately address Disaster Risk Reduction in the country. As the Community plays the role of First Responder, it is critical that there is adequate awareness and preparedness at the community level, especially amongst the most vulnerable set of communities residing in the most vulnerable areas of the country. Therefore, the process of formulating the National Policy Guidelines on CBDM has got initiated by NDMA. The guidelines envision spelling out the role of communities in all phases of disaster management and strengthening the existing mechanisms for community organization and involvement. The guidelines would lay down certain key action points and SOPs, which will enable the communities to perform their respective roles and would provide impetus for capacity building, resulting in creation of risk resilient communities and adoption of build back better strategy.

5

Capacity Development

Introduction

5.1 A strategic approach to capacity development can be addressed effectively only with the active and enthusiastic participation of the stakeholders. This process comprises awareness generation, education, training, research and development (R&D) etc. It further directs towards putting appropriate institutional framework in place, management systems and allocation of resources for efficient prevention and handling of disasters.

5.2 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.
- ◆ Conceptualization 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 response groups at State/ District/ Local levels.

Initiatives of Capacity Building & Training (CBT) Division

Pilot Project on Capacity Building of

Government officials (GOs), PRIs and Urban Local Bodies (ULBs) in partnership with Indira Gandhi National Open University (IGNOU)

5.3 NDMA in collaboration with IGNOU has implemented a Pilot Project on Capacity Building on Disaster Management of GOs, representatives of PRIs and ULBs in the areas of disaster prevention, preparedness, mitigation, response and recovery by conducting eight Face to Face Training Programmes (FFTPs) at all the designated centres in 54 districts of 11 hazard prone states.

5.4 The identified States and Districts were:

- ◆ Andhra Pradesh – Anantapur, Mahbubnagar, Srikakulam, Nellore, Prakasam.
- ◆ Assam- Dhemaji, Lakhimpur, Barpeta, Dhubri, Cachar.
- ◆ Bihar – Sitamarhi, Muzaffarpur, Patna, Supaul, Madhepura.
- ◆ Haryana – Gurgaon, Panipat, Ambala, Yamuna Nagar, Rohtak.
- ◆ Himachal Pradesh – Kullu, Kinnaur, Chamba, Kangra, Manali.
- ◆ Kerala - Idukki, Wayanad, Malappuram, Ernakulam and Palakkad
- ◆ Maharashtra- Nasik, Raigarh, Thane, Pune, Satara.
- ◆ Orissa – Ganjam, Bhadrak, Jagatsinghpur, Kendrapara, Balasore.
- ◆ Tripura – North Tripura, South Tripura, East Tripura (Dhalai), West Tripura.
- ◆ Uttarakhand - Bageshwar, Pithoragarh, Rudraprayag, Chamoli, Uttarkashi.
- ◆ West Bengal – Bankura, South Dinajpur, Murshidabad, Burdwan, Purba Medinipur.

5.5 In all, 16,479 participants against the targeted number of 16,200 participants attended the FFTPs. IGNOU has already submitted the draft report which is under process for final printing.

Pilot Project for Capacity Building of Indian Administrative Service (IAS)/ Central Service at the Centre for Disaster Management at Lal Bahadur Shastri National Academy of Administration (LBSNAA)

5.6 NDMA in collaboration with Centre for Disaster Management, NIAR, and LBSNAA, Mussoorie has undertaken a pilot project for capacity building of IAS/ Central Service at the Centre for Disaster Management at LBSNAA for providing Basic Foundation Training Courses with regular updates in Refresher and Orientation Programmes for IAS and All India Service Officers at LBSNAA. The objective is to ensure that all officers who are likely to be posted as District Collectors receive a minimum level of training in DM. For senior officers, awareness about policy options for Disaster Risk Reduction (DRR) will be the focus. LBSNAA has submitted the draft report indicating 1048 participants attended different courses/ modules relating to disaster management.

Other Initiatives

5.7 NDMA facilitated conducting of multiple DM related events organized by various organizations such as Federation of Indian Chambers of Commerce and Industry (FICCI), All India Institute of Medical Sciences (AIIMS), IITs, Confederation of Indian Industry (CII) etc. Some of these events were on International Conference on Emergency Medicinal, National Seminar on Disaster Management, Emergency Planning and DM in Chemicals, Petro-Chemicals etc. A total number of 17 Seminars/ Symposiums were organized during 2012-13.

5.8 To inculcate a culture of preparedness amongst the government functionaries, industries, other stakeholders to reach out to the community, a number of Table Top and Mock Exercises have been conducted throughout the country on various types of disasters viz. earthquakes, cyclones, floods, fire and chemical (industrial) disasters etc. Also Capacity Development Programmes

(Mock, Table Top and IRS) were organized in 16 divisions of Punjab, Himachal Pradesh, Haryana and Chandigarh. Total 47 such exercises were conducted during the year.

5.9 Training of master trainers for social mobilization/ awareness against JE/ AES at various district headquarters of Eastern Uttar Pradesh as well as at Gorakhpur were undertaken as per the initiatives of NDMA.

Capacity Building Initiatives by NDMA with focus on Chemical, Biological, Radiological and Nuclear (CBRN) Emergencies

International Conference on Radiation Environment Assessment, Measurement & Its Impact (RADENVIRON-2012)

5.10 International Conference on Radiation Environment Assessment, Measurement & Its Impact (RADENVIRON-2012) was held on 12.04.2012 in Lucknow, Uttar Pradesh. In his Key Note Address Maj. Gen (Dr.) J K Bansal apprised the audience that in today's environment of industrial revolution, radionuclide is used in disinfecting food, sterilizing medical equipment, finding oil and sensitive smoke detectors, Nuclear material is also used to assist in diagnosing and treating diseases, improving agricultural yields, producing electricity and expanding scientific knowledge. The application of sources of radiation is growing daily, and consequently probability of nuclear accidents is increasing. He cited the example of Chernobyl Nuclear Reactor accident in 1986 & Fukushima Nuclear Plant accident 2011. Dirty bomb can also cause radiation effect. Dirty bomb/suitcase Nuke by terrorist's gains importance because of the fact that terrorism is a state sponsored widespread activity, and terrorists have got financial and technical support from rough states. It is therefore important to know about details of dirty bomb/suitcase nuke. He mentioned that whatever may be the scenario, destructive potential of nuclear agent is enormous. There will be tremendous devastation to human and other living beings, flora, fauna and environment including air, water and soil. Even with best preventive efforts possibility of nuclear disaster cannot be entirely eliminated. Therefore preparedness for facing nuclear emergency is to be considered as integral part of National framework for disaster management planning. Emergency

response plans have to be devised at all levels viz., community, districts, states and nation as a whole.

6th Training Programme on CBRN Security and Preparedness to handle CBRN emergencies for security staff of Parliament House Complex (PHC)

5.11 On 13&14 June 2012 NDMA conducted 6th training programme on CBRN Security and Preparedness to handle CBRN emergencies for security staff of Parliament House Complex (PHC). Programme was inaugurated by Vice Chairman, Shri Shashidhar Reddy, NDMA. In his inaugural address, Vice Chairman highlighted the need of CBRN Security of the PHC and reiterated NDMA's commitment to have regular training programmes.

5.12 Giving an overview of the CBRN training programme, Maj Gen (Dr) J.K. Bansal, Member, NDMA emphasized on necessity of hands on practical training with CBRN protection, detection and decontamination equipment. Approximately 70 participants attended the programme. CBRN experts were invited as faculty from NDMA, Defence Research Development Organisation (DRDO), and Bhabha Atomic Research Centre (BARC) etc.



CBRN Training Programme for NDRF Medical Officers

5.13 NDMA conducted three days training programme of NDRF, medical doctors and para medics on emergency medical response in CBRN scenarios, from 31 July to 2 August, 2012. There are 4 CBRN trained NDRF battalions. NDRF had effectively managed Mayapuri radiation incidence, Mumbai Port chlorine leak and hazardous chemical found near Ghaziabad. Treatment

of CBRN casualties need specialized medical facilities and expertise; keeping that in view, Shri M. Shashidhar Reddy, Vice Chairman, NDMA started the training programme for doctors and para medics of NDRF. During his inaugural address Shri K.M. Singh, Member, NDMA said that the participants were detailed from all CBRN battalions located in different parts of the country. The training programme included lectures and practical demonstration of CBRN equipment required for protection, detection and decontamination. A mock drill was also conducted to keep all the doctors and para medics staff in ready state in case of any CBRN eventuality for medical response. Delivering the Key Note Address, Maj Gen (Dr) J.K. Bansal, Member, NDMA explained the methodology as to how to treat a case at the site of incident and how to do the decontamination. The use of protective equipment like face mask, gloves & boot was also demonstrated. Monitoring of radiation, as well as chemical agents was fully covered during the course. Specialized investigations like radio bio-dosimetry, use of de-corporation drugs for radiation and antidotes for hazardous chemicals were discussed during the programme. Experts and faculty were invited from NDMA, DRDO, Armed Forces, BARC, Apex Trauma Centre, AIIMS, and Delhi Fire Service for the theoretical lectures. All lectures were followed by practical demonstration so that theoretical knowledge gained during the lectures could be applied during the practical demonstration.



CBRN Security, Prevention, Mitigation and Preparedness

5.14 Maj. Gen. (Dr.) J. K. Bansal, Member, NDMA convened a meeting with Inspector General of Police, Chandigarh for training the police force of Chandigarh city on CBRN Security, Prevention,

Mitigation and Preparedness to respond to CBRN scenario. During the meeting procurement of CBRN protective equipment like face mask, gloves, chemical monitoring, radiation meters and field kits for detection of biological agents was discussed.

CBRN Seminar by NDMA at Delhi Police Headquarters

5.15 NDMA organized one day seminar on "CBRN Scenario: Prevention & Mitigation" for Delhi Police at Police Headquarters on 27th September 2012. The keynote address on the "Overview of CBRN Scenario" was delivered by Maj Gen (Dr) JK Bansal, Member, NDMA. He explained as to how to detect CBRN agents, use of protective equipment like face mask, gloves, boot & decontamination. He also discussed about treatment of CBRN injuries including specialized investigation like, radio biosimetry, use of de-corporation drugs for radiation and antidotes for hazardous chemicals. The programme was attended by senior police officers including Shri Neeraj Kumar, Commissioner of Police. The training programme was very useful for awareness and sensitization of senior police officers that paved the way for the road map for training of all police personnel so that they will be able to handle any such eventuality. The expert faculty was invited from DRDO & Inter University Accelerator Centre (IUAC). Along with theoretical lectures there was a practical demonstration of CBRN equipment by DRDO. CBRN equipment & monitoring of radiation, as well as chemical agents were demonstrated by Defence Research Development Establishment (DRDE). It was proposed that such trainings must be an ongoing event where more number of police officers and other personnel need to be trained and refresher courses need to be conducted regularly. Delhi Police also needed to be equipped with CBRN equipment to handle any such eventualities in prompt and an effective manner.

Radiological and Nuclear Emergencies: Preparedness and Counter Measures

5.16 On 22 November 2012 Maj Gen (Dr) JK Bansal, VSM, Member, NDMA chaired a session on 'Radiological and Nuclear Emergencies: Preparedness and Counter Measures'. The presentation was made by Dr. Norman Coleman from Nuclear Cancer Institute, USA during

International Conference on Radiation Biology held at Mumbai. In the introductory remarks Member, NDMA highlighted the need for training of medical doctors for handling nuclear casualties & creation of Medical facilities for treatment of Radiation injuries.

Capacity Building in Police & Security Forces in Bioterrorism Prevention & Mitigation

5.17 On November 29, 2012 a working group meeting on 'Capacity Building in Police & Security Forces in Bioterrorism Prevention & Mitigation' was held under the chairmanship of Maj Gen (Dr) J K Bansal, Member NDMA. The meeting was attended by representatives and experts from MHA, Central Bureau of Investigation (CBI), Intelligence Bureau (IB), NDRF, Bureau of Police Research and Development (BPRD), National Investigation Agency (NIA), DRDO, Department of Animal Husbandry Dairy & Fishery (DAHDF), Delhi Jal Board (DJB) and School of Biotechnology, JNU. During this meeting deliberation were on various capacity building and training aspects of Police and Security Forces on Bioterrorism prevention and mitigation. The meeting also discussed and finalized the NDMA, CBI & Interpol training collaboration. Besides training collaboration, the working group also finalized a comprehensive road map for capacity building programs.

Disaster Management: Emerging Challenges for the Armed Forces

5.18 Maj. General (Dr.) J.K. Bansal, visited the Army War College at MHOW, Madhya Pradesh and delivered a lecture to Army Officers and faculties on Disaster Management: Emerging Challenges for the Armed Forces, on 5 June, 2012. During the lecture Member, NDMA highlighted the Role of Armed Forces in Disaster Management. Highlighting some of the emerging challenges such as CBRN, he called for special initiative by Armed Forces in the field of training and capacity building for detection, protection & response to CBRN emergencies.

5.19 Maj. General (Dr.) J.K. Bansal, visited Dr. Babasaheb Ambedkar National Institute of Social Sciences (BANISS) at MHOW on 5th June, 2012. Member discussed with Shri. R. N. Berwa, IAS (Retd), Director General, BANISS, about various

aspects of disaster management and creating community based psychosocial care worker through the faculties of social services. Member highlighted that BANISS can play an important role in capacity building.

5.20 Maj. General (Dr.) J.K. Bansal, visited College of Veterinary Sciences at MHOW and interacted with Dean Dr. S.N.S. Parmar and faculties. Member called for cross sectoral sensitization of veterinarian, livestock farmers and industries to put in joint mechanism to minimize the impact of disaster on livestock.

Training programme on CBRN Security, Preparedness and Response for Delhi Police

5.21 On 30 January, 2013 NDMA conducted Training programme on CBRN Security, Preparedness and Response for Delhi Police. This programme was inaugurated by Vice Chairman. In his inaugural address, Vice Chairman highlighted the need of CBRN Security of the Police Force and reiterated NDMA's commitment to have regular training programme for Delhi Police. He mentioned that NDMA has taken initiative to provide radiation monitoring equipment mounted on 1000 police vans across the country out of which 60 will be in Delhi itself. Giving an over view of the CBRN training programme Maj Gen (Dr) JK Bansal, Member, NDMA emphasized on necessity of hands on practical training with CBRN protection detection and decontamination equipment. Approximately 50 participants attended the programme. CBRN experts were invited as faculty from NDMA, DRDO, and BARC etc.



Psychosocial Support and Mental Health Services during Disaster

5.22 On 24 December 2012 a workshop on Psychosocial Support and Mental Health Services

during Disaster was held in NDMA. In his key note address Maj Gen (Dr) JK Bansal, highlighted that NDMA had already released National Guidelines on Psychosocial Support and Mental Health Services in disaster for central ministries, departments and State Government, UTs and districts. He said that guidelines have been sent to all stakeholders for preparing action plans to deliver psychosocial care in case of disaster. However, there is an unavoidable need to create awareness, training and re-training about the Psycho Social Support and Mental Health Services (PSSMHS) among various relevant sectors, department and other stakeholders.

5.23 Maj Gen (Dr) JK Bansal, said that the workshop would extend the knowledge platform to elaborate on practically applicable measures to address critical issues identified in the guidelines. This will be a step toward achieving major objective of ensuring implementation of guidelines by reviewing the post issue of guidelines initiatives taken up by various stakeholders. The workshop concluded with a panel discussion to chalk out a road map for capacity building, care of vulnerable groups and integration of psychosocial workers to render effective psychosocial care in case of disaster.

Capacity building on Trauma Life Support

5.24 Trauma due to transport and other related disasters are one of the leading causes of mortality and morbidity in India. Pre-hospital care is virtually non-existent in most rural and semi-urban areas in India, and implementation of the golden hour concept is still an unachieved goal. NDMA has initiated a demonstrative project in collaboration with JPN Apex Trauma Centre, AIIMS, New Delhi on capacity building for advanced trauma life support in India with an aim to reduce injury/trauma related mortality/morbidity in the country by developing human resources (doctors and nurses) to provide effective advance in-hospital trauma care.

5.25 The project has trained around 117 Specialists (doctors) and 229 health professionals from Bihar, Assam and Andhra Pradesh in the pilot phase which included participation of 129 Doctors for the Advanced Trauma Life Support

(ATLS) Course, 131 participants for Rural Trauma Team Development Course and 53 Nurses for Advanced Trauma Care for Nurses (ATCN) course.

5.26 The project envisages that the states will further undertake trainings at local sites for various categories of specialist doctors, nurses and paramedics. Efforts are currently in progress to upscale the project to 10 more vulnerable states of India in the current Plan Period.

National Conference on Trauma Management

5.27 JPN Apex Trauma Centre, AIIMS in collaboration with NDMA hosted the National Conference on Trauma Care and Management in the month of November 2012 in New Delhi which was attended by the medical and paramedical including representation from many states. The objective of the conference was to build up the sensitization regarding trauma life support procedures and demonstrate vital skills on trauma care and management.

Capacity Building on Hospital Safety, Mass Casualty Management and Hospital DM Planning

5.28 In order to build the capacities of Hospitals and Medical Institutions to respond to various internal and external emergencies, capacity enhancement courses are being imparted to hospital functionaries in hospital disaster management planning, mass casualty management and hospital safety. It is emphasized that all hospitals should have disaster management plans which are to be tested by way of mock drills from time to time. NDMA has undertaken series of such trainings for more than 600 senior hospital functionaries during 2012-13 conducted in Srinagar (June 2012), Guwahati (September 2012), Ladakh (October 2012), Delhi (November 2012), Lucknow (January 2013) and Patna (February 2013).

5.29 In order to prepare hospitals for Mass Casualty Management and Hospital Safety, NDMA carried intensive efforts for capacity development of senior officials of Health Department of States and in this regard workshops were held on 28th May, 2012 at NIHF, Delhi, 09-14 June, 2012 at Srinagar, 05-10 October 2012 in Leh, 9-10 November 2012 at Delhi and 17-19 September 2012 at Guwahati.

Emergency Management Exercises in the Mega Cities of India: Towards Strengthening Urban Emergency Response

5.30 Mega cities in India are hosts to huge concentrations of urban population who day in and day out live under the threat of the possible occurrence of natural and man-made hazards including terrorist attacks and episodes of insurgencies which can spell havoc in matter of minutes. In many instances, emergency response machinery is not fully geared to be able to handle these incidents on account of the complex nature of the hazards and lack of capacities and standard operating procedures on preparedness and response.

5.31 Taking in view the absence of coordination mechanisms and lack of appropriate response capabilities, NDMA started implementing the Model of Emergency Management Exercises which focuses on undertaking capacity building and strengthening inter agency coordination of diverse group of stakeholders (emergency responders) involved in emergency/disaster with a special focus on mass casualty management and preparedness. This is very relevant in the Indian context where fast track growth and urbanization has led to a situation where most of the Tier 1 and 2 cities in India are facing increased risks of disasters/calamities and there is an imminent need for these cities to be adequately prepared to confront them. The hope is that this approach will serve to create a locally driven, multi-disciplinary, sustainable commitment to emergency management activities and will, over time, become a validated model that can be easily reproduced in other cities. This in turn would provide a structured engagement between the emergency response community on preparedness planning, capacity building and practice for all the ESFs (Emergency Support functions) and civil society organizations of the city to launch a coordinated action to manage any mass casualty incident.

5.32 The model has been successfully implemented in Guwahati (November 2012) and Delhi (December 2012). The cities witnessed capacity building of more than 1000 diverse set of stakeholders in each city as trainers on different domains of emergency preparedness and response. The stakeholders also underwent tabletop and field simulation (city wide drill) which enabled them to

rehearse SOPs on emergency preparedness and response in a coordinated manner. The model adopted for implementing EMEx rests on creation of a resource pool of trainers at the state/city level who in turn can disseminate the training further at the local levels.

5.33 Government of Assam hosted the Guwahati Emergency Management Exercise 2012 in partnership with NDMA and other key organizations from 28th October to 4th November 2012.

Public Health in Emergencies

5.34 Water Supply, Sanitation and Hygiene (WASH) play a critical role in ensuring the health and overall well-being of people, especially women and children during peace time as well as at the time of crises. Ensuring availability of safe drinking water and sanitation to the disaster affected communities is critical, as lack of appropriate WASH facilities can potentially trigger outbreak of epidemics. State level workshops and EXPOs on WASH in Emergencies were conducted in 3 states that are highly vulnerable to natural disasters, especially floods - Bihar, West Bengal and Andhra Pradesh in 2012. The purpose of the state level workshops and EXPOs was to strengthen the capacity of government departments responsible for Emergency WASH, particularly PHED / RWSS / Health, by exposing the engineers, health functionaries and other officials to a wide range of Emergency WASH related issues. This led to better understanding of WASH priority needs and key issues during crises and emergencies at the respective state level.

Knowledge and Capacity Building on PHiE in India

5.35 A Core Group at the national level comprising of experts and practitioners from the domain was formed under the aegis of NDMA to develop joint action for Capacity development in "Public Health in Emergencies" in India in November 2012. There were rigorous deliberations with key stakeholders which led to development of the draft strategy and suggested road map for consideration of all the key stakeholders.

Multi-stakeholder Action to Address Nutrition in Emergencies

5.40 NDMA in collaboration with Sphere India, National Coalition of Humanitarian Agencies in India and Welthungerhilfe organized two national consultations this year to bring different Government and Non-Government Stakeholders together to collaboratively strategize and develop a common road map for action to address "Nutrition in Emergencies" in the country. Officials from different government ministries, state government officials from WCD and NGO's at national and International level participated at these deliberations.

Chemical Industrial Disaster Management

5.37 NDMA is collaborating with Ministry of Environment and Forests and NIC in developing data base for Chemical Industrial hubs of various states on GIS platform for Emergency Planning and Response (GEPR) with resource mapping around industrial hubs. Two state level workshops jointly hosted by NDMA, MOEF, NIC and the State have been conducted in Hyderabad and Jaipur respectively. Around 200 stakeholders from diverse emergency support functions were trained at the workshops on essential elements pertaining to GIS based emergency planning and response.

5.38 Awareness and capacity building by way of Conferences and workshops in collaboration with FICCI have been organized. Stakeholders from diverse Industrial Set ups brought up on a common platform to spread awareness on prevention and control of chemical industrial disasters and accidents. The Conferences on Chemical Industrial Disaster management were held in Mumbai, Chandigarh – June 2012 and Hyderabad November 2012. A total of around 1500 stakeholders have been sensitized on essential aspects of CIDM at these conferences. NDMA also constituted a Core Group which is working on handling of hazardous material in ports.

Capacity building on School Safety

5.39 School Safety has been an area where NDMA launched demonstrative project 'National School Safety Project' in 22 States, 43 Districts. The workshop at Cuddalore, Puducherry was organized by NDMA, in collaboration with AIDMI Ahmedabad and State Govt. of Puducherry.

5.40 The National Policy Guidelines on School Safety is currently being formulated by NDMA. The objective of the Guidelines is to help in creation of a safer learning environment for children and highlight specific actions towards school safety that can be undertaken by different stakeholders within the existing framework for delivery of education.

5.41 Training workshops on school safety and disaster preparedness have been conducted by NDMA for senior education functionaries and teachers in Jammu and Kashmir (Srinagar and Ladakh), Assam (Guwahati) and Delhi in 2012.

Summer School on Cross Sectoral Disaster Risk Reduction Strategies in Livestock Sector

5.42 Maj. Gen. (Dr.) J. K. Bansal, visited Bihar Veterinary College, Patna and inaugurated "Summer School on Cross Sectoral Disaster Risk Reduction Strategies in Livestock Sector" on 29 May, 2012. Delivering his Keynote address Member, NDMA highlighted the importance of Livestock in the agrarian society of India and consequential adverse impact of disaster on the same. Citing NDMA's National Guidelines on Biological Disaster Management that has an exclusive chapter on Livestock Disaster Management, he called for a sustainable unified strategy for mitigation of livestock disasters. Member, NDMA stressed upon the need of joint research, training and operational integration to handle emerging zoonosis like Swine Flu (H1N1) and Bird Flu (H5N1) to avoid its serious implications on human health, economy and national security implications.

National Summit on Disaster Management - "Forging Partnerships for Readiness and Relief", 18 December 2012

5.43 "Approximately 71 per cent of small industries/ businesses do not have any disaster management plan and 43 per cent of them never reopen after a disaster hit them", Shri M Shashidhar Reddy, Vice Chairman of NDMA said during his Inaugural Address at National Summit on Disaster Management. Confederation of Indian Industries (CII) in collaboration with the NDMA organized a two day National Summit on Disaster Management with focus on "Forging Partnerships for Readiness and Relief" at India Habitat Centre on 18-19 December 2012.

5.44 The inaugural session was also attended by Shri T K A Nair, Adviser to the Hon'ble Prime Minister of India, Shri V K Duggal, Member, NDMA, Shri Subodh Bhargava, Past President CII and Chairman CII National Council on Development Initiatives and Chairman Tata Communications Ltd. and Shri Sudhir Kapur, Chairman, CII Regional Committee on CSR (NR) and Managing Director & CEO Country Strategy India. In his Keynote address, Shri Nair appreciated the activities of NDMA and complemented them for remarkable achievements.

Delhi Emergency Management Exercise (DEMEX) 2012 - "Towards Strengthening Urban Emergency Preparedness and Response in Delhi", 04 December 2012

5.45 Delhi Disaster Management Authority (DDMA) conducted a Delhi Emergency Management Exercise (DEMEX) in Delhi from 9th August to 9th December 2012. The main activities include organizing 16 academic tracks on various subjects at various locations in Delhi from 29th November to 2nd December 2012 followed by Table Top Exercise on 3rd December 2012 and disaster simulation exercise on 4th December 2012 and hot-wash on 5th December 2012. The exercise was conducted at 32 different locations in all the 11 Revenue Districts of Delhi State on 4th December 2012.

5.46 The preparations for the launch of DEMEX 2012 was initiated in August 2012 with the commencement of preparation of contingency plans at various levels, followed by a series of preparatory workshops on hospital contingency planning and disaster management, inter-agency communication and coordination and school safety in the months of October and November 2012 involving stakeholders from all the 11 Districts of NCT Delhi. These plans were also reviewed subsequently to ascertain the preparedness amongst the stakeholders.

International Cooperation

Follow up activities as a result of EAS – India Disaster Management Workshop 2012

5.47 EAS India Workshop on "Building Regional Framework for Regional Risk Management" was conducted on 8th-9th November 2012 at New Delhi. This was conducted as follow up of

declaration by Hon'ble Prime Minister for hosting East Asia Workshop on Disaster Management and Relief in the case of occurrence of earthquake during the 6th East Asia Summit held on 19th November 2011 in Indonesia.

5.48 A meeting was held to discuss and finalize the activities to be undertaken as a follow up of the EAS-India Disaster Management Workshop 2012 held on 19th March 2013. It was recommended in the meeting that an EAS Earthquake Risk Reduction Centre would be set up in NIDM with the help of existing infrastructure of NIDM. It also recommended that NDMA will provide knowledge based inputs, such as guidelines etc. for ibid centre under guidance of Member, NDMA. This has the approval of Vice Chairman.

GOI-USAID Project on Disaster Management Support

5.49 A meeting was held under the chairmanship of JS (DM) MHA on 2nd April 2012 regarding implementation of IRS in India under GOI-USAID Project on Disaster Management Support. It was decided that NIDM should plan and conduct more courses/seminars/workshops for effective implementation for IRS modules for state/UT officials. NIDM should maintain the IRS database system to record and track the availability of IRS trainers and trainees and to maintain and update IRS curriculum. NDMA is also in the process of formalizing the introduction of IRS into Mock Drills of NDMA as requested by US Forest Service.

6

Awareness Generation

Introduction

6.1 Recognizing that awareness is the corner stone of proactive approach to disaster management and community preparedness, NDMA has launched a number of initiatives in this regard. As an ongoing programme, mock exercise/ drills are being conducted regularly to generate awareness and identify the gaps in planning and resources at the district/ enterprise levels. Full use of electronic and print media is being made to sensitize the community about disaster risks and vulnerabilities. Interviews, articles and press releases are being issued to centre-stage the awareness generation. The mock exercise is one of the most important initiatives which the NDMA has undertaken to facilitate the State Governments and District Administration in reviewing the effectiveness of their Disaster Management Plans for both natural and man-made disasters and assess the response capabilities along with creating public awareness. These exercises are conducted in the most vulnerable districts and industries on the recommendations of the State Governments.

Mock Exercises

6.2 The aim of the mock exercises is to test the adequacy and efficacy of the Emergency Response Plans, highlight the roles and responsibilities of the concerned stakeholders at various levels of administration, enhance coordination and synergize efforts of various Emergency Support Functions, find gaps in the resources, manpower, equipment, communication and systems. It also empowers the vulnerable groups to face disasters squarely.

6.3 These exercises are conducted in a well-planned and comprehensive manner by adopting a step-by-step approach. In the initial stage an orientation-cum-coordination conference is held to highlight the roles and responsibilities of the

various stakeholders. In the next phase, the Table Top Exercise is carried out to elicit the responses of the participants on simulated scenarios. These scenarios are painted to cover the entire gamut of the disaster management cycle. At the end of this phase the lessons that emerged are shared with all the participants and sufficient time is given for the participants to hone their responses and train their subordinates before the actual conduct of the mock exercise. The exercise is conducted on a simulated scenario and is progressed keeping in view the responses of the various participants. A number of observers are also detailed to monitor the exercise. Apart from the participants, the spectator from the community and stakeholders are also invited to attend the mock exercise. After the mock exercise, a detailed debriefing is carried out in which the observers are asked to give their feedback. The gaps identified during these exercises are communicated to the State and District Administration and also to the Management of various industries for taking necessary actions for improvement.

6.4 Conduct of mock exercises has gone a long way in creating a culture of preparedness at the grassroots level. There has been a large participation of the community as well as the students in most of these exercises. The District Administration, the Corporate Sector and the other First Responders have shown tremendous enthusiasm. Most of these exercises have been attended by the elected representatives of the people and senior level functionaries at the State level. These exercises have also been widely covered by the local print and electronic media, thus spreading the awareness amongst large number of people.

Awareness Campaigns

6.5 In its endeavour to spread awareness amongst the masses, Public Relation & Awareness

Generation (PR&AG) Division launched various public awareness initiatives through electronic and print media. The focus is on building appropriate environment for disaster management by impacting the target audience. These awareness campaigns are being implemented through various modes like TV, Radio, Print, Exhibition etc. The awareness campaigns are centered on spreading awareness among the masses with the two prime objectives:

- a) Preparing the citizen of the country for any impending disasters (earthquake, cyclone, floods, landslides, etc.).
- b) Spreading awareness on various activities of NDMA.

6.6 The following disaster management awareness campaigns were launched during the year 2012-13.

Audio-Visual Campaigns

6.7 Audio-Video spots on natural disasters like earthquakes, floods, urban floods, cyclones were prepared and telecast/broadcasted on Doordarshan (National Network and Regional kendras of Doordarshan), private TV Channels (National and Regional), Lok Sabha TV, Digital Cinema, All India Radio, F.M. Radio Channels.

6.8 Five video spots on Earthquake Disaster and its management titled "Saavdhan Hai To Jaan Hai", "Salaah Se Salamati", "Jhooko, Dhako, Pakdo", "Tayyari Mein Hai Samajdhari" and "Non-Structural Safety" were got prepared and telecast/broadcast.

6.9 Four video spots on Flood Disaster titled "Amma", "Main Taiyyar Hoon", "Anekta Main Ekta" and "NDRF in Action" were telecast/broadcast.

6.10 Two video spots on Cyclone disaster titled "Machhuara" and "Ghar Phir Ban Jayega" were also telecast/broadcast.

Print Campaign

6.11 Print media was also utilized for awareness generation by release of advertisements in various newspapers and magazines on issues related with the management of earthquake, flood and cyclone. Advertisements were released in major national and regional newspapers on the occasion of release of NDMA Guidelines on Scaling, Type of Equipment and Training of Fire Service.

6.12 In order to generate awareness about Japanese Encephalitis in 15 districts of Eastern Uttar Pradesh, 4000 copies of Manual for Trainers, 1 lakh copies of Flip Card for health workers and 1 crore copies of Flyers for door to door distribution were got printed and delivered for the campaign.

Production of Audio-Video Spots

6.13 Three audio-video spots on Landslide disaster titled "Postman", "Geologist" and "Hamari Galti" in Hindi language were got prepared through NFDC. Two audio-video spots on "Safety Kit" and one on "Urban Flooding" have been prepared through DAVP.

Disaster Reduction Day

6.14 NDMA & NIDM observed "Disaster Reduction Day" on the 10th October, 2012 at New Delhi on the lines of International Day for Disaster Reduction which is observed in October every year.

6.15 The occasion was graced by Shri. T. Nanda Kumar, Member, NDMA, Dr. Muzaffar Ahmed, Member, NDMA and Shri A.K. Mangotra, Secretary (BM), Ministry of Home Affairs and many other dignitaries, officials & children. A special talk on the occasion was delivered by Shri. B.K. Sharma, Former Principal, Ludlow Castle School, Delhi on Safe Schools: Journey of Ludlow Castle School. 15 schools across the country participated in School Safety Plan competition organized by NDMA & NIDM.

7 Disaster Risk Mitigation Projects

National Cyclone Risk Mitigation Project (NCRMP) Phase I

7.1 NCRMP has been drawn up with a view to address the Cyclone risks in the country, with World Bank assistance. The main aim and objective of the Project is to strengthen the structural and non-structural cyclone mitigation efforts, to reduce the cyclone risk and vulnerability in the coastal districts prone to cyclones and in building capacities for cyclone risk mitigation therein.

7.2 The Financing and Project Agreements relating to NCRMP were signed between the Department of Economic Affairs, World Bank and the State Governments of Andhra Pradesh and Odisha on 14.1.2011. This constitutes Phase I of the project which will be implemented over a period of five years up to 31.10.2015 by NDMA in coordination with the Governments of Andhra Pradesh and Orissa and the NIDM at a cost of ₹ 1496.71 crore. The project will be funded by the World Bank as an Adaptable Programme Loan with an International Development Association (IDA) credit amounting to ₹ 1198.44 crore. The remaining amount of ₹ 298.27 crore will be contributed by the State Governments of Andhra Pradesh and Orissa (under component – B).

7.3 The Project has four principal components namely:-

- A) Last Mile Connectivity (₹ 72.75 crore)
- b) Cyclone Risk Mitigation Infrastructure (₹ 1164 crore)
- C) Technical Assistance for Cyclone Hazard Risk Mitigation, Capacity Building and knowledge Creation (₹ 29.10 crore)
- D) Project Management and Implementation Support (₹ 95.06 crore).

E) Unallocated and contingency @ 10% of overall cost (₹ 153.80 crore).

7.4 Component A, C and D will be fully financed by the Central Government through World Bank assistance. The Component-B will be financed by Central and State Government in the ratio of 75:25.

Achievements

7.5 The achievements under NCRMP I up to 31.03.2013 are discussed as under:

Component A: Early Warning Dissemination System

7.6 Nine (9) firms had applied with respect to the Expression of Interest (EOI) published on 7th September, 2012, out of which 6 firms were short-listed by a committee constituted for this purpose on 19th December, 2012. Concurrence/NOC on RFP from the World Bank received on 04.01.2013. RFP floated to 6 shortlisted firms on 18.03.2013 and award was targeted by 30.06.2013.

Component B: Cyclone Risk Mitigation Infrastructure

7.7 This component of the project consists of infrastructure development for cyclone risk mitigation effort. The position of award of works and physical and financial achievements up to 31.03.2013 are as under:

a) Andhra Pradesh:

- i) **Award of Works:** The contracts of 187 packages consisting of 382 works amounting to ₹ 297.65 crores were entrusted during 2012-13. Of these 27 packages consisting of 45 works amounting to ₹ 45.3 crores pertain to Multi-purpose Cyclone Shelters (MPCSS), 145 packages consisting of 322 works amounting to

₹ 206.8 crores pertain to roads and 15 packages consisting of 15 works amounting to ₹ 45.55 crores pertain to bridges.

- ii) **Physical and Financial Achievements:** Eight MPCs out of 45 awarded have been completed and rest is at various stages of completion. 111 roads out of 117 have been completed and rest is at various stages of completion. 9 bridges out of 11 have been completed. The remaining works are at various stages of completion. An amount of ₹ 87.18 crores have been incurred on these accomplishments.

b) Odisha

- i) **Award of Works:** The contracts of 216 packages consisting of 275 works amounting to ₹ 336.00 crores were entrusted during 2012-13. Of these 147 packages consisting of 150 works amounting to ₹ 165.41 crores pertain to Multi-purpose Cyclone Shelters (MPCs) and 69 packages consisting of 125 works amounting to ₹ 170.58 crores pertain to roads.
- ii) **Physical and Financial Achievements:** One MPC out of 83 awarded have been completed and rest is at various stages of completion. 22 roads out of 71 have been completed and rest is at various stages of implementation. An amount of ₹ 39.50 crores have been incurred on these accomplishments.

Component C

7.8 The status of award of contracts for carrying out studies under this component is as under:

- i) **Consulting services for cyclone hazard, vulnerability and risk for 13 coastal States/UTs:** Expression of Interests (EoI) for consulting were received from 22 consultancy firms. Six firms were shortlisted for issuing RFP for financial and technical bids on 11.12.2012. Prior review and NOC on RFP from the World Bank received on 15.02.2013. RFP floated on 21.02.2013. Pre-proposal conference held on

8.03.2013. Award targeted to be completed by 30.06.2013.

- ii) **Post Disaster Need Assessment Study by NIDM:** In response to the EoI published on 10th November 2012 eight bids were received. These were evaluated against the pre-determined criteria by the committee. On evaluation, six firms have been shortlisted & RFP floated by NIDM. Technical and Financial bids have been received from consultants. Evaluation of Technical bid is in process. The study is proposed to be awarded by 30.06.2013.
- iii) **Preparing Long Term Training and Capacity Building Strategy for Disaster Risk Reduction in India under NCRMP by NIDM:** SEEDS, a consultancy firm, has been selected for this job. Project contract document signed on 30th July 2012 between NIDM and SEEDS Technical Services. The first deliverable was achieved on 14th August 2012. The second deliverable was received on 24th August 2012 containing draft inception report and detailed delivery schedule and incorporating all comments by NIDM. Technical Committee approved the third deliverable on 29th November 2012.

Component D: Benefit Monitoring Study

7.9 Committee shortlisted 6 top ranking firms on 11th January 2013. Prior review and NOC on RFP from the World Bank received on 14th February 2013. RFP floated to 6 shortlisted firms on 21st February 2013. Pre-proposal conference was held on 8th March 2013. Proposed task is likely to be finalized before 30th June 2013.

Financial Management

7.10 The position of budget allotment and expenditure of various units/organization up to 31.03.2013 for the financial year 2012-13 is as under:

State/ Organization	Budget allotted during 2012-13. (In crores)			Budget carried forward from 2011- 12 (In crores)			Total Budget for 2012-13 (In crores)		
	GOI	State share	Total	GOI	State share	Total	GOI	State share	Total
A.P.	47.76	4.37	52.13	26.78	6.48	33.26	74.54	10.85	85.39
OSDMA	44.84	17.00	61.84	16.44	10.77	27.21	61.28	27.77	89.05
PMU	0.82	0.00	0.82	0.00	0.00	0.00	0.82	0.00	0.82
NIDM	0.54	0.00	0.54	0.07	0.00	0.07	0.61	0.00	0.61
Total	93.96	21.37	115.33	43.29	17.25	60.54	137.25	38.62	175.87

7.11 The position of utilization of budget for the financial year 2012-13 up to 31.03.2013 is as under:

State/ Organisation	Total budget for 2012-13 (In crores)			Budget utilized up to 31.03.2013 (In crores)			Budget pending utilization during 2012-13 (In crores)		
	GOI	State share	Total	GOI	State share	Total	GOI	State share	Total
A.P.	74.54	10.85	85.39	40.98	10.85	51.83	33.56	0.00	33.56
OSDMA	61.28	27.77	89.05	28.50	7.65	36.15	32.78	20.12	52.90
PMU	0.82	0.00	0.82	0.82	0.00	0.82	0.00	0.00	0.00
NIDM	0.61	0.00	0.61	0.44	0.00	0.44	0.17	0.00	0.17
Total	137.25	38.62	175.87	70.74	18.50	89.24	66.51	20.12	86.63

7.12 The utilization of budget for the financial year 2012-13 was found to be only about 60.70% by the Govt. of A.P. and about 40.60% by OSDMA. This was found to be quite low. Both the states and NIDM have been asked to speed up the implementation of works and so also expenditure to fully utilize this year's budget.

Disbursement

7.13 The disbursement under the project was nil as on 31.03.2012. A disbursement of US \$ 36.70 Million (₹ 198.22 crores) has been achieved up to 31.12.2012 of which US \$ 18.10 Million is advance given by the World Bank. A claim of US \$ 5.62 Million (₹ 29.24 crores) has been filed with the World Bank for quarter 1.01.2013 to 31.03.2013 as actual expenditure with advance of US \$ 12.9 Million. This reimbursement claim through CAA is expected shortly. The total disbursement under the Project after receipt of this claim will be US \$ 55 Million up to 31.03.2013.

National Earthquake Risk Mitigation Project

7.14 NDMA proposes to implement National Earthquake Risk Mitigation Project (NERMP) in the various parts of the country with special emphasis on States in seismic zone IV and zone V. The objective

of this project is to strengthen the structural and non-structural earthquake mitigation efforts and to reduce the earthquake risk and vulnerability in all States/UTs in the country particularly the high risk areas in Zone IV and V, highly prone to earthquakes. This project would incorporate schemes/activities in accordance with Earthquake guidelines prepared by NDMA. As per the draft DPR, the project will have following six components:

- i) Techno-Legal Regime
- ii) Institutional Strengthening
- iii) Capacity Building
- iv) Public Awareness
- v) Retrofitting of Hospitals
- vi) Project Management, Monitoring and Evaluation

7.15 The draft DPR for the Project and draft EFC Memo were sent to Ministry of Home Affairs (MHA). MHA, however, desired that project may be reviewed keeping in view the feasibility of large scale trainings for capacity building involved in the project and it may be considered to be implemented in a phased manner.

7.16 It is now proposed to implement the project

in two phases namely Preparatory Phase and Main Implementation Phase. The total duration of NERMP is proposed to be 7 years including a preparatory phase of 2 years to assess the effectiveness /proof of the likely concepts as envisaged in the DPR as well as to demonstrate the effectiveness of the full project.

7.17 The Preparatory Phase will consist of various activities including strengthening the Techno-Legal Regime, Institutional Strengthening, Awareness Generation and Capacity Building including Training of Master Trainers, Training of Trainers of Civil Engineers, Architects and Masons with focus on seismic zone IV and V. The preparatory period will also be utilized to undertake development of course content for various training programmes, Guidelines for Retrofitting in accordance with the National Retrofitting Policy being formulated by NDMA separately, and other contents for capacity developments and awareness generation.

7.18 Planning Commission has conveyed their 'in principle' approval to the proposal on Preparatory Phase. The comments received from Ministry of Earth Sciences and Department of Expenditure along with the comments of NDMA on the same, have been forwarded to MHA. Approval of MHA to the Project is awaited.

Landslide Risk Mitigations Scheme (LRMS)

7.19 Landslide Risk Mitigation Scheme (LRMS), envisages financial support for site specific landslide mitigation proposals recommended by States, site specific Landslide studies/investigations from Premier Institutes-covering disaster prevention strategy, disaster mitigation and R& D in monitoring of critical Landslides, thereby leading to the development of Early Warning System and Capacity Building initiatives.

7.20 The objective of the proposed Scheme would be more to take up pilot projects so as to establish a mechanism to enhance scientific and technical knowhow in the country for effectively addressing landslide risk mitigation concerns for large scale replication subsequently.

7.21 The draft proposal was prepared and sent to Ministry of Mines, Geological Survey of India, Ministry of Earth Sciences, Department of Science and Technology, Planning Commission,

Department of Expenditure, and MHA for seeking their comments.

7.22 The Planning Commission has since conveyed 'in-principle' approval for taking up the Project as a Centrally Sponsored Scheme. The scheme is being revised.

Flood Risk Mitigation Scheme (FRMS)

7.23 NDMA has formulated Flood Risk Mitigation Scheme (FRMS). The Scheme envisages a programme based approach to consider financing proposals/ Schemes from States/Organisations on following activities:-

- i) Pilot Projects for development of model Multi-Purpose Flood Shelters; and
- ii) Development of River Basin specific Flood Early Warning System and Digital Elevation Maps for preparation of Inundation Models for giving early warning to the villagers for evacuation in case of flood.

7.24 The Planning Commission has since conveyed 'in-principle' approval for taking up the Scheme as a Centrally Sponsored Scheme and to support Pilot/Demonstration Projects. Towards processing of the Scheme, a meeting was held in Ministry of Home Affairs on 21st February, 2013. Based on the discussion with MHA, Ministry of Water Resources (MoWR) has been requested for certain clarification in respect of the Scheme.

Other Disaster Management Projects

A. Projects/schemes undertaken/completed by the NDMA under ODMP during 11th five year plan

7.25 NDMA has undertaken implementation of some Pilot projects and studies through various national institutions of repute e.g. IITs, I.I.Sc., and SERC etc. Details of activities undertaken and completed by the NDMA during 11th Five Year Plan under "Other Disaster management Projects" are as under:-

Development of Probabilistic Seismic Hazard Map of India (PSHA)

7.26 NDMA undertook a study on Development of Probabilistic Seismic Hazard Map of India (PSHA) for creation of a national database catalogue of earthquakes for seismic hazard analysis,

which included development/selection of strong motion attenuation relationships for six or seven different seismogenic regions of the country, and development of national PSHA map for PGA and S_a at Bedrock level on a grid of $0.2^\circ \times 0.2^\circ$ for different return periods. This study coupled with the Geo-tech Investigations envisaged covering the deficiencies in the existing database. The Structural Engineering Research Centre (SERC), Chennai who undertook this study has since submitted the Report which has been accepted by NDMA. Total expenditure on the project has been ₹ 56.14 Lakh. Copies of the Reports have been sent to all concerned and have also been put on the website of NDMA.

Geo-Technical Investigation for Seismic Microzonation of Indian Land Mass

7.27 As per the decision taken in the National Workshop on Seismic Microzonation of the Indian Land Mass held on 16.7.2008, preparation of the Technical Document on Geo-Technical Investigation for Seismic Microzonation Studies in India was entrusted to the Indian Institute of Science, Bangalore, who has submitted the Technical Document which has since been accepted. Total expenditure on project has been ₹ 39.50 lakh. Copy of the report has been put on the website of NDMA.

Cartography

7.28 The work of preparation of a report for development of Cartographic Base for India has been awarded to National Atlas and Thematic Mapping Organization (NATMO), Kolkata to prepare a Detailed Project Report (DPR) at the required scale with the specific Contour intervals. NATMO has recently furnished its report to the NDMA. Total cost of the Project is ₹ 3.31 lakh.

Brahmaputra River Erosion Study

7.29 NDMA had awarded the Consultancy Project "Study of Brahmaputra River Erosion and its Control" to IIT, Roorkee. The final reports of the study along with recommendations have been received in NDMA. The Scope of the study included Satellite data processing & analysis; Hydrological data procurement, processing and analysis; and design analysis and recommendations. The study

has identified vulnerable sections of Brahmaputra River. Copies of study report have been sent to Ministry of Water Resources, CWC, Brahmaputra Board and the Government of Assam and have also been uploaded in NDMA's web site. Total expenditure on the project is ₹ 32.49 lakh.

B. Projects/schemes under (ODMP) likely to continue during 12th plan

7.30 NDMA has also initiated following projects under ODMP in 2011-12 which are likely to be completed during the 12th Five Year Plan.

Seismic Vulnerability Assessment of Building Types in India

7.31 The work for preparation of catalogue of different building types in various parts of India and development of vulnerability functions for a number of different building types appearing in the building catalogues has been awarded to IIT Bombay which has been undertaken in association with four different nodal institutions in different parts of the country viz, (1) IIT Roorkee – North Zone, (2) IIT Kharagpur-East Zone, (3) IIT Guwahati-North East Region, (4) IIT Bombay-West Zone, and (5) IIT Madras-South Zone. Total estimated Project cost is ₹ 126 lakh. IIT Bombay has prepared Draft Final Report which is to be discussed with the experts.

Preparation of Upgraded earthquake Hazards Maps

7.32 As recommended by the Working Committee of Experts (Geophysical-Hazards), a project for upgrading Earthquake Hazards Maps in various parts of the country is being undertaken through Building Material Technology Promotion Council (BMTPC) at an estimated cost of ₹ 76.83 lakh.

Setting up of Mobile Radiation Detection Systems (MRDS)

7.33 With increasing incidents of terrorism, threat scenario from possible RDD explosions is assuming the dimensions of serious concern. Even though RDDs are not devices of mass-destruction, these are weapons of mass- disruption with high potential for creating panic and psychological impact in addition to the associated problems of contaminating large number of people, area

and the vicinity. NDMA as part of its programme on national level Preparedness to Cope with Radiological Emergency, has decided to equip the surveillance vehicles of identified police stations in more than 50 Capital and metro /other major cities of the country and some sea ports, airports and border check posts with simple monitoring instruments and personal protective gear. The project called Mobile Radiation Detection Systems (MRDS) has been approved to this effect. Under the Mobile Radiation Detection Systems (MRDS) Project, apart from equipping the police vans in the identified cities are to be equipped with radiation detection equipments. Total estimated cost of the project is ₹ 7.48 crore.

Project on Research on soil piping in the highlands and foothills of Kerala

7.34 Soil piping is a recently noticed phenomenon in Kerala. It is a sub-surface soil erosion process which is dangerous since the soil erosion takes place beneath the soil. This phenomenon is new and requires proper instrumentation for studying this and suggesting measures for mitigation. Government of Kerala through the Centre for Earth Science studies (CESS) with financial assistance from NDMA is undertaking Soil Piping Project to study this phenomenon and suggest measures to avoid a disaster. The total cost of the Project is ₹ 87.11 Lakh. The financial contribution of NDMA for the Project is ₹ 49.73 Lakh and that of Government of Kerala is ₹ 37.38 Lakh. Government of Kerala is to closely monitor the progress of the Project. Government of Kerala will take all necessary actions to implement the mitigation measures recommended by the Research Team in its final report for avoiding further spread of this land degradation process.

National Disaster Communication Network Project

7.35 NDMA is in the process of setting up Pan India, disaster resilient National Disaster Communication Network (NDCN). It will provide assured services such as audio, video, data and knowledge based information to meet the requirement of various stakeholders for proactive and holistic management of disasters with particular emphasis on last mile connectivity to affected community during all phases of disaster management continuum. NDCN will leverage existing communication

network including NICNET, SWANs, POLNET and DMSNET etc. to provide connectivity to Emergency Operation Centres (to be established at National, State and District level). NDCN will establish separate satellite network which will link NEOC, SEOCs, DEOCs and mobile EOCs through VSAT Network/ INMARSAT Phones for providing fail-safe communication during disaster scenarios.

7.36 Price Waterhouse Coopers Pvt. Ltd (PWC) was selected as consultant for preparation of Detailed Project Report (DPR). NDMA had sent DPR & EFC Memo to MHA on 26 December 2011. MHA vide their communication advised NDMA to demonstrate application of NDCN in five multi hazard Districts, as a Pilot Project. However, after discussions within the NDMA, it was decided at the level of VC, NDMA to implement the Pilot Project on NDCN in the following 14 location:

- i) Control Room, NDMA in Delhi (1).
- ii) State Emergency Operation Centers (SEOCs) located in the State Capitals of Andhra Pradesh, Uttarakhand and Odisha (3).
- iii) District Emergency Operation Centers (DEOCs) located at three Districts each in Andhra Pradesh (Krishna, Khammam, Kurnool) and Odisha (Puri, Jagatsinghpur, Baleshwar) and four Districts in Uttarakhand (Rudraprayag, Chamoli, Uttarkashi, Pithorogharh) (Total 10 districts).

7.37 The Pilot Project has been proposed to be implemented with NIC support. Therefore, on NDMA's request, NIC have prepared a Project Proposal on Pilot Project of NDCN.

National Disaster Management Information System (NDMIS)

7.38 A project for implementation of Geographic Information System (GIS) Platform based on NDMIS is being implemented by NDMA. The main objective of NDMIS is the generation of knowledge based information termed as Vulnerability Analysis and Risk Assessment (VA&RA) for pre-event scenario (essential for prioritization of resources for mitigation without adhocism) and development of Decision Support System (DSS) for during – (for faster, more effective and more efficient response through dynamic information in maps) and post disaster scenarios for building back better (to

replace existing practice by voice, video and data).

7.39 A technical committee headed by Member, NDMA Shri B. Bhattacharjee has been constituted with officers from NRSC, ISRO, NIC and NDMA for preparation of DPR. The said committee in its meeting held on 30-31 August 2012 had prepared a Project Proposal which was sent to Chairman, ISRO for concurrence. In response, Director, NRSC has conveyed approval with certain guidelines. NRSC, Hyderabad has prepared a MOU to be signed with NDMA. This is under examination.

Revamping and up gradation of NDMA's Website

7.40 With the advancement of Science and Technology, a need was felt to revamp and upgrade the existing NDMA's website. After completing procedural formalities, a contract for consultant services was signed in March 2012 between NDMA and M/s Mphasis Limited. The project is being implemented.

8

National Disaster Response Force: Strengthening Emergency Response

8.1 The National Disaster Response Force (NDRF), constituted under the provisions of Sections 44 and 45 of the DM Act, 2005, has established itself as one of the most visible and vibrant face of the NDMA. Ten Bns of NDRF are located at ten different locations in the country based on the vulnerability profile to cut down the response time for their deployment. During the current year (2012-13),

two more battalions of NDRF have been approved by the Govt. one at Haridwar (Uttarakhand) and the other in the North-Eastern region of the country. Suitable locations for the newly sanctioned two Bns are being explored by the NDMA/NDRF. Locations of present ten Bns of NDRF are illustrated in Fig 8.1.

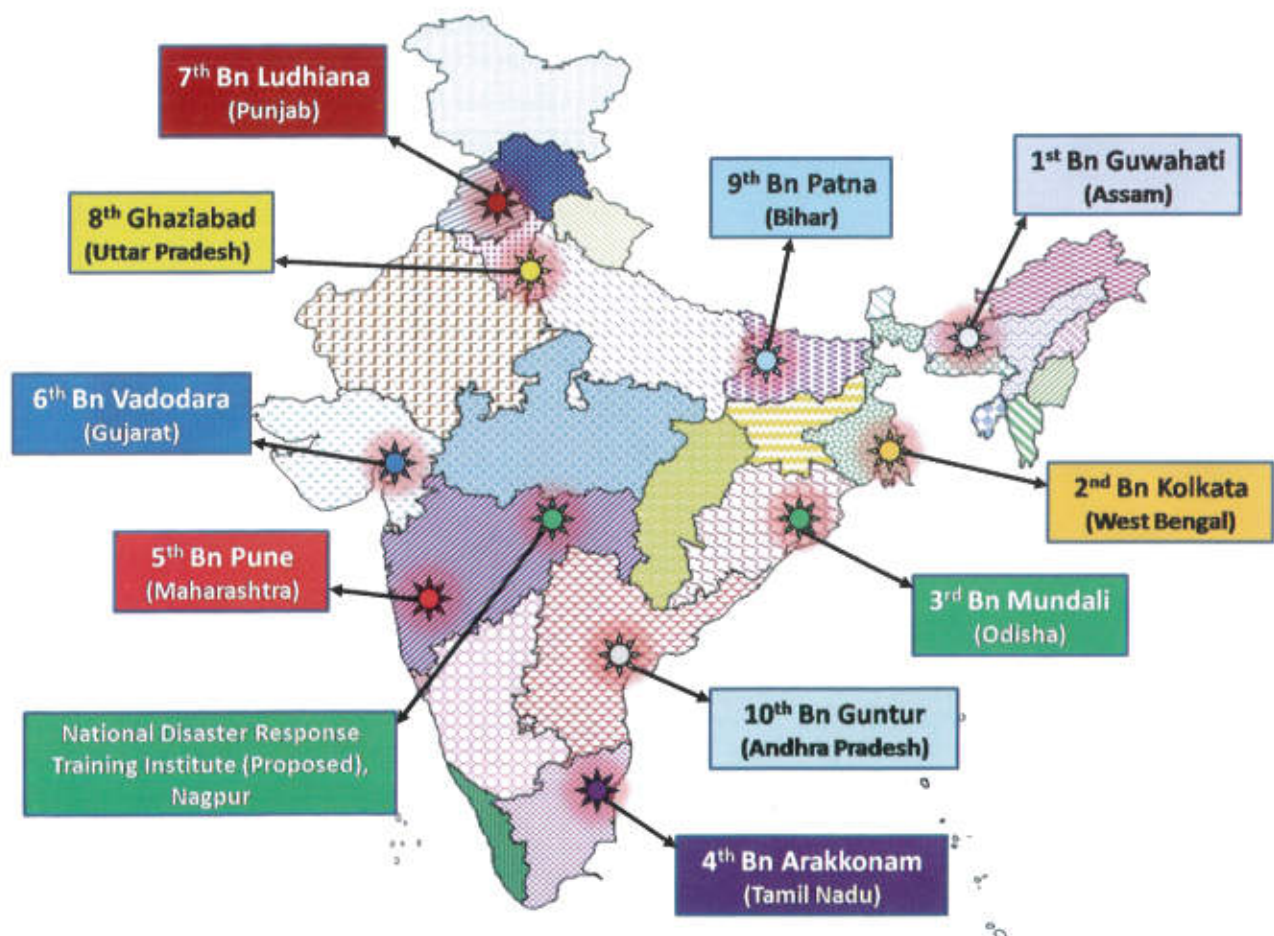


Fig 8.1

8.2 The DM Act, 2005 has made statutory provisions for constitution of NDRF for the purpose of specialized response to natural and man-made disasters. According to Section 45 of the Act, the NDRF has to function under the general superintendence, direction and control of the NDMA and under command and supervision of Director General, NDRF. In line with the vision enshrined in the Section 44(i) of the Act, the NDRF is gradually emerging as the most visible and vibrant multi-disciplinary, multi-skilled, high-tech force of the NDMA capable of dealing with all types of natural and man-made disasters.

Vision

8.3 The DM Act, 2005 envisages a paradigm shift from the erstwhile response centric syndrome to a proactive, holistic and integrated management of disasters with emphasis on prevention, mitigation and preparedness. This national vision inter alia, aims at inculcating a culture of preparedness among all stakeholders. NDRF has proved its importance in achieving this vision by highly skilled rescue and relief operations, regular and intensive training and re-training, capacity building & familiarization exercises within the area of responsibility of respective NDRF Bns, carrying out mock drills and joint exercises with the various stakeholders.

Role of NDRF

8.4

- ◆ Specialized response during disasters
- ◆ Proactive deployment during impending disaster situations
- ◆ Acquire and continually upgrade its own training and skills
- ◆ Liaison, Reconnaissance, Rehearsals and Mock Drills
- ◆ Impart basic and operational level training to State Response Forces (Police), Civil Defence and Home Guards
- ◆ Training of State Police and help in raising of SDRF

Vis-à-vis Community

- ◆ Community Capacity Building Programme
- ◆ Public Awareness Campaign
- ◆ Exhibitions : Posters, Pamphlets, literatures

- ◆ Training of village volunteers & other stakeholder

Organization

8.5 NDRF was initially constituted with eight battalions, two each from the BSF, CRPF, CISF and ITBP. Each battalion has 18 self-contained specialist search and rescue teams of 44 personnel each including engineers, technicians, electricians, dog squads and medical/paramedics. The total strength of each battalion is 1,149. All the battalions are trained and equipped as per International standards to respond to all natural disasters including earthquake, floods, cyclone, landslides etc. and also Chemical, Biological, Radiological & Nuclear (CBRN) emergencies. With inclusion of 2 more Bns in 2011-12 and further expansion by another 2 Bns (stands approved by the Govt.), today the Force has acquired the unique distinction of being the "Single Largest Dedicated Disaster Response Force in the World".

NDRF: High Priority for NDMA

8.6 NDMA provided the much needed impetus to establish NDRF as a truly specialist force for Disaster Response. Right from its inception in September 2005, NDMA accorded highest priority to ensure that NDRF is trained and equipped as per international standards. With consequent efforts of NDMA, today NDRF has become a "Multidisciplinary, Multi-Skilled, High-Tech Specialist Force Trained & Equipped as per International Standards" capable of responding to any natural disaster or CBRN emergency.

Disaster Response

8.7 Over the years, NDRF has acquired a niche for itself of being a truly specialist response force to deal with any natural disaster and CBRN emergencies. The response time of this force has been reduced to the barest minimum on account of the concept of 'proactive' availability of this Force to the states and also the concept of 'pre-positioning' the force in threatening disaster scenario. The NDRF is being increasingly requisitioned by the states for rescue and relief operations in earthquake, floods, cyclones, landslides, building collapses, train accidents and CBRN emergencies. Some of the major response operations undertaken by NDRF during 2012-13 are mentioned in succeeding paragraphs:



Floods in Assam

8.8 Massive water-rise in Brahmaputra River since June 25, 2012 onwards resulted in flash flood situations affecting 17 districts (832 villages) of Assam, worst affected districts being Tinsukia, Dhemaji, Sonitpur, Lakhimpur, Sivasagar, Kamrup (Rangia), Jorhat (Majuli) and Nagaon. On requisition of ASDMA, Govt of Assam, NDMA instructed NDRF Hqrs for deployment of NDRF personnel in flood affected areas of Assam. Subsequently, 16 teams (12 from Guwahati and 04 from Kolkata NDRF Bn) consisting of 599 personnel along with 72 inflatable boats and water search and rescue equipment were deployed and carried intensive flood rescue & relief operations in flood affected areas of Assam. NDRF personnel saved lives of about 32,207 flood marooned people by evacuating them to safer places and also along with the local authorities distributed 1,913 quintals of relief materials among 15,539 flood affected families. Medicines were distributed among 8,389 people and about 3,483 cattle were vaccinated. NDRF personnel also recovered 13 bodies of drowned victims.



Multi-storey Factory Building Collapse at Jalandhar, Punjab

8.9 On requisition of district administration on



16 April, 2012 about a five-storey factory building collapse at Jalandhar Punjab, 02 teams of NDRF Bn Bhatinda along with collapsed structure search and rescue equipment and canine immediately reached the incident site and carried out search and rescue operations. In 24-hours continuous search and rescue operations, NDRF personnel successfully rescued 12 live victims trapped under huge debris and retrieved 19 bodies of victims.



Boat Capsize in Brahmaputra, Assam

8.10 On requisition of State authorities about an incident of a ferry capsized in Dhubri district of Assam on 30 April, 2012, 03 teams (100 personnel) of NDRF Bn Guwahati along with deep-divers, inflatable boats and other swift-water search and rescue equipment reached the site and undertook the onerous task of searching the drowned victims. The strong current of river had swept bodies of drowned victims downstream, making the task herculean but unrelenting efforts of the NDRF rescuers led to recovery of 19 bodies of victims during the eight days long operations.



Search and Rescue Operation in Boat Capsizing, Bhojpur, Bihar

8.11 On 10 September, 2012 on requisition of district authorities 01 team (28 personnel) of NDRF Bn Patna along with 04 boats and other life saving equipments carried search and rescue operations at the incident site in Son river, Bhojpur district where a boat carrying passengers had capsized. NDRF personnel retrieved 13 bodies and handed over to the District Administration.



Rescue and relief operations during Cyclone Nilam

8.12 Cyclonic Storm Nilam made landfall near Mahabalipuram on 31 October, 2012. In Chennai's Marina Beach, strong winds pushed piles of sand ashore and seawater reached nearly 100 meters inland. Nine teams (310 personnel) of NDRF along with boats and other life saving equipments were preemptively deployed in Nellore, Eluru, West Godavari, and East Godavari districts of Andhra Pradesh and Kancheepuram district of Tamil nadu to keep a close watch, monitor the

situation in respective areas and to quickly respond to any emergency situation. NDRF personnel saved lives of 6,362 trapped people by shifting them to safer places.



Four-storey Building Collapse at Pune, Maharashtra

8.13 Two teams (78 personnel) of NDRF Bn Pune along with the state-of-art equipments and life detectors were immediately deployed on Sept 24, 2012 at the Sahakar Nagar, Pune Maharashtra wherein a four-storey under-construction building had collapsed. NDRF personnel, in their meticulous search and rescue operations, successfully saved lives of 11 victims trapped under the huge debris. 10 bodies were also recovered by the NDRF.



Boat Capsizing at West Godavari, Andhra Pradesh

8.14 One team (30 personnel) of NDRF along with 04 boats and other life saving equipments carried out search and rescue operations in river

Godavari near village Koneru Lanka on November 18-19, 2012; where a passenger boat had capsized and 04 women were reported missing. NDRF personnel successfully retrieved 04 bodies and handed over to the concerned authorities.

Detection of Hazardous Chemical in Gang Nahar, Ghaziabad, Uttar Pradesh

8.15 On requisition of district authorities on July 03, 2012 to inspect a dump of drums containing unidentified chemical substance near Gang nahar, Modinagar of district Ghaziabad; one team (40 personnel) of NDRF Bn Ghaziabad along with CBRN equipments reached the site and collected sample which was detected as N-Vinylcarbazole & Phenozybenzyl Alcohol (hazardous chemical) as per analyses of DRDE Gwalior. Subsequently, CBRN trained NDRF personnel disposed off the chemical which could have been fatal if water of Gang Nahar was poisoned with it.



Pre-emptive Deployment at Kumbh Mela, Allahabad, Uttar Pradesh

8.16 Four teams (139 personnel) of NDRF Bn Patna along with 16 boats and other life saving equipments were pre-emptively deployed at five different Ghats to meet any eventual emergency



situation during the Kumbh Mela in February 2013. NDRF personnel rescued 5 persons from drowning in river Ganga and handed over to medical authorities for treatment.

8.17 Also on 17 February, 2013, NDRF personnel rescued one Army personnel along with 7 others from drowning in the river when an Army boat toppled due to over speeding.

Search and rescue operation at Uttar Baster Kanker, Chhattisgarh

8.18 On requisition of state authorities regarding rescue of a person trapped in the cavity of a hill at Bhanupratappur village Uttar Baster Kanker, Chhattisgarh on 14 March, 2013, one team (15 personnel) of NDRF Bn Mundali along with CSSR and other life saving equipments was airlifted from Bhubaneswar airport and reached the incident site and carried out search and rescue operation. NDRF personnel successfully rescued the trapped victim.

Boat Capsize at Etawah, Uttar Pradesh

8.19 On requisition of local administration regarding a boat capsized incident in river Yamuna and missing of 9 persons on 21 February, 2013; one team of NDRF Bn Ghaziabad along with inflatable boats and other life saving equipments reached the incident and carried search and rescue operation. NDRF personnel recovered 07 bodies of drowned victims and handed over to local authorities.



Search and rescue Operation in a Plane Crash

8.20 A plane of Indian Air Force crashed in the mountains of village Dzongu Leak, Block Mangan, North Sikkim on Nov 30, 2012 at 1405 hrs and a pilot was trapped inside the plane. NDRF was assigned the task of evacuation of trapped pilot from the crashed debris of plane. NDRF personnel

successfully saved the life of injured pilot by evacuating him and assisting local authorities in stabilizing the pilot by providing him pre-hospital treatment.



Various Drowning Incidents

8.21 On requisition of State and district authorities NDRF helped local administration in several drowning cases across the country in their respective Areas of Responsibilities. NDRF personnel saved lives of 23 drowning victims and recovered 56 dead bodies during their search and rescue operations in different drowning cases.

Other Deployments

Def Expo India 2012, Pragati Maidan, New Delhi

8.22 One team (24 personnel) of NDRF Bn Ghaziabad was deployed during "Def-Expo India-2012" from 29 March to 01 April, 2012 at Pragati Maidan along with NBC suit and other MFR & CSSR equipments.



Deployment during Amarnath Yatra

8.23 Two teams (93 personnel) of NDRF Bn Bhatinda along with portable shelter and other MFR & CSSR equipment were deployed at Pahalgam,

Chandanwadi, Shesnag and Zojipal in Kashmir valley from June 25 to August 02, 2012 to help and assist pilgrims during Amarnath Yatra. NDRF personnel shifted 06 bodies and 08 injured victims from Pisutop to Chandanbari, 84 persons were provided pre-hospital treatment and around 5,200 yatries were provided other administrative help.



International Aerospace Exposition Aero India 2013

8.24 Three teams (117 personnel) of NDRF along with CSSR, CBRN and other life saving equipments were deployed during International Aerospace Exposition Aero India show 2013 held at Bangalore, Karnataka during the period 26 January to 12 February, 2013 to handle any emergency situation.

Capacity Building

8.25 Familiarization Exercises, Awareness Generation and Community Capacity Building are key components of proactive approach on Disaster Management. Since community is invariably the first responder, if the local people are properly sensitized about the precautions and preventive actions to be taken in case of any calamity, the loss of life and damage to property can be drastically reduced. Thus, NDRF has been



engaging itself in a big way in Community Capacity Building and Public Awareness programmes which includes training of people (the first responders) and concerned government officials at different levels in the areas with high vulnerability. During 2012-13, more than 3.10 lakhs community volunteers and other stakeholders have been trained by NDRF in different parts of the country.

Training

Logistics Training of NDRF Team towards IEC

8.26 The 1st Module of Logistics Assessment Training of NDRF USAR Team towards IEC (INSARAG External Classification) was conducted at NDRF Bn Mundali location by Swiss Logistics Experts between the period June 15-17, 2012. Apart from NDRF's Logistics team members, the training was also attended by the Experts of Swiss Development Corporation (SDC).



Canine Training of NDRF Team towards IEC

8.27 Three modules of search (canine) training were conducted by Swiss experts at NDRF Bn Mundali between May-June, 2012. The purpose of this training was to prepare search component of NDRF's heavy USAR team for international response operations. The NDRF's IEC team is supposed to undergo IEC test in 2015.

Training of SDRF Personnel

8.28 As a part of capacity building initiatives of States, NDRF Bns have been imparting disaster response training to State Police personnel. During 2012-13, total 1,967 personnel were trained by NDRF Bns in various States.

Mock Exercises

8.29 Since 01 April, 2012 onwards NDRF Bns conducted 85 mock exercises on Chemical (Industrial Disasters), Urban Flooding, Cyclones, Earthquake simulation, Train accidents etc with different stakeholders in various parts of country. During the mock exercises NDRF personnel demonstrated search & rescue (SAR) operations, Medical First Response (MFR), methods of rescue of trapped victims on triage in a mass casualty scenario, victim search & location techniques in a collapsed structure, decontamination operations etc. About 2,01,688 people benefitted from these mock exercises.

9 Administration and Finance

General Administration

NDMA Secretariat

9.1 The NDMA Secretariat comprises five Divisions, namely, (i) Policies, Plans, Capacity Building and Awareness Division, (ii) Mitigation Division, (iii) Operations and Communications Division (iv) Administration and Coordination Division, and (v) Finance and Accounts Division.

Policies, Plans, Capacity Building and Awareness Division

9.2 This division deals with all matters pertaining to the formulation of policies, guidelines and approval of DM plans of Central Ministries Departments as well as capacity building and awareness in all the States. Mainstreaming DM in development plans is also an important task of this division. The total sanctioned staff in this Division is 15, comprising one Advisor (JS level), three Joint Advisors (Director Level), three Assistant Advisors (US level) and 8 support staff.

9.3 Capacity Building which is a major subject to be dealt with by the NDMA is another task of this division. This division has taken up the task to lead this effort and ensure that the culture of preparedness is inculcated at all levels. It also handles conceptualization and execution of an awareness generation campaign involving both electronic and print media, besides involvement of the community and other stakeholders at the grassroots level.

Mitigation Division

9.4 The responsibilities of this division are to take up Risk Mitigation Projects at national level in conjunction with the Central Ministries / Departments and the States pertaining to disaster themes like Cyclones, Earthquakes, Floods,

Landslides and failsafe Communication and IT plan etc. It also guides and commissions specialized studies and projects like Micro-zonation, Vulnerability Analysis, etc. It also supervises and monitors the design and implementation of the mitigation projects to be undertaken by the Ministries / Departments. The total sanctioned staff in this Division is 10, comprising one Advisor (JS level), two Joint Advisors (Director Level), two Assistant Advisors (US level) and 5 support staff.

Operations and Communications Division

9.5 NDMA, as the Apex Body, needs to be always in a state of readiness to tender advice to the Government on disaster situations at all times, for which it must remain fully apprised of the latest information. For this critical activity NDMA has an Operations Centre to provide round the clock disaster specific information and data input facility and also guide the effort during the subsequent stages of response. This division is also closely involved with the tasks relating to Rehabilitation and Recovery and ensures that all new built environments are disaster resilient.

9.6 It also has the task of maintaining a dedicated and continually operational state-of-the-art communications. The key components of the Communication and IT Wing are Communications and IT network and DM Information System with special reference to Knowledge Management and Data Fusion with emphasis on GIS based applications. The total sanctioned staff in this Division is 19, comprising one Advisor (JS level), three Joint Advisors (Director level), four Assistant Advisors (US level), two Duty Officers (US level) and 7 support staff.

Administration and Coordination Division

9.7 This Division is responsible for all aspects

of Administration and Coordination. Its activities involve extensive interface with the Ministries/ Departments and States. This Division also provides administrative and logistic support to the Members and the staff of the NDMA at all levels. The total sanctioned staff in this Division is 22, comprising one JS, one Director, two USs and 18 support staff.

Finance and Accounts Division

9.8 The Finance and Accounts Division deals with the work relating to maintenance of accounts, preparation of budget, financial scrutiny of proposals, etc. This Division also monitors progress of expenditure and advises NDMA on all matters falling within its delegated financial powers, etc. The total sanctioned staff in this Division is 8, comprising one Financial Advisor (JS level), one Director, one Assistant FA (US level) and 5 support staff. Details of its functions and responsibilities are:

- ◆ Drawl of budget of the NDMA.
- ◆ Maintenance of departmental accounts in accordance with the requirements under General Financial Rules (GFRs).

- ◆ Watch and review the progress of expenditure against sanctioned grants through maintenance of control registers.
- ◆ Advise NDMA on all matters falling within the field of delegated powers.
- ◆ Associate closely with the formulation of schemes and important expenditure proposals from their initial stages.
- ◆ To watch settlement of audit objections, Inspection Reports, Draft Audit paragraphs etc.
 - ◆ To ensure prompt action on Audit Reports, Reports of Public Accounts Committee (PAC) and Estimates Committee.
 - ◆ To ensure timely submission of periodical reports and returns.

Finance and Budget

NDMA-Expenditure (Consolidated) (Plan) for Financial Year 2012-13 - Expenditure for the period April 2012 to March 2013

NDMA – Budget Allocation & Expenditure (Plan) for the period April 2012 to March 2013

(₹ in Lakhs)

Name of Project	Budget Allocation	Expenditure
National Earthquake Risk Mitigation Project (NERMP)	100	0
Landslide Risk Mitigation Project (LRMP)	100	0
Disaster Management Communication Network (DMCN)	500	0
Other Disaster Management Projects (ODMP)	4200	3300.73
National Cyclone Risk Mitigation Project (NCRMP) with World Bank Assistance	10000	9395.90
Flood Risk Mitigation Project (FRMP)	100	0
Total	15000	12696.63

**NDMA – Budget Allocation & Expenditure (Non-Plan) for the period
April 2012 to March 2013**

(₹ in Lakhs)

	BE 2012-13	RE 2012-13	Expenditure 2012-13
Salaries	700	770	750.7
Wages	0.10	0.10	0
OTA	0.10	0.10	0
DTE	270	270	269.92
FTE	30	15.20	10.07
OE	400	525	524.34
RRT	5	5	0.00
Publication	55	38	36.20
OAE	200	80	71.32
Supplies & Materials	0.10	0.10	0.00
POL	0.50	0.50	0.00
Advertisements & Publications	1200	800	623.25
Minor Works	150	2	0.00
Professional Services	125	100	93.85
OC	20	20	0.23
IT OE	25	25	21.47
IT M&E	150.20	50	37.44
Grand Total	3331	2701	2438.36

Composition of NDMA

Present Composition

1.	Dr. Manmohan Singh, Prime Minister of India	Chairperson
2.	Shri M Shashidhar Reddy	Vice-Chairperson (Since 16.12.2010)
3.	Shri B Bhattacharjee	Member (Since 15.12.2011)
4.	Shri J K Sinha	Member (Since 18.04.2007)
5.	Shri T Nandakumar	Member (Since 8.10.2010)
6.	Maj. Gen. J. K. Bansal	Member (Since 6.10.2010)
7.	Dr. Muzaffar Ahmad	Member (Since 10.12.2010)
8.	Shri K M Singh	Member (Since 14.12.2011)
9.	Dr. Harsh K. Gupta	Member (Since 23.12.2011)
10.	Shri Vinod K Duggal	Member (Since 22.06.2012)

Founding Members

1.	Gen. N. C. Vij	Vice-Chairperson (Since 28.9.2005 to 27.9.2010)
2.	Lt. Gen. (Dr.) J. R. Bhardwaj	Member (Since 28.09.2005 to 27.09.2010)
3.	Dr. Mohan Kanda	Member (Since 05.10.2005 to 04.10.2010)
4.	Prof. N. Vinod Chandra Menon	Member (Since 28.09.2005 to 27.09.2010)
5.	Shri M Shashidhar Reddy	Member (Since 05.10.2005 to 04.10.2010) Member (Since 11.10.2010 to 16.12.2010)
6.	Shri K M Singh	Member (Since 28.09.2005 to 27.09.2010)
7.	Smt. P. Jyoti Rao	Member (Since 14.08.2006 to 13.08.2011)
8.	Shri B Bhattacharjee	Member (Since 21.08.2006 to 20.08.2011)
9.	Shri J K Sinha	Member (Since 18.04.2007)

Annexure II

List of Senior Officers of the NDMA

1.	Dr. Shyam S Agarwal, Secretary (Since 15.02.2013)
2.	Dr. Sutanu Behuria, Secretary (Since 02.11.2011 to 31.08.2012)
3.	Smt. Archana Goyal Gulati, Financial Advisor (Since 01.02.2012)
4.	Sh. Amit Jha, Joint Secretary (Since 27.02.2009 to 02.07.2012)
5.	Smt. Sujata Saunik, Advisor (Since 18.12.2009)
6.	Sh. P. K. Tripathi, Advisor (Since 6.10.2010 to 04.01.2013)
7.	Sh. Satyajeet Rajan, Joint Secretary (Since 15.11.2012)
8.	Brig S Visvanathan, Advisor (Since 26.11.2012)
9.	S. P. Vasudeva, Project Director, NCRMP (Since 19.01.2012)
10.	Sh R.K. Singh, Director (Since 20.09.2009)
11.	Smt. Madhulika Gupta, Joint Advisor (Since 01.09.2010)
12.	Smt. Preeti Banzal, Joint Advisor (Since 15.09.2010)
13.	Col. Shashi Bhushan, Joint Advisor (Since 31.8.2010 to 30.08.2012)
14.	Col. B B Singh, Joint Advisor (Since 14.1.2011 to 31.01.2013)
15.	Sh. B S Agarwal, Joint Advisor (Since 25.04.2011)
16.	Shri Munish Girdhar, Director (Since 6.07.2011 to 31.07.2012)
17.	Dr. (Mrs.) Suman Keshari Agrawal, Director (Since 02.08.2012 to 16.01.2013)
18.	Sh. Vinay Kajla, Joint Advisor (Since 31.08.2012)
19.	Shri R K Chopra, Dy Secretary (Since 4.4.2011)
20.	Shri S K Singh, Director (Since 23.07.2012)
21.	Shri Bhupinder Singh, Dy. Secretary (Since 25.02.2013)
22.	Shri S. S. Jain, Deputy Project Director, NCRMP (Since 9.11.2012)
23.	Shri P. Thakur, Assistant Advisor (Since 01.05.2008 to 20.11.2012)
24.	Dr. Pavan Kumar Singh, Sr. Research Officer (Since 23.05.2008)
25.	Dr. Susanta Kumar Jena, Sr Research Officer (Since 01.08.2008)
26.	Shri J.C. Babu, Assistant Advisor (Since 03.10.2008)
27.	Shri S.K. Prasad, Assistant Advisor (Since 01.10.2008)
28.	Shri A.K. Jain, Assistant Advisor (Since 03.11.2008)
29.	Shri Budh Ram, Assistant Financial Advisor (Since 31.12.2008)

30.	Smt. Vijaylakshmi Bhardwaj, Assistant Advisor (Since 19.01.2009)
31.	Shri Nawal Prakash, Sr. Research Officer (Since 22.05.2009)
32.	Shri S M Abdul Faheem, Under Secretary (Since 30.9.2009 to 27.04.2012)
33.	Dr. A K Sinha, Sr. Research Officer (Since 22.10.2010)
34.	Shri D P Majhi, Under Secretary (Since 18.08.2011 to 17.04.2012)
35.	Sh Partha Kansabanik, Under Secretary (Since 18.08.2011)
36.	Sh Amal Sarkar, Under Secretary (Since 14.11.2012)
37.	Sh R K Sinha, Under Secretary (Since 15.11.2012)
38.	Sh Turram Bari, Under Secretary (01.01.2013)
39.	Shri R K Yadav, Project Accountant/ Administrative Officer, NCRMP (Since 3.7.2012)