Capacity Building Strategy for Disaster Risk Reduction in India under NCRMP
MESSAGE

The National Disaster Management Authority (NDMA), has been playing a pivotal role in addressing the concerns regarding Disaster Management in India. The NDMA has steadfastly pursued the case for mainstreaming disaster risk reduction within the overall development agenda of the Nation. The NDMA newsletter "SAMVAD" will further contribute in this direction.

I extend my best wishes to the NDMA family for their initiative in bringing out this newsletter on the occasion of "11th Formation Day".

(Rajnath Singh)
MESSAGE

I am happy to know that the National Disaster Management Authority (NDMA) is bringing out a newsletter ‘SAMVAD’ to share information in the sphere of disaster management. I am sure this Newsletter will turn out to be a very useful platform for engaging with the stakeholders in this field and information shared will be utilized to maximize the use of existing expertise, access and experience by all stakeholders.

As concise information about disaster preparedness activities along with risk reduction measures can prevent disaster situations and reduce sufferings considerably. I am confident that NDMA will utilize this Newsletter in effectively disseminating all relevant information in this regard.

I take this opportunity to congratulate NDMA for providing a much needed space for information sharing in Disaster Management.

(Kiren Rijiju)
Dr. P.K. Mishra  
Addl. Principal Secretary  
Tel.: 011-2301 4844

MESSAGE

The National Disaster Management Authority (NDMA), set up a decade ago, has taken several initiatives for effective disaster management in India. One of the important factors for our enhanced capability to respond to and cope with disasters is the pro-active measures taken by NDMA, which has been playing a crucial role in policy formulation and implementation, as the nodal agency for disaster management in the country.

Many a time government organizations are too engrossed in achieving their objectives, and not able to disseminate information on their activities. We live in an age of information. While citizens have the right to information, accessing information - and educating oneself - for better preparedness is vital for managing disasters. NDMA has rightly felt the need to publish a newsletter and inform all the stakeholders and general public about the various activities and initiatives taken for disaster risk reduction. This newsletter is an attempt to inform and update all concerned periodically about various measures taken by the government and others for ensuring a disaster-free India.

I hope this newsletter will be useful not only to disaster managers, but also to researchers, academics, students and other stakeholders. I congratulate NDMA for bringing out a much needed newsletter and wish the team all success in this endeavour.

(P. K. Mishra)  
23 September 2015
MESSAGE

Indian sub-continent is vulnerable, in varying degrees, to many natural disasters. Creating a disaster resilient India is a shared responsibility of individual, households, communities and the Government. Disaster resilience needs to be integrated with development planning for sustainable development. We need to build our capacity for managing and mitigating disaster risks. National Disaster Management Authority (NDMA) was set up a decade ago by Government of India to usher such an integration of disaster risk reduction and development.

NDMA, over the period of years has played an important role in enabling better preparedness and quick response, in the aftermath of major disasters. It has also played the role of a guide to help state governments enhance their disaster management capabilities. The launching of a quarterly newsletter “SAMVAD” on the occasion of commemoration of the 11th year of formation of NDMA will add to the cause of long-term disaster management by informing and educating all the stakeholders about the various initiatives of Government of India for disaster risk reduction.

I congratulate NDMA for this initiative and I hope that this newsletter will provide a platform for dialogue among the various stakeholders involved in the cause of risk reduction.

(Rajiv Mehrishi)
On the occasion of 11th NDMA Formation Day, I have the pleasure of introducing SAMVĀD — the Newsletter of NDMA as the National Authority takes concerted steps towards strengthening Disaster Risk Reduction (DRR) efforts in the country in coordination with Departments of GoI, States and other Stakeholders. Over the years, NDMA has been playing a leading role in centre-staging Disaster Management into the Governance Paradigm of the Country. The past year has witnessed the Authority performing diverse tasks such as coordinating and monitoring the relief support for major disasters, formulation of important National Guidelines, Standard Operating Procedures (SOPs), implementing projects of national importance and facilitating sustained dialogue with Nodal Ministries and Departments of the Government of India and States.

The Newsletter will be a quarterly feature with focus on national and regional efforts for Disaster Risk Reduction (DRR) in the country. Being the first edition, this Newsletter highlights major initiatives undertaken by the Authority. However, SAMVĀD is being envisioned as a platform for establishing communication between the disaster managers across the country. It is expected to fill up the space for much needed dialogue and deliberations amongst all the stakeholders on regular basis. I would urge the State Governments and other agencies to keep contributing to the future issues of SAMVĀD to make it more relevant and useful channel of communication and information sharing. The newsletter will also serve as a platform for states as well as other stakeholders to share their experiences on disaster risk reduction efforts.

(R. K. Jain)
The National Disaster Management Authority (NDMA), as the apex body for disaster management in India, has the mandate for laying down policies, plans and guidelines for Disaster Management in the country. The NDMA coordinates with the concerned agencies and stakeholders to ensure that all activities relating to Prevention, Mitigation and Preparedness and Risk Reduction as envisaged by the Disaster Management Act 2005 are performed in a time-bound and effective manner.

**Vision of NDMA**

“To build a Safer and Disaster Resilient India by a holistic, pro-active, technology driven and sustainable development strategy that involves all stakeholders and fosters a culture of Prevention, Preparedness and Mitigation.”

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**THE PAST FEW MONTHS – SNAPSHOT OF MAJOR INITIATIVES**

A. India’s Response and Recovery Support to Nepal

Following the Himalayan Earthquake Tragedy in Nepal during April 2015, which resulted into colossal loss of life and infrastructure, NDMA was mandated to coordinate the rescue and relief operations from India. NDMA mobilized the expert teams to provide technical guidance and oversight as summarized below:

a) Team of 5 Structural Engineering Experts from IITs & Central Building Research Institute (CBRI) to provide technical advice for damage assessment of buildings and structural safety measures (9th May – 14th May 2015)

b) Team of 4 disaster management specialists for technical guidance and support for Post Disaster Needs Assessment (PDNA) and formulation of framework for recovery (16th May – 30th June 2015)
c) Team of 4 Experts from ASI, BRO, PGCIL & IIT Madras to be part of sectoral teams for PDNA with respect to damages to buildings and critical infrastructure in Nepal (25th May – 7th June 2015)

d) 2 Experts from NBCC to provide technical guidance on demolition of unsafe buildings (28th May – 30th May 2015)

e) Team of Experts comprising one each from GSI, ISRO, SASE-DRDO, CWC, IMD and Wadia Institute of Himalayan Geology for technical guidance on vulnerability assessment for landslides and floods (3rd – 7th June 2015)

B. South Asian Annual Disaster Management Exercise (SAADMEx) 2015

India is committed towards enhancement of regional capacities for disaster risk reduction. The Government of India has taken the lead to begin the process through Joint Exercises on Disaster Management in the Region by SAARC Nations. The “South Asian Annual Disaster Management Exercise (SAADMEx)” is being jointly conducted by MHA, MEA, NDMA, NDRF & NIDM.

• The main focus of “SAADMEx–2015” will be to test inter-governmental coordination strategy, create synergy and synchronize efforts to institutionalize regional cooperation on disaster response among the SAARC member countries.
• The preparatory meeting of stakeholders called Advance Coordination Conference (ACC) was held in Delhi with representatives from Member Countries on 3rd and 4th September 2015, where the modalities and requirements of the main exercise were discussed.
• Preparations are in progress for the main exercise, which will be held from 23rd to 26th November 2015 in the National Capital Region.
• The main exercise will consist of three components, namely the Table Top Exercise (TTE), the Field Training Exercise (FTE), and the After Action Review (AAR). This will be followed by one day Regional Workshop on

“Sharing Best Practices on Disaster Risk Reduction” scheduled on 27th November 2015 in New Delhi.

C. NDMA – Civil Society Dialogue

The Global Framework for Disaster Risk Reduction (2015-2030) was adopted at the Third World Conference on Disaster Risk Reduction (WCDRR), held from 14th to 18th March 2015 in Sendai, Miyagi, Japan. With seven targets and four priorities for action, Sendai Framework for Disaster Risk Reduction (2015-2030) recognizes that the State has the primary role to reduce disaster risks but that responsibility should be shared with other stakeholders including local government, the private sector, civil society and other stakeholders. In light of the Sendai Framework, NDMA organized a brainstorming session on 29th June 2015 at NDMA Bhawan with representatives of various International and National Non-Governmental and Community Based Organizations in India to take forward the DRR agenda. The meeting was well attended by more than 30 civil society representatives. The prospects and priority for strengthening public and civil society engagement in respect of DRR initiatives were deliberated during the session.

D. Participation of NDMA at the International DRR Forums (last quarter)

• Smt. Neelkamal Darbari, Former Joint Secretary,
NDMA attended 50th Session of the Programming Committee of SAARC at Islamabad, Pakistan on 8-9 July 2015.

- Maj Gen Anurag Gupta, Advisor-Operations, NDMA attended PEER Strategic Planning Workshop from 21-23 July 2015 in Kathmandu, Nepal
- Shri R.K. Jain, Member Secretary, NDMA chaired the South Asia Policy Dialogue on Child-Centered Disaster Risk Reduction in Kathmandu, Nepal on 17-18 September 2015.

E. Visit of International Delegations to NDMA (last quarter)

- Policy Meeting with UNOCHA on 14th August 2015 to discuss potential areas of mutual cooperation.
- Meeting with Japanese Delegation on 18th September 2015 with a focus on potential cooperation for ICT in Disaster Management.

**ACTION ON THE GROUND**

A. Risk Mitigation Measures in Zanskar Valley of Jammu & Kashmir

- In January 2015, River Phuktal, a tributary of River Indus was blocked due to a major landslide. The landslide led to creation of an artificial lake. There was potential danger of reservoir breaching, leading to flash floods. The possible disaster could have caused grave danger for the life and livelihood of the local population.
- NDMA constituted an Expert Team drawn from technical personnel from BRO, NHPC, CIMFR, CWC, SOI, NDMA, Army Engineer Regiment, Indian Air Force and State Administration to inspect the situation and suggest remedial measures.
- Braving the difficult terrain and extreme climatic conditions, the Expert Team was able to create a 100 metres long and 2 metres wide channel which resulted in the controlled release of substantial amount of impounded water into the river downstream.
- To monitor the level of water in the river downstream, an Automatic Water Level Recorder (AWLR) was installed at Phuktal Gompa, approx. 18 km downstream the blockage. Though Self-breaching of the Dam occurred on 07 May 2015; no loss of life or livestock was reported.
- Post Phuktal intervention, NDMA has prepared Standard Operating Procedures (SOP) on ‘Averting Threats Emanating from Landslides on Dams/ Rivers in Mountainous Regions’. It has been issued to the States of North East, J & K, Himachal Pradesh, Uttarakhand and concerned Ministries/Departments of GoI.

B. Support to the State of Jammu and Kashmir in the aftermath of 2014 Floods

The State of Jammu & Kashmir witnessed one of the devastating floods in the history of the state in the month of September 2014. Response Support coordinated by NDMA included:

- Mobilization of resources for relief and response, which included equipments for de-watering, relief materials and medical first response.
- Disbursement of Financial Assistance from the Prime Minister National Relief Fund to the affected community, whose houses were damaged due to floods.
- Till date, around Rs. 367.19 Cr has been credited directly to the bank accounts of around one lakh ten thousand beneficiaries through direct benefit transfer facility.
- Coordinating the procurement of Medical Equipments for tertiary care hospitals in Srinagar, Jammu and Leh which were affected by the floods.
- Distribution of text books for the primary and upper
primary school children in J&K. A total of more than 1.18 lakh text book sets were distributed amongst 77,244 Government Schools and 41,256 Private Schools.

C. Simulation & Mock Exercises

Till date NDMA has conducted around 500 Mock Exercises to sensitize different stakeholders on disaster preparedness. In the last one year, NDMA organized more than 2 dozen mock exercises on various natural and man-made disasters. The Broad objectives of the Mock Exercise is to review disaster management plans, procedures and interagency coordination between various DM stakeholders in different public and private sectors.

a. Inter-Ministerial Tabletop Exercise on Disaster Management

NDMA conducted a Tabletop Exercise focused on inter-ministerial/interagency communication and coordination on disaster management with select Ministries and Departments of GoI on 28th May 2015 at NDMA Bhawan, New Delhi.

b. First Mock Exercise on Radiological Emergency

A mock exercise on Radiological Emergency was conducted on 2nd Aug. 2015 in the cargo section of Netaji Subhash Chandra Bose Airport, Kolkata. All the stakeholders including the State Authorities, NDRF, AAJ, CISF, DAE etc. participated in the exercise. The exercise identified some vital areas for reinforcement in terms of training, interagency communication, medical response etc.

c. North-East Earthquake Awareness and Preparedness Campaign

NDMA signed an MoU with CSIR – NEIST (CSIR-North East Institute of Science and Technology), Jorhat, Assam for implementation of the North East Earthquake Awareness & Preparedness Campaign in 2013-2014. The initiative involved undertaking a scientific study for development of Mw 8.7 Shillong 1897 Earthquake Scenario to assess the vulnerability of the North Eastern Region covering all the eight NE states including Sikkim, to understand the potential impact of a big earthquake and to facilitate capacity building and Multi-State preparedness in case of such incident.
d. Emergency Management Exercises (EMExes)

Eight emergency management exercises (EMEx) have been conducted through technical support of NDMA in Chennai, Delhi, Guwahati, Silchar, Jorhat, Dibrugarh, Nagaon and Barpeta. These were large scale, urban based learning & capacity building exercises, designed to explore and strengthen the emergency response systems in disaster–prone cities and develop skills for emergency management. NDMA has also formulated the training manual on “How to conduct an EMEx” which is a practical guide to states and stakeholders for conducting EMEx in their respective jurisdictions.

FROM THE POLICY DESK

- Since its inception, NDMA has prepared 18 National Disaster Management Guidelines on various thematic and cross cutting themes of disaster management. These guidelines are available on NDMA portal.

Major initiatives undertaken during the past 12 months are as follows:


b) “National Guidelines on Crowd Management at places of mass gathering” formulated in consultation with the IIM, Ahmedabad and Gujarat Institute of Disaster Management, Ahmedabad in the month of February 2015.

c) The National Guidelines on School Safety and Hospital Safety have been formulated and are currently under process of approval.

d) The National Guidelines on Role of NGOs in Disaster Management (DM) and Community Based Disaster Management (CBDM) are on the verge of finalisation.

e) The Draft National Disaster Management Plan for the Country is being revised to include operational perspectives.

Policy Meeting with Senior Officers of 15 most vulnerable cities/towns falling under seismic zone V in India

NDMA held a Stakeholders meeting on 10th June 2015 at NDMA Bhawan, New Delhi to deliberate upon Safety Audit & Resilience Assessment of the Lifeline & Critical Buildings of 15 Selected Towns/Cities falling under Seismic Zone V. Around 40 representatives from 15 Cities/Towns (including some DMs and DCs of Districts and CEOs and Executive Engineers of Municipal Boards), 6 Nodal Ministries and 9 Technical Institutions attended the meeting. The focus of deliberations was on the following issues:

- Developing a system of structural safety peer review of structural designs of proposed constructions in Municipal Areas
- Developing a System of Licensing of Engineers
- Instituting a system of tall building committee to ensure safety of tall structures
- Sustained investment in awareness
- Training and capacity building of stakeholders and communities.
FROM THE RISK MITIGATION DESK

World Bank Aided National Cyclone Risk Mitigation Project (NCRMP — Phase 1)

The National Cyclone Risk Mitigation Project (NCRMP) has been designed with a view to address Cyclone Risks and to strengthen disaster resilience of the vulnerable coastal areas of the Country, with World Bank Assistance through Adaptable Programme Loan. The initial outlay for Phase – 1 was Rs. 1496.71 Crores covering the States of Andhra Pradesh and Odisha. Govt. of India has now approved the Additional Financing of Phase 1 upto 31st March 2018.

**Project Components:**

- **A.** Early Warning & Dissemination System and Last Mile Connectivity.
- **B.** Cyclone Risk Mitigation Infrastructure such as Multi-Purpose Cyclone Shelters, Evacuation Roads & Saline Embankments.
- **C.** Technical Assistance for Cyclone Hazard Risk Mitigation, Capacity Building and Knowledge Creation.
- **D.** Benefits Monitoring and Implementation Support.

- Component A, C, D are fully financed by the Central Govt. through World Bank Assistance where as Component B is being financed in the ratio of 75:25 by Central and State Govts.

**Physical Progress:**

In Andhra Pradesh, 76 Cyclone Shelters, 386 Roads, 14 bridges have been completed and 2 Saline Embankments are nearing completion. This infrastructure is expected to benefit approximately 8.5 lakh vulnerable coastal people in the State.

In Odisha, 125 Cyclone Shelters, 105 Evacuation Roads have been completed and 12 Saline Embankments are in advanced stage of construction. This infrastructure is expected to benefit approximately 5.2 lakh vulnerable coastal people in the State.

**Financial Progress:** An expenditure of Rs.950.68 Cr. has been incurred in Phase – 1 of the project which works out to 63.5 % of the total outlay upto 31st August 2015.

- In order to address the gaps noticed during management of cyclone Phailin, Government of India approved Additional Financing for the Phase 1 States of Andhra Pradesh and Odisha. The revised outlays for Phase 1 of NCRMP is Rs. 2331.71 Crores. The extended Phase 1 is scheduled for completion by 31st March 2018.

**NCRMP Phase 2:** Govt has approved Phase 2 covering the States of Goa, Gujarat, Kerala, Karnataka, Maharashtra and West Bengal with a total outlay of Rs. 2361.25 Crore and duration of five years upto March, 2020. Along with the earlier Phase 1(Components A, B, C, D), Under Ground Cabling has been included in Phase 2 based on lessons learnt during Cyclones PHAILIN and HUD-HUD.

Road from Pedapattapupalem to Nandempuram of Kavali mandal in Nellore dt on 06.03.2014. MSS check (DEE present). Total length : km 2.844 (BT : 2.844KM
NDMA Technical Team visited Hud-Hud Affected Districts

NDMA deputed a technical team to visit the HUDHAndroid affected districts of Andhra Pradesh and Odisha, to gather knowledge about the good practices followed during cyclone management and to identify gaps, if any and lessons learnt for future. The Authority has authored a report and documented good practices as well as possibilities for further improvement. The report is available on NDMA’s website.

B. National School Safety Programme (NSSP)

- The “National School Safety Programme (NSSP)-A Demonstration Project” implemented by National Disaster Management Authority (NDMA) in partnership with the State/UT Governments has been successfully implemented in 8600 schools in 43 districts spread over 22 States/UTs of the country falling in seismic zone IV & V.
- The project entailed preparation of Teachers’ Training Module on School Disaster Preparedness and standard IEC Material on school safety and risk reduction especially for children.
- Teachers, School Staff, Officials of District Administration, Community members including parents and children were sensitized on different aspects of safety and disaster preparedness.
- Teachers were trained as master trainers in each of the project districts.
- School disaster management plans were formulated and mock drills were conducted.
- Non-structural measures and demonstrative structural retrofitting were undertaken.

Following the result-oriented experience of the pilot project, some of the states have up-scaled the initiative extending it to other districts in their respective jurisdiction.

C. Project on Mobile Radiation Detection System

A pilot project on early detection of radiation in public domain, by equipping police personnel, has been initiated by NDMA. Police patrol vehicles in select cities will be provided with radiation measuring detectors. Radiation monitoring instruments and safety kits will be kept in the nearby area police stations. NDMA has signed an MoU with DAE for technical details and procurement of the items required in the project. SOP has already been prepared by a Committee. Further process regarding signing MoU with the State Governments and preparation of training module is underway.

D. Project on National Disaster Management Services (NDMS)

NDMA has conceptualized a project for creation of 17 Emergency Operation Centres and dedicated disaster management communication network while integrating terrestrial network with satellite communication. The Project is expected to assist the local administration in rescue and relief Operations based on the inputs from various agencies viz. IMD, CWC, NRSC, AERB, NPCIL, GSI, etc.

FROM THE AWARENESS DESK

In its endeavor to spread awareness amongst the masses, the National Disaster Management Authority
launches regularly public awareness initiatives through electronic and print media. In 2014-15, video spots on flood, earthquake and safety kits were telecast in 920 cinema halls of 9 States, 947 cinema halls of 22 States, 973 cinema halls of 10 States respectively through digital cinema. Similarly safety kit awareness campaign was also run on All India Rail Sampark, 139 Railway Enquiry, IVR for two months in all the 4 zones of Railways in regional languages.

Participation by NDMA at the 34th India International Trade Fair, 2014

NDMA participated in the 34th India International Trade Fair, 2014 from 14th to 27th November, 2014 at Pragati Maidan, New Delhi to bring awareness among general public, students and various stakeholders with respect to disaster management and risk reduction. Dr. P. K. Mishra, Additional Principal Secretary to Prime Minister

inaugurated the NDMA Stall on 14th November 2014. The NDMA pavilion was awarded Silver Medal by Hon’ble Minister of State for Tourism and Culture.

Editorial Committee for the Newsletter

(i) Shri B. Pradhan
Joint Secretary (Administration), NDMA
(ii) Dr V Thiruppugazh
Joint Secretary (Policy & Planning), NDMA
(iii) Smt. Aastha Saxena Khatwani
Financial Advisor, NDMA
(iv) Shri Anil Kumar Sanghi
Joint Secretary (Mitigation), NDMA
(v) Smt. Naghma Firdaus
Sr. Consultant-CBDM, NDMA
(vi) Shri Nawal Prakash
SRO, NDMA

EDITOR’S NOTE:

It has been very satisfying to harness energy within NDMA for designing, drafting and launching its first newsletter “SAMVAD”. We are grateful to Hon’ble Home Minister, Minister of State for Home Affairs, Additional Principal Secretary to Prime Minister & Union Home Secretary for their blessings and good wishes. The editorial committee takes this opportunity to express heartfelt gratitude to Member Secretary and Members of NDMA for their able guidance and keen support for this initiative. The committee is also thankful to all the officers and consultants for their valuable contribution and inputs

B. Pradhan
Joint Secretary, NDMA

Suggestions/Feedback can be sent to us at : jsadm@ndma.gov.in, samvaad@ndma.gov.in
NDMA Bhawan, A-1, Safdarjung Enclave
New Delhi-110029
Phone: 011-26701700