

Minutes of the Workshop

Workshop for Capacity Building of State Disaster Management Authority (SDMAs) Hosted by Capacity Building Commission and National Disaster Management Authority

Date: 27 April, 2023

Opening Remarks:

Shri Parveen Pardeshi, Member (Administration), Capacity Building Commission gave the opening remark and emphasized the importance of focusing on mitigation and risk management before disasters occur. He emphasized the need to capacitate officials of SDMAs and DDMA's to effectively implement NDMA's guidelines on mitigation and hazard-specific mitigation.

He cited Japan's and the United States' successful mitigation strategies and Turkey's lack of effective strategies resulting in significant loss of life. He emphasized the importance of taking proactive measures and reiterated that today's workshop provides a valuable opportunity for learning, sharing and implementing effective strategies to mitigate the issue at hand.

Mr. Kamal Kishore, Member Secretary, National Disaster Management Authority emphasized the need to maintain focus on mitigation actions throughout the process and cited the Hon'ble Prime Minister's agenda, which has six out of ten points dedicated to this issue. India's performance in terms of mitigation has room for improvement, and there is a need for specialized expertise and efficient utilization of funds to execute visible actions and productive projects.

He also mentioned that resources such as the Vulnerability Atlas, NDMA's dynamic composite risk analysis tool, and seismic micro zonation maps can contribute to risk information, but accurate feedback and validation are necessary. Mr. Kishore stressed the need for greater capacity building and frequent workshops to exchange best practices and devise successful mitigation strategies.

Mr. Krishna S. Vatsa, Member, NDMA addressed the need for a dedicated cadre for disaster management professionals to improve the capacity of SDMAs and DDMA's in addressing the comprehensive focus of the entire Disaster Management Cycle. The creation of the cadre would institutionalize a core professional capacity within the government to undertake disaster management activities.

He proposed the creation of a dedicated cadre for disaster management professionals that moves across institutional memory. The need for capacity building of SDMAs and DDMA was highlighted due to challenges faced and the need for optimal utilization of funds.

The creation of a specialized cadre will lead to the creation of jobs for students and young professionals graduating with specialized knowledge in disaster management, institutionalize a core professional capacity, and provide services for designing, formulating, and implementing policies and programs for the entire cycle of disaster management.

Mr. Hitesh Makwana, Additional Secretary, Ministry of Home Affairs, acknowledged the importance of Disaster Management Act, 2005 and emphasizes the need to support and guide states and district authorities for effective disaster management. He welcomed suggestions and feedback from states regarding the national government's mitigation strategies.

He stressed on collaborative effort between national and state governments for effective mitigation strategies and encouraged all states to establish SDMAs and earmark State Disaster Response Funds.

Shri Alok, Additional Secretary, NDMA, provided a framework for disaster mitigation projects based on guidelines from the Ministry of Home Affairs, National Disaster Management Authority, and Finance Commission. The presentation aimed to make states aware of the guidelines and encourage review for easy NDMA approval. The conceptual framework of disaster mitigation includes pre-disaster focusing, preparedness, response, and recovery.

Mr. Alok pointed attention towards various aspects of mitigation based on hazard, vulnerability, and risk exposure in the Indian Context- including high earthquake prone areas, flood prone areas, hilly terrain, and high altitude, GLOF, coastal areas, lightning, heatwave, and cold wave.

Other key points included the importance of both structural and non-structural measures, the scope of NDMF, regional projects, projects that need national level technical assistance, and a small grant window for Research and Development (R&D).

Presentations by attendees:

National Mitigation Programmes

1. Kunal Satyarthi, Advisor, NDMA

Mr. Satyarthi elaborated on the mitigation programs planned for the following disasters: forest fire, lightning, river and coastal erosion and drought.

- The National Programme on Forest Fire Management (NPFFM) is a joint programme of NDMA and MoEFCC that includes five regional consultative workshops.
- 150 top priority districts have been identified for the NPFFM based on various variables, and 52.67% out of state funds will be allocated to them.
- The National Lightning Risk Mitigation Programme (NLRMP) has been developed in the light of rising lightning incidents in India and aims to enhance institutional and technical capacity of SDMAs and DDMA in dealing with lightning incidents through five components.
- The National Mitigation Programme: Coastal and River Erosion addresses erosion problems due to natural and anthropogenic factors, with Rs. 1500 crore earmarked from proposed NDMF.
- Drought Mitigation Planning involves developing long-term management mechanisms at the State and District Level, with Rs. 100 Cr each allocated to twelve most drought-prone states over five years. Each drought affected district has to develop a plan to bring about convergence of interventions and monitor them on a long-term basis, with focus on semi-arid areas, dry-land farming, and small and marginal farmers.
- Plans to foster Partnerships and Convergence with key ministries and agencies.

2. Col. K.P. Singh, Advisor, NDMA

Col K.P Singh elaborated on the mitigation programs planned for following disasters: earthquakes, landslides, urban floods, and Glacial Lake Outburst Floods (GLOF)

- National Landslide Risk Mitigation Programme (NLRMP) has been developed to enhance landslide resilience through local level interventions
- Strengthening the Early Warning System, enhancing scientific and technical capabilities and empowering local communities lie within the purview of the programme.
- A similar project is the National GLOF Risk Mitigation Programme (NGRMP).

- Capacity building and awareness forms a part of the NGRMP and facilitates preparation of training modules, training of individuals, participation, and preparation of contingency action plans at regional, national and transboundary levels.
- The National Earthquake Risk Mitigation Programme (NERMP) aims to better assess earthquake hazards.
- Through the programme, it addresses the capacity building needs of teachers of architecture and civil engineering colleges, engineers, and architects, of masons and artisans and of officers of SDMAs and DDMA
- Urban Flood Risk Mitigation Programme (UFRMP) looks after the management of excess storm or rainwater through the development of drainage structures. Components of this program include structural measures taken, non-structural measures and capacity building of all stakeholders.

The experience of Implementing Two Phases of World Bank-funded Cyclone Risk Mitigation Programmes: Constraints and Challenges

Presented by: Mr. Anup Karanth, World Bank

- Mr. Karanth shared the experiences of implementing World Bank projects in two phases with the support of NDMA and State Governments. The overall progress of the project showed that the World Bank invested nearly US \$1.5 billion across 10 coastal states and UTs.
- At the time of inception, risk mitigation was embedded in recovery and coastal zone management projects, and the National Cyclone Risk Mitigation Projects (NCRMP I and II) were conceptualized based on several emergency response operations. It focused on reducing impact and residual risks by implementing early warning and impact-based forecasting systems, evacuation, mitigation infrastructure, community, and official capacities for response.
- Lessons learned from coastal risk reduction projects in India, including NCRMPs, also highlighted the success of early warning systems, evacuations, and shelters.
- The project identified knowledge gaps in coastal erosion management, including state-of-the-art modelling, regular monitoring, and benchmarking for maintenance programs, among other lessons.
- Innovations and good practices in NCRMP included GIS-based site screening and fully automated GIS-enabled web dynamic composite risk atlas and mobile applications, multi-hazard considerations in design of investments and MPCS, formation of cyclone shelter management and maintenance committees, and environment and social safeguards considerations.

- Mr. Karanth also briefly discussed the project management structure, results framework, and key outputs.

Community-based Disaster Risk Mitigation Programme: Bringing together Disaster Management and Climate Change Adaptation

Presented by: Mr. Manu Gupta, SEEDS India

- Mr. Gupta discussed the integration of disaster risk reduction and climate change adaptation in India due to the challenges faced by the country.
- Climate-induced disaster events are worsening the impact on communities and existing development programs are not adequately prepared for them.
- SEEDS India is working on the National Community-Based Risk Mitigation Programme to build a sustainable model for CCA and DDR integration at the local level.
- The program aims to put local communities at the centre of disaster mitigation measures and implement 100 community-based projects each year with a budget of Rs. 5 Cr annually.
- The projects will focus on hazard vulnerability and impact on systems, including initiatives like rejuvenation of local water bodies, securing livelihood chains, and retrofitting anganwadis.
- The program may be integrated with other ongoing government/private schemes at the local level to add value, such as elevated toilets in high flood-prone areas.

States' Mitigation Initiatives

1. Nagaland

Presented by: Mr. Johnny Ruangmei, Jt. CEO Nagaland, SDMA

Mr. Ruangmei provided a brief overview of the disaster mitigation initiatives undertaken by the Nagaland Disaster Management Authority.

- A simple proforma has been developed by the Nagaland State Disaster Management Authority to collect and collate data of the work performed. The proforma generated by a software platform with a unique identification number for each of the districts includes information such as type of calamity, date of occurrence, location, and any other relevant information.
- Images of completed works under mitigation were presented by Mr. Ruangmei through the state presentation. The completed projects were located in Tuophema, Burma Camp at Dimapur, Heritage Site at Phesame,

among others. A new site, Noklak Town, has also been identified for mitigation work.

- The Landslide Risk Mitigation Project Site has become an important location due to the unique topography of the North Eastern Region. Urgent mitigation measures are required to reduce the impact of landslip to the one and only Nagaland State Assembly Secretariat. It also aims to reduce economic losses and human lives.

2. Nagaland

Presented by: Dr. A Jayathilak, ACS, DM, Kerala

Dr Jayathilak provided a brief overview of the disaster mitigation initiatives undertaken by the Kerala Disaster Management Authority.

- Kerala is vulnerable to natural hazards such as cyclones, droughts, floods, landslides, coastal hazards, wind, earthquakes, and epidemics, as well as anthropogenic hazards like stampedes, firecracker incidents, petrochemical transportation accidents, dam break, and oil spills.
- Accordingly, Kerala has implemented various mitigation measures such as the Early Warning Dissemination System (EWDS), which integrates geological and hydro-meteorological sensors in the state and is designed to cover 78 Taluks, 14 districts, and states via VPN.
- Kerala has also developed Cyclone Risk Mitigation Infrastructure and Multi-Purpose Cyclone Shelters, with 17 shelters created across Kerala under the National Cyclone Risk Mitigation Project II.
- Other mitigation projects undertaken by Kerala include Pluvial Flood Mitigation- Operation Anantha, Drought Mitigation- Jalavarshini, among others.

Prof. Ravi Sinha, from IIT Mumbai, delivered a speech highlighting the need for a paradigm shift in the way we approach disaster management. He emphasized the need for a greater focus on mitigation, understanding risks, and the importance of collaborative efforts between different stakeholders.

According to Prof. Sinha, the key to effective disaster management and mitigation is to focus on capacity building and training in a multi-dimensional manner. He suggested that capacity building initiatives should not be limited to the government sector alone but should also involve the private sector.

He also highlighted the need for innovation and entrepreneurship in disaster management. Prof. Sinha explained that yesterday's technologies are barely enough to solve yesterday's problems, and tomorrow's problems due to climate

change cannot be solved by today's technology alone. Therefore, there is a need to think big, think innovatively, and encourage entrepreneurship in the field of disaster management.

Mr. Tom White from UNICEF emphasized the importance of "LOCALISATION" in disaster management, stressing on the need to integrate disaster management into mainstream policies while conducting local-level risk analysis and involving communities in mitigation initiatives.

Breakout groups:

Each group was given a presentation format which needed to be filled in forty minutes after discussing among the respective groups. Post that, each group nominated a person to present the findings of the group.

Breakout Group A- How to undertake mitigation programmes-guidelines etc.

During the meeting, the group discussed various issues related to disaster management, including the need to balance guidelines and functional freedom.

The group recommended: restrictions imposed of state disaster mitigation fund be made flexible and empower states to undertake mitigation projects as per needs of each state. The group recommended that limits like permitting only the 50% of annual grant to be used for one disaster should be removed. It should be left to the State Executive committee to allocate state disaster mitigation funds for any of nationally notified disasters as per state's priorities.

In general, the group suggested relaxing certain aspects of the guidelines, making them indicative and flexible in using funds. They also recommended providing functional autonomy for State Governments. However detailed technical guidance on various aspects of hazard specific mitigation measures and innovative technologies would be welcomed by state governments. Ministry of Home Affairs (MHA) may create an exclusion list to avoid certain types of mitigation activities but MHA should do away with positive list of mitigation projects as this can never be exhaustive enough to meet the requirements of each state and districts .

Another issue that was discussed was the need for a mechanism to identify proposals. To address this issue, the group recommended soliciting ideas and proposals from line Departments like Irrigation, Public Works, Education and Health. The group strongly recommended soliciting 75-80% mitigation projects from District Disaster Management authorities using appropriate/local technology and knowledge.

The group also discussed the importance of engaging community groups and enabling mitigation measures using support from community organizations. The group recommended soliciting project proposals from SHGs and FPOs and even Gram Panchayats.

Finally, the group discussed the need for a system to solicit new ideas and solutions. They suggested holding annual conclaves with start-ups to ideate for enhancing R&D and innovations for future technologies. The group also recommended engaging with organizations in this space to help generate new ideas and solutions.

Breakout Group B- Capacity enhancement through a cadre of dedicated disaster management personnel

Nagaland has created a system for contractual workers and entry level for contractual workers are section engineers. Economics and statistics officers are taken on attachment and look after documentation.

Two common issues arising at the district level are the administrative nature of DPO level functions and lack of proper career progression, leading to intellectual stagnancy. States need to retain consultants once projects are completed. NDMA and SDMA and DDMA must establish a proper monitoring mechanism. Procedures for minimum competency and selection proposed in presentation on dedicated disaster cadre should be followed by all states.

The group recommended that MHA guidelines should permit upfront expenditure up to 2.5% approved project staff to be in place before the States initiate projects using 2.5% funds for engaging disaster expert professionals who can be retained from one project to the next. Newly recruited officers should have regular trainings and role-based competency trainings should be given when officers move from one position to another. An assessment framework should be developed post trainings from international institutions and NIDM. Insurance provisions should be created for officers or consultants working in high-risk areas. Accountability should be transferred to the organisation for their officers and consultants to achieve results and tackle the issue of under-utilisation of resources.

Disaster management systems should be organised at the state-level and the district (job description, structure of reporting, accountability). Each role should include administrative duties since it is indispensable in a government structure. SDMA should function as an integrated unit, not a separate department.

Good metrics to gauge if the system is working include utilisation of all 4 windows of funding, full activation of all 4 areas, fully functional DDMA and SDMA. 30 years, 3 promotions, contract renewal only on the basis of performance.

The policy note on developing a cadre of professional by Member NDMA should be circulated to all states to consider adopting the framework for retaining and creating a permanent cadre of disaster professional to enhance state Disaster management authorities.

Breakout Group C- Mitigation challenges due to climate change and extreme weather-related disaster

The group discussed several issues related to disaster management, including governance, diversified geographies, response problems, and evacuation challenges. To address these issues, the group suggested several solutions, including:

For governance-related issues, the policymakers need to participate in more frequent capacity building activities, develop a futuristic plan with climate change mitigation, engage and coordinate with all departments, and adopt a dynamic planning process with risk governance.

For diversified geographies/new areas impacted, pre-identification of such areas is necessary. The group suggested identifying plans or tools where risk reduction could be mainstreamed.

To address problems with response and exploiting existing infrastructure of armed forces, greater inclusivity is required, including armed forces in disaster management planning.

To tackle evacuation challenges, the perception of risk, and insecurity of belongings, social awareness and behavioural change campaigns are necessary. The group also suggested developing new disaster financing mechanisms.

Breakout Group D- Financing disaster management

During the meeting, the group identified various issues related to disaster management financing, including a lack of mainstreaming, inadequate fund flow for local disasters, channelization of philanthropic resources, indemnity-based financing, and no financial mechanism to include differently abled groups. To address these issues, the group proposed the following solutions:

For mainstreaming DRM financing, a resilience budget window should be included in the state budget.

To address inadequate fund flow for local disasters, the 10% policy mentioned in MHA Mitigation guidelines should be revised, and flexibility in percentage capping should be allowed, for local disasters such as for erosion-affected people in Assam. For channelization of philanthropic resources, a platform or window should be created to receive funds at the state level.

To enable states to utilize funds for insurance solutions, the SDMF guidelines should be revised to allow payment of premiums.

To include differently abled groups' disaster management needs, funds should be allocated specifically for them.

Concluding Remarks and Action Points:

Mr. Biswarup Das, Director (Mitigation), NDMA spoke about the India Mitigation Portal which is an online platform envisioned by the National Disaster Management Authority (NDMA) to facilitate and empower stakeholders at all levels for planning, execution, and precision monitoring of mitigation measures.

During the workshop, the details of the Mitigation Portal were thoroughly explained, highlighting that it will act as a centralized database of all projects appraised and implemented under the two-tier funds - National Disaster Mitigation Fund (NDMF) and State Disaster Mitigation Fund (SDMF).

He stressed that the platform aims to provide an integrated and holistic approach to mitigation by including all stakeholders on a single platform. It will enable a whole-of-government approach to maximize the output and ensure effective utilization of mitigation funds. Through the India Mitigation Portal, stakeholders will be able to access information related to mitigation, and the platform will provide them with the tools to plan and execute mitigation measures effectively.

Valedictory Address by Dr. P.K. Mishra-

Dr. P.K. Mishra congratulated the Capacity Building Commission and the National Disaster Management Authority for their efforts towards capacity building and disaster mitigation. He stressed the need for a whole-of-government approach to maximize output and suggested that all organizations come together to tackle major problems in various areas.

Dr. Mishra also emphasized the need for capacity building in mitigation measures, which involves taking measures to reduce the impact of a particular hazard or prevent a hazard from turning into a disaster. He highlighted the importance of analysing the risk profile of a particular geography and area and preparing an education plan to limit the impact of future disasters.

Dr. Mishra acknowledged the lack of clarity regarding funding and the unclear definition of mitigation as the reasons for the non-success of mitigation measures in the past. However, he mentioned that India has now made strides in creating the first Disaster Mitigation funds, which should encourage new ideas, innovations, and effective utilization of mitigation funds.

He also highlighted the importance of developing specialized cadres for disaster management officials and emphasized the need for role-based training and learning to enhance capacity building in disaster management. Finally, he stressed the importance of institutional reform and support, which is the job of all departments, to effectively address the challenges posed by disasters and climate change.

Closing Remarks by Lt. Gen Syed Ata Hasnain-

Lt. Gen Syed Ata Hasnain also stressed the need to involve and educate the community in disaster mitigation efforts, and to have a bottom-up approach in capacity building. He suggested that states should focus on building the capacity of local communities, particularly vulnerable groups such as women, children, and the elderly, to enable them to respond effectively in times of disaster.

Finally, Lt. Gen Syed Ata encouraged all stakeholders to work together towards achieving the common goal of disaster mitigation, stressing the importance of collaboration, coordination, and communication. He concludes by emphasizing that capacity building is a continuous process that requires sustained efforts and investments, and that the workshop has provided a valuable platform for sharing knowledge and best practices and strengthening collaboration between the center and the states.

Action Points/Way Forward

The action points proposed by Mr. Pardeshi and Mr. Makwana, to fast-track mitigation and capacity building activities are as follows:

ACTION POINTS	RESPONSIBILITY
Digitization of physical courses on mitigation and disaster management	NIDM, CBC
Broad training program on Mitigation	NIDM, CBC
State Disaster Mitigation Project	SDMAs of Bihar, Nagaland, Meghalaya, Uttar Pradesh, Kerala, Assam, Arunachal Pradesh, and Maharashtra should each develop and fund at least one major Mitigation project based on SDMF addressing risks like flood risk in Maharashtra, UP, Bihar, cyclone risk in Kerala and Orissa, GLOF in Arunachal, Uttarakhand.
To review the guidelines issued by MHA and NDMA on disaster mitigation and provide formal feedback with evidence for any suggested amendments within the next 1 month.	SDMAs
To ensure optimal and effective utilization of disaster mitigation funds and seek guidance from NDMA for the same.	SDMAs, NDMA
Issue guidelines for earmarked allocations under NDRF for modernization of fire services and resettlement of people affected by erosion.	Ministry of Home Affairs
Provide a template for drought mitigation plans in the 12 most drought-prone states, in partnership with the Department of Agriculture and Farmers Welfare.	NDMA
A program to manage seismic and landslide risks in 10 hilly areas of Himachal Pradesh and Uttarakhand is under progress, with Rs. 250 Cr allocated for each area. The program is awaiting MHA approval.	NDMA, Ministry of Home Affairs
A mitigation program for urban flooding is also under progress and will be launched shortly. States are encouraged to expedite their measures on urban flooding.	NDMA, SDMAs

To start visiting states and SDMAs to ensure the smooth functioning of mitigation activities and processes.	Ministry of Home Affairs, NDMA
To circulate Disaster Management Cadre proposal to all states.	NDMA

Annexure

Attendees:

Praveen Pardeshi, CBC
Kamal Kishore, NDMA
Alok, NDMA
Kunal Satyarthi, NDMA
Krishna S. Vatsa, NDMA
Hitesh Makwana, MHA
Dr P.K. Mishra, Principal Secretary to the PM
Rajendra Singh, NDMA
M. War Nongbri, IAS (Secy Revenue)
Dani Salu (Secy DM) A.P.
M.S. Vaidyanathan, Consultant TNDARRA
Sumera Shafi (Dy. Resident Commissioner), LADAKH
Anup Karanth (Sr. DRM Specialist, World Bank)
Sheena Arora (World Bank)
Vivek Coelho (World Food Programme)
Ranjini Mukherjee (United Nations Resident) Coordinator's Office
Manu Gupta (SEEDS, India)
Prashant Kumar, Project Associate, VPSDMA
Jitendra Solanki, SDMA, Consultant
Vivek Sharma, Sr. Consultant, Punjab, SDMA
K. Wannian, DDMO, Meghalaya
Dorjee Khandu, Asst. Dir.
Papang Duggag
Shreedutt kamat, SPO
Manish Mohandas, UNDP
Chetan Bhakkad
Johnny Ruangmei, Jt. CEO
Dr. Sneta Baidya
Biswarup Das, Jt. Advisor, NDMA
Amit Tandon
Vikrant
Brijender Singh, OSD DMRD/SDMA (Rajasthan)
Prasad Unnikrishnan
Lt. Gen. Syed Ata Hasnain
Rajendra Ratnoo, ED, NIDM
Puneet Aggarwal, Pr. Secy (Tripura)
Priyanka Jindal, NDMA
Anuj Tiwari, NDMA
Robin Agarwal, NDMA

Sanjay K Sharma
Javed Iqbal
Amaresh Kr Niraj
Ravi Sinha, IIT Bombay
Tom White, UNICEF
Ajay Kumar, NIC
Nalini Shankaran
Tandriila Sarkar, Geologist, USDMA
Dr. Vedika Pant, IRS Expert, USDMA
Raj Vikram Singh, Senior Specialist, CDRI
Ranu Chauhan
Dr. Kajal Joshi, NDMA
Dr. B. K. Sahay, Advisor, Bihar, SDMA
Dr. A Jayathilak, ACS. DM, Kerala
Ramam Guru, DM, Punjab, SDMA
S. S. Sahota, UNICEF
Dr. Lalrokima Chenkual, Dy. Dir. Mizoram
Fatima, NIDM
Dr. Mukta Gardha, Sr. Consultant-DDMA
Gyanandra Tripathi, Pr. Secy, Assam