



# FOREST FIRE









# Preparatory Meeting for the First 'BIMSTEC Disaster Management Exercise-2017'

A two-day preparatory meeting for the first 'BIMSTEC Disaster Management Exercise-2017' was conducted at Vigyan Bhawan in New Delhi on August 8-9, 2017. This meeting was held in the run-up to the first-ever 'BIMSTEC Disaster Management Exercise-2017' to be held in New Delhi from October 10-13, 2017.

The modalities and requirements of the forthcoming exercise were worked out during the preparatory meeting.

Lt. Gen. N. C. Marwah (Retd.), Member, NDMA, who was the Chief Guest at the inaugural session, said that prevention, mitigation and resilience to trans-boundary disasters needed strong bilateral and regional vision and cooperation.

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional organisation comprising seven Member States: Bangladesh, Bhutan, India, Nepal, Sri Lanka, Myanmar and Thailand. As many countries in the region share common geological formations and river basins, collaborating efforts towards reducing disaster risks makes sense.

The Disaster Management (DM) Exercise augment capacities, especially response capacity, besides promoting cooperation and coordination on Disaster Risk Reduction (DRR) among Member States. It will also aid the sharing of best practices in DRR.

Making a presentation on the vulnerability profile of the BIMSTEC region, Shri Kamal Kishore, Member, NDMA, said that recurrent disasters deplete resources and affect the poor the most.

Senior officers from MHA, MEA, NDMA, NDRF and National Institute of Disaster Management (NIDM), besides representatives from all BIMSTEC nations participated in the meeting.



## **Hospital Safety Initiatives**

In its efforts towards ensuring the safety of hospitals, in February 2016, NDMA released guidelines on Hospital Safety to help hospitals in the preparation of their Disaster Management Plans (DMPs).

## Life and Fire Safety in Healthcare Facilities in India

A national workshop was jointly organized by Ministry of Health and All India Institute of Medical Sciences (AIIMS), New Delhi with NDMA, School of Planning and Architecture, Delhi Fire Services, and Central Building Research Institute (CBRI), Roorkee. The workshop aimed to sensitize hospital administrators about important issues related to life and fire safety in healthcare buildings.

"We have to aim to ensure zero tolerance with regard to risk of fire," said Shri J. P. Nadda, Union Minister of Health and Family Welfare while inaugurating the workshop.

### **Hospital Disaster Resilience Meeting**

NDMA, in collaboration with the Asian Disaster Preparedness Center (ADPC), conducted a meeting on March 29, 2017, to contextualize hospital safety as a national priority in the overall scheme of DRR initiatives.

The meeting stressed upon coordination

among all stakeholders to make public health infrastructure risk resilient and the role of NDMA guidelines in preparing Hospital DMPs.

NDMA also supports initiatives on hospital resilience by the States.

### Medical Preparedness & Response to CBRN emergencies

A workshop was conducted in Mumbai, Maharashtra, from April 5-7, 2017 by the DM cell of Municipal Corporation of Greater Mumbai in collaboration with NDMA. Stakeholders from different hospitals, police, fire brigade, armed forces and NGOs participated in the workshop.

Mumbai is the first city in India to circulate a Standard Operating Procedure (SOP) for medical management during Chemical Biological Radiological Nuclear (CBRN) emergencies.

#### **Development of Operational Guidelines and SOPs for Mass Casualty Management**

This workshop was jointly organized by Dept. of Disaster Management and Dept. of Health, Govt. of Bihar in Patna on June 8, 2017. The workshop aimed to seek peer feedback on the draft SOPs and Operational Guidelines for Mass Casualty Management.

The SOP was later released by Shri Nitish Kumar, Chief Minister, Bihar during the recent State Platform on DRR.

## SC directs NDMA's School Safety Policy should be implemented by all stakeholders

The Supreme Court on August 14, 2017 directed that the guidelines and policy spelt out by NDMA should be implemented by all the concerned authorities in the States.

NDMA said that its guidelines on school safety policy 2016 were statutorily required to be complied with "scrupulously without any deviation". It further added that it would be the duty of district disaster management authority to ensure and monitor its compliance.



#### Training programme for NDMS Project

A two-day training programme was conducted at NDMA Bhawan in New Delhi on August 28-29, 2017 for training the concerned staff of states/districts to handle the equipment and operations related to National Disaster Management Service (NDMS) effectively.

NDMS is a pilot project for connecting the control rooms of the Ministry of Home Affairs (MHA), NDMA, headquarters of the National Disaster Response Force (NDRF), all the states and union territories as well as 81 hazard-prone districts. Once installed, it will provide failsafe communication infrastructure and technical support for Emergency Operation Centres (EOCs) in the case of a disaster.



#### Meeting on CBRN Emergency training

One major gap that leads to radiological emergencies in public domain is inadequate training of staff. NDMA has planned to organise basic training courses on CBRN emergency management for the staff responsible for emergency handling at major airports, sea ports and land border crossings.

A meeting on this issue was held at NDMA Bhawan on August 29, 2017.

# Mock Exercise on Earthquake

n 30th June, 2017, Delhi woke up to overcast skies and a wet morning. It was a Friday and people were looking forward to a pleasant weekend when a massive shaking of the earth startled everyone. It was an earthquake measuring 7.9 on the Richter Scale with its epicentre near Moradabad along the Moradabad-Delhi fault line.

Almost instantaneously, a siren went off at the Delhi state headquarters at 5, Shamnath Marg. Once the Emergency Operation Centre (EOC) was activated, reports of damage and destruction started trickling in from all the 11 districts of the state. Incident Response System (IRS) was activated - Staging Areas identified, Incident Command Posts established, rescue teams formed with essential resources such as doctors, healthcare staff, vehicles, fuel, earth movers, National Disaster Response Force (NDRF) teams, Civil Defence volunteers and Home Guards and sent for the sites under Incident Commanders - in all the districts.

Even as the rescue teams were readied and sent for search and rescue operations, government hospitals were also activated to tend to the injured about to be rushed in from various locations - schools, hospitals, residential buildings, markets, metro stations - across the affected districts.

While the reactions to this event were real, the event was thankfully not. The earthquake and its aftermath were simulated scenarios for a state-wide mock exercise for earthquake preparedness.

# **Preparedness**







The mock exercise, conducted by NDMA in collaboration with the State administration. aimed at testing the preparedness and response mechanism of all government agencies in the event of a high-intensity earthquake and prepare responders for any such real-life situation.

"Delhi is highly vulnerable to earthquakes. It is, therefore, important that similar exercises are conducted in Delhi regularly, "said Lt. Gen. (Retd.) N. C. Marwah, Member, NDMA, adding that mock exercises play an important role in generating awareness among the local population who are the first responders in case of any disaster.

Delhi falls in Seismic Zone IV, one of the most risky zones. Add to that its high-density population and unplanned construction and it is staring at a major catastrophe in case of a massive earthquake in or around the city. Besides the loss of lives, an earthquake in a mega-city such as Delhi will also lead to severe economic losses leading to the collapse of the local or regional economy.



Mock exercises work like a refresher course for those engaged in disaster management, officials and volunteers alike.

"As no fool-proof early warning system exists for earthquakes, regular mock exercises should be conducted in high risk zones. These exercises oil the administrative machinery and enhances its ability to respond faster, better and in a planned manner during and after a disaster," said NDMA's Maj. Gen. V. K. Datta (Retd.), who led the exercise.



In the post-exercise analysis, done through video-conferencing, all the participating districts discussed the challenges faced during the exercise. Many participants felt that their lack of expertise in using communication devices such as satellite phones would hamper operations during a real-life situation. Gen. Datta agreed that communication among responders is the key in any post-disaster response. He added that it was important to "continuously upgrade the capacity of all the stakeholders".

This was the biggest such exercise in Delhi after a similar state-level earthquake preparedness exercise in 2012.

# **RAISING THE BAR**



- Santosh Kumar Srivastava and Amit Kumar Singh Sahbhagi Shikshan Kendra (SSK)

# Raised hand pumps in flood-prone districts of Uttar Pradesh ensure clean drinking water supply even during floods

n Uttar Pradesh, about 4,50,000 people in 209 villages along the Ghaghara River in Bahraich district are affected by annual flooding. Ironically, the biggest problem people faced during floods is the lack of that one thing which has otherwise a bountiful presence near them - Water.

Hand pumps in the affected areas would get submerged severing the only source of clean drinking water for the affected population. During a routine field survey, interaction with locals threw at us a simple but transformational idea - "Why can't we raise our hand pumps just as the flood water rises high?" This set us thinking. Villagers had offered a solution; it just needed to be translated into reality.

The locations were chosen with consensus - near community-owned structures such as temples, primary schools, etc. - so as to ensure

accessibility to the poorest and socially vulnerable. Hand pump Nigrani Samitis (Caretaking committees) comprising five-six locals have been formed in each hamlet with at least one woman representative in each samiti. These committees are in-charge of maintenance as well as other issues related to the hand pumps in their villages. This is an excellent example of





people's initiative and community participation.

"We knew that the water we were drinking during floods was contaminated but had no other option. Our children used to fall sick. Now, we use the raised hand pumps during the floods. Our children no longer have to drink dirty water", says Dharamraj from Matrepur village. He further adds, "Our community is benefitting from these hand pumps. Therefore, it is our duty to maintain these. We take turns to ensure that the hand pump is working fine."

The first raised hand pump was installed in 2008 in Bahraich. The scheme was later expanded to Barabanki district as well.

During floods, about 70 per cent of the population in each village uses these hand pumps during floods.

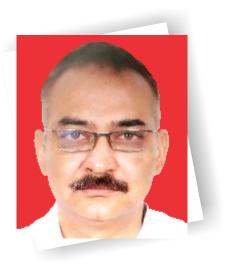
"Jabse unchkae nal laag gawa hain, hum log uhi ka pani piye lagen hai, tabse bahut kam beemar pari hai. Aam samay, kamhai log pani piyat hain, baki badhia maa sabhayi pani unchkae nal se piyat hain," (Since the day raised hand pumps were installed, we has been using it for drinking water. People don't fall ill regularly now. In normal times, people use the other pumps too, but during the floods, everybody drinks water from the raised hand pumps) says Purwa village's

Ramsagar, who is happy now that the instances of waterborne diseases has come down in his village.

# BENEFITS OF RAISED HAND PUMPS:

- Access to clean drinking water during floods
- Decline in the cases of water-borne diseases
- Great cost to benefit ratio
- Safe for evacuation during floods





# PIYOOSH RAUTELA ON FOREST FIRE MOCK EXERCISE

Fires are dangerous. Forest fires, even more so, as they often get out of control and spread over a huge area. These destroy vast tracts of forest cover and wildlife, disturb the forest ecosystem, adversely affect human settlements in the vicinity and cause huge economic losses.

NDMA conducted its first-ever mock exercise on forest fire in Uttarakhand in April this year. 'Aapda Samvaad' spoke with Dr. Piyoosh Rautela, Executive Director, Disaster Mitigation and Management Center (DMMC), Dehra Dun, about the role of such exercises in reducing disaster risks.

# Q. What is the significance of this mock exercise for Uttarakhand?

**A.** Any mock exercise, whether on forest fires or earthquakes, presents an opportunity to review our plans, check the readiness of various departments, ensure coordination with central government agencies and paramilitary forces. So, it is an important tool for reducing disaster losses.

We have had major forest fires across the state in 2016. National Disaster Response Force (NDRF), army and other paramilitary forces were called in to assist the rescue and relief operations.

# Q. How was this exercise different from other mock exercises conducted previously?

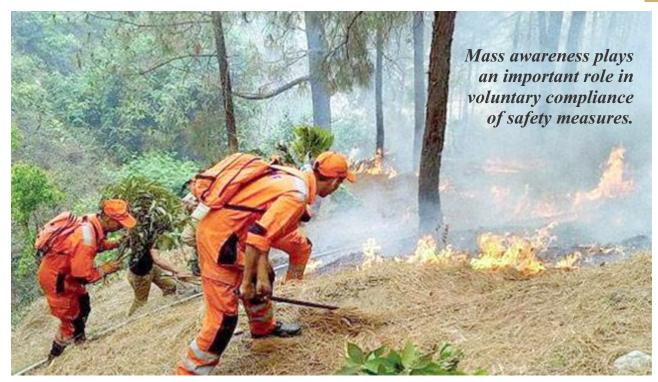
**A.** Earlier, we used to exchange information with the forest department on incidents of fire. However, this was the first time that the forest department was actively involved as a stakeholder. It will certainly improve interagency coordination and help us handle incidents of forest fires better.

# Q. How do you ensure that the community is made an active stakeholder in the Disaster Risk Reduction (DRR) process?

A. Community's involvement in reducing disaster risks is of utmost importance as mass awareness plays an important role in voluntary compliance of safety measures. These mock exercises generate a lot of media reports which, in turn, makes the community aware about 'Do's and Don'ts' of disasters and level of preparedness of the government. Important information like emergency contact numbers also become readily available.

Besides, student volunteers, cadets from Nehru Yuva Kendra Sangathan (NYKS) and National Cadet Corps (NCC), representatives from Mahila Mangal Dal, Gram Pradhans, chowkidaars, etc. are directly involved at various stages of mock exercises.

Uttarakhand has been running 10-day training programmes for the communities for almost seven years now. More than 15,000 persons have been trained on search & rescue, and First Aid so far.



#### Q. How do you plan to take this initiative on forest fire further?

**A.** More than 70 per cent of Uttarakhand's geographical area is under forests. Forest fires are common, especially from February to June. This clearly tells us how important it is to be prepared for forest fires. Next year onwards, we would try to conduct such an exercise before the onset of the season so that we are fully prepared to deal with cases of forest fire.

#### Q. Many forest fires are man-made. What is the state doing to address that?

A. Human activities such as controlled burning of grass (local traditional beliefs say regeneration and growth is better after a fire) and using fire as an easy method to clear a piece of land cause a majority of forest fires. Such incidents can be reduced by generating awareness about its ill-effects.

People have been gradually alienated from forests in past few decades. Firstly, a lot of young people have migrated from villages leaving many villages thinly populated. This means lesser number of hands in dousing fires in surrounding forests. Secondly, various Forest Conservation Acts have distanced people from forests as they no longer have access to forest property (wood, fodder, fruits, etc.) which used to be an integral part of their day-to-day lives earlier. Since they no longer associate with forests, they are no longer willing to contribute as they feel they don't gain anything out of it. As I

pointed out earlier, awareness among people is an important preventive measure against such incidents.

#### DRR measures for forest fires \*

- Limit development in high risk areas; clear vegetation surrounding homes/other
- Build firebreaks between homes and forest areas, if a natural break (road/river etc.) does not exist.
- Plant vegetation of low flammability.
- Use fire-resistant building materials.
- Raise public awareness as people are often responsible for forest fires.
- Develop fire fighting capacities.
  - \* Source: Abridged from UNISDR Media book





13th Formation Day
National Disaster Management Authority

# School Safety.

28th September 2017, New Delhi



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