

JUNE 2019



AAPDA
SAMVAAD

Cyclone
Fani



Dr. P. K. Mishra gets Sasakawa Award

United Nations Office for Disaster Risk Reduction (UNDRR) on May 16, 2019 conferred Sasakawa Award 2019 for Disaster Risk Reduction to Dr. P. K. Mishra, Additional Principal Secretary to the Prime Minister of India, at an Award Ceremony during the 6th Session of Global Platform for Disaster Risk Reduction (GPDRR) 2019 at Geneva, Switzerland (13-17 May, 2019).

Dr. Mishra received the award in recognition of his long-term dedication to improve the resilience of communities most exposed to disasters and his personal commitment to social inclusion as a critical principle to reduce inequality and poverty, enhancing the safety net of the socially and economically marginalized.

"As the geography of disaster risk is changing in the world, ever newer categories of people are getting exposed to disasters... Development gains are at risk," Dr. Mishra said. He added that there was a need to collectively think about the next generation of disaster risk management efforts to deal with new realities.

The United Nations Sasakawa Award is the most prestigious international award in the area of Disaster Risk Management. It was instituted more than 30

years ago and is jointly organized by the UNDRR and the Nippon Foundation. The theme of the 2019 Sasakawa award was "Building Inclusive and Resilient Societies". UNDRR received more than 61 nominations from 31 countries for the 2019 award.

India to co-chair CG of GFDRR 2020

India will for the first time co-chair of the Consultative Group (CG) of Global Facility for Disaster Reduction and Recovery (GFDRR) for the fiscal year 2020. The decision was taken during the CG meeting of GFDRR held in Geneva, Switzerland on the margins of the 6th Session of the Global Platform for Disaster Risk Reduction (GPDRR) 2019. GFDRR is a global partnership that helps developing countries better understand and reduce their vulnerability to natural hazards and Climate Change. India's candidature was backed by its consistent progress in disaster risk reduction (DRR) in the country and its initiative to form a coalition on disaster resilient infrastructure. This will give the country an opportunity to work with the member countries and organizations of GFDRR with a focused contribution towards advancing the disaster risk reduction agenda.



Relief Commissioners' annual conference

A two-day annual conference of Relief Commissioners/Secretaries was held on May 21-22, 2019 in New Delhi to review the status of preparedness for South-West Monsoon 2019. In his inaugural address, Union Home Secretary Shri Rajiv Gauba said that the Centre would provide all possible assistance under the National Disaster Relief Fund (NDRF) and the State Disaster Relief Fund (SDRF) besides mobilization of Central Forces. He called upon the States to undertake capacity building since they are the first responders during a calamity.

Shri Gauba urged the States to increase coverage of farmers under the Pradhan Mantri Fasal Bima Yojana Crop Insurance Scheme to provide immediate relief to farmers in the event of natural disasters.

He further said the Government has sanctioned additional Battalions of National Disaster Response Force (NDRF) and new Battalions are being set up in Jammu and Kashmir, Himachal Pradesh, Uttarakhand and Delhi NCR.

The conference was attended by Relief Commissioners of State governments and Union Territories and senior officials of National Disaster Management Authority (NDMA), India Meteorological Department (IMD), Geological Survey of India (GSI), MHA, Defence Ministry and Central Water Commission (CWC).

Earlier, NDMA too conducted a meeting on May 18, 2019, with various stakeholders to review the pre-monsoon preparedness.

NDMA issues Thunderstorm Guidelines

NDMA issued national guidelines on Thunderstorm & Lightning / Squall/ Dust Storm/Hailstorm and Strong Winds in March 2019. These Guidelines aim to provide help to vulnerable states in preparing their Action Plans, and developing tools for Early Warning, Preparedness, Mitigation as well as coordinated strategies to minimize losses to lives and property.

Thunderstorm and its associated phenomena have emerged as a major weather hazard in recent years affecting different parts of the country. In India, more than 2,500 people die due to thunderstorm and lightning every year.



During May 2018, severe dust storms, thunderstorms and lightning hit several parts of India resulting in a large number of casualties/loss of lives and severe economic losses. These incidents as well as experiences from the past led to the realization that preparation of national guidelines were a must for improving the capacity of the States to deal with these incidents in a scientific and planned manner.

NDMA also conducted a meeting through videoconferencing in April 2019 with States most affected by and vulnerable to thunderstorms and lightning to monitor their preparedness ahead of the season of these extreme weather events.

Managing Heat Wave 2019

Heat wave has emerged as one of the major severe weather events around the globe in recent years. Climate change is driving temperatures higher as well as increasing the frequency and severity of heat waves. India too is experiencing increased instances of heat waves every year.

NDMA has been closely working with vulnerable States to reduce the adverse impacts of heat wave. To ensure preparedness for Heat Wave 2019, NDMA conducted a national-level workshop on Heat Wave at Nagpur, Maharashtra in February. Taking this forward, the Authority held a meeting of Nodal Officers from various Central Ministries/ Departments on Heat Wave Management on March 25, 2019. Further, a meeting on the expert committee on heat wave was also organised on March 27, 2019 to discuss the outcome of the workshop as well as long-term mitigation measures.

NDMA is also working on revising the Guidelines on Heat Wave to incorporate the latest research and development towards mitigating heat risk.



Meetings on Landslide Risk Mitigation

NDMA conducted a five-day training programme on Landslide Mitigation, implementing and enforcing landslide mitigation measures in their concerned States. About 23 participants from Kerala, Karnataka, Andhra Pradesh, Maharashtra, Tamil Nadu and the Geological Survey of India (GSI) participated in the training programme.

NDMA also held the third joint meeting of Ministry of Mines (MoM), GSI and other stakeholders on May 28 in New Delhi to discuss issues related to generation of regional-level landslide early warning, satellite-based monitoring of landslide-prone regions, status of national Centre for Landslide Research Studies and Management (CLRSM) and the status of projects and other works related to landslide risk reduction and management.

Training of Aapda Sakhis

A 15-day training for 50 "Apada Sakhis" (women disaster volunteers) was held from 8-22 March, 2019 in Kolhapur, Maharashtra, under NDMA's Aapda Mitra programme. These community volunteers were trained on Flood Management, rescue techniques and First Aid.

Aapda Mitra aims to train 6,000 community volunteers in disaster response in 30 most flood prone districts (200 volunteers per district) in 25 States across the country.



Training Programme for CBRN emergencies

NDMA conducted a five-day basic CBRN training programme at the Cochin Port Trust in Kochi from March 11-15, 2019. The training programme helped enhance the preparedness of Seaport Emergency Handlers (SEHs) to respond to CBRN emergencies at the seaports.

This was the second in a series of such programmes that will be conducted at various seaports across the country to enable SEHs to respond suitably until the arrival of specialised response teams.

CBRN emergencies pertain to threats emanating from the use of Chemical, Biological, Radiological and Nuclear material.

The training programme, conducted in collaboration with the Indian Ports Association (IPA), Institute of Nuclear Medicine & Allied Sciences (INMAS) and National Disaster Response Force (NDRF), was aimed at improving the CBRN safety at our seaports. The programme consists of lectures as well as field training, including live demonstrations of detection and decontamination including use of Personal Protective Equipment (PPE). Besides equipping the SEHs to handle CBRN emergencies, the training programme also enabled the participants to provide medical first aid and initial psycho-social support.

Around 50 participants representing various agencies responsible for operation and maintenance of the seaport were trained on various aspects of CBRN emergencies. Another 150 working level staff were sensitized on the subject in a half-day module.

Launch of ARISE-India

ARISE-India initiative was launched in New Delhi on March 18, 2019. ARISE is the Private Sector Alliance For Disaster Resilient Communities



supported by the UN Office for Disaster Risk Reduction.

Speaking during the launch, Lt. Gen. N. C. Marwah (Retd.), Member, NDMA, said the ARISE programme will not only cover development sectors in India, but in SAARC countries as well.

CYCLONE FANI

As early as April 21, IMD predicted the likelihood of a low pressure area in the Equatorial Indian Ocean and south Bay of Bengal. It kept a close watch on the situation and by April 25, it started issuing special three hourly bulletins with latest forecast. Fishermen were asked not to venture out into the sea. The depression intensified into Cyclone Fani on April 27, became a severe cyclonic storm by April 29 and a very severe cyclone on April 30. As it developed near the Equator, it spent days over the sea gathering power and moisture before it struck Odisha with all its ferocity on May 3.

It left a trail of devastation - uprooted trees, fallen power lines, damaged infrastructure, battered vehicles, mangl

ed electricity wires, blocked roads, scattered debris, disrupted communication networks and cancelled flights and trains. More than a crore people in a total of 14 districts in the State were affected. Summer crops, orchards and plantations were devastated.

Despite the massive cyclone that Fani was, it could kill only 38 persons. A similar cyclone in 1999 in Odisha had killed more than 10,000 persons. This time, the difference lay in improved forecasting, aware communities, and an alert State administration. As soon as it became evident that the cyclone would make its landfall in Odisha, more than 15 lakh people were evacuated from vulnerable areas and put into cyclone shelters. National Disaster Response Force (NDRF) teams were deployed as well as kept on standby.

Indian Coast Guard and Navy deployed ships and helicopters for relief and rescue operations. Army and Air Force units were also put on standby.

Massive awareness campaigns asking people to follow safety instructions were run through radio and TV besides announcements at public places. National Disaster Management Authority's Social Media channels started disseminating information from the moment IMD talked about the low pressure area. It also widely published Do's and Don'ts for the general public for before, during and after the cyclone.

A pro-active government machinery from the Centre extended all possible support and help. Union Cabinet Secretary Shri P. K. Sinha on April 29 chaired a meeting of the National Crisis Management Committee (NCMC) to take stock of preparatory measures for the impending landfall of Fani. The meeting was attended by senior officials from NDMA and concerned Ministries/ Agencies.



Tamil Nadu, Andhra Pradesh, Odisha and West Bengal participated through video conference. All stakeholders were directed to put preparedness and response measures in place. In fact, the NCMC continued to meet on a daily basis for some time to ensure that the State is up and running as soon as possible.

Due to effective strategies adopted during the preparatory phase, Odisha ensured unified action by multiple agencies and speedy mobilization of rescue teams, relief material and equipment. Work is on in full swing. Hundreds of health facilities have been restored, mobile medical teams have been deployed, and efforts to restore 100 per cent electricity are being undertaken. Teams from NDRF, State Disaster Response Force (SDRF) and Odisha Forest

Development Corporation (OFDC) have been deployed for clearing the roads.

India's 'zero casualty' policy towards cyclone management has drawn praise from far and wide. In her tweet, UNISDR's Mami Mizutori called India's approach to managing extreme weather events as a major contribution to the implementation of the Sendai Framework. Global media has also applauded the swift and efficient management of Cyclone Fani.

What is a cyclone?

A cyclone is an extreme weather phenomenon caused by disturbances around a low pressure area over water bodies. Winds spiral around the centre of this low pressure area in a snake-like coil and gather speed. These winds rotate anticlockwise in the northern hemisphere and clockwise in the southern hemisphere. When it develops over tropical waters, it is known as a tropical cyclone. Similarly, when it is formed over extra-tropical waters, it is known as an extra-tropical cyclone.

Tropical cyclones that are formed over the Atlantic Ocean are called hurricanes; those formed over the Indian Ocean are called cyclones, and those which are formed over the Pacific Ocean are called typhoons.

The average life period of a tropical cyclone is about seven days. However, they are relatively short lived over the north Indian Ocean with a life period of about 5-6 days.

There are two cyclone seasons in the north Indian Ocean - pre-monsoon season (April-June) and post-monsoon season (October-December). The months of May-June and October-November are known to produce cyclones of severe intensity. Tropical cyclones that develop during the monsoon months (July to September) are generally not intense.

The eastern coast of India is more vulnerable than the western coast. Odisha and Andhra Pradesh are the most vulnerable followed by West Bengal and Tamil Nadu and Puducherry. On the western coast, Gujarat is most vulnerable.

Do's & Don'ts

Before cyclone

- Ignore rumours, Stay calm, Don't panic
- Keep your mobile phones charged for emergency communication; use SMS
- Listen to radio, watch TV, read newspapers for weather updates
- Keep your documents and valuables in water-proof containers
- Prepare an emergency kit with essential items for safety and survival
- Secure your house; carry out repairs; don't leave sharp objects loose
- Keep cattle/animals untied to ensure their safety
- Identify safe shelters in your area. Find the closest routes to reach them
- Store adequate food grains and water
- Conduct mock drills for your family and community

During and After Cyclone

A) If Indoors

- Switch off electrical mains and gas connection
- Keep doors and windows shut
- If your house is unsafe, leave early before the onset of a cyclone
- Listen to radio; rely only on official warnings
- Drink boiled/chlorinated water
- Do not go out until officially advised that it is safe. If evacuated, wait till advised to go back.

B) If Outdoors

- Do not enter damaged buildings
- Watch out for broken electric poles and wires, and other sharp objects
- Seek a safe shelter as soon as possible

Fishermen should

- Ignore rumours, Stay calm, Don't panic
- Keep your mobile phones charged for emergency communication; use SMS
- Keep a radio set with extra batteries handy
- Listen to radio, watch TV, read newspapers for weather updates
- Keep boats/rafts tied up in a safe place
- Don't venture out in the sea

IWDRI 2019

Second International Workshop on Disaster Resilient Infrastructure
19-20 March | New Delhi



IWDRI 2019 kicks off CDRI

By 2030, about five billion people will be living in towns and cities. This means an extra burden on the existing infrastructure and a huge demand for new infrastructure. The way we operate, maintain or build this infrastructure, as the case may be, will either put our future generations at risk or make them resilient.

At the 2016 Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) in New Delhi, a featured event on “Disaster Risk Resilient Infrastructure for Sustainable Development”, highlighted the need for stronger collaboration and co-operation among countries towards building resilient infrastructure. Following this, the Prime Minister announced that India would work with partner countries and key stakeholders in launching a global Coalition for Disaster Resilient Infrastructure (CDRI), envisaged as a knowledge

exchange and capacity development partnership.

Towards this collective responsibility, stakeholders from across the globe gathered in New Delhi in January 2018 for the first International Workshop on Disaster Resilient Infrastructure. They explored potential ideas for building the resilience of key infrastructure sectors. IWDRI2018 also gave an impetus to the global CDRI, an initiative India had since been pushing for at various international platforms.

To further build upon the concept of CDRI in conjunction with potential partners, National Disaster Management Authority organised the Second International Workshop on Disaster Resilient Infrastructure (IWDRI) in March 2019 in New Delhi. Representatives from 33 countries, 12 international organisations, experts on disaster resilience and academic institutions attended the workshop.

Welcoming the participants, Shri Kamal Kishore, Member, NDMA, said, "The Sendai Framework is no longer a 15-year Framework. Four years have already gone by. We now need to work with a sense of purpose, with a sense of focus, with a sense of urgency." This intent fructified as an agreement was reached upon to establish a CDRI, which will serve as a platform where knowledge is generated and exchanged on different aspects of disaster and climate resilience of infrastructure.

Co-creation will remain the cornerstone of the Coalition and member countries will access and disseminate knowledge and resources to/from other members to make their infrastructure resilient and thus, contribute to each other's economic growth and sustainable development.

Thematic areas around which the functions of the CDRI would be developed:

- ✓ Risk governance and policy development
- ✓ Risk identification and estimation
- ✓ Resilience standards and regulation
- ✓ Institutional mechanisms for capacity development, and knowledge exchange
- ✓ Technology and innovation for disaster and climate resilience
- ✓ Support for infrastructure recovery and reconstruction
- ✓ Finance for resilience building and climate adaptation
- ✓ Building social and community capacities to enhance disaster and climate resilience

For more information and the outcome document, please visit the Workshop website: <https://resilientinfra.org/iwdri/>

Who Said What

Collective actions are preferable than efforts by individual nations, and we certainly are better off with a coalition on disaster resilient infrastructure
- N. K. Singh, XV Finance Commission, India

India will see more than 400 million people migrating to urban areas in near future. Urban Resilience is key for sustainability
- Dr. Rajiv Kumar, NITI Aayog, India

We must build resilient infrastructure with a focus on the poor and the vulnerable
- Dr. P. K. Mishra, Prime Minister's Office, India

Disaster resilience demands a multilayered approach, there is a need to involve everyone, including the private sector and the civil society
- H.E. Kenji Hiramatsu, Japan

The need of the hour is to come up with initiatives that address issues in a comprehensive manner. Only 11 years left to implement the Sendai Framework. **- Kamal Kishore, NDMA India**

A global coalition on resilient infrastructure is key to avoiding creation of new risks and adding to economic losses, particularly for low income countries **- Mami Mizutori, UNISDR**

It is important to strengthen local governments and involve communities for improved disaster management **- Junaid Kamal Ahmad, World Bank**



Flood Do's and Don'ts

BEFORE

- Ignore rumours; Stay calm; Don't panic.
- Keep your mobile phones charged for emergency communication; use SMS.
- Listen to radio, watch TV, read newspapers for weather updates.
- Untie cattle/animals to ensure their safety.
- Prepare an emergency kit with essential items for safety and survival.
- Keep a first aid kit with extra medication for snake bite and diarrhoea ready.
- Keep your documents and valuables in water-proof bags.

AFTER

- Do not allow children to play in or near flood waters.
- Don't use any damaged electrical goods; get them checked.
- Watch out for broken electric poles and wires, sharp objects and debris.
- Do not eat food that has been in flood waters.
- Use mosquito nets to prevent malaria.
- Don't use toilet or tap water if water lines/sewage are damaged.

DURING

- Don't drive through flooded areas.
- Don't enter flood waters. In case you need to, wear suitable footwear.
- Stay away from sewerage lines, gutters, drains, culverts, etc.
- Stay away from electric poles and fallen power lines to avoid electrocution.
- Eat freshly cooked or dry food. Keep your food covered.
- Drink boiled/chlorinated water.
- Use disinfectants to keep your surroundings clean.

IF YOU NEED TO EVACUATE

- Place furniture, appliances on beds and tables.
- Put sandbags in the toilet bowl and cover all drain holes to prevent sewage backflow.
- Turn off power and gas connection.
- Take the emergency kit, first aid box and valuables with you.
- Do not enter deep, unknown waters; use a stick to check water depth.
- Come back home only when officials ask you to do so.



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