

Webinar On

Enhancing Preparedness for Responding to COVID19 and Extreme Weather Events



Local Level
Response
Cyclones
Climate Change
Action Plan
Locust Attack
Preparedness

Webinar Report

Organized on: 4th November 2020

By

SAARC Disaster Management Centre (IU)
Gandhinagar, Gujarat, India



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Program Note

Enhancing Preparedness for Responding to COVID19 and Extreme Weather Events

Background

SAARC region comprises nearly 23% of the world's population and is one of the most disaster-prone regions in the world. Given the geographical location of the region and the cascading impacts of climate change, the extreme weather events are increasing in intensity and frequency. These events include cyclones, excessive rainfall, heatwaves, drought conditions, locust attack, etc.

Climate change and the complexities associated with disasters are creating deep uncertainties. Enhanced technology and greater data availability allow many hazards to be predicted with greater accuracy, however, climate change results into deviation and amplification of disaster impacts. It is therefore increasingly difficult to determine risk of the given area and prepare accordingly¹.

As per the Global Climate Risk Index 2020, some of the SAARC Countries are ranked in top 20 most vulnerable countries to the fatal impacts of climate risks². Owing the population density other SAARC countries are also highly vulnerable. In 2019, floods and storms events accounted for 68% of the total number of affected people globally. The total number of disaster events occurred in recent years have almost doubled as compared to total number of disaster events in last decade. The South Asian region has recently experienced the brunt of extreme weather events. Cyclones have developed both in the Arabian Sea and the Bay of Bengal, there have been extreme heat events leading to extreme water stress conditions, attack of the locust swarms destroying food and agriculture, and heavy flooding. Most of these events happened amidst the COVID19 pandemic. The COVID-19 pandemic already brought in new challenges for the humanity. In such situation the compounding impact of two or more simultaneous events has been experienced.

With the advent of science and technology South Asian Countries have shown enhancement in preparedness to deal with events like cyclones. They have significantly reduced loss of life from hydro-meteorological events in recent years because of effective early warning systems combined with timely evacuations in the face of extreme weather events. National Disaster Management Organizations (NDMOs), humanitarian agencies and iNGOs already engaged in the COVID-19 response are now blending those efforts with response to heavy rainfall due to monsoon and cyclone seasons which usually impact millions of people across Asia.³

Community-based actions are becoming more vital as emergencies increase in number and frequency, due to changing hazards (e.g. seasonal probable hazards during ongoing COVID 19

¹ Summary of the Asia-Pacific Disaster Report 2019

² Global Climate Risk Index 2020

³ <https://reliefweb.int/report/india/extreme-weather-events-time-covid-19>

pandemic) and growing vulnerabilities (e.g. reduced economic activities, food logistics systems, etc.). This has put more communities at risk, and has challenged the response capacity at national and local levels. Thus, it is essential that greater localization of risk information, preparedness and response efforts, underscored by local partnerships needs to be up scaled considering their crucial role in DRR. This also focuses on the Target E of the Sendai Framework for Disaster Risk Reduction which states to substantially increase the number of countries with national and local disaster risk reduction strategies by 2020. With this it also touches upon other targets like reduction of mortality, affected people, and economic loss.

Community-based actions have demonstrated its significance in reducing disaster impacts against hazards by:

- Enhancing knowledge of the local risk and new emerging risk ensuring that the actual capacities of the communities are developed and utilized;
- Preventing and mitigating risk at local level by avoiding exposure to hazards;
- Preparing and organizing communities to respond in planned and structured manner, taking care of their vulnerabilities;
- Ensuring comprehensive actions in the initial hours after an emergency, thus saving many lives.

Therefore, there is a need to encourage governments and all – of- the – institutions working in DRR to reinforce the community by facilitating preparation of local level action plans, strengthening existing systems, and providing resources to support local actions towards reducing disaster risks and manage residual risk.

Aim

The webinar will aim to highlight lessons learned from the past flood events, challenges faced during recent cyclone response due to COVID19 and deliberate on methods through which Member States can enhance community preparedness through local level action plans for climate related hazards & risk management to build more resilient systems that are better placed to prevent such crises in the future.

Target Audience

This webinar aims to engage Senior Officers from Ministries from Member States dealing with Disaster Risk Management, Disaster Response; National Disaster Management Organizations (NDMOs); Ministries working with Community Preparedness towards Public health in emergencies and other concerned ministries.

Agenda

#	Topic	Time (IST)	Resource Person/ Moderator
1.	Inauguration of the Webinar	13.30 – 13.50	SDMC (IU)
i	Welcome & Introduction of the Director - SDMC (IU)	1 min.	Mr. Sumedh Patil PM/RO – SDMC (IU)
ii	Introductory Address	3 Min	Director, SDMC (IU)
iii	Introductory remarks from the representative of each of the Member States	16 min. (2 min. each)	Representatives from all SAARC Member States- <u>Afghanistan</u> : Mr. Mohammad Omer Mohammadi <u>Bangladesh</u> : Ms. Kazi Tasmin Ara Ajmery <u>Bhutan</u> : Mr. Tshewang Norbu <u>India</u> : Dr. Pawan Kumar Singh <u>Maldives</u> : Mr. Umar Fikry <u>Nepal</u> : Mr. Kali Prasad Parajuli <u>Pakistan</u> : Mr. Tahir ud Din <u>Sri Lanka</u> : Maj. Gen. Sudantha Ranasinghe <u>Moderator</u> – Director, SDMC (IU)
2.	<i>Introduction of the Speaker</i>	13.50 – 14.10 20 min.	<i>Moderator- SDMC (IU)</i>
	Climate Change & Extreme Weather Events in the SAARC Region + Q & A		Dr. Roxy Mathew CCCR, IITM, India
3.	<i>Introduction of the Speaker</i>	14.10 – 14.30 20 min.	<i>Moderator- SDMC (IU)</i>
	Emerging Risks of Locust attack in the SAARC Region: Genesis, Warning and Response + Q & A		Mr. Keith Cressman Senior Locust Forecasting Officer, FAO, Rome
4.	<i>Introduction of the Speaker</i>	14.30 – 14.50 (10 min. each) 20 min.	<i>Moderator- SDMC (IU)</i>
	Lesson Learnt from the Cyclone Amphan: Local Level response and challenges caused by COVID-19 situation + Q & A - India Experience - Bangladesh Experience		Mr. Randeep Ku. Rana DIG Operations -NDRF, India Mr. Syed Ashraf ul Islam Communication and Media Specialist, Department of Disaster Management, Bangladesh
5.	<i>Introduction of the Speaker</i>	14.50 – 15.05 15 min.	<i>Moderator- SDMC (IU)</i>
	Strategy for development of Local Level Action Plan for enhancing preparedness towards Extreme Weather events compound with COVID19 situation + Q & A		Mr. Aslam Perwaiz Department Head, ADPC, Thailand

6.	Experience sharing from Member States towards recent compound disaster events in SAARC Region + Q & A	15.05 – 16.05 (7 min. each) 60 min.	Representatives from all the SAARC Member States- <u>Afghanistan</u> : Mr. Sayed Abdul Baset Rahmani <u>Bangladesh</u> : Mr. Probir Kumar Das <u>Bhutan</u> : Mr. Sangay Tenzin & Mr. Ugyen Tshering <u>India</u> : Dr. Pawan Kumar Singh <u>Maldives</u> : Mr. Umar Fikry <u>Nepal</u> : Mr. Sameer Kumar Adhikari <u>Pakistan</u> : Mr. Tahir ud Din <u>Sri Lanka</u> : Dr. Novil Wijesekera <u>Moderator</u> - Director, SDMC (IU)
7.	Concluding Remarks	16.05 – 16.10 05 min.	Director, SDMC (IU)

Regional Webinar on Enhancing Preparedness for Responding to COVID19 and Extreme Weather Events

Introductory Session

On behalf of the SAARC Disaster Management Centre, Mr. Sumedh Patil welcomed all the participants from respective SAARC Member States for the first webinar conducted by SDMC(IU).



The keynote address was given by Mr. P.K. Taneja, Director, SDMC (IU). He welcomed and introduced all the dignitaries and resource persons. Representatives from each Member States gave introductory remarks.

Session 1: Climate Change & Extreme Weather Events in the SAARC Region

**Dr. Roxy Mathew Koll, Indian Institute of
Tropical Meteorology, India**



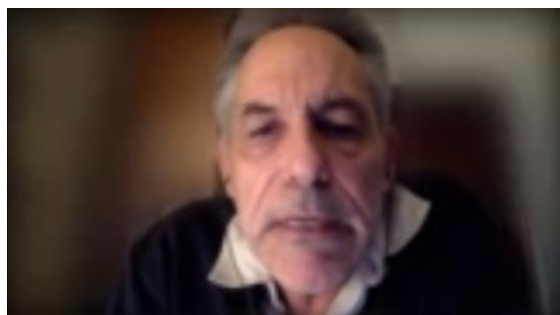
Dr. Roxy talked about the plethora of extreme weather events that occur in the Indian Ocean region. These events include cyclones, excessive rainfall, heatwaves, drought conditions, locust attack, etc. Major change in the Indian ocean is the sea level

rise and most of the heavily populated coastal cities in the SAARC region are located at the rim of Indian ocean. As per the analysis done, sea level rise is happening at 3-6 cm per decade. There are visible impacts of sea level rise in the Indian Ocean like the Vaan Island in Gulf of Mannar. The impacts of climate change have been on the biodiversity as well, Bramble Cay Melomy is the first species to be extinct due to anthropogenic climate change. Dr. Roxy also discussed about the mitigation measures like the Seagrass and Coral restoration. He also explained movement of Locust swarms that started in East Africa following heavy rains of 2018-2019 activated due to warming in Western Indian Ocean. Cyclone characteristics are also changing and they are becoming more intense in short time. Eg. Cyclone Amphan intensified from Cat1 to Cat 5 cyclone in 18 hours. Predicting the rapid intensification of cyclones is a difficult task for weather models. The warming of ocean that leads to formation of cyclones also results in marine heat waves. The same ocean temperatures that intensified cyclone Amphan, led to coral bleaching in Gulf of Mannar also. On the land, total monsoon rainfall is decreasing, number of extreme rains (above 150 mm/day) are increasing. All these events act together leading to compound events. Dr. Roxy mentioned about the first assessment report on Climate Change over the Indian region; Indian Ocean Review; The IPCC Special Report on Ocean and Cryosphere in a Changing Climate; Economic Impact Assessment in Monsoon Mission; and their salient outcomes. He also discussed about the Flood Warning Systems at Local level (iFLOWS- MUMBAI) and at

SAARC level (South Asia Flash Flood Guidance System).

Session 2: Emerging Risks of Locust attack in the SAARC Region: Genesis, Warning and Response

Mr. Keith Cressman, Food and Agriculture Organization, Rome



Mr. Keith talked about the characteristics of desert locust and factors to mitigate the locust plague. Desert locust basically live in desert and can cover upto 20% of the earth's land surface. They basically live in the area between Senegal to India and South Europe to Tanzania. They grow in number exponentially which is in response to the climate. The change in climate impacts their number as they need rain to reproduce and green vegetation for food and shelter. In SAARC region, they are mainly found in India and Pakistan. Rarely they can reach to countries like Nepal and Afghanistan. In general, they are in desert, in low numbers, not posing a threat. But more rainfall events, means a greater number of locusts. When they form a swarm, they can travel upto a distance of 150 km per day. In last two years there have been dramatic increase of desert locust numbers in the South West Asia. They have huge impact on food security and livelihood not just on farmers community but on countries and regions. Mr. Keith highlighted the reasons behind more desert locusts which are increasing temperatures, unusual rainfall events, and changing wind patterns which lead to more rapid

maturation, more frequent outbreaks, and new invasion areas, respectively. Subsequently he discussed upon methods to deal with swarms of locust like aerial control operations which includes spraying of pesticides and biopesticides from the aircraft. This can be supplemented with ground control operations also. Such operations also have high cost implications. He discussed about the desert locust early warning system which is nearly 100 years old and very rich in experience and data. All the affected countries share data directly with FAO through desert locust early warning network. The strategy is very similar to forest fire prevention. Detection in early stage is very essential. There are tools to collect information from the field or using remote sensing/satellite imagery or instruments like drone. The data is shared through cloud in realtime which is used by concerned departments of the countries. There is a specific Commission of FAO for the South Asian region (covering India, Pakistan and Afghanistan of the SAARC) – Commission for Controlling the Desert Locust in South-West Asia. It helps strengthen the capacities of the countries to manage desert locust.

Session 3: Lesson Learnt from the Cyclone Amphan: Local Level response and challenges caused by COVID-19 situation

India Experience

Mr. Randeep Ku. Rana, National Disaster Response Force, India



Mr. Randeep described the strongest cyclone 'Amphan' to strike the Indian coast since the 1999 Odisha Super cyclone and the process that Disaster Response Force followed prior and post landfall. 38 & 20 teams of NDRF were deployed in the States of West Bengal and Odisha, evacuating 8,13,092 and 2,37,296 respectively. In view of the COVID-19 scenario, all teams were reoriented for facing dual challenge and equipped with PPE etc. to carry out community awareness campaigns and restoration work in both the States. Mr. Rana explained the ABCD analysis and preparedness by NDRF which basically includes protection gears for COVID19. Tailor-made training on COVID-19 was given to response personnel. The challenges to deal with Complex emergency situation were many, responders and stakeholders were also infected by COVID19 during operations (including 74 NDRF personnel), lack of COVID-19 safe accommodation was also a challenge and many buildings were converted to evacuation shelter keeping in view the COVID advisories about physical distancing. Community involvement, coordination- both at macro and micro level, homogeneity between central, state and local agencies, and India's preparedness and EWS contained the loss of lives to just double digits.

Bangladesh Experience

Mr. Syed Ashraf Islam, Department of Disaster Management, Bangladesh



Mr. Syed talked about the double burden issues – the sufferings, losses and

displacement due to COVID19 faced with flood and cyclone. 2.6 Million were provided shelter in 13,153 shelters during cyclone. Fortunately, the containment zones were not affected by Cyclone Amphan and subsequently floods did not occur at extreme hot spots. Government of Bangladesh took extensive relief and incentive support program through the Ministry of Disaster Management and Relief. Many MoDMR field officials were also affected by COVID-19. Mr. Syed highlighted the drivers of Disaster Management Response to COVID-2019 viz PM's 31-point directive in wake of the novel coronavirus situation which focussed on most disadvantaged people, senior citizens and children, etc. DDM prepared contingency plan and COVID protocols. All cyclone, flood and temporary shelters maintained a supply of sanitizers, masks, and other basic protective material for stranded people along with food, fodder for livestock etc. He also highlighted the fact that it had not been practical to apply COVID19 precautions during the humanitarian phase of Amphan and during sessions of flood, since saving of lives was precedence over the risk of contracting the disease but after disaster, social distancing was not ignored when relief was distributed.

Session 4: Strategy for development of Local Level Action Plan for enhancing preparedness towards Extreme Weather events compound with COVID19 situation

Mr. Aslam Perwaiz



Mr. Aslam interestingly highlighted the shift from global to local level since 2015 through implementation of international frameworks and defined local level anything which is below National level. He showed the analysis of Target E of the Sendai Framework and reflected upon local DRR & resilience strategies and action plans. Reflections were upon: Identifying key priorities based on risk & resilience assessments, including governance diagnosis and financial aspects; Fostering an enabling environment for local actions through awareness, advocacy, bridging governance gap, capacity and monitoring; Overcoming challenges and moving ahead because disaster that will happen is not the one we prepared for; the cost of doing nothing could be very high. He focussed on all-hazards approach to achieve risk reduction as a basis for sustainable development. COVID-19 pandemic is a timely reminder of how hazards within the complex and changing global risk landscape can affect lives, livelihoods and health.

Session 5: Experience sharing from Member States towards recent compound disaster events in SAARC Region

Afghanistan

The Member State representative listed the extreme weather events that impacted the country this year, which were heavy snowfall, avalanches, landslides and flash floods. Some 144,039 people were affected and the harsh weather conditions resulted in interruption of the delivery of humanitarian assistance. COVID 19 crisis forced to revise the existing Country Humanitarian Plan. Ministry of Public Health established the Centre for Command and Control. To address socio-economic impact of COVID-19, government provided short term assistance to the affected population across the

country, in the meantime coordinated with the humanitarian actors on expansion of responses. The lessons learnt were: Weather events are localized and leave very less time for respond, therefore preparedness action needs to be localized; Disaster Risk Assessment should encompass the greater component for climate risk assessment; Integrated Early Warning System with reaching to very remote areas with Maximum lead time; Strengthen coordination between all key stakeholders and create multiple Working Group to feed in to the policy process.

Bangladesh

The major disasters of 2020 were Cyclone Amphan, flood, and lightning that claimed a total of about 300 deaths. The representative of the Member State presented on the statistics of Cyclone Amphan and the initiatives taken by Govt. of Bangladesh. Early Warning Dissemination was done through IVR (Interactive Voice Response - a technology that automates interactions with telephone callers) where in 5 million people called in during 19-20 May 2020. Joint Need Assessment was conducted after the Cyclone Amphan which highlighted destroyed infrastructures, inundation of agri-land by tidal surge and salinity intrusion, loss of livelihood, physical distancing in emergency shelters was challenge. As a way forward, Bangladesh representative mentioned about re-establishment of South Asian Disaster Knowledge Network Portal (SADKN), development of digital vulnerability atlas for each member state under unique framework, improve best practices and lessons learnt from DRR efforts at national levels, develop and implement regional programmes and projects for Multi-Hazard Early Warning, establish a regional sharing platform for using space based technology in disaster management.

Bhutan

Bhutan, with zero COVID mortality till date, highlighted the timeline of COVID19 interventions. The representative from the Member State discussed the Community Transmission Mitigation Strategy which included intensive testing, enhanced surveillance, enhanced surge capacity, and behavioral change. Leadership of the Bhutan government and national COVID19 Incident Command Structure played a major role in management of the disease. The road ahead focuses on health, social, and economic security.

India

Representative from the Member State talked about the situation of the pandemic in the country. Ministry of Health and Family Welfare is the nodal agency for managing biological disasters. Soon after the outbreak, COVID19 containment plan was released by the Ministry. Template for state and district level planning were formulated by NDMA. As pre-emptive measure GoI took several steps in sensitizing States, UTs, and other stakeholders to plan for concurrent disasters during ongoing pandemic. This included preparatory and mitigation measures on heatwave, planning for floods, disasters particularly impacting urban areas like earthquake and urban floods, etc. Advisories were released before the onset of cyclone season, in view of the pandemic situation, which included maintenance of physical distancing and using face mask during mass evacuation, capacity of evacuation shelters shall be reworked, PPEs for first responders. Member State representative discussed about various hazard related plans for preparedness and response at national level. Strengthening regional cooperation is the major way ahead as the region faces similar type of hazards.

Maldives

Maldives has a low impact, high frequency hazard profile. These include cyclonic rainfall, storm surges, swell waves, wind storm, flooding, tsunami is also a threat. Such events also cause severe coastal erosion in the islands. Maldives needs to reiterate the future outlook due to climate change. There have been stress of coral bleaching and heatwave events due to rising sea temperature. Representative from the Member State mainly highlighted the impacts of climate change that an island nation would bear in future if measures to mitigate the impacts are not taken.

Nepal

Representative from the Member State explained the organizational structure for command and response for COVID 19 and the activities undertaken. The monsoon event that started in June was heavier than usual, destructed many infrastructures and many casualties were reported. There were warning on chances of glacial lake bursting due to heavy precipitation. Rare event of locust attack also happened, more than 8 million locusts entered Nepal and resulted in crop damage of 1,118 hectares of land. Ministry of Agriculture and Livestock Development implemented strategies to minimize the damage - Early warning with locust trajectory prediction, Developing and disseminating Locust Advisory, Developing and disseminating User's guide for reporting the locust. Key learnings highlighted were multi sectoral coordination and collaboration in every disaster, health systems strengthening required against infectious diseases outbreak/pandemic, necessity of integrated and tailored approach, technological advancement and usage, early and honest risk communication and community engagement.

Pakistan

The representative from the Member State talked about compound disasters in the country which include COVID, locust and floods. He mentioned three tiers of disaster management organizations in the country. Like any other SAARC country, Pakistan faces similar natural and man-made hazards but in the pandemic situation, the strategy was required to be updated as per the requirement. The response was planned keeping health department as the main stakeholder in the situation. Working of National Command and Control Centre and National Command and Operation Centre (to deal with ground issues) was discussed. People were aware of the historical hazards like earthquake and floods that have been impacting the country but exposure to pandemic was new which lead to revision of the strategies and action plans. Representative highlighted the logistics and supply challenges faced, socio-economic impacts and measures taken to manage the same.

Sri Lanka

The emergencies that occurred in Sri Lanka during COVID19 were floods, landslides, and drought. Both urban and rural areas were affected and large number of deaths associated with landslides. Effective response in this situation was promoted due to Disaster Management Institutional Framework, Standard Operating Procedures, Emergency Operation Centers, resilient health system and support of the defense sector – tri-forces, police and state intelligence service. The way forward as highlighted by the representative of the Member State - All hazard approach must be continued for the investments to be cost Effective; Health – Disaster Management – Defense Sector coordination is critical for effective preparedness and response;

Capacity building is the key for effective preparedness for future extreme events.

Concluding Remarks

Concluding remarks and vote of thanks was given by Director SDMC(IU).






























Webinar on Enhancing Preparedness for Responding to COVID19 and Extreme Weather Events

4th November, 2020

List of Participant

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