सत्यमेव जयते

NATIONAL WORKSHOP

ON

HEAT WAVE – 2023

“EARLY PLANNING, AND EFFECTIVE ACTION: SAVING LIVES”

VENUE: IIT BOMBAY, MAHARASHTRA

FEBRUARY 13-14, 2023

भारत 2023 INDIA

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Background

Heatwave has emerged as one of the major extreme weather events around the globe, cities, and region in recent years. As per IPCC 2022 for policy maker and assessment of Climate Change over the India Region report, the Ministry of Earth Science indicated that the intensity and frequency of heat waves have increased in recent times with climate change driving temperatures even higher. Eleven out of fifteen warmest years occurred between 2004 and 2019 (WMO). There has been an increasing trend of heat waves in India over the past several years whereby a number of States/districts/cities/towns in India have been severely affecting the health and livelihood of vulnerable populations.

In India, the average maximum temperature recorded in March 2022 is the highest ever recorded with 33.1 ºC for the period 1901-2022. Similarly, in the month of April 2022, the maximum temperature over Northwest India has been 35.9 degrees Celsius, which is the highest recorded average in last 72 years for the period 1950-2022(Source: IMD, New Delhi). In 2022 several northern states were severely affected by heat waves. While human health was the most affected sector, its cascading effects were felt across all sectors, from power, water, wildlife, and agriculture.

In the year 2021, we reported 4 deaths, this year we should aim at zero tolerance towards heat wave-related deaths. There is a need for State governments and stakeholders to take extra measures to ensure that this downward trend of reducing death is maintained.

Earlier action taken by NDMA, State governments and other stakeholders:

National Disaster Management Authority (NDMA) issued the National Guidelines for 'Preparation of Action Plan – Prevention and Management of Heat Wave' 2016 to provide a framework for implementation, coordination and evaluation of extreme heat wave-related activities in India. Further, NDMA revised the National Guideline on Heat waves in 2017 and again in 2019. This contains, inter alia, long-term mitigation measures for addressing the issues at a broader level by undertaking activities by states/local authorities in their respective areas to reduce the negative impact of extreme heat wave conditions. NDMA has been organizing annual national workshops on Heat waves in collaboration with one of the States prone to heat waves to coordinate with all the stakeholders. NDMA has issued several advisories for

managing heat waves to the central Ministries / departments, States, Districts, and Municipal Corporations for taking appropriate actions. A review of heat wave preparedness has been done through Video Conferencing with all heat wave-prone states. NDMA is also focusing on community sensitization and awareness generation through social media, print/electronic media, advertisements, and short TV commercial films on heat wave protection.

IMD provides a special focus on early warning and impact-based forecast/alerts of heat wave events over a particular area, which helps the states in taking appropriate measures in mitigating the adverse impacts. National Centre for Disease Control Ministry of Health and Family Welfare, monitors and collects data on epidemic-prone diseases on weekly basis, builds capacity of medical staff, provides justification of illness and casualty certifications etc.

The concerned State Governments have taken necessary preparedness and mitigation measures for heat wave. During last few years, many state governments, districts/cities have prepared Heat Action Plan and are implementing them. Based on these Action Plans, the State Governments and District administration take all possible measures to prevent mortality due to heat wave.

Impact of Actions Taken

In the past few years, despite taking several measures heat wave is becoming a major challenge. The actions taken by central /state governments, district administration, meteorological department, health department, and civil society in a planned way has resulted in a significant reduction in mortality due to heat wave.

Required early planning and preparedness of Heat wave

This year, various research organizations including World Bank have warned that India could soon experience heat beyond human survival limit. Therefore exposure to heat wave preparedness and mitigation measures could be shared by the State Governments. NDMA has taken two important studies-

1. Assessment of Vulnerability and Threshold of heat-related Health Hazards- Dr. Lipika Nanda, Vice President, PHFI, Hyderabad.

2. Developing Framework for Heat Vulnerability Mapping and model heat Action Plan for Indian cities- Dr. Rajashree Kotharkar, Professor, V-NIT Nagpur.

Based on the studies conducted on heat waves and its findings NDMA is organizing a workshop in partnership with Government of Maharashtra and IIT Mumbai at the State level and develop a series of national and State level initiatives to mitigate the impact of heat wave.

Objectives

- To provide a platform for sharing experiences and lessons learned on sustainable long-term mitigation measures for heat waves.
- To discuss and determine the future course of action for addressing heat waves.
- To bring together representatives from heat wave-prone states, concerned central Ministries, and stakeholders involved in weather forecasting and mitigation.
- To involve research institutions in the workshop discussions.
- To focus on finding solutions for long-term sustainable heat wave mitigation.
- To facilitate the exchange of ideas and knowledge on heat wave management among attendees.

Expected Outcome

The Workshop aims to help all vulnerable states /districts in preparation for their Heat Action Plan for 2023. It also aims to discuss the integration of various development plans including long-term measures, adapting cool roof technology, and increasing forest coverage and green areas in various states to reduce the risk of heat waves as well as climate change impacts. Moreover, interactions with experts from different fields as well as other stakeholders such as early warning and forecasting agencies, government departments and research institutions would help to figure out appropriate region-specific short, medium and long-term mitigation measures most suited for their regions. This platform also aims to provide an opportunity for community and capacity building and awareness generation.

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