

## **Innovative Practices in Community Awareness-Generating Better Preparedness Against Extreme Heat in UP**

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Uttar Pradesh, located in a subtropical region, experiences a variety of climatic conditions, including intense summers with extreme temperatures peaking during the pre-monsoon season (April to June), resulting in frequent heatwaves. Elevated temperatures are strongly associated with an increase in heat-related illnesses and morbidity. These heatwaves have a significant impact on ecosystems, the environment, and public health. Effective public health responses require population-focused interventions that are both impactful and efficient. Socioeconomic factors increase vulnerability to extreme heat events. Individuals with a lower socioeconomic status frequently face increased risks as a result of various factors; consider the prolonged outdoor exposure while waiting for public transportation. The efficacy of community-level heat stress prevention initiatives need no emphases. Programs emphasise identify high-risk groups, including children and the elderly and furnish processes and resources innovatively for mitigating heat-related illnesses are bound to succeed. Towards this, the primary goal is to bolster community understanding, attitudes, and perceptions towards heat stress prevention. Community awareness thus stands as a cornerstone strategy in the prevention and management of heat-related illnesses.

### **1. Gearing up for Heat Wave Action**

Uttar Pradesh recognised the severity of heatwaves as early as 2016 and notified it State Disaster eligible for relief assistance. Ever since Uttar Pradesh State Disaster Management Authority (UP SDMA) has taken proactive steps to address the consequences of extreme heat events. As part of its commitment to population safety, UP SDMA developed and distributed the Uttar Pradesh Heat Wave Management Plan 2024 to the state departments and District Disaster Management Authorities (DDMA). This comprehensive plan serves as a guideline for departments to develop strategies and protocols for mitigating the effects of heat waves and ensuring a timely response during such emergencies.

To develop and execute district-specific heat wave action plans in order to facilitate effective local-level implementation UP SDMA established a standardised format. This standardised approach ensures consistency across districts while allowing for localization based on needs and vulnerabilities. All 75 districts in Uttar

Pradesh have prepared their respective district heat action plans. These plans are tailored to each district's specific challenges and available resources, ensuring a coordinated and effective grassroots response to heatwave events. Uttar Pradesh hopes to improve its resilience to heatwaves by integrating state and district-level strategies, protecting vulnerable populations, and minimising the negative impacts on public health, infrastructure and the environment. The collective efforts reflect Uttar Pradesh's dedication to proactive disaster management and the well-being of its people.

## **2. Capacity Building**

UPSDMA has prioritised the development of skills and readiness of govt. officials to manage heat waves effectively. An inter-departmental workshop on February 20, 2024, was a significant step in this direction. This workshop aimed to improve preparedness in accordance with the Uttar Pradesh State Heat Action Plan-2024. Senior officials from various line departments participated in the event, which promoted inter-disciplinary collaboration and shared understanding.

A specialised workshop was organised on March 1, 2024 by UP SDMA to train Additional District Magistrates (ADM), Sub-Divisional Magistrates (SDM), disaster experts, and officers from the Health and Labour Departments. The Workshop was designed to provide participants with the knowledge and skills required to effectively implement the various strategies and activities outlined in the State and District heat action plans.

These capacity-building initiatives not only enhance the technical proficiency of officials but also promote cohesive inter-departmental coordination. By investing in training and skill development, UPSDMA ensures a more robust and coordinated response to heatwave emergencies, thereby safeguarding the well-being of the residents of Uttar Pradesh.

## **3. Awareness Programmes**

UP SDMA has taken a number of proactive steps for heatwave management through a variety of initiatives. These include a Community-Based Disaster Management Training Programme, Mukhya Mantri School Safety Programme, and a comprehensive one-day disaster risk management awareness training. These efforts, combined with the empowerment of participants as master trainers, demonstrate a commitment to promote community resilience and disaster risk management awareness across Uttar Pradesh. The details of the above programme are as follows:

**3.1 Community-Based Disaster Management Training Programme.** The programme successfully reached out to 2,800 Gram Panchayats across 56 districts in the state. It encompassed Gram Panchayat Level Training for over 84,000 frontline workers and members of Panchayati Raj Institutions.

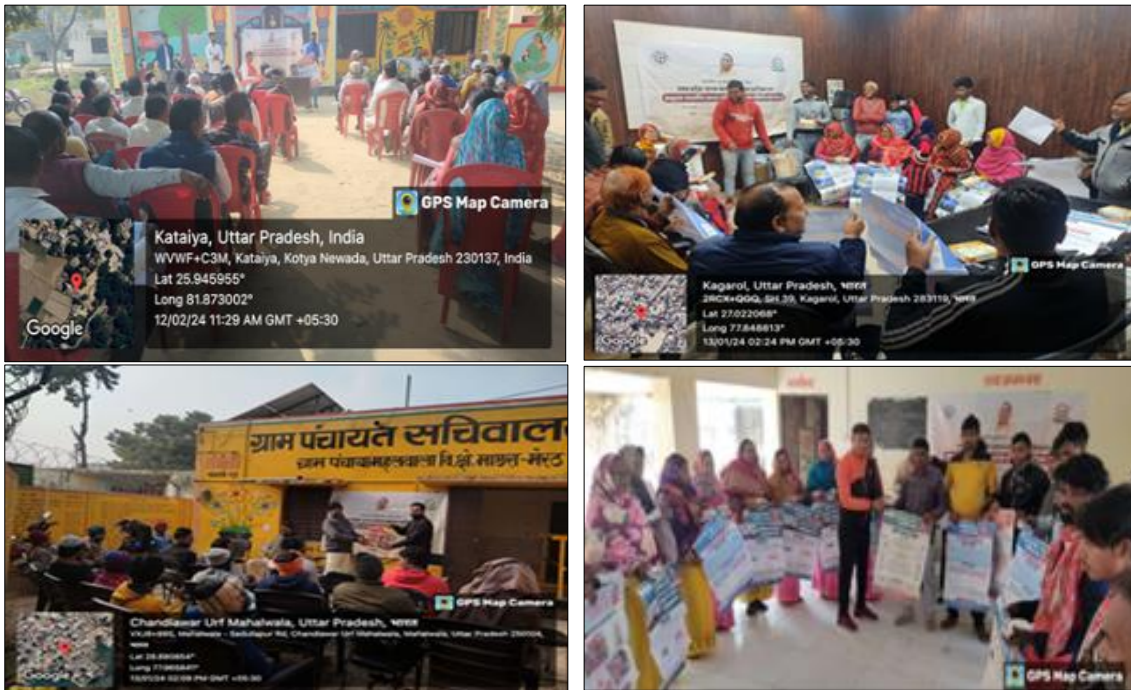


Figure-1: Community-Based Disaster Management Training Programme

**3.2 Mukhya Mantri School Safety Programme.** This initiative achieved its goals in 3,750 schools spanning all 75 districts in the State. The training of over 1,87,500 school children and educators, enhanced their preparedness and response to disasters.



Figure-2: Mukhya Mantri School Safety Programme

**3.3 School/Degree Colleges and Gram Panchayat Level Training Programme.** A comprehensive one-day disaster risk management awareness training was conducted across all Gram Panchayats and educational institutions in the State. This initiative trained 1,25,855 educators from schools and degree colleges across all 75 districts and engaged 2,32,376 community members, including Panchayat Secretaries, Gram Pradhans, Rajasav Kanungos and Lekhpals from every Gram Panchayat in the state. Participants were equipped with Information, Education, and Communication (IEC) materials comprising posters, pamphlets and short films on CDs related to disaster risk management. Importantly, each participant was trained as a master trainer, empowering them to further disseminate knowledge and skills within their communities and fields of work. By fostering a cascade training model, this approach ensures a wider reach and sustained impact, strengthening community resilience and awareness in disaster risk management across Uttar Pradesh.



**Figure-3: School/Degree Colleges and Gram Panchayat level training programme**

**3.4 Women Self-Help Group Training Programme.** Aligned with the Prime Minister's Ten Point Agenda on Disaster Risk Reduction (Agenda No. 03), which emphasises the central role of women's leadership in disaster risk management, the Uttar Pradesh State Disaster Management Authority (UPSDMA), in collaboration with District Disaster Management Authorities (DDMAs), organised a training programme Role of Self-Help Groups (SHGs) - Women in Disaster Risk Reduction (DRR) at the divisional level during 2023-24. Over 5,500 women's self-help group leaders, as well as state and district officials, actively participated in this initiative. The programme sought to provide women leaders with knowledge and skills in disaster risk reduction,

recognising their critical role in community resilience and disaster preparedness. By engaging women at the forefront of DRR efforts, UP SDMA underscores its commitment to inclusive and gender-responsive disaster management strategies in Uttar Pradesh.



Figure-4: women's self-help group training programme.

#### 4. Information Education and Communication (IEC)

**4.1 Posters.** Posters effectively convey crucial information, educating the public on heatwave risks and preventive measures. To enhance community awareness, the UP SDMA has designed informative 4 types of coloured sticking posters related to Do's and Don'ts about Heatwave and distributed these at DDMA level and below. About 12.4 lac of self-sticking type posters were distributed in all Divisions, Districts, CDO office, BDO office, Tehsils and Gram Panchayats of Uttar Pradesh during the ensuing heat wave.



**4.2 Sun Boards.** Sun boards, measuring 2x3 feet, displaying 'Do's and Don'ts' related to various disasters, including heatwaves, are being installed in all 57,702 Gram Panchayats offices of the State. These boards serve as constant reminders and educational tools for communities to stay informed and prepared.



**4.3 Video.** A concise animated video highlighting the 'Do's and Don'ts' for managing heatwaves has been prepared by UP SDMA. This engaging video is accessible through the link: <https://www.youtube.com/watch?v=AQs0lvQZxxA>, providing an easily accessible and informative resource for the public to understand and act upon heatwave preventive measures.

**4.4 Radio Jingles.** A radio jingle will soon be aired during the peak period from 1 May, 2024 for 60 days by all the radio channels in 9 slots every day.

## **. Best Practices and Case Studies (District Level)**

**5.1 'Integrated Traffic Management System' for Heat Wave Preparedness in Gorakhpur.** Gorakhpur district has pioneered an innovative approach to community awareness through its 'Integrated Traffic Management System'. This system disseminates 'Do's and Don'ts' for preventing heatwave-related illnesses through widely publicized campaigns. Additionally, awareness videos are displayed on screens adjacent to traffic signals, reaching a broad audience and reinforcing key preventive measures.

**5.2 Water Resources and Planting Initiatives in Lalitpur.** Lalitpur district has prioritized water resource management as a critical aspect of heatwave preparedness. The district has established at least one pond at the block level to mitigate the impact of heatwaves. Furthermore, concrete tanks have been installed at 'gaushalas' (cow shelters) to ensure a continuous water supply. Orders have also been issued for the repair of all faulty tube wells across both urban and rural areas, ensuring adequate water arrangements during heatwave events.

**5.3 Collaboration with Artists/Cartoonists in Hathras.** Hathras District Administration has creatively engaged artists and cartoonists to develop awareness posters on heatwave prevention. These visually appealing posters are shared widely through platforms like WhatsApp and Twitter, effectively raising community awareness and emphasizing the importance of preventive measures against heatwave-related risks.

**5.4 Dastak Campaign.** Recognising the critical role of community health workers as the vital link between communities and the health system, the Health Department has launched the "DASTAK" campaign. This innovative campaign aims to engage communities and raise awareness about heatwave-related

illnesses, with a focus on adults, children, and vulnerable groups. Accredited Social Health Activists (ASHA) are leading the "DASTAK" initiative, conducting door-to-door awareness campaigns. These dedicated health workers disseminate critical information on identifying heatwave symptoms, taking preventive measures, and responding appropriately to heat-related illnesses. ASHA workers use interactive sessions to educate households on the importance of staying hydrated, seeking shade during peak heat hours, and recognising the early signs of heat exhaustion or heatstroke. Special attention is given to vulnerable groups, including children, elderly individuals, and those with pre-existing health conditions, ensuring they receive tailored information and support.

## **6. Uniqueness- Setting up a System of Reporting, Recoding and Evaluating the District-Level Activities**

UP SDMA has implemented a robust system to improve the reporting, recording, and evaluation of District Authorities' activities. This systematic approach ensures that heatwave management strategies are implemented across districts in a transparent, accountable, and effective manner. UPSDMA has implemented a ranking system that evaluates districts based on a variety of criteria. These criteria include the creation and implementation of heat action plans, capacity-building training initiatives, Information, Education, and Communication (IEC) activities, best practice adoption, and media sensitisation.

## **7. Conclusion**

UP SDMA attempts to demonstrate a sincere commitment steeped in innovation to deal with the challenges posed by heatwaves throughout the State. UP SDMA has established a solid foundation for heatwave management through a multifaceted approach that includes community engagement, capacity building, awareness campaigns, and strategic collaborations. Initiatives like the "DASTAK" campaign, Community-Based Disaster Management Training and Women's Self-Help Group Training demonstrate a proactive approach to equipping communities with knowledge and skills to mitigate heatwave risks. The implementation of comprehensive systems for reporting, recording, and evaluating district-level activities demonstrates UP SDMA's commitment to transparency, accountability, and continuous improvement.

Collaborative efforts with District Authorities, innovative best practices, and robust IEC activities all help to increase the impact of UP SDMA initiatives. The combination of technology, media sensitisation, and community-based approaches contributes to a comprehensive and resilient heatwave management plan. A comprehensive and inclusive approach to heatwave management establishes a standard for proactive disaster preparation and response. A forward-thinking approach to protect its citizens and ensure their well-being from the negative effects of heat waves by focusing on community engagement, capacity-building and innovation

demonstrates the importance of adaptive, inclusive, and community-centred strategies in building resilience and improving preparedness for future challenges.