

# National Workshop on Heat Wave 2024

## Management Interventions and Mitigation Strategies for Heat Wave

Venue: Vigyan Bhavan, New Delhi

Date: 13-14 February, 2024

### **SCHEDULE**

#### Day-1 (13<sup>th</sup> February 2024)

<b>REGISTRATION (09.00-10.00)</b>	
<b>INAUGURAL SESSION (10.00 - 11.00)</b>	
10.00 - 10.15	Welcome Address and Context Setting: Shri Kamal Kishore, Member and HoD, NDMA
10.15- 10.30	Special Address: Dr. M. Ravichandran, Secretary, Ministry of Earth Sciences
10.30- 10:50	Inaugural Address: Shri Kiren Rijiju, Hon'ble Union Minister of Earth Sciences
10.50- 11:00	Vote of Thanks: Shri Kunal Satyarthi, JS, NDMA
<b>HIGH TEA BREAK (11.00 – 11.30)</b>	
<b>TECHNICAL SESSION I (11.30 – 13.00)</b>	
<b><u>Early Warning and Climate Services</u></b>	
<b>CHAIR: Dr. Krishna S. Vatsa, Member, NDMA</b>	
<b>Moderator: Col. Kirti Pratap Singh, Advisor (Ops &amp;Comm)      Rapporteur: Dr. Swati Sulagna, Sr. Cons.</b>	
11.30 – 11.45	Weather Services and Effectiveness of Heat Wave Warnings: Dr M Mohapatra, DG, IMD
11.45 – 12.00	Future Climate Projections for Heat Waves: Dr. Roxy Mathew Koll, IITM, Pune
12.00 – 12.15	Health-Based Thresholds for Early Warning Systems: Shri Abhiyant Tiwari, NRDC India,
12.15– 13.00	Suggestions from Stakeholders
<b>LUNCH BREAK (13.00 – 14:00)</b>	
<b>TECHNICAL SESSION II (14.00 – 15.30)</b>	
<b><u>Health Impacts of Heatwave</u></b>	
<b>CHAIR: Dr. Dileep Mavalankar, IIPH Gandhinagar</b>	
<b>Moderator: Ms Rakhee Sadhu, DS, NDMA      Rapporteur: Shri Anuj Tiwari, Sr. Cons.</b>	
14.00 – 14.15	Health Impacts of Heatwave and Preparedness Measures: Dr. Harshal Salve, AIIMS, New Delhi
14.15 – 14.30	Mechanism of Data Collection and Sharing for Heatwave Related Morbidity & Mortality and Preparedness & Mitigation Measures: Dr. Aakash Srivastava and Dr. Purvi Patel, NCDC MoHFW
14.30– 14.45	Health Sector Data Collection for Cities: Dr. Dileep Mavalankar, IIPH Gandhinagar
14.45 – 15.00	Impact of Heat Waves on All-Cause Mortality in India: Dr. Siddartha Mandal, Scientist, CCDC
15.00 – 15.30	Discussion on Reducing Heat Wave Morbidity/Mortality and Robust Database
<b>TEA BREAK (15.30 – 16.00)</b>	
<b>TECHNICAL SESSION III (16.00 – 17.30)</b>	
<b><u>Impact of Heatwaves on Infrastructure &amp; Production Sectors and Mitigation Strategies</u></b>	
<b>CHAIR: Shri Amit Prothi, DG, CDRI Delhi</b>	
<b>Moderator: Dr. S K Jena, JA(RR)      Rapporteur: Shri Priyank Jindal, Sr. Cons.</b>	
16.00- 16.10	Risks to Critical Infrastructure due to Extreme Heat: Shri Amit Prothi, DG, CDRI Delhi
16.10- 16.20	Impact and Risk Mitigation of Extreme Heat on Agriculture: Dr.V K Sehgal, IARI, New Delhi and Dr. Sanjoy K Bandyopadhyay, IARI
16.20- 16.30	Heatwave Challenges to Livestock and Mitigation Measures: Dr. Vijay Teotia and Dr. Sujit Dutta, DAHD, Govt of India
16.30- 16.40	Model Heat Action Plan for Indian Cities: Dr Rajashree Kotharkar, VNIT Nagpur
16.40- 16.50	Heat Wave Risk Assessment Using an Indicator-Based Approach: Subdistrict levels Analysis of Maharashtra State: Prof Parmeshwar Udmale, IIT Bombay
16.50-17.00	Affordable Strategies to Reduce Heat Stress in Urban Housing: Prof. Minu Aggarwal, CEPT
17.00 - 17.20	<b>Sectoral Burden of Rising Heat:</b> <ul style="list-style-type: none"><li>○ Ministry of Road Transport and Highway: Shri Alok Kumar and Shri Vikram Mittu</li><li>○ Ministry of Railways: Shri Utkarsh, Executive Director (Safety)</li><li>○ Water Sector: Dr. Alok Sikka, IWMI</li><li>○ Power Sector: Shri Alok Kumar, Senior General Manager Grid India</li></ul>
17.20 – 17.30	Discussion Q&A

**DAY-2 (14<sup>th</sup>February 2024)**

<b>TECHNICAL SESSION IV (10.00 – 11.30)</b> <b><u>Experience Sharing of Heatwave Management: Voices From the Field</u></b> <b>CHAIR: Shri Sanjeev Kumar Jindal, Additional Secretary, MHA</b> <b>Moderator: Shri Kunal Satyarthi, JS, NDMA</b> <b>Rapporteur: Ms. Shalini Singh, Sr. Cons.</b>			
10.00- 11.30	<b>Sharing of Experience of Extreme Heat Management at local level:</b> <ul style="list-style-type: none"><li>• Dr. Sujeet Kumar Yadav, Chief Medical Superintendent, Ballia, UP</li><li>• Shri Ramveer Tanwar, Pondman (Say Earth), Delhi</li><li>• Shri Ravindra Kumar, DM, Bareilly, UP</li><li>• Shri G. S. Naveen Kumar, Relief Commissioner, UP</li><li>• Shri Kunal Aggarwal, IG, SDRF, West Bengal</li><li>• Challenges of Urban Heat Management and Heat Resilient Cost-Effective Urban Design Strategies: Ms. Minni Sastry UNEP, Delhi</li></ul>		
<b>TEA BREAK (11.30– 12.00)</b>			
<b>TECHNICAL SESSION V (12.00 – 13.30)</b> <b><u>Urban Heat Island (UHI) and Impact on Vulnerable Communities: Preparedness and Mitigation</u></b> <b>CHAIR: Lt. Gen. (Retd.) Syed Ata Hasnain, Member, NDMA</b> <b>Moderator: Shri Nawal Prakash, JA, (IT &amp; Comm)</b> <b>Rapporteur: Shri Abhinav Walia, Sr. Cons.</b>			
12.00 – 12.30	Experience Sharing of Heatwave Management <ul style="list-style-type: none"><li>• Brig. Kuldeep Kumar Ashta. Medical Hospital Jalandhar</li><li>• Maj (Dr.) Vishnu Prasad R, OC, SHO Jodhpur</li><li>• Lt. Col Devendra Dodeja, Army Syndicate</li></ul>		
12.30 – 12.40	Impact of Heat on Vulnerable Slum Communities & Possible Solutions: Shri Siraj Hirani, MHT		
12.40 – 12.50	Community Based Heat Assessment and Actions for Vulnerable Community: Shri Manu Gupta, SEEDS		
12.50 – 13.10	Listening to the Affected People Engaged in Supporting Services, Construction and Informal Sector Enterprises		
	• Ms Laxmi • Ms Raziya	• Ms Uma • Jarino Begum	• Shayra Bano • Kiran Naval Kishor
13.10 – 13.30	Discussion Q&A		
<b>LUNCH BREAK (13.30 – 14:30)</b>			
<b>TECHNICAL SESSION VI (14.30 – 16.00)</b> <b><u>Heat Action Plans (HAPs) - Preparedness and Mitigation Strategies</u></b> <b>CHAIR: Safi Ahsan Rizvi, Advisor, NDMA</b> <b>Moderator: Ms. Sumita Singh, JS (IC)</b> <b>Rapporteur: Shri Amit Tuteja Sr. Cons.</b>			
14.30– 14.40	Extreme Heat Management: Shri Anand Malligavad, Lakeman, Bangaluru		
14.40– 14.50	Heat Action Platform and Heat Resilience: Kurt Shickman, Washington, DC (online)		
14.50– 15.00	Past Learnings and Next Generation City Heat Action Plan: Dr. Mahaveer Golechha, IIPH Gandhinagar		
15.00– 15.10	Nagar Van Yojna- Role in Heat Wave Management: Shri Sanjay Kumar Shukla, I/C NAEB, GreenIndia Mission, MoEFCC and Member Secretary, Central Zoo Authority		
15.10-15.20	SOP for Developing City Heat Action Plan: Shri Rohit Magotra, IRADe, New Delhi		
15.20-15.30	Evaluation of HAPs: Shri Aditya Valiathan Pillai, Sustainable Futures Collaborative, Delhi		
15.30-15.40	Role of Passive buildings for long term urban heat mitigation: Ar. Ashok B Lall		
15.40-15.50	India Cooling Action Plan: Shri Aditya Narayan Singh, Scientist F, Ozone Cell, MoEFCC		
15.50 -16.00	Discussion Q&A		
<b>WRAP-UP SESSION (16.00 – 17.00)</b> <b><u>Mainstreaming Mitigation Strategies</u></b> <b>CHAIR: Shri Rajendra Singh, Member, NDMA</b> <b>Moderator: Ms Rakhee Sadhu, DS, NDMA</b> <b>Rapporteur: Shri Vazeem Iqbal, Cons.</b>			
16.00-16.30	Key Takeaways from all the Sessions: Shri Kunal Satyarthi JS, NDMA and Shri Abhiyant Tiwari, NRDC India, Delhi		
16.30 – 16.45	National Heatwave Mitigation Strategy: Dr. Krishna S. Vatsa, Member, NDMA		
16.45 – 17.00	Concluding Remarks: Shri Kamal Kishore, Member and HoD, NDMA		
<b>HIGH TEA (17.00-17.30)</b>			