



SUDSC WEBINAR SERIES

Climate-proofing Urban Infrastructure (focus on Heat Resilience)

Time

15:00 to 16:30 Hrs (IST)

Date

19th April, 2024

Online- MS Teams

Link: <https://rb.gy/v07ixm>

(Meeting ID: 349 799 213 162 Password: fthJBU)

Background

Climate change has significantly amplified the severity of disasters including heat waves across the world in recent times. The IPCC AR6, 2023 indicates that the earth is now around 2.0°F (1.1°C) warmer than it was in 1850-1900. In India, over 10,000 heat related deaths have been recorded between 2010-2020 by the National Centre for Disease Control (NCDC) of the Ministry of Health and Family Welfare (MoH&FW), Govt. of India. As per the India Meteorological Department (IMD), the year 2023 was recorded as the second warmest year since 1901 with the months of August and February, 2023 recorded as the warmest months in the last 123 years.

Unplanned urbanisation has led to rapid changes in land use and land cover, significant loss of green cover and wetlands, and growth of densely populated areas. This is exacerbating the impact of heat waves in form of a “silent disaster” which adversely affects the livelihood and productivity of people. In addition to these, the built environment profoundly affects the socio-ecological systems in cities.

Until recently, heat waves in cities were largely overlooked by the administration, mainly due to their complex spatio-temporal dynamics as well as the absence of comprehensive assessment frameworks to address them. However, the urgent imperative to address heat-wave challenges and their far-reaching impact on energy consumption, water availability, physical and mental health has all become evident. As a result, there is an urgent need to develop climate-resilient urban infrastructure that encompasses comprehensive risk assessment, strategic planning, meticulous designing, robust construction, vigilant maintenance, and efficient operation.

In 2015, the Government of India acknowledged the need to mitigate the impacts of heat waves. As part of continued effort, the National Disaster Management Authority (NDMA) formulated the ‘Guidelines for the Preparation of Action Plan - Prevention and Management of Heat Wave’ in 2019, to assist the States in developing their Heat Action Plans.

The guidelines emphasised on adoption of inclusive strategies with the aim of enhancing the adaptive capacity of cities, reducing urban heat island effect, and prioritising the well-being of urban residents. At the same time, the Ozone Cell of Ministry of Environment, Forest and Climate Change (MoEF&CC) formulated the 'India Cooling Action Plan (ICAP)' in 2019 with a 20-year long

perspective (2017-18 to 2037-38) and provided recommendations to address the cooling requirements across sectors. Subsequently in the year 2021, NDMA released a 'House Owners' Guide to Alternate Roof Cooling Solutions' focusing on affordable and easy-to-use techniques and materials.

About the Webinar

NIUA has entered into a strategic partnership with GIZ for supporting the implementation of the Sustainable Urban Development in Smart Cities - Phase II (SUDSC II) project, which is jointly implemented by the Ministry of Housing and Urban Affairs (MoHUA), Government of India, and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). As part of the project, NIUA and GIZ have jointly initiated the "SUDSC-II Webinar Series" to support setting up of Communities of Practice. The webinar series is a set of curated dialogues/discussions focusing on urban topics related to municipal finance,

climate resilience, digital innovations for urban governance. The 8th webinar in the series, titled as "Climate-proofing urban infrastructure with a focus on Heat Resilience" aims to offer insights for cities to construct climate-resilient infrastructure capable of addressing heat-related challenges.

It will emphasise on the importance of building heat resilience, multi-stakeholder collaboration, policy integration, capacity building, innovative financing mechanisms, and real-life case studies.

The goal is to equip participants with the practical knowledge and strategies for climate-proofing cities against extreme heat events to long-term sustainability and resilience.

Session	Speakers	Discussion Points
Introduction (10 mins)	NIUA/ GIZ Team	<ul style="list-style-type: none"> Introducing the Webinar and the topics to be covered Introducing the Speakers
Plenary 1 (20 mins)	Prof Rajeshree Kotharkar Visvesvaraya National Institute of Technology (VNIT), Nagpur	<ul style="list-style-type: none"> Need for undertaking a heat-risk assessment: understanding of the phenomenon, vulnerabilities, parameters, data sources.; Processes and key challenges in undertaking assessment, across different vulnerable groups; Examples from cities that have undertaken heat assessments.
Plenary 2 (20 Mins)	Dr Gyana Ranjan Das Executive Director Odisha State Disaster Management Authority (OSDMA)	<ul style="list-style-type: none"> Policy and governance related interventions- for effective implementation of strategies/ techniques; Emerging technologies for building heat-resilience; Challenges/ limitations in implementing interventions.
Case Study (20 Mins)	Dr Dileep Malvankar Former Director Indian Institute of Public Health, Gandhinagar (IIPHG)	<ul style="list-style-type: none"> Preparation of Heat Action Plan- Case of Ahmedabad; Interventions and Actions towards building heat-resilience; Key players, multi-stakeholder engagement, etc.
Q&A (20 Mins)	NIUA/ GIZ Team	<ul style="list-style-type: none"> Q&A session and open discussion

Profile of Speakers



Prof Rajashree Kotharkar
Professor & Urban Climate Researcher
Visvesvaraya National Institute of
Technology

Prof Rajashree Kotharkar is a distinguished academician and an expert in the field of Architecture and Sustainable Urban Development. She currently holds the position of Professor at the Department of Architecture and Planning in Visvesvaraya National Institute of Technology (VNIT), Nagpur, Maharashtra. With a wealth of experience spanning nearly three decades, Prof Kotharkar has made significant contributions to research and education. Her work focuses on energy-efficient architecture, urban heat island studies, and the concept of a compact city. Her dedication to advancing sustainable urban development continues to inspire students and fellow researchers alike.

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Dr Gyana Ranjan Das IAS
Executive Director
Odisha State Disaster
Management Authority (OSDMA)

Dr. Gyana Ranjan Das, an IAS officer, currently serves as the Executive Director of the Odisha State Disaster Management Authority (OSDMA). His role involves working with various stakeholders to promote sustainable development, reduce disaster risk, and enhance people's well-being and safety. Prior to this, Dr. Das held positions such as CMC Cuttack, District Collector Bhadrak, and Director of PR&DW department. His contributions in the field of disaster management have been commendable, and he continues to play a vital role in ensuring the safety and resilience of Odisha.

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Dr Dileep Mavalankar
Former Director
Indian Institute of Public Health,
Gandhinagar (IIPHG)

Dr Dileep Mavalankar, a distinguished figure in the field of Public Health, is the Former Director of Indian Institute of Public Health, Gandhinagar. His academic journey includes an MBBS and MD in Preventive and Social Medicine from Gujarat University, Ahmedabad, along with an MPH and Dr. P.H from the Johns Hopkins School of Hygiene and Public Health, USA. His extensive work experience spans across institutions such as the National Institute of Health, Bethesda (USA), IIM Ahmedabad, and Mailman School of Public Health at Columbia University, New York. His consultancy roles have included collaborations with organizations like Columbia University, Mother Care Project (USA), WHO, UNICEF, and more.

Moderators



Mr Raman Kumar Singh
Senior Urban Development Specialist,
National Institute of Urban Affairs



Ms Moumita Shaw
Technical Advisor,
SUDSC-II, GIZ