

Building Capacity to Assess Urban Climate Hazards and Tackle Heat and Flooding in Cities

A Three-Part Capacity Building Training Webinar Series

Summary

Cities around the world are reeling from the impacts of climate change. Urban areas are on the frontline of increasingly expensive and deadly climate risks such as extreme heat and flooding, among other climate-related hazards. In cities, these risks are exacerbated by the density of infrastructure, impermeable surfaces, and the vulnerability of many communities living in urban environments. Nature-based solutions (NBS) can play a role in mitigating these risks by enhancing urban resilience to climate change. For example, green roofs, urban forests, and permeable pavements help reduce heat and manage stormwater, which can alleviate flooding. Tools like the Climate Hazard Vulnerability Assessment (CHVA) framework can help to identify the most vulnerable areas in a city, prioritize interventions, and ensure that adaptation measures are targeted effectively. By utilizing NBS and leveraging tools such as the CHVA framework cities can make informed decisions on where to implement NBS and how to prioritize other strategies to reduce exposure to heat, flooding, and climate hazards, fostering more livable and resilient urban spaces.

Co-organized by WRI India, UrbanShift, and Cities4Forests, this three-part capacity building training webinar series is designed to build capacity of city officials to conduct vulnerability assessments and implement nature-based approaches to enhance climate resilience in cities. The three webinars will focus on

- (1) an introduction to the Climate Hazard Vulnerability Assessment (CHVA) framework to prioritize resilience actions in cities,
- (2) nature-based solutions to tackle extreme heat in cities, and
- (3) nature-based solutions to mitigate urban flooding.

City government officials from global South cities, national government officials with urban development mandates and other urban practitioners are encouraged to attend and advised to participate in all three webinars for a comprehensive learning experience.

The webinars will be conducted in English and simultaneous interpretation will be offered in French and Bahasa Indonesia.

Webinar 1: An Introduction to the ‘Climate Hazard Vulnerability Assessment’ Framework to Prioritize Resilience Actions in Cities

Vulnerability assessments help assess the extent of climate vulnerability based on the three lenses: exposure, sensitivity, and adaptive capacity. By conducting a vulnerability assessment, cities can identify areas, communities and critical infrastructure that are most vulnerable to climate change induced hazards. This helps city authorities plan adaptation and risk mitigation strategies accordingly. This webinar will also introduce participants to the concept of ‘differential vulnerability’, sharing data sources, templates, tools and approaches to help cities meet the needs of those who are socially, economically, and politically most vulnerable to climate hazards.

- Date: Wednesday 5 February 2025
- Time: 9:30-10:45 am Accra / 10:30-11:45 am Bonn / 12:30-1:45 pm Nairobi / 3:00-4:15 pm India / 4:30-5:45 pm Jakarta
- Simultaneous interpretation offered in French and Bahasa Indonesia

Emcee: John-Rob Pool (WRI)

Time	Item	Speaker(s)
5 mins	Welcome remarks	John-Rob Pool (WRI)
5 mins	Introductory remarks	Deepti Talpade (WRI India)
45 mins	Training & Case Studies	Presenters: <ul style="list-style-type: none">• Avni Agarwal (WRI India)• Bhanu Khanna (WRI India)
15 mins	Audience Q & A	Moderator: John-Rob Pool
5 mins	Closing	Deepti Talpade

Speakers

- John-Rob Pool, Senior Manager, UrbanShift & Nature-based Urban Development, WRI
- Deepti Talpade, Program Lead, Urban Development, WRI India
- Avni Agarwal, Program Manager, Urban Development, WRI India
- Bhanu Khanna, Program Manager, Geo Analytics, Sustainable Cities and Transport, WRI India

Webinar 2: Nature-based Solutions to Tackle Urban Heat in Cities

Urban heat is a growing existential challenge in cities around the world. Rapid urbanisation has led to increased heat absorbing surfaces, loss of green cover and water bodies that exacerbates urban heat stress, which manifests in biodiversity loss, health, and economic impacts in cities. Nature-based solutions, in the form of both blue and green infrastructure are increasingly being used by cities as innovative, adaptable and low-cost approaches with added co-benefits that can build resilience to urban heat. This webinar will explore the effectiveness of these solutions when they are developed and implemented collaboratively with local communities, leveraging data-driven and evidence-based methodologies. It will cover methods to identify heat hotspots, case studies of heat-resilient urban design, and long-term strategies, policies and plans that can be adopted at a city-scale.

- Date: Wednesday 5 March 2025
- Time: 9:30-10:45 am Accra / 10:30-11:45 am Bonn / 12:30-1:45 pm Nairobi / 3:00-4:15 pm India / 4:30-5:45 pm Jakarta
- Simultaneous interpretation offered in French and Bahasa Indonesia

Emcee: Hellen Wanjohi-Opil (WRI Africa)

Time	Item	Speaker(s)
5 mins	Welcome remarks	Lubaina Rangwala (WRI India)
5 mins	Introductory remarks	Hellen Wanjohi-Opil (WRI Africa)
10 mins	Keynote presentation	Bushra Afreen (City of Dhaka)
35 mins	Training presentation	Deepti Talpade (WRI India)
15 mins	Audience Q & A	Moderator: Hellen Wanjohi-Opil
5 mins	Closing	Lubaina Rangwala

Speakers

- Lubaina Rangwala, Program Head, Urban Development, WRI India
- Hellen Wanjohi-Opil, Lead, Climate and Engagements, WRI Africa
- Bushra Afreen, Chief Heat Officer, Dhaka North City Corporation
- Deepti Talpade, Program Lead, Urban Development, WRI India
- Mukta Salunkhe, Senior Program Associate, Urban Development, WRI India

Webinar 3: Nature-based Solutions to Mitigate Flooding and Stormwater Risks in Cities

Urban floods are one of the biggest climate risks for growing urban centres. The impacts of urban floods include loss of life and property, increased health risks and damage to infrastructure. Rapid urbanisation has led to increased impervious surfaces and loss of green cover that result in increased stormwater runoff and flooding. On the other hand, drinking water shortages during dry months have become more frequent and severe. To make our cities more resilient, we need actions that holistically target water security in both wet and dry months. Blue-green infrastructure solutions have proven to be an innovative, affordable, with multiple co-benefits. When co-created with the most vulnerable communities, and informed by scientific data and technology, these approaches yield the best outcomes.

The session will cover:

- Methods to identify flood risk areas in cities and issues associated with it.
 - Solution pathways that can be adopted for a holistic water secure city
 - Case studies on nature-based solutions for urban flood management across urban forms and scales.
 - Long-term interventions, policies and plans that can be adopted at a city-scale
- Date: Wednesday 26 March 2025
 - Time: 9:30-10:45 am Accra / 10:30-11:45 am Bonn / 12:30-1:45 pm Nairobi / 3:00-4:15 pm India / 4:30-5:45 pm Jakarta
 - Simultaneous interpretation offered in French and Bahasa Indonesia

Emcee: Priya Narayanan (WRI India)

Time	Item	Speaker(s)
5 mins	Welcome remarks	Mukta Salunkhe (WRI India)
5 mins	Introductory remarks	Priya Narayanan (WRI India)
30 mins	Training presentation	Sahana Goswami (WRI India)
30 mins	Panel Discussion: Solutions from Cities	Rep from Indian city Rep from African city Rep from Brazilian City Moderator: Priya Narayanan (WRI India)
5 mins	Closing	Priya Narayanan

Speakers

- Mukta Salunkhe, Senior Program Associate, Urban Development, WRI India
- Priya Narayanan, Senior Program Manager, Urban Development, WRI India
- Sahana Goswami, Senior Program Manager, Urban Development, WRI India

- City 1 – India, TBC
- City 2 – Africa, TBC
- City 3 – Brazil/Indonesia. TBC