



UNDERSTANDING EXTREME HEAT IN INFORMAL SETTLEMENTS

Heatwaves reportedly claimed more than 17,000 lives in 50 years in India. With increasing frequency as many as 706 heatwave incidents occurred in India from 1971-2019. The Fifth Assessment Report of the Intergovernmental Panel on Climate Change notes that rising mortality rate due to heat waves is a major climate risk for South Asian countries. A moderate increase in average temperatures or a slight increase in the duration of heatwaves can lead to a significant increase in the mortality rate in India unless remedial and response measures are taken, the report stated. Given these grave planetary shifts with calamitous local manifestations, it is important to rapidly build governmental and civil society capacities to both mitigate the hazard, lower exposure, map vulnerable populations and provide resources for communities to deal with heat. This two-day module is designed for mid level government officials and staff of civil society organisations.

COURSE STRUCTURE

SESSION

Understanding Heat and Urban Climate Change

Heat Vulnerability in Indian Cities

Measuring heat and mitigating heat hazard

Heat mitigation: Whose responsibility?

METHOD

DURATION

Lecture

2 hours

Field Study

4 hours

Demonstration +

Workshop

2 hours

Group Work

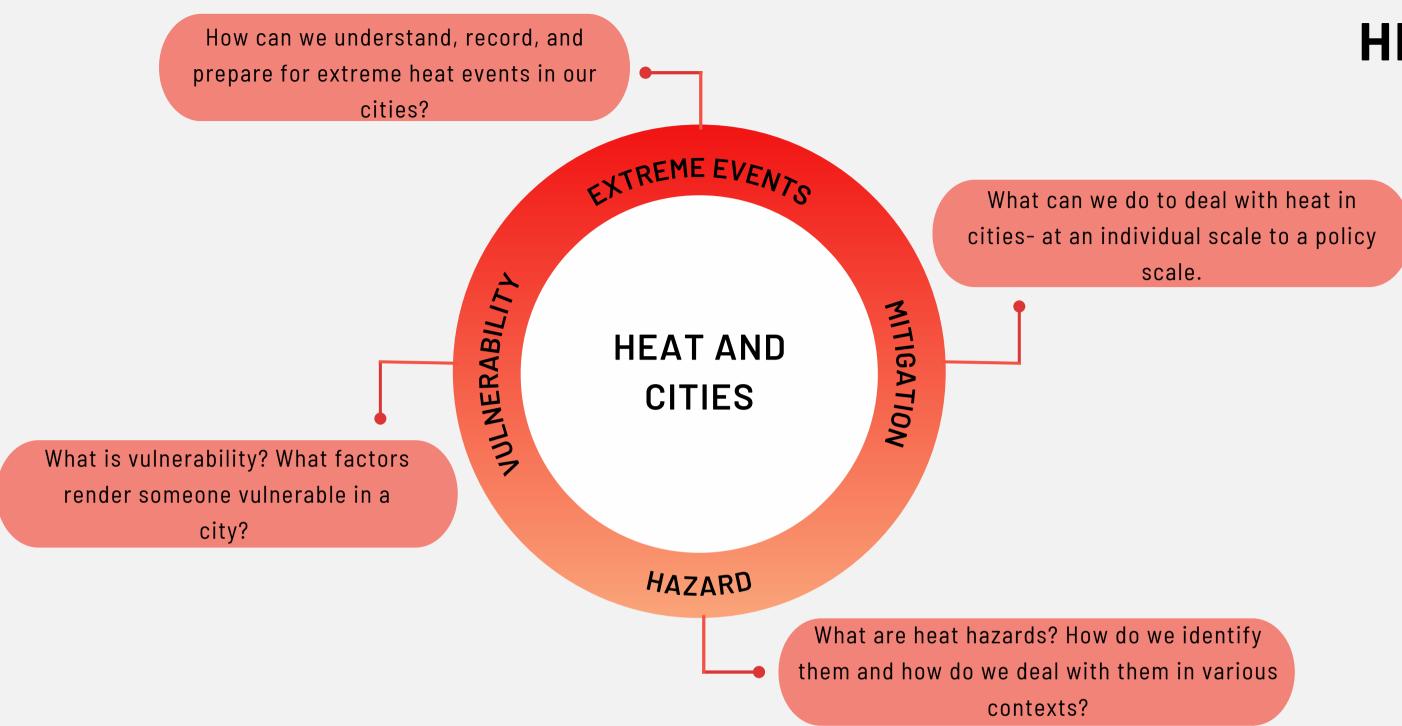
4 hours



CONCEPTS

KNOWLEDGE

SKILLS



HEAT AS AN URBAN
CLIMATE CHANGE
PHENOMENON

LEARNING OUTCOMES



Building Practices

Learn to recognise & understand building materials and practices.



Mitigation Practices

Understand heat mitigation practices in informal settlements.



Spatial Histories & Heat

Building simple histories of informal settlements & their consequences for heat.

LEARNING RESOURCES



ESSENTIAL READINGS

- Impacts, Adaptation and Vulnerability
- <u>Lessons and challenges as Indian</u>
 <u>cities step up planning for heat</u>
 <u>waves</u>



WATCHIT

- <u>Can India adapt to extreme heat?</u>
 <u>FT Film</u>
- What is causing the intense heat in India?
- Climate Change: Mega Cities Turn
 Into 'Urban Heat Islands'
- How can the UK adapt its cities to heatwaves?



LEARN MORE

<u>Essential Information for Climate</u> <u>action for Policy makers</u>



ADDITIONAL RESOURCES

• <u>Summary for policy makers</u>





HEAT VULNERABILITY IN INDIAN CITIES

READ: SPATIAL HISTORY OF SINGARENI COLONY

LEARNING OUTCOMES FROM FIELD STUDY

In what ways do spatial transformations and development (or lack thereof) affect residents' exposure and vulnerability to heat?

How to understand the layers. of vulnerabilities to heat in informal settlements?

What types of coping mechanisms do they come up with?

MEASURING HEAT AND MITIGATING HEAT HAZARDS

IPCC defines **Mitigation** (of disaster risk and disaster) as the lessening of the potential adverse impacts of physical hazards (including those that are human-induced) through actions that reduce hazard, exposure, and vulnerability.

LEARNING OUTCOMES

- Ways to measure heat cities, especially in informal settlements
- How can we imagine heat mitigation at various scales within the urban?

READ

Heat Relief as a Matter of Entitlement?

The Socio-Materialities of Thermal

Governance in an Informal Urban Settlement





HEAT MITIGATION: WHOSE RESPONSIBILITY?

LEARNING OUTCOMES

- How do we think of creating policies for heat mitigation?
- What factors do policy makers need to consider to frame policies for the most vulnerable?
- How can policies be flexible to help meet the needs of those in informal settlements?

TOOLKIT FOR GROUP WORK

