

## Climate Change and Uncertainty from Below and Above

About the project: **Uncertainty from Below and Above**  
[www.steps-centre.org/project/uncertainty](http://www.steps-centre.org/project/uncertainty)

Project briefing  
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### Summary

The STEPS Centre (Social, Technological and Environmental Pathways to Sustainability) is a global research and policy engagement centre uniting development studies with science and technology studies. Our interdisciplinary research is carried out with partners across Asia, Africa, Latin America and Europe.

In India, as part of the Uncertainty from Below and Above project, the STEPS Centre is working

with leading research institutes - the Institute of Health Management Research, Kolkata; Sarai of the Centre for the Study of Developing Societies, Delhi; and the Gujarat Institute of Desert Ecology, Bhuj, Gujarat - in locations with distinctive ecological features and uncertainties brought about by climate change:

- The Sundarbans (wetlands)
- Kachchh (drylands)
- Delhi & Mumbai (urban and peri-urban)



## Research focus

Global warming has brought about irreversible changes to the climate and environmental systems around the globe. For poor and marginalised citizens of the world who depend on natural resources for their lives and livelihoods, mere survival now means negotiating extensive additional burdens and challenges in an uncertain world.

The Uncertainty project is working to bridge the gap in the perceptions of those who theorise about climate change and uncertainty from 'above', those who experience it from 'below', as well as those in the 'middle' who act as intermediaries between the two.

The project conceptualises 'above' as the 'experts' who provide the 'official' accredited expertise. 'Below' is represented by local people and their largely 'experiential' knowledge rooted in everyday practices. We are also interested in

the 'middle', which acts as the interface between the 'above' and the 'below', and of course, there are usually overlaps between the three.

“We are working to bridge the gap between climate change experts 'from above' and local people who experience it 'from below'”

Our project, funded by the UK's Economic and Social Research Council (ESRC), aims to explore the varied dimensions of climate-related uncertainties and their accompanying discourses.

We intend to generate discussion amongst a range of stakeholders to advocate and communicate sustainable pathways that deal with climate-related uncertainties that put the interests of the poor and marginalised upfront.

A mother and her children in front of their home in the Sundarbans after the devastation wrought by Cyclone Aila | Photo: IIHMR-STEPS Centre





## Focus sites

### The Sundarbans

The Sundarbans, a unique delta in West Bengal and Bangladesh, is one of the most visible victims of the ravages of climate change in India. The rapidly-changing ecosystem, coupled with decades of government neglect, has made this region particularly vulnerable.

Researchers from STEPS Centre partner the Institute of Health Management Research (IIHMR) are exploring how different people experience climate-related changes and accompanying challenges, their adaptation and resilience in terms of health and livelihood, and the overall developmental debate in challenging areas like Sundarbans.

### Urban India

This part of the research, by Sarai of the Centre for the Study of Developing Societies (CSDS), will examine the relationships between different kinds of uncertainties in particular domains (e.g. natural disasters, water, energy, waste, and housing) in two of the biggest metropolises of India – Delhi and Mumbai. Their distinct topographical situations present differences in

the way climate change is perceived in the two cities. Mumbai, being a coastal city, has specific concerns such as the effects of a rise in sea-levels. The rainfall pattern of the city, when seen in conjunction with its island terrain, suggests that soil erosion, landslide and flooding are likely to intensify. Other concerns - like heat-island effect, dwindling water resources, the generation of waste, rising energy demand and increasing concretization - are common with the issues in the landlocked city of Delhi.

### Kachchh

Kachchh is a dryland area in western India known for scarcity and ecological uncertainty. In Kachchh, the STEPS Centre has partnered with the Gujarat Institute of Desert Ecology (GUIDE) to understand the experiences and perspectives of climate-livelihoods connections in three of the district's diverse ecological areas: grasslands, agro-pastoral lands and the coast. Each area is experiencing various climate-related variability and vulnerabilities, including a change in rainfall and drought patterns. Local peoples' knowledges about extreme climate events and their impacts on livelihoods and society will also be explored, aiming to bring together perspectives and experiences from above, middle and below levels.

## What will we do?

'Uncertainty' is experienced by different people in different ways. The perception of 'above' is generally based on 'theoretical' knowledge which may have very little to do with how everyday men and women understand, live and cope with uncertainty in their daily life. This is the missing dimension we seek to highlight.

Uncertainty project researchers will generate knowledge through collecting implicit and explicit narratives from, and communicating between, the 'above', 'middle' and 'below'. We intend to create a dialogue across these domains which aims to unravel a range of pathways of climate change and uncertainty from 'below' and 'above', seeking out whether alternative pathways more conducive to dealing with sustainability and social justice can emerge.

We want to make sure our research is relevant and useful to local stakeholders. We will work to inform the stakeholders from the 'above', 'middle' and 'below' of our research findings, seeking to help inform decision-making and to trigger the active involvement of civil society to protect the interests of the majority whose interests and perspectives are largely ignored in dominant debates about climate change and sustainability.

To trigger the active involvement of key stakeholders, the STEPS Centre Uncertainty project will focus on:

- Providing a comprehensive picture of climate discourses and how climate change is perceived and interpreted by a range of stakeholders.
- Promotion of a learning and sharing agenda to bring together multiple stakeholders – civil society organisations, academics, governments and funding agencies – to engage in research processes, to reflect on their own work, and to move towards promoting the needs and interests of the most vulnerable and poor.

## How to get involved

We strive to 'unearth uncertainty' and facilitate dialogues with the key stakeholders, practitioners, end users and the wider community. A series of workshops, panel discussions, blogs, audio-visual reportage and focused fora have been planned, and we welcome new participants. Contact us if you'd like to get involved, or sign up via the website to receive STEPS Centre newsletters.

## Contact for this project

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## About us

**The STEPS Centre** (Social, Technological and Environmental Pathways to Sustainability) is an interdisciplinary global research and policy engagement hub uniting development studies with science and technology studies. Based at the Institute of Development Studies and SPRU Science and Technology Policy Research, at the UK's University of Sussex, we work with partners around the world and are funded by the Economic and Social Research Council.

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