

# **Ecology, Security and Sustainability**

**Webinar on 14 October 2025**

## **A Report**

**Sohini Sengupta** (Assistant Professor, Tata Institute of Social Sciences, Mumbai) commenced the proceedings by building up on the connection between ecology, security and sustainability. At first, she explored the concepts and the concepts of environment and natural settings that humans inhabit. Human relationships with the environment have led to questions of planetary collapse and the impacts of human actions on the environment as disastrous. Sengupta spoke about climate change, and the concerns for all living communities, especially with growing discourses on changing climate patterns and global warming and the planet turning uninhabitable. Excessively hot summers, flooding of streets and cities, frequent crises due to infectious diseases. The complexities of humans having disruptive and catastrophic impacts on their surroundings and natural habitats that provide resources and ecosystem services give rise to several areas of investigation. Ecologists have been grappling with the search for the elements and processes that constitute environmental systems and their stabilities, and what keeps biological systems and their functions and relationships moving. The understanding, in popular discourse that the relationship between environment, the world that humans inhabit and development, interpreted as the standard of living that human everywhere increasingly aspire to, is contentious. The infinite search for productivism is at odds with the finding, obtaining or retaining intuitive balance with the habitat, such as (for example) through concepts of home, belonging, indigeneity and identity. What are the causes and ethical consequences of walking on these paths by communities past and present? Through what strategies and actions, and what institutional practices are these paths sundered (or brought together)? Is the prioritising of the 'biotic community' with the human as only one of the 'morally valuable' components, as ecologists have long argued, a path to just resolution to the human-environment relationship or constitute a legitimising narrative (associated with extreme forms of conservationism) for economic and political processes that make humans surplus, and the vulnerable worse off? The speaker expanded on some of these questions by tracing a few prominent narratives and processes around environmental crisis (why, whom), insecurities (whom, how),

protections (what, whom) and regeneration (how, what, by and towards whom), drawing on environmental pragmatism and instances from three specific contexts. First, Himalayan communities at the frontline of natural hazards, second, drying up landlocked regions maximising farm outputs and third, the overcrowded cities where unprotected mobile populations may risk their all.

**Amites Mukhopadhyay** (Professor, Jadavpur University, Kolkata) spoke about climate reductionism and its role in addressing deeper issues of climate actions and environmental disaster hotspots like Sundarbans and Himalayan regions. The speaker explained that the lure of livelihoods often pulls people to environmentally fragile areas where flourishing tourism industries also come up with the passing of time. The protective forests conservation schemes, joint-forest management acts and irrigation programmes and initiatives in environment restoration, often look upon forest-dependent communities and rural dwellers as intruders. Referring to Megnaa Mehtta's work on Sundarbans with focus on crab collectors and their antiques in and around waterways and the forests of Sundarbans, which argues that when it comes to the crab collectors, it is alleged that they contribute to environmental degradation. Whereas, the role of commercial vessels, trawlers, luxury cruisers and eroding shorelines go unmarked and hidden in plain sight whereas the focus remains on the crab collectors and the venial scenes while authorities and technology-driven masses are busy reigning the ropes of morality on the poorest and weakest. Mukhopadhyay stressed that it is important to address the fact that while living in an age of climate change, people's understanding of climate change also informs major changes. For example, recent disasters and cyclones made climatologists argue about the unsuitability of living in the Sundarbans — a region from which the State and other similar agencies (not fitting into the rubrics of State but similar in governmentality and agency) would try to evacuate people. This also sets one to think that while there is the threat of climate change in the Sundarbans, climate change is governing and changing policies, and controlling development projects that focus on people's adaptive capacities and resilience, while mitigation designs indicate towards managed retreats. Is climate change address the only way to deal with the underlying causes of what lurks beneath climate-induced disasters? The climate reductive arguments have included the understanding of biodiversity hotspots like Sundarbans and therefore a look at the issues of climate understandings perhaps call for other approaches that take a better glance at the delta. The Sundarbans have had a history of experiences with

cyclones and how the forests were cleared to make avenues available for agricultural practices, yet the fears of losing lives and livelihoods to disasters in such a disaster-ridden region now become perilous — and these issues should be looked into from newer lenses, beyond its portrayal of a biodiversity zone only for natural beings but also the activities that inform after destructive disasters. From the viewpoint of sustainability, a discourse on managed or guided retreat tells one if only a grand plan like retreat would be workable or else, in case of a disaster strike, there needs to be multiple relief in place. Climate also provides a framework for looking at inequalities every time a disaster strikes and therefore it is also significant that structural inequities and asymmetries are also assessed, while the nuances of climate change need to be understood at various levels.

Chair for the session Gopa Samanta (Professor, Burdwan University) commented that the first speaker of the session, Sohini Sengupta linked the three concepts of ecology, security and sustainability, and the theoretical position of where people belong and where academic discourses have been coming up through the citing of three examples of mountains, drier regions and cities. Cities having become difficult places for marginal communities to survive, and the ways in which climate scientists or policy makers are talking about protecting cities from climate change, raises the question — what would be a safe place for marginalised groups other than cities, and the uncertainty of where vulnerable groups would be headed? Samanta mentioned that the second speaker, Amites Mukhopadhyay rightly pointed out that climate change-dominated arguments have pushed away the focus from underlying causes of structural and social inequalities and environmental insecurities. Participants raised pertinent points of discussion on the ways in which issues of draining wetlands can be addressed by contextualising climate change catastrophes in places that have been used for agriculture and after draining of wetlands the problems of addressing issues of the same grounds for carbon absorption becomes complicated. The idea of restoration or conservation projects in the Himalayan region or coastal regions would give rise to the questions of ‘who has the power to take the decisions’; and in such cases, the local population would have negligible decision-making power and participation. Land could be changed through planned projects and conferring rights to land and water for protection would not only bring in conservation of land and water, but would also help encourage ethical considerations and would perhaps find collaborations; a planned project for restoration can be created but the local communities would have to bear the burden of dealing with resultant changes.