

CULTURES, HISTORIES AND DROUGHT IN THE CONTEXT OF CLIMATE CHANGE INDUCED DISLOCATIONS AND MITIGATION EFFORTS: A CASE STUDY OF THE MAHANADI BASIN AREA IN ODISHA

Abstract

The Intergovernmental panel on climate change released their most recent report, the first instalment of the sixth assessment report (AR6), in August 2021, as the world reeled under the coronavirus pandemic. Through this the force of evidence on the argument about anthropogenic effects on the changing global climate received further affirmation. Climate change implicates human societies in problems of loss, depletion, disappearance and collapse (Elliot 2018)¹ while the more broadly conceptualized, Anthropocene describes a new epoch in Earth's history to mark the boundary that describes accelerated change based on stratigraphic indicators and 'human forcing'.² The Anthropocene, argues Dipesh Chakrabarty (2016, 2018)^{3,4}, entails rethinking of human history enabled by the collision of human and geological timescales such that stories of human injustice must now be encapsulated not within the relatively short period of modern capitalism but include diverse planetary sufferings.

If Chakrabarty's thesis highlights the scale of human influence and the depth of human predicament, others find the focus on 'planetary epochs' and the abstract level of 'species-life' as limiting the scope of engagement and empathy.⁵ In this context, living with perpetual crisis has emerged as the new emulative paradigm, associated with non-western or indigenous worlds, promotion of policies of 'de-growth' by strong states to reduce the impact of human activities on the planet (Mastini 2017). For some critics, visions of geo-historical transformations aid a global agenda of securitization aided by northern fears of planetary collapse⁶, for others, it enables environmental populisms that foreground technocratic-eco-centrism rather than democratic deliberation.⁷ Discourses about planetary transformation create political and ethical obligations 'to develop viable modes of living' and the need to engage with diverse ecologies, that some anthropologists believe is restricted by the apocalyptic frames of ecological disasters or 'foreclosed visions of future' (Whittington 2016)'.⁷

¹ Elliott, R. (2018). The Sociology of Climate Change as a Sociology of Loss. *European Journal of Sociology*, 59(3), 301-337. doi:10.1017/S0003975618000152

² For a concise summary of the debate see, van der Pluijm, B. (2014), Hello Anthropocene, Goodbye Holocene. Earth's

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³ Chakrabarty, D. (2018), ANTHROPOCENE TIME. *History and Theory*, 57: 5-32. <https://doi.org/10.1111/hiht.12044>

⁴ Chakrabarty, D. (2016). Whose Anthropocene? A Response. *RCC Perspectives*, (2), 101-114. Retrieved September 6, 2021, from <http://www.jstor.org/stable/26241365>

⁵ https://www.environmentandsociety.org/sites/default/files/2016_i2_final.pdf

⁶ Verhoeven, H. (2011), Climate Change, Conflict and Development in Sudan: Global Neo-Malthusian Narratives and Local Power Struggles. *Development and Change*, 42: 679-707. <https://doi.org/10.1111/j.1467-7660.2011.01707.x>

⁷ Zulianello, M. and Ceccobelli, D. (2020), Don't Call it Climate Populism: On Greta Thunberg's Technocratic Ecocentrism. *The Political Quarterly*, 91: 623-631. <https://doi.org/10.1111/1467-923X.12858>

This position paper will draw insights from such unsettled debates among historians and anthropologists about anthropocene and climate change, to understand and articulate how the interpretations of natural, social and cultural aspects of droughts, including causation, implication and accountabilities, in the context of India, have been articulated in historical records and institutional narratives. Droughts are among the least visible of all climate hazards. Its effects are slow, long drawn, chronic and mostly less dramatic and can be interpreted as an adaptation problem. Situated within climate debate, drought has been moving away from agriculture centric perspective to a range of impacts associated with the competing use of water, land and environmental resources.⁸ Anxieties about deforestation, aridity and desiccation have preoccupied colonial administrators in India from the early nineteenth century (Grove 1993). What role did natural environments play in such accounts? What were/are the diverse and contested narratives of nature and natural calamities? Should humans be viewed as peripheral or incidental rather than central actors in the collapse hastened by arid conditions? Local knowledge about calamities is not best obtained through a concept of 'closed culture' but found in complex human encounters that link biophysical and social processes.

More specifically this research will explore the population dislocation and migration shaped by the increasingly frequent drought events in the Mahanadi River basin area in the state of Odisha. A historically drought prone area with high dependence on rain-fed agriculture and concentration of indigenous tribal population, this area also has a large internally displaced population and high levels of seasonal migration since the second half of the twentieth century. In recent decades land-hungry extractive mineral industries, industrial-infrastructure projects and unfolding agrarian crisis has interacted with some of these issues to create distress and conflicts. Tension has also arisen with neighbouring states of Chhattisgarh and AP over water sharing and displacement. Construction of the Hirakud multipurpose project on the Mahanadi led to widespread displacement of population, submergence of natural forests, while creating irrigation and flood protection for the densely inhabited coastal areas prone to floods, cyclone and submergence. As the drought and flood protective ability of ageing infrastructure deteriorates, water availability is also getting reduced due to the construction of barrages on the upstream of the Mahanadi River.

In this context, it is also important to note that the state of Odisha has been recognised by the Indian government as the 'most prepared among Indian states and union territories to reach the United Nations mandated sustainable development goal (SDG) on Climate action (Down to Earth, June 2021).⁹ Highly susceptible to extreme weather events such as floods, droughts and cyclones, Odisha was also one of the first states to draft a climate action plan in 2009 with

⁸ Wilhite, D. (2016). Managing drought risk in a changing climate. *Climate Research*, 70(2-3), 99-102. Retrieved August 13, 2021, from <https://www.jstor.org/stable/24897473>

⁹ <https://www.downtoearth.org.in/news/climate-change/odisha-andamans-most-prepared-to-reach-climate-action-sdg-government-77255>

support from donor agencies and participation from civil society organisations (Jogesh and Dubash 2014).¹⁰ Recently the government of Odisha has published the second climate action plan in which the special vulnerability of the region to climate change in the form of: 'sea level rise, increased storm intensity, extreme droughts and heat waves, and increased wind and rainfall events' has been highlighted.¹¹ Odisha has a large agriculturally dependent population, large forest area and in recent years has seen high profile conflicts between local indigenous tribal and rural communities and multi national corporations from Bauxite mining, steel industry and power sector reforms, have led to communities successfully staking their rights to cultural heritage, forests, natural resources and livelihood and against state acquisition of land (Nigam 2017, Mishra and Nayak 2011, Jena 2013).¹²

Information for the proposed study will be based on qualitative interviews with selected representatives of various institutions, civil society organisations working on migration, forest and environmental issues, displaced people and disaster mitigation as well as academics, farmer organisation, tribal groups and relevant government departments. In addition to this, information about drought and population displacement, from secondary and archival sources will be reviewed. The study will assess how the ebbs and flows of displacements (voluntary, involuntary or through specific state relief and resettlement measures) around droughts (and/or other extreme weather events floods and cyclones) relates to and affects the changing habitation patterns and competing rights and use of land, through the adverse experiences of the most vulnerable population groups (tribal and internally displaced people, rain-fed farmers and seasonal migrant workers). Environmental degradation, social breakdown, economic poverty and increasing resource conflicts between rival and unequal groups (local people, state, industries) will be important areas of exploration.

Reference

<https://www.downtoearth.org.in/blog/climate-change/lack-of-water-intensifies-distress-in-the-mahanadi-river-basin-61221>

¹⁰https://www.cprindia.org/sites/default/files/working_papers/jogesh__dubash_mainstreaming_climate_in_state_planning_odisha_climate_plan_feb_2014.pdf

¹¹ Forest and Environment Department, Government of Odisha, June, 2018: Odisha Climate Change Action Plan - Phase II (2018-2023)
<http://climatechangecellodisha.org/pdf/State%20Action%20Plan%20on%20Climate%20Change%202018-23.pdf>

¹² Nigam, R.P. 2017. POSCO Exit: Pyrrhic Victory for the People's Movement, EPW, Vol.52, Issue 51.; Mishra, B and Nayak, B.K .2011. Paan or POSCO: EPW, Vo.46, Issue, 26-27; Jena, M. 2013. Voices from Niyamgiri, EPW, Vol.48, issue 35.