

Changing Trajectories of Blue Infrastructure in Kolkata—Natural History, Political Ecology, and Urban Development in an Indian Megacity

Jenia Mukherjee

The book aims to explore the complex and cyclical interactions between city and nature across historical scales. It focuses on Kolkata's blue infrastructures, i.e. rivers, canals, and wetlands, as a composite system that evolved partly as natural but mostly as consciously constructed scape(s), and which encountered complex processes of excavation, reclamation, degradation, and encroachment across transforming urban planning and development initiatives. Using the historical urban political ecology (HUPE) framework, which combines urban environmental history and urban political ecology, the book studies urban change, i.e. transforming urban-environmental equations and the implications on the city and its people. The book comprises two major parts: the colonial and the contemporary.

The first part describes the emergence of the urban from the natural world through a series of tamed interventions initiated by the colonial capitalist state. It combines urban history, environmental history, and history of technology to explore historical selection of the site (Kolkata) as the imperial center, marked by ecological advantages; development of networked infrastructures (extensive canal networks) through statist interventions; and the parallel evolution of untamed practices (sewage-fed agriculture and pisciculture using wastewater from canals) becoming embedded into multilayered urban-environmental realities.

The second part unfurls the dialectics and dynamics surrounding disrupted infrastructures (degraded canals and wetlands) during the contemporary period, and studies the socioecological costs of disruption. It analyzes the reasons behind such transformations by looking into the shifting development interests and priorities of the post-colonial state, determined by complex global and local politico-economic eventualities. Chronological analyses and interpretations of planning acts and development action plans is pursued to project dualities and ambiguities in urban planning and development, affecting urban sustainability. The study also uses the environmental justice framework to unpack post-colonial political debates and questions on "informality" and "citizenship" on the "inhospitable" stretches of canals, thickly populated with squatter settlements. The book elucidates various forms of resistance against catastrophic transformations of urban ecosystems and socioeconomic livelihoods surrounding these. It elaborates on two movements (the *Adi Ganga Bachao Andolan* and Save the Wetlands) and, using situated urban political ecology (SUPE), maps the wide spectrum of varied interests and actions across multiple social stakeholders that determine and shape urban environmental transition.

By emphasizing on ecology "of" cities instead of ecology "in" cities, the book exposes limitations within contemporary ecological restructuring of Indian cities. It provokes innovative and empirical research focusing on other cities in these lines.