

## Grassroots Innovation for Greening Bangladesh's Urban Slums: The Role of Local Agencies

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**Abstract :** The chapter investigates the roles of local Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs) in climate change adaptation through grassroots innovation in urban slums in Dhaka, Bangladesh. The section highlights green infrastructure as an innovative process to mitigate the challenges emanating from climate change at the bottom of the pyramid. The research draws on semi-structured in-depth interviews with 11 NGOs and 2 CBOs working in various slums in Dhaka. The study explores the activities of local agencies relating to urban green infrastructure (UGI) and its possible mitigation of a range of climate change impacts: thermal discomfort, heat stress, flooding and the urban heat island. The main argument of the chapter is unlike the Global North stakeholders' activities relating to UGI in cities of the Global South have not been expanded on a large scale. Moreover, UGI as a risk management strategy is underutilised in the developing countries. The study finds that, in the context of Bangladesh, climate change adaptation through green infrastructure in cities is still nascent for local NGOs and CBOs. Mostly their activities are limited to addressing the basic needs of slum communities such as water and sanitation. Hence urban slum dwellers have been one of the most vulnerable groups in that they are deprived of the city's basic ecological services. NGOs are utilizing UGI in an innovative way despite various problems in slums. For instance, land scarcity and land insecurity in slums are two key areas where UGI faces resistance. There are limited instances of NGOs using local and indigenous techniques to encourage slum dwellers to adopt UGI for creating sustainable environments. It is in this context that the paper is an attempt to showcase some of the grassroots innovation that NGOs are currently adopting in slums. Also, some challenges and opportunities are discussed to address UGI as a strategy for climate change adaptation in slums.

**Keywords :** climate change adaptation, green infrastructure, Dhaka, slums, NGOs

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