

## Urban Ecosystem Health and Urban Agriculture

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**Abstract :** Introductory Statement outlining the background: Little has been written about political ecology of urban gardening, such as a network of knowledge generation, technologies of food production and distribution, food consumption practices, and the regulation of 'agricultural activities. For urban food gardens to sustain as a long-term food security enterprise, we will need to better understand the anthropological, ecological, political, and institutional factors influencing their development, management, and ongoing viability. Significance of the study: Dhaka as one of the fastest growing city. There are currently no studies regards to Bangladesh on how urban slum dwellerscope with the changing urban environment in the city, where they overcome challenges, and how they cope with the urban ecological cycle of food and vegetable production. It is also essential to understand the importance of their access to confined spaces in the slums they apply their indigenous knowledge. These relationships in nature are important factors in community and conservation ecology. Until now, there has been no significant published academic work on relationships between urban and environmental anthropology, urban planning, geography, ecology, and social anthropology with a focus on urban agriculture and how this contributes to the moral economies, indigenous knowledge, and government policies in order to improve the lives and livelihoods of slum dwellers surrounding parks and open spaces in Dhaka, Bangladesh. Methodology: it have applied participant observation, semi-structured questionnaire-based interviews, and focus group discussions to collect social data. Interviews were conducted with the urban agriculture practitioners who are slum dwellers who carry out their urban agriculture activities. Some of the interviews were conducted with non-government organisations (NGOs) and local and state government officials, using semi-structured interviews. Using these methods developed a clearer understanding of how green space cultivation, local economic self-reliance, and urban gardening are producing distinctive urban ecologies in Dhaka and their policy-implications on urban sustainability. Major findings of the study: The research provided an in-depth knowledge on the challenges that slum dwellers encounter in establishing and maintaining urban gardens, such as the economic development of the city, conflicting political agendas, and environmental constraints in areas within which gardening activities take place. The research investigated (i) How do slum dwellers perform gardening practices from rural areas to open spaces in the city? (ii) How do men and women's ethno-botanical knowledge contribute to urban biodiversity; (iii) And how do slum dwellers navigate complex constellations of land use policy, competing political agendas, and conflicting land and water tenures to meet livelihood functions provided by their gardens. Concluding statement: Lack of infrastructure facilities such as water supply and sanitation, micro-drains and waste disposal areas, and poor access to basic health care services increase the misery of people in the slum areas. Lack of environmental health awareness information for farmers, such as the risks from the use of chemical pesticides in gardens and from grazing animals in contaminated fields or cropping and planting trees or vegetable in contaminated dumping grounds, can all cause high health risk to humans and their environment.

**Keywords :** gender, urban agriculture, ecosystem health, urban slum systems

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