

Urban Forestry in Urban Development Policy in Sri Lanka: A Case Study of the City of Kandy

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Abstract

Forest cover in Sri Lanka declines rapidly due to rapid urbanization, unsustainable infrastructure developments, and urban expansion. Changes in forest landscapes resulted in increased climate change effects and vulnerability to natural disasters and biodiversity loss. The National Forest Policy and Action Plan aim to increase forest cover, and the National Land Use Policy-2007 set out guidelines to assure integrating forest conservation in sectoral and physical development programs. It has been projected that the proposed infrastructure development projects, especially the road networks and urban development under the National Physical Plan 2017-2050 may cause further deforestation. Urban forestry plays a significant role in urban life; stormwater management, mitigating urban heat island effect, Carbon sequestration, offering habitats, and contribution to biodiversity is significant. The objective of the study was to examine the policy gaps in assuring urban forestry. Considering geospatial, socioeconomic, and environmental factors, Kandy city was selected as a case study. Kandy, the second-largest city in Sri Lanka, is located in a valley, surrounded by approximately 104 ha of forest-covered mountains. Due to the rapid urban population increase, the forest cover declined unprecedentedly. Simultaneously, natural disasters occur frequently. The vegetation cover of Kandy has decreased 52% by the end of the colonial era and further decline to 35% at the present. Therefore, it is important to conserve and reforestation in the study area for a sustainable future city. Mixed-method was applied, primary data was obtained through 10 key in-depth interviews in the urban planning sector, geo-spatial analysis, and secondary data were obtained from official reports. Data reveals that while the urban area of Kandy has increased by 251% from 1972 to 2014, plantation areas have decreased by 34%, and scrub areas declined to 26%. Even of the National Land Use Policy mandates the lands above 1,600 m MSL are to be protected and lands with over 60% slope are to be retained as permanent forest, it was observed that those mandates have not been taken into consideration during the urban expansion and development process of the Kandy city. Currently, there are no strong urban development regulations are in force due to the absence of urban development policy in Sri Lanka. Therefore, the study recommends adopting an urban development policy that ensures conservation and management of urban forestry across the country, and it's an urgent need for hilly regions.

Keywords: Urban development, Urban forestry, Human well-being, Urban development policy, Kandy city