

**COMPARING TEMPORAL CHANGES OF LAND USE IN COLOMBO AND KOLONNAWA  
DIVISIONAL SECRETARIAT DIVISIONS**

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Rapid urbanization, development projects, and industrial growth lead to converting or modifying the natural environment to a built-up environment. After the post-war boom, the Sri Lankan government implemented several development projects, which led to an increase in the trend of urbanization in the Colombo and Kolonnawa Divisional Secretariat (DS) Divisions. The main objective of this paper is to identify the spatial and temporal land use changes in Colombo and Kolonnawa and analyze issues related to land use conversion. Data was collected through Landsat satellite images in 1992 and 2014. The statistical data were analyzed quantitatively using Excel and ArcGIS Software. The study revealed that being a top destination in the tourism industry and a hub of economic and urban growth, Colombo DS Division has increased built-up areas drastically from 1992 to 2014, with -18 ha of annual change in non-built-up areas. From 2001-2021, the Kolonnawa DS Division, which has accommodated a large volume of non-residential activities, has lost 18 ha of tree cover with a -45.3 ha of annual decline in non-built-up areas. This is equivalent to a 3.2% decrease in tree cover since 2000, extending over 12% of its land area. The study revealed that there was a decline in green spaces in both DS Divisions, resulting in high risks of environmental issues due to enhanced pollution, and reclamation of low-lying lands.

**Keywords:** Development Projects, Land use, Land cover change, Urbanization