A study on identifying land use changers in Monaragala city area

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Abstract

This study examines the changes that have occurred in the land use of the Monaragala city area during the period from 1985 to 2018. The main objective of this research is to identify land-use changes, trends, and progress of the land use pattern in the study area. Three Grama Niladhari Divisions belonging to the Monaragala Divisional Secretariat Division were selected as the study area. Because the City area was located in these three GN Divisions. Quantitative and qualitative data were used for this study using a regional approach and secondary data required for the study were obtained from the Land Use Department of Monaragala District, Department of Agriculture in Monaragala District, and the Agrarian Services Center of Monaragala District. Investigating the nature of the study area which is 1:50000 Metric Digital Data in 1985 and 1: 50000 Metric Digital Data in 2000 and 2018 data is obtained through Google Earth. The data thus collected were analyzed using GIS technology and Excel. After analyzing the data, it was possible to identify the changes, trends, and progress of the land use pattern in this area. The land area of a home garden which was 4.179km2 in 1985 had increased to 5.054km2 in 2018. Rubber plantations were introduced to the study area in the year 2000, which resulted in a change in land-use patterns. Accordingly, in the analysis of the data, it was found that by the year 2018, 0.709km from the study area had been planted rubber. And also the forest cover of 2.032km2 in 1985 has decreased to 1.325km2 by 2018. The number of paddy lands reduced from 0.417km2 in 1985 to 0.219km2 by 2018. The rock area of the study area was 0.171km2 in the year 1985, and it has reduced to 0.147km2 by the year 2018. Thus, at the end of the study, four key factors were identified that could influence changes, trends, and progress in land use patterns in the study area. They are increased service facilities, increased city limits of Monaragala town area, increased habitat, and the introduction of new crops such as rubber.

Key Words: Land use changes, Patterns, Trends, Monaragala city

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