

Socio-Economic and Environmental Impact of Urban Sprawl: A Case Study Adigrat City, Tigray, Ethiopia

Authors : Fikre Belay Tekulu

Abstract : This thesis presents the socio-economic and environmental impacts of urban sprawl in the case of Adigrat city, Tigray Region, Ethiopia. The main objective of this research is to assess major causes, trends and socio-economic and environmental impacts of the urban sprawl of Adigrat city. The study employed both quantitative and qualitative methods as questionnaires, interviews and observation used for data collection. Simple random sampling has been used to select the participants. The land use and land cover change for agricultural land and forest and grassland resource analysis is done with the aid of GIS. Urban sprawl is mainly caused by the rapid population growth, increase in the living and property cost in the core of the city, land demand and land speculation and the growth of transport and an increase in income of people and demand of more living space. The study indicates 15726.24 hectares (515.49 per cent) of new land added to the city jurisdiction from its adjacent Gantafeshum Wereda between 1986 and 2018. The population of Adigrat city increased by 9.045 per cent per year, while the city expanded 16.01 per cent per annum and the LCR was 0.0233 hectares per person between 1986 and 2018. Built-up area increased by 35.27 per cent per annum, while agricultural land, forests and grassland cover decreased by 1.68 per cent and 1.26 per cent per annum respectively in the last thirty three years. This rapid growth of urban sprawl brought social-economic and environmental change in the city that has been observed by the city residents. Therefore, the city administration should need strong, integrated, effective and efficient work, with its neighbor rural area and also done timely preparation, implementation, supervision, and evaluation of the structural plan of the city to bring out sustainable development of the city.

Keywords : cause,, trends, urban sprawl, land use land cover, GIS

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