

Urban Sprawl and Its Impact in Landcover, Wildlife Habitat and Ecosystem Balance: Al-Baha City Case Study Analysis

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Abstract

The Paper examined and analyzed the impact of urban sprawl in Al-Baha city ecosystem from 1990 to 2022 focusing on land use spreading, forests, landcover, mountains, transportation and vegetations. The study aims to identify how far of modification on these aspects during 32 years and how these modifications impacted in urban ecosystems and environmental identity in southwestern regions of Saudi Arabia. The used approach is using digital satellite maps in different locations in Al-Baha city in different years between 1990 to 2022 and analyze these maps in terms of its influence in landcover and ecosystem. The findings confirmed that, many forests and farms, plants cover and mountains which had had its environmental identity has been modified and changed to be new district areas and high density of population. Raghdan forest is one of the biggest and famous forests in Saudi Arabia which has been influenced by urban sprawl and special maps for this forest has been analyzed. The land cover modification has been discussed in its influence in wildlife habitat, forests, environmental identity and ecosystem. Urban solutions had been provided for urban planners and architects that can be applicable for all mountains regions in Saudi Arabia. The study concluded by some recommendations for future research and urban planners.

Index Terms

Urban Sprawl; Land Cover; Ecosystem; Environmental Identity; Wildlife Habitat.