

Analysis of Ecological Footprint of Residents for Urban Spatial Restructuring

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Abstract : Since the rapid economic development, Korea has recently entered a period of low growth due to population decline and aging. Due to the urbanization around the metropolitan area and the hollowing of local cities, the ecological capacity of a city is decreasing while ecological footprints are increasing, requiring a compact space plan for maintaining urban functions. The purpose of this study is to analyze the relationship between urban spatial structure and residents' ecological footprints for sustainable spatial planning. To do this, we try to analyze the relationship between intra-urban spatial structure, such as net/gross density and service accessibility, and resident ecological footprints of food, housing, transportation, goods and services through survey and structural equation modeling. The results of the study will be useful in establishing an implementation plan for sustainable development goals (SDGs), especially for sustainable cities and communities (SDG 11) and responsible consumption and production (SDG 12) in the future.

Keywords : ecological footprint, structural equation modeling, survey, sustainability, urban spatial structure

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