Accessibility Analysis of Urban Green Space in Zadar Settlement, Croatia

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Abstract: The accessibility of urban green spaces (UGS) is an integral element in the quality of life. Due to rapid urbanization, UGS studies have become a key element in urban planning. The potential benefits of space for its inhabitants are frequently analysed. A functional transport network system and the optimal spatial distribution of urban green surfaces are the prerequisites for maintaining the environmental equilibrium of the urban landscape. An accessibility analysis was conducted as part of the Urban Green Belts Project (UGB). The development of a GIS database for Zadar was the first step in generating the UGS accessibility indicator. Data were collected using the supervised classification method of multispectral LANDSAT images and manual vectorization of digital orthophoto images (DOF). An analysis of UGS accessibility according to the ANGst standard was conducted in the first phase of research. The accessibility indicator was generated on the basis of seven objective measurements, which included average UGS surface per capita and accessibility according to six functional levels of green surfaces. The generated indicator was compared with subjective measurements obtained by conducting a survey (718 respondents) within statistical units. The collected data reflected individual assessments and subjective evaluations of UGS accessibility. This study highlighted the importance of using objective and subjective measures in the process of understanding the accessibility of urban green surfaces. It may be concluded that when evaluating UGS accessibility, residents emphasize the immediate residential environment, ignoring higher UGS functional levels. It was also concluded that large areas of UGS within a city do not necessarily generate similar satisfaction with accessibility. The heterogeneity of output results may serve as guidelines for the further development of a functional UGS city network.

Keywords : urban green spaces (UGS), accessibility indicator, subjective and objective measurements, Zadar

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