Abstract

Nowadays, optimal distribution of urban green space as a place for social presence has become a major concern of urban management, since such distribution can increasingly improve the quality of urban life. The city of Zabol, with the 0.6 m^2 green space per capita, is among the cities which suffer a proper distribution of green space. This rate is far below the standard indicators set by the United Nations (20-25 m^2) and even by the Housing and Urban Planning Organization (7-20 m^2). Besides, there is no equal distribution of green space in the areas. The main objective of this research is positioning the most optimal sites for indoor green space and distributing such uses properly so as facilitate access and improve demand. The method, relying on documentary and field studies, is descriptive-analytical. First, the extent of the disparity of five areas in terms of access to urban green space is evaluated. Second, after gathering the required data, providing information layers, classifying and internalizing the layers, and weighing and overlapping of them in the ArcGIS environment, the urban lands of the city are prioritized to create green space. Finally, with the use of the Tabu search (TS) meta- algorithm for solving the problem of Hub location, the most suitable areas are selected according to the access scales of the 40 districts, and two zones are chosen as the final options for establishment of new green spaces.

Key words: Zabol, Green Space, Tabu Search (TS) Meta- Algorithm, Hub Location



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Optimal Assessment and Positioning of Zabol Green Space Using Tabu Search (TS) Meta- Algorithm

Supervisor: Dr. A. Kiani

Advisor: Dr. Gh. Khammar

> **By**: F. Vazifejoo

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