

عنوان مقاله:

Improving the Location of Recycling Stations in Shiraz Metropolitan Areas Using Landscape Geographic Information Systems Software and Landsat Images

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خلاصه مقاله:

Solid waste production has been a major problem in human societies in recent decades. Changes in consumption patterns have imposed great problems and costs on large cities to dispose the waste. Today, the geographic information system is considered due to the possibility of analyzing a huge volume of information layers, which has been used in this study to investigate the current stations and improve them. National and international experiences, three layers of the population, land use and access route have been selected. The hierarchical analysis method has been used to weigh the criteria and Landsat images of Shiraz have been used to locate the stations. According to experts, the covered population with the weight of ۰.۵۴۰ has the highest value, land use with ۰.۲۹۷ has the next priority and access route with ۰.۱۶۳ is used to improve the collection stations for home recycling materials in Shiraz, based on the population in ۱۳۹۶. Assuming that ۵۰% of the city's population delivered their recycled materials to the stations, ۶۱ stations were located using Landsat images, of which ۱۶ stations with a short distance (۳۰۰ meters) from the current station were shown. Twenty-one medium-distance stations (۳۰۰-۷۰۰ meters) and ۲۴ long-distance stations (more than ۷۰۰ meters) were identified. In areas with long-distance stations, it is necessary to build and add drop-off centers, collecting recycled materials

کلمات کلیدی:

hierarchical analysis, Geographic Information System, Recycling, Landsat, drop-off centers, Shiraz

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