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Multi-Criteria Decision Support System for Modeling of Civic Facilities Using GIS Applications: A Case Study of F-11, Islamabad

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Abstract : The urban landscapes are being change with the population growth and advancements in new technologies. The urban sprawl pattern and utilizes are related to the local socioeconomic and physical condition. Urban policy decisions are executed mostly through spatial planning. A decision support system (DSS) is very powerful tool which provides flexible knowledge base method for urban planning. An application was developed using geographical information system (GIS) for urban planning. A scenario based DSS was developed to integrate the hierarchical muti-criteria data of different aspects of urban landscape. These were physical environment, the dumping site, spatial distribution of road network, gas and water supply lines, and urban watershed management, selection criteria for new residential, recreational, commercial and industrial sites. The model provided a framework to incorporate the sustainable future development. The data can be entered dynamically by planners according to the appropriate criteria for the management of urban landscapes.

Keywords : urban, GIS, spatial, criteria
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