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Evaluation of the Ardabil City Environmental Potential for Urban Development

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Abstract: Urbanized population increasing has been a major driving force for physical development and expansion. In this regard, selecting optimal management strategies for sustainable development of cities as the most important population centers has gotten more attention by the city managers. One of the most important issues in planning a sustainable development is environmental sustainability. In this research, identifying the optimal physical development strategies of Ardabil city in the future condition have been investigated based on land-use planning principles and regularities. Determination of suitable lands of urban development was conducted through natural variables comprised of slope, topography, geology, distance from fault, underground water's depth, land-use strategies and earth shape using hierarchical process method (AHP) in Geographical information system (GIS). Region's potential capabilities and talents were estimated by environmental elements extraction and its measurement based on environmental criteria. Consequently, specified suitable areas for Ardabil city development were introduced. Results of this research showed that the northern part of the Ardabil city is the most suitable sites for physical development of this city regarding the environmental sustainability criteria.

Keywords: urban development, environmental sustainability, Ardabil city, AHP, GIS

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