Rehabilitation of Enter-city Tissue with Form-based Zoning Approach
(Case Study: Borazjan City)

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Extended abstract

Introduction
With increasing population growth in recent decades in Iran, the space and spatial sustainable development became important for urban planners and policy makers. Many cities have huge valuable timeworn space sources available that can be used for reconstruction problems. Thus, renovation and rehabilitation of these old urban textures are attracted the attention of the policy makers. Hence, the smart growth approach defined as a model for managing growth in the USA pays particular attention to endogenous potentials for growth. Special principles and instruments are defined in the model for management of land to apply it in urban planning system of the country. These executive tools direct the urban land development so that it can be observed in landscape of land development. Therefore, the main goal of this research is to investigate internal development of city with an emphasis on re-development of the timeworn textures to consider the fact that as long as there are the potentials of old textures within the cities, directing the cities towards surrounding areas can lead to unsustainability in physical environment of the cities.

Methodology
Using form-based zoning as one of the executive instruments of smart growth, we have made a zoning of the regions and neighborhoods of Barazjan County based on coding system of the intelligent growth model in GIS environment. The zoning has been made in three different levels of regions, communities, sectors that have network relationships with each other. In region category the areas have potentials in six separate sections. In community category, there are three zones specifying development patterns of the six regions. In the third category, each of the regions is divided into sectoral zones from natural and rural gamut to urban core. Hence, using spatial analyst in ArcGIS, the zoning was conducted for the regions of Barazjan according

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to the levels. Finally, the research hypotheses have been tested according to form-based zonation model.

Results and discussion

According to the results of this research, each of thezones based on indicators have a certain capacity to adapt to any development. In this zoning, the study area of research was re-qualified for talent development. According to this model, the first hypothesis is confirmed that old textures and Central Borazjan have the potential for redevelopment. The second hypothesis of the research is based on the statement that use of form-based zoning in smart growth development model can determine development pattern of old textures of Borazjan. We have examined two indices of gross population density and parcel sizes in the study area to test the hypotheses. The results combined on zone G4 determined two patterns of TND and RCD for development of communities of old textures. The RCD is capable for development of commercial parcels and TND is also capable for urban neighborhoods and local centers. In the third step of the analysis, each of the two zones have been assigned to the T-Zone (transect). At this stage, the identity of any part of the urban environment to urban core was determined..

Conclusion

As the development patterns were determined for each region of the city and the necessity to conserve agricultural lands and natural capitals in surrounding areas, it can be said that the most suitable region for future development of Barazjan is central old textures of this city. Directing the urban development towards the old timeworn textures makes it possible to reduce dispersal growth in surrounding areas to control unbalanced urban growth. Therefore, applying the strategies and principles of smart growth in the plans of urban development can accelerate this process and direct future growth of the city towards internal non-usable old textures.