Analysis of Barriers and Factors Affecting the Implementation of Projects and Spatial Planning in Tehran Province

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Abstract

Studies on spatial planning in Iranian history has experienced more than seven decades of programming, But has never been implemented and a firm determination for its operation has not been seen so far. This is an applied and developmental research, descriptive and analytical in method. Research instrument was questionnaires and Delphi technique was conducted. In this study, using cross-impact analysis and cross-impact matrix software to perform complex calculations were performed MICMAC. The results showed effective factors on implementation of spatial planning; Tehran province is regional political polarization, Tehran as a development pole in this province and being placed on the west to east and north to south corridors and the necessity of the province interaction with neighbor regions was determined and suitable solutions to overcome barriers in the way of implementing spatial planning in Tehran province, have been suggested in this study.

Keywords

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The Doctrine of South Korea Spatial Planning System in Order to Apply in the Circumstance of Iran

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Abstract

Developing according to foreign investment in South Korea is an economic miracle of contemporary century. The evolution of economic miracle has been accomplished by complete success of spatial planning. The most striking feature of spatial planning in South Korea is its implementation. Using descriptive- analytical method, this paper will seek success procedure of South Korea spatial planning and basic role of government in order to respond three questions: how government of South Korea was able to achieve such successes? Applying spatial planning as a tool in this process, which role government play? And what doctrines have this experiment in order to apply in Iran? Spatial planning of South Korea implement in three scale of master land, regional and urban plan. Urban planning of Korea has a three-tier structure. Urban master plan determine long-term growth path and future image of city in the upper level, urban management plan present program of city with binding rules and objective details in the next level, and the manner of programs and necessary strategies implementation in the third level. Urban management plan, including zoning plan (land use), urban facility plan, Maintenance plan of the city (time-out texture) and detailed plan of regions, is an unique, thorough and so successful sample among different countries and its doctrine is exploitable for Iran which has no land use and urban facilities plan and no sufficient and necessary solidarity in the field of time-out textures and detailed plan. Administrative identical process, preparing all plans by executors and approving lower– rank plans by preparers of upper– rank plans are another striking feature applying in spatial planning system of Korea which is major factors of urban plans implementation.

Keywords

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Spatial and Temporal Change of Costal and Non-costal Urban form in Mazandaran Province Using Landscape Metrics

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Abstract

Land cover always has changed due to human activities and natural phenomena, Intensive and variety of these changes in urban environments are more than others. The objective of this research was assessment the temporal and spatial changes for two coastal cities (Chalus and Babolsar) and two non-coastal cities (Ghaemshahr and Amol) in Mazandaran province with the view to compactness, complexity and centrality of urban form using landscape metrics. The methodology of this research was quantify method and the land use maps were produced in three classes (urban, cropland and water) by maximum likelihood classification using Landsat satellite images. For landscape change analysis 12 landscape metrics was used in the class and landscape level. The results show that the NP for cropland in four cities increased, which represent fragmentation, loss of continuity and interference in cropland. Additionally, increasing trend of number of patches was observed in two cities Ghaemshahr and Babolsar in landscape level showed fragmented structure in these cities. Also, ENN-MN decreased only for Ghaemshahr that means high centralization was occurred in this city. Generally, the significant difference was not observed between coastal and non-coastal cities with the view to compactness and complexity.

Keywords

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Foresight Settlement System in Scenario Planning, Improvement Regional Planning
(Case: Isfahan Province)

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Abstract

Regional Foresight, which focuses on some of the specific land area in a given territory sub-national aims to achieve the desired future decisions, will be operational. This article examines the spatial organization of Settlement systems in Isfahan province And Presentation of the urban system in the horizon 1420. This paper tries to identify the key factors influencing the development process at the regional scale, producing both possible and probable scenarios to provide the in the next 25 years Isfahan province. This research is a combination of documentary and survey methods in terms of category and is based on new methods in the science of future studies, analytical and exploratory in terms of nature, which is conducted by a combination of qualitative and quantitative models. Structural analysis is used to analyze data by use of MICMAC software. The results indicate that the key and strategic variables of Isfahan province development in Horizon 1420 includes: the way of countries macro management, the way of managing the province, water resources, inter-institutional cooperation, population, Research & Development, role of transnational Province, Investment security, Industrial Production and mineral, level of IT, Tourism, production technology. Based on the findings, Isfahan province in terms of arrangement space systems will face in the next 25 years with five main scenario: Radial scenario, a scenario dismissed Islands, a cluster scenario, the scenario of multi-center, network scenario. Among the scenarios planned, the network scenario we can see the functional spatial integration in the region and the development integrated and balanced space.

Keywords

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Prediction the Most Suitable of Agricultural Zones in the Tajan Watershed Using Multi Criteria Evaluation (MCE) Approach

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Abstract

In recent decades almost of land use changes without taking capabilities and limitations of environmental have caused environmental problems and known forms of soil degradation and aquatic ecosystem pollution. The purpose of this investigation is determining how to mitigate the effects of future land use changes in Tajan watershed by investigating ecological potential as a strategy for natural resource conservation. Therefore, the land change modeling (LCM) was used for the analysis of possible future land use and then using Geographic Information System (GIS) and multi-criteria analysis (linear weighted combination) was determined the most sustainability of agricultural areas. The results showed that during the period from 2010 to 2040, 34739 hectares of forest land use were declined and 27071 and 7668 hectares of agricultural lands and pastures will increase respectively and the 3473 hectares of the most susceptible areas possible change from forest to agriculture and pasture were extracted. So expect to assessing changes land use based on the ecological potential in the future can protect Hyrcanian forests for the prevention of unprincipled changes in the coming period in this region.

Keywords

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Land Cover Change Modeling based on Artificial Neural Networks and transmission potential method in LCM
(Case: Forests Gilan-e Gharb, Kermanshah Province)

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Abstract

In order to land cover change modeling and detect to possibility of predict the future trend of Land Change modeler (LCM) was used. VNIR Data ASTER Sensor of TERRA satellite with spatial resolution of 15m for three periods 2000, 2007 and 2016 from Gilan-e-Gharb forests of Kermanshah province were analyzed. Land cover maps of years 2000, 2007 and 2016 four categories: forest cover, pasture lands, agricultural lands and built-up area areas for each of images were extracted. The results of data analysis in the first period (2000-2007) and the second period (2007-2016) showed the greatest increase in agricultural lands and pasture lands have the greatest decrease area. Based on these changes and by taking eight independent variables, transition potential modeling of 2016 was done using Artificial Neural Network. Then by hard predict model and images were classified of first period (2000-2007), the land cover map in 2016 using Land Change Modeler was predicted. After evaluating the model, 83.09 and 71.10 overall accuracy was obtained for the first and second periods showed the consistency between prediction map and classified map of year 2016. The land cover maps by entering the second period (2007-2016) to Land Change Modeler the land.

Keyword

Gilan-e-Gharb, Land cover, LCM, Modeling, Transition potential.

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Integration Assessment of the Protected Areas Using Landscape Ecological Approach
(Case: Kolah Ghazy National Park and Wildlife Refuge)

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Abstract

Landscape fragmentation, due to the roads construction, urban infrastructure development and other land uses, seems to be in result of the loss of habitat in protected areas. Indeed, Landscape fragmentation causes a huge negative impact on wildlife, including important species. In result, the monitoring and management of protected areas, through the landscape ecology and quantification of fragmentation, will be so applicable. This research aims to quantify the landscape fragmentation in Kolah Ghazy national Park and wildlife refuge. To achieve this purpose, RS and GIS techniques were used to extract land uses in studied area and then landscape fragmentation was quantified using landscape metrics (CA, CAP, TE, MSI, NP, MPS and MNN) in class level. The results cleared that rich rangeland patches have been more integrated, but the incompatible land uses, such as mining, agriculture and urban infrastructure development make these patches to be more far away from each other, so, reduction of incompatible land uses is recommended in the region.

Keywords

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Dispersion Modeling Drought Caused by Climate Change in Iran Using System Dynamics

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Abstract

Drought changes for optimal operation management of water resources well are the sensible. That's why last round of very extensive research on modeling drought in the world and Iran is and using their water projects and has conducted numerous hydraulic. One of the goals dynamic systems is to modeling potential policies to improve system performance. Modeling SPI index as an indicator of the country's drought situation stations using radial neural network model for each station was done. Independent variables neural network, relative humidity, temperature and lack of objects were selected according to their impact on precipitation. SPI index is the dependent variable. In total period of 42 years calculated by SPI, 12-month and 348 standard score by calculating the SPI 24-month, 336 standard score is obtained for each station. At all stations, ETo values from January to July, then December increased and then fell in July to its maximum level reached in all stations. The highest average monthly ETo values in Abadan and Ahvaz stations in July and 18.232 and 16.214 mm respectively happened.

Keywords

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