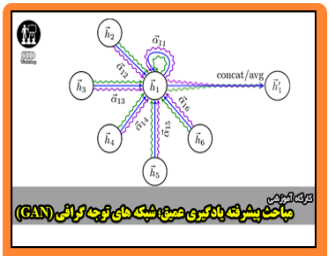
کارگاه های آموزشی مرکز اطلاعات علمی جهاد دانشگاهی

کارگاه آنلاین مکالمه روزمره انگلیسی

کارگاه آنلاین آموزش استفاده از وب آو ساینس



مباحث پیشرفته یادگیری عمیق؛
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Appraising Ecological Power for Identifying Appropriate Districts for Development Around Sahand New Town

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Introduction

During the history, human being has always been dependant on nature and environment for providing his main requirements, but during the time has caused many effects on the land because of their management methods and different interventions. So with regard to human beings potential capability, ecological capability has much importance for future development of land.

On the other hand appropriate developments of cities depend on appropriate use of land potentials. Thus, identifying the potentials and capabilities of the area prior to its establishment and loading usages and urban activies has a great importance. Otherwise the development of the cities and inhabitats will be performed in a way that natural and ecologica limits will prohibit the continuity of activies and practically a lot of used investments will be lost. According to these issues, before any intervention in the land, ecological capability of the land should be assessed and regard to this capability and considering social and economic needs we should develop cities.

The most important issue in evaluating the ecological capability of new town of Shahand is using environmental criteria for obtaining sustainable urban development. In fact it can be said that the main goal of this study is to determine the best location for urban development of new town of Sahand, which has had the least amount of bad effects in the present and in long term.

Research Methodology

This study attempts to identify appropriate districts for Sahand new town and its future development by using descriptive – analytical method. In fact Research method is descriptive and analytical method and data collection has been performed by library ,studies and field observations, the required information were also obtained from Omran company in Sahand new town, Urbanization and Housing Organization of East Azarbaijan Province, Iranian Statistics Center, Meteorology

organization of East Azarbaijan, Geology and mine Exploration Organization of Iran , Research Society of Water and Soil, and General office of Environment Protection of East Azarbaijan.

Discussion and Results

Sahand is a new established town in East Azerbaijan province which was constructed about two decades ago for controlling the extreme growth of Tabriz city and for attracting the extra population of this metropolis. Sahand new town is 20 kilometers far away from Tabriz. The area of lands allocated for this town is about 12650 hectares and it is situated on the hillside of Sahand Mountain, but only 1050 hectares of which has been constructed up to now.

In this paper, for future development of this city in the areas with proper ecological properties and capability, Sahand land areas have been evaluated based on logistic principles of the region. The main goal of this study is locating the best area and place for the city development which has the least bad effects in short and long term.

The process for assessment of ecological capability in the present research includes the following three main parts, in which after passing these stages , the ecological property at this study area has been determined

- First, identifying ecological resources
- Second, analysis and adding up the data
- Third, assessment and classification of the area

It should be mentioned that in the assessment of ecological capability of Sahand new town, GIS is used in a way that there is no need to fill the table (the method generally used in geographical information systems), but by converting maps to Resteri format and use of weight overlaying based on Resteri data, the evaluation of ecological capability of the region has been studied, in fact the final overlayed map covers all the information and date of the model.

After identifying ecological resources, analysis and adding up the relevant data and also comparing the determined parameters as two by two, at the next stage, the final map of ecological capability of the under study area has been extracted. This map, based on the score, has been classified in to two groups of rather appropriate areas (grade 1) and medium appropriate areas (grade 2), and then the final map which is obtained based on the acceptance of the two groups of rather appropriate and medium of development and as overlaing of the maps of these two areas, determines the appropriate lands for development

Conclusion

Assessment of ecological potential in Iran is based on multi factor assessment. With respect to the exclusiveness of ecological features of each region, it is obvious that assessment of ecological potential in each region has its own special criteria and regulations. In this research, based on the criteria specified for development of Sahand new town, it is tried to to find the direction and area of the most appropriate geographical limits for development of Sahand new town.

By implementing the indicated assessmemt criteria and after specifying the appropriate area from the view point of ecological potential, the final area of development is determined through overlaying and

separating the relevant ecological maps and appropriate land slope from urbanization point of view (figure No.5). In the map for slope dividing, with respect to different types of suitable slopes in urbanization activities, these slopes in three classes of 0-8%, 8-12%and 12-15% has been considered in development of Sahand new town.

All the development land with an area of 3500 hectares is located at east and south east of Sahand. By scrutinizating this area and not considering the areas which have no efficiency for providing the appropriate lands of development, an area of about 3200 hectares is considered for planning the future development of Sahand new town.Also, at the new recommended area, creating the areas with in appropriate width has been avoided because such areas will increase the infrastructural costs.

Finally, this development area based on morphology, natural features and Sahand-Tabriz freeway were divided in to four urban districts and was considered for future development of Sahnd town as prioritization.

Keywords: Ecological capability assessment, City development, Sahand new town, AHP, GIS.

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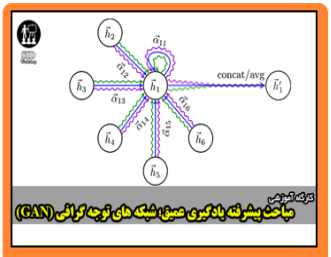

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