The Study of Passion–Play as One of the Potentials of Religious Tourism Using SWOT Technique

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Abstract

The tourism theory in fact results from the difference in the social structures and wherever there are two different types of something, doubtlessly attraction would emerge for comprehending the other type. The diversity of religions also generates attraction for comprehension of other religions and forms as an incentive in the tourists for religious tourism. Religious tourism is one of the most common forms of tourism across the world. Religious attractions, sacred places and shrines attract a large number of tourists every year. In the country of Iran passion-play is a traditional-religious drama which is a blend of Persian and Shia Islam believes in which the social and philosophical values of Persian community are shaped. Passion-play is one of the potentials of religious tourism that has the capacity to attract religious tourists. The research method is of descriptive-analytic type. For this purpose, in the process of conducting the research, first the religious tourism is described and in continuation while drawing a chart of different types of religious tourism, passion-play is studied as an Iranian national-religious display. Using SWOT technique the strengths, weaknesses, opportunities and thereats of passion-play have been surveyed. After surveying the mutual effects of them on each other and analyzing them, finally 21 strategies proportional to them were extracted and arrayed. These strategies can further clarify the importance and origin of passion - play in Iran and its cultural and artistic values and objectives.

Keywords: Passion-play, Religious tourism, SWOT technique.

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Modeling the Appropriate Location for Landfilling Using AHP, Fuzzy Logic, Weight Overlay Index and Boolean Logic Methods (Case Study: Ardebil City)

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Abstract

Ardebil city has located in East Azerbaijan. As the third most populated city of Azerbaijan; it has been one the main centers regarding the population. Since 1993 it has been recognized as the center for Ardebil Province. A number of industrial towns have been built around it and have created much waste. The prime objective of the present study is identifying suitable locations for landfill in Ardebil city. To achieve this objective, the weighted overlay, analytic hierarchy (AHP), fuzzy logic and Boolean logic methods are used. The second objective of this study was to compare the above methods and identify appropriate methods for locating solid wastes of Ardebil city. In order to collect the required data geologic, topographic, hydrologic, and use and climatic factors maps were used. Required data for locating the landfill has been processed in IDEISI and ArcGIS.3 software and the final maps have been drawn. The results show that Ardebil city landfill location is a piece of land with 45 hectares area which has located 17km north of Ardebil (left side of the Ardebil-Moghan road). Field observations also confirm the suitability of the area for the landfill. Also the results show that the methods of AHP, index of overlap weight and fuzzy logic have the highest correlation with locating landfills in Ardebil, respectively. Boolean method presented wrong location for landfill and it is an inappropriate method for this purpose.

Keyword: Locating methods, Garbage, Ardebil city, GIS.

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Synoptic Analaysis of Thunderstorms in Tabriz (1996-2005)

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Abstract

The thunderstorms are climate destroyer phenomena every year entering irreversible losses on the establishments, farms, houses and so on such as the hail, the flooding rains and the thunder strike. The recognition of the role of these storms is very important that can decrease the possible losses. In the present research after the analyzing the thermodynamic and synoptic characteristics about the Tabriz thunderstorms in a statistical ten-year period (1996-2005) and ensuring the results of the instability indicators, the researches show strong anticyclone dominance on Russia which extends to the westernorth of Iran and causes increasing thermal gradiant at this area. Also in the higher levels, the presence of strong cyclones on the eastern south of the black sea due to the constant raining of the northern latitudes on this area has caused high depth of the entering path of the black sea on the north western of Iran. With the insertion of two low pressure cells of Sudan and Mediterranean on Kuwait and south of Iraq and with the extention of it's dominance toward the western north of Iran and also the presence of a low pressure cell on Hormoz strait and north of Arabia and finally the transfering of heat and the moisture of Oman sea and the Persian Gulf on the areas have provided the necessary conditions for the higher instability and the thunderstrikes.

Keyworlds: Thunderstorm, Tabriz, Synoptic Analysis, Unstability.

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Zoning Watershed for Artificial Recharge of Ground Water Using AHP and GIS Techniques

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Abstract

Iran has a dry land with very small amount of precipitation so that its average rainfall is less than one third of average rainfall in the world. Nowadays, with increase in population demand for food increased. Therefore, utilization of water resources extended much more than the past. This amount of consumption was more than the amount of ground water resources. In other words, input source become less than output. Therefore shortage of ground water resources should be compensated through artificial recharge of ground water resources.

The purpose of this study is zoning watershed for artificial recharge ground water. The analytic hierarchy process (AHP) is one of the most efficient techniques designed to multiple criteria decision making. This technique allows formulation of complex issues as hierarchy and also provides the possibility to consider various quantitative and qualitative criteria in question. To ensure the final results, potential layer of study area was provided in raster calculator, weighed overlay and weighted sum methods. The results show that among the three methods mentioned above raster calculator method allocated the maximum of area to high potential against weighed overlay that allocated the minimum area. But the weighted sum method is between the two methods and results of its confidence are higher. Among these, zones with highest potential are based on more coarse alluvial sediments and most areas with the highest density and zones with lowest potential both coincide with highest altitutes with the lowest penetration and steep slope and the low areas with high density of gypsum deposits and high rate of evaporation and temperature. The results of this study can be used in environmental management of groundwater resources and also the fruitful exploitation of optimal design of water resources and prevention of over exploitation of which can be productive.

Keywords: Baazed, Watershed, AHP, Technical GIS. Zoning, Artificial Recharge.

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The New Shopping Center Site-selection in Urban Areas by Using AHP Model; Case Study: City of Saghez

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Abstract

In the modern urban planning using GIS for land use analysis is usual and efficient. Distribution of shopping centers as one of urban land uses plays important role in urban planning and its rearrangement. It seems that using the AHP extensions for site-selection of new shopping centers can aid improve urban structures and increase urban efficiency.

The main goal of this research is to survey and analyze suitable locations for constructing new shopping centers in Saghez. The city has located in Northwest of Kordestan province and its population is 131329 based on the report of Iranian Census Center in 1385. Majority of the residents do not have proper access to high quality shopping centers and therefore the current research aims to use AHP topropse new shopping centers locations in Saghez.

The results of this research show that the distribution of shops and commercial centers in this city have not adapted with urban planning standards and construction of new shopping centers in districts 3 of Saghez city would provide optimal distribution of commercial centers, and improve accessibility and proper services for residences in city.

Keywords: Site-Selections, New shopping centers, Analytical Hierarchy Process (AHP), Saghez city.

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The Analysis of Synoptic Conditions of Flood Occurrence in Heavy Rainfalls (Koohrang County)

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Abstract

In this paper we study the heavy precipitation and probability of occurring flood as a result of it for Koohrang station. The synoptic and discharge maps were chosen and drawn in purpose of showing the discharge peak for 29 February by175 mm rainfall. In this day a low pressure center was located in Greek. As this center expanded to the north, the thermal low pressure above the Sudan and Saudi Arabia became dynamic and stretched toward the west of Iran. According to the sea surface, 500 mb and moisture flow, this heavy rainfall was the result of the instability from surface to 500 geopotential levels and generated 5.7 m^2/s discharges in the regain.

Keywords: Synoptic analysis, Forecasting floods, Heavy rainfall, Cyclone, Unticyclone, Koohrang.

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The Analysis of the Trend and the Cycles of Annual Precipitation Characteristics of Zanjan

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Abstract

Principal Component Analysis (PCA) is an optimum mathematical method to decrease variables into some limited components in order to justify the highest variance of primary variables. In this study some statistical characteristics of annual precipitation of Zanjan city including sum of annual precipitation, number of rainy days, extreme daily precipitation in a year, the ratio of extreme precipitation to the sum of annual precipitation and some characteristics such as Standard Deviation (SD), Skewness (Sk), Kurtosis (Ku), Absolute Mean Deviation (AMD) and Mean Absolute Interannual Variability (MAIV) were was calculated from monthly precipitation for each year, and were introduced principal component analysis technique. The results show that 95% percent of annual precipitation variations can be explained through 4 components. The first component which indicates the highest data variance (42.6%), represents annual precipitation and absolute variability indices including SD, AMD and MAIV. The second component represents the shape of frequency distribution indices (Sk, Ku), the third component represents extreme precipitations and finally the fourth component represents the number of rainy days. The analysis of the trend of components scores show that first and fourth components scores have a significant decreasing and increasing trend, respectively. Round a lines show a precipitation decrease during the period under study from one hand and having uniform temporal distribution on the other hand.

Keywords: Principal Component Analysis, Trend, Precipitation, Zanjan City.

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Study of Morphotectonic and Neotectonic Characteristics in Sabalan Mountain

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Abstract

Sabalan Mountain is one of main morphtectonic units of Iran. This unit has extensive area, therefore in this research only southern slopes of Sabalan have been selected. Study area is located between 37° 56′ to 38° 14′ N and 47° 36′ to 48° 00′ E. Selected area from hydrograph is formed of four basins, including Pislarchay, Aghmion, Biokchay and Aghlaghanchay. There are several faults in this area as geomorphic evidences. Main effects of these include linear valley, offset stream, escarpment, shutter ridges, displacement of alluvial fan and hot spring.

Southern slopes of Sabalan Mountain are active in terms of tectonic processes. For investigation of neotectonic characteristic we used several geomorphic indexes such as mountain front sinuosity (Smf), ratio of valley-floor with to valley height (VF), drainage basin shape ratio (BS), asymmetry factor (AF), topographic symmetry factor (T) and latitude ratio. This index was calculated in four basins in separation. According to Smf and VF results, two basins have active conditions and two others are semi active. BS index for all basins presents active tectonic. The results of AF and T confirm the above conclusion. In the end we used Latitade (Lat) ratio. According to this index, three basins are in active condition.

Keywords: Morphtectonic**,** Geomorphic evidence of faults, Neotectonic, Geomorphic index, South slopes of Sabalan Mountain.

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Zoning Watershed for Artificial Recharge of Ground Water Using AHP and GIS Techniques

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Abstract

Iran has a dry land with very small amount of precipitation so that its average rainfall is less than one third of average rainfall in the world. Nowadays, with increase in population demand for food increased. Therefore, utilization of water resources extended much more than the past. This amount of consumption was more than the amount of ground water resources. In other words, input source become less than output. Therefore shortage of ground water resources should be compensated through artificial recharge of ground water resources.

The purpose of this study is zoning watershed for artificial recharge ground water. The analytic hierarchy process (AHP) is one of the most efficient techniques designed to multiple criteria decision making. This technique allows formulation of complex issues as hierarchy and also provides the possibility to consider various quantitative and qualitative criteria in question. To ensure the final results, potential layer of study area was provided in raster calculator, weighed overlay and weighted sum methods. The results show that among the three methods mentioned above raster calculator method allocated the maximum of area to high potential against weighed overlay that allocated the minimum area. But the weighted sum method is between the two methods and results of its confidence is higher. Among these, zones with highest potential are based on more coarse alluvial sediments and most areas with the highest density and zones with lowest potential both coincide with highest altitutes with the lowest penetration and steep slope and the low areas with high density of gypsum deposits and high rate of evaporation and temperature. The results of this study can be used in environmental management of groundwater resources and also the fruitful exploitation of optimal design of water resources and prevention of over exploitation of which can be productive.

Keywords: Baazed, Watershed, AHP, Technical GIS. Zoning, Artificial Recharge.

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Agroclimatic Zoning of Sunflower in North of Urmia Lake

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Abstract

This research aims at studying and understanding the full capabilities of West Azerbaijan province for sunflower cultivation. Geographic information system (GIS) was used to carry out the research. Climate data elements such as the minimum temperature during the growing season (May to September), the rainfall during the growing period, the relative humidity during growth of sunflower, were prepared in 9 stations in the region between the years (1387-1373). Slope, soil and elevation data were included to determine and identify the appropriate area of study in the range of sunflower cultivation.

Using vegetative needs (favorable climatic conditions) of the crop, the production of information and data rate of each series were classified. In order to investigate the influence of each element in the earth's climate and physical factors affecting agro-climatic planting of sunflower, the data on temperature, precipitation and relative humidity were combined and then all data elements in the earth's climate and physical factors together were then integrated. The final map of the land capability for planting of sunflower was produced. Finally, the AHP model, and overlapped data in both weighted area of Zone 2, were used. Sunflower planting area in the north east and eastern parts of the study area (the city of Khoy, Qara Zyaaldyn, Poldasht and Shoot) was specified. The areas suitable for cultivation in both models were chosen to be the city of Qara Zyaaldyn and Poldasht.

Keywords: Zonning, Agro climate, Sunflower, North of the Urmia Lake.

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Evaluation of Runoff Components by SWAT Model in Taleghan Catchment

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Abstract

One of the main concerns in recent years with regard to climate change and global warming is how to efficiently manage the water resources of the world. Insufficient or unavailable hydroclimatological data further aggravate the difficulty of good water management. Hence the use of hydrologic and hydraulic models is a possible solution to ease the job of the water managers. In this research, Soil and Water Assessment Tools (SWAT) are used to predict and validate the discharge in Taleghan Watershed of Iran. The inputs required include soil, land use and DEM layers with hydroclimatological data. Statistical methods were used for calibration and validation of the SWAT model. The results indicate that the observed and predicted discharge have the least mean absolute relative error both in the annual and monthly periods. From the SPSS analysis, these values were found to be not significant at 95% probability for the annual and monthly discharges for the calibration and validation periods. The study illustrates the usefulness of the SWAT Model in predicting runoff components in a watershed. The annual results in Taleghan catchments during 1987 and 2007 indicate an increasing 7.3% surface runoff and decreasing 11.3% and 11% interflow and groundwater flow respectively.

Keyword: SWAT, Runoff Components, Model, Taleghan.

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The Study of Relationship between Economic Growth, CO2 Emissions, Energy Consumption and Employment Ratio in Iran

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Abstract

This paper examines the long run and causal relationship issues between economic growth, carbon emissions, energy consumption and employment ratio in Iran using autoregressive distributed lag model. Empirical results for Iran over the period 1971-2007 suggest an evidence of a long-run relationship between the variables at 5% significance level in Iran. The estimated income elasticity of carbon emissions per capita is 0.40 and the income elasticity of energy consumption per capita is 0.71. Results for the existence and direction of Granger Causality show the neither carbon emissions per capita nor energy consumption per capita cause real GDP per capita in the short run. In addition EKC hypothesis at causal framework by using a logarithmic model is not valid in Iran case. The overall results indicate that energy consumption and controlling carbon dioxide emission are likely to have no adverse effect on the real output growth of Iran.

Keywords: CO2 Emissions, Energy Consumption, Economic Growth, Granger Causality.

JEL lassification Code: Q56, Q53, Q43.

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