

ABSTRACTS

Assessment and Evaluation the Dimensions of Development Catalyst in Recreation of Traditional Districts (Case study: Haji District in Hamadan Historical Context)

Dr. Hasan Sajadzadeh

Assistant Professor of Urban Design,
Faculty of Arts & Architecture
University of Bu-Ali Sina

Maryam Hamidi Nia

M.Sc of Urban Design, Faculty of
Arts & Architecture
University of Bu-Ali Sina

Rezvan Dalvand

M.Sc of Urban Design, Faculty of Arts & Architecture
University of Bu-Ali Sina

Urban development has tried to restore urban life to inefficient areas, with two approaches of internal development and urban restoration of eroded texture. In order to facilitate this trend and to pay attention to the ancient tissue grafts with urban development, planning and implementation of development catalyst projects as one of the strategies used to provide the necessary infrastructures for the presence of residents and attention to the potential and dimensions of development have been considered. The descriptive-analytical and quantitative approach is used in this study. Research resources are library resources, field observations and questionnaires. For this purpose, 300 questionnaires were distributed among residents of Haji district of Hamadan. In order to analyze data, parametric statistical tests, single group test, Pearson correlation test and Friedman test have been used in Spss software. The approach of this research is catalysts which has physical-spatial, social-cultural and environmental aspects. This study tries to answer the question “which one of these regeneration aspects plays the role of development catalysts in district? Accordingly, in Haji neighborhood, the results of Friedman test showed that the ranking of the spatial-physical factors, socio-cultural factors and environmental factors are significant (as $p < 0.05$). it can be said that Hajji district, in terms of socio-cultural quality has the highest rank and in terms of spatial quality has the lowest rank, and as a result, socio-cultural factors can be considered as a catalyst in Haji neighborhood, and while preserving the historical and physical values of the neighborhood, plays an important role in turning the neighborhood into a bio-location compatible with today's life and in line with personality and historical identity.

Keywords: Recreation, Development catalyst, Historical texture, Haji neighborhood of Hamadan.

**Potential Survey of Establishing Solar Power Plants Using AHP
Model and Fuzzy Logic in Sistan and Baluchistan Province**

Dr. Mohammad Rahimi

Assistant Professor of Geography&Urban Planning
University of Shahid Bahonar Kerman

Fatemeh Pazand

M.Sc of Urban Planning
Kerman Islamic Azad University

Dr. AliAsghar Abdollahi

Assistant Professor of Geography&Urban Planning
University of Shahid Bahonar Kerman

Solar energy is one of the clean and renewable energies that can be used anywhere in the world. This energy has a special place in terms of efficiency power and economics. Many parts of Iran have potential for exploiting solar energy and clean energy production. Considering the location of the solar power plant, it has a significant impact on its production and efficiency rate, it is also important to determine the suitable areas for its establishment. In this paper, the potential of cities in Sistan and Baluchestan Province for solar power plant has been studied. The main criteria of this potentiometer include sunny hours, temperature of the area, cloudiness, rainfall, dust and the height. The present research is applied in terms of its purpose and in terms of its nature and method is descriptive-analytical one. The data interpolation method (IDW) and layers' fuzzy by using fuzzy logic formulation in GIS environment analysis were used to analyze the data. Hierarchical Analytic Model (AHP) has also been used to determine the importance of variables. By combining the fuzzy weighted layers, the map of potential areas for the construction of a solar power plant in Sistan and Baluchestan province was obtained. Finally, the results show that the cities of Saravan and Nik Shahr are suitable for the construction of a solar power station, Khash and parts of the Iranshahr city are the suitable and fairly suitable areas. Zabol, Zahedan, Chabahar, Konarak and part of the city of Iranshahr are relatively inappropriate and completely inappropriate for the construction of a solar power plant.

Keywords: Potentiometric, Solar Power Station, Fuzzy logic, AHP, Sistan and Baluchestan Province.

**Evaluation of the Development Capacity of Entrepreneurship in Rural Areas with a
Approach to the Development and Diversification of the Rural Economy
(Case study: Rural District of Bezeqi)**

Dr. Tahereh Sadeghloo

Assistant Professor of Geography & Rural Planning
Ferdowsi University of Mashhad

Dr. Vakil Heydari Sarban

Associate Professor of Geography & Rural Planning
University of Mohaghegh Ardabili

Salimeh Gholizadeh

M.Sc Student of Geography & Rural Planning
Ferdowsi University of Mashhad

Rural entrepreneurship as a basic strategy for rural development can help significantly to rural development and contribute to reduce unemployment and increase employment and thereby increase revenue, diversify the economy, the efficient use of resources and improve the life of villagers. The basic point in the realization of entrepreneurial activity in the society is providing situation for entrepreneurship in rural society. This study was performed to investigate the entrepreneurial capacity in the field of rural development. The research method is Descriptive -analytic one and the documents and field studies were used to collect data, for this purpose, a questionnaire was designed so that its validity was 0.63. The study population were the rural families of Bezeqi (N =791) from Gol Bahar district of the Chenaran city. By Using Cochran formula and random sampling, 155 households from 10 villages were chosen by random sampling as the case study. The study has been statistically analyzed in 5 dimensions of economical, environmental, personal capacity, infrastructure, socio-cultural and institutional. Also the multi-criteria decision-making methods VIKOR by entropy weighted method have been used. The results show that among the 10 villages of Bezeqi, Solugerd village with a maximum capacity of entrepreneurial is in the first rank, and Mohammad Abad Baloch village has the least entrepreneurial capacity. Also, the Sig value of the means comparison test i.e.T for all economical, individual, environmental, socio-cultural, institutional, and infrastructure indicators is equal to 0.000 (less than 0.05). As a result, the economical, individual, environmental, socio-cultural, institutional and infrastructural dimensions have had a high and positive impact on the creation and development of entrepreneurial capacities. Finally, according to the analysis results, applied proposals have been presented.

Keywords: Entrepreneurship, Rural development, Entrepreneurial capacity, VIKOR, Shannon entropy .

**An Analysis on Management - Institutional Capacity of Urban Spaces in
Relation with Participation of Citizens in the Management of Cities
(Case study: District No. 8 of Tabriz)**

Dr. Manijeh Lalehpour

Assistant Professor of Geography & Urban Planning

University of Maragheh

The realization of citizen's participation in cities administration requires creating capacities in the institutional and organizational dimensions of urban spaces. From this approach, in order to realize participation and along with the formation of structural elements such as city councils, factors that are related to status and communication capacities between urban management organizations and citizens in urban spaces are concerned. Regarding the theoretical idea, and with the aim of identifying the components of institutional capacity-management of urban spaces and its relationship with citizen participation, the present study examined this issue in Tabriz district No. 8. The problems that urban management is faced with in this area that is related to the lack of active citizenship can be the lack of urban management revenue, the weakness in the provision of services to citizens, lack of cooperation of citizens for paying duties to the municipality, irresponsibility of citizens toward the issue of cleaning up neighborhoods,, neglecting the priorities of citizens in implementing urban projects, unfamiliarity with citizenship rights, etc. The research method is a descriptive and correlation study which was conducted using library-documentary and field study (questionnaire and interview). The sample size was estimated to be 384 according to the size of the statistical population. Data reliability was calculated using Cronbach's alpha coefficient of 0.76. Through implementing one-sample T test, the two first hypothesis of the research based on the unfavorable status of participation and the low management-institutional capacity of urban spaces for Citizens' Participation in District No. 8 was approved. The result of the stepwise regression test showed that the component of government's attitude toward participation with the beta coefficient of 0.469 had the most effect among the components of institutional-managerial substrates. Then, the components of the role of mass media, the role of popular organizations and the creation of opportunities for communication with urban management with Beta coefficients of 0.443, 0.408 and 0.370 were in subsequent steps. Also, the result of Pearson correlation test shows that there is a relationship between participation and institutional and managerial components involved in citizen participation in the studied area.

Keywords: Institutions, Management-institutional capacity, Participation, Urban management, District No. 8 of Tabriz.

Evaluating the Performance of Decision Tree Model in Estimating the Suspended Sediments of river (Case study on the Basin of Meimeh River)

Dr. Amirhosein Halabian

Associate Professor of Geography
Payame Nour University, Tehran

Dr. Majid Javari

Assistant Professor of Geography
Payame Nour University, Tehran

Zeinab Akbari

M.Sc of Watershead Management Engineering
& Agricultural Board
Payame Nour University, Ilam

Golbahar Akbari

M.Sc Student of Climatology in Environmental Planning
Payame Nour University, Isfahan

Understanding and determining the amount of carried sediment by river have been considered by experts because of the importance and the role of sediment transfer in water-shed basins subject , among them is rivers organizing that carry out for erosion and sedimentation control or river-bed stabilization and flood eject. The current study aims at determining the efficiency of decision tree model in estimating suspended sediment of Meimeh river. The data used in the study includes sediment ,water , rain fall , and daily discharges related to the statistic periods from 1967-68 to 2009-2010. After data processing 554 records with accessible statistic discharges and their corresponding sediment were chosen and the obtained results were compared using sediment rating curve. To this aim, statistical criteria of R^2 , RMSE, MAT , R and Bias were applied. To investigate, the rain fall effects and daily discharges on precise measuring of sediment by tree model, the data related to the rain fall and daily discharges were added to the model. The results showed that the decision tree model has presented reasonable results for the simulation of the suspended load in the present study station. So that based on criteria RMSE, MAE, r^2 and Bias decision tree with less error than the sediment rating curve deposits is estimated. The results did not change much and sediment discharge rate is most correlated with the corresponding discharge of sediment.

Keywords: Suspended sediment, Data analysis, Decision tree, Sediment rating curve, CART algorithm, Meimeh river.

**Explanation and Analysis of the Inequalities of Health Development Services Using
Multi-criteria Decision-Making Methods (Case study: Golestan Province)**

Dr. Khodarahm Bazzi

Associate Professor of Geography&Urban Planning
Golestan University of Gorgan

Ebrahim Moamari

M.Sc Student of Geography & Urban Planning
Golestan University of Gorgan

The study of health indices and their distribution patterns in different geographic spaces causes the imbalance in health facilities distribution to be better identified and planning for their fair distribution and access of all people to the desired services to be realized as desirable. The present study uses descriptive-analytical method and by using 11 health indicators has analyzed and explained the inequality in health care services and its distribution in the county of Golestan province. In this regard, TOPSIS, SAW and Pearson's coefficient of skewers were used for ranking and Enhanced Shannon used for scoring. For analyzing data, EXCEL statistical software was used and for non-quantifying data, the non-linear and linear methods were used. Also, ARC GIS 9.3 software was used for the space displaying. Data and information was collected by documentary and library method. The findings of the research indicate that distribution of health indicators in Golestan province is polarized and uneven, so that the city of Gorgan is the most favored city of the city and Maravetappe city is the most deprived city in the province. The results of the study reveal the necessity of a justice-centered view in the field of planning and efforts to create the optimal spatial deployment of these services and indicators in the province of Golestan.

Keywords: Ranking, Health services- Health, Topsis, Saw, Golestan province.

**Upheaval of Urban Management by Strengthening the Relationship
Between Culture and Organizational Intelligence in the Municipality
(Case study : Mashhad Municipality)**

Dr. Rostam Saberifar

Associate Professor of Geography & Urban Planning

University of Payame Nour

Municipalities are among the most important institutions that have the most public appearances, and despite the numerous financial and non-financial difficulties, they carry out the most development and executive measures in the city. Nevertheless, in the ranking of the satisfaction of the provided services, they have the highest public complaints. To overcome this problem, several solutions have been considered, and among them, the most emphasis has been on increasing the effectiveness and efficiency of the organization through the use of internal capacities such as intelligence and organizational culture. For this purpose, this study aimed to determine the effect of organizational culture and its role on organizational intelligence for increasing efficiency and effectiveness. This descriptive and analytical study was carried out in Mashhad municipality and 200 individuals were selected simply and randomly among employed persons in this institution. The required data were obtained using the Denison organizational culture questionnaire and Alberhat's organizational intelligence. Data and data collected in this way, using Pearson correlation coefficient and path analysis, were performed using SPSS and Lisrel software. The results of path analysis showed that from the view point of employees, there is a direct and significant relationship between organizational culture with dimensions of organizational intelligence (strategic vision, shared destiny, desire for change, morale, unity, agreement, knowledge use and performance pressure). Conditions can affect the utilization and effectiveness of the organization. Considering the effect of organizational culture on improving the level of organizational intelligence, it is possible to use the efficiency and effectiveness of the municipality of Mashhad and with the least facilities, provide the highest efficiency to the citizens.

Keywords: Organizational culture, Organizational intelligence, Municipality, Mashhad.

**Comparison the Performance of M5 Tree Model with the Artificial Neural Network and Support Vector Machine Models in Derivation of Flow Duration Curve
(Case study: Khazangah Station of Aras River)**

Dr. Ghorban Mahtabi

Assistant Professor of Water Engineering,
Faculty of Agriculture
University of Zanjan

Fatemeh Bayat

Student, Department of Water Engineering,
Faculty of Agriculture
University of Tabriz

Flow duration curve is one of the most important and applicable signals of hydrologic response of a basin. This curve was used for analyzing the frequency of low and flood flows of a river in many hydrologic uses. Also, the flow duration curve (FDC) was used to display the complete domain of river discharge from minimum up to maximum flood. Therefore, accurate derivation of this curves with the least error is necessary. In this study, applicability of M5 Tree Model in derivation of flow duration curve in Khazangah station located on Aras River, East Azerbaijan province was investigated and compared with the results of Artificial Neural Network (ANN) and Support Vector Machine (SVM) models. The results of M5Tree Model showed competition of 80 percent of data for training and the remaining for the testing has the best performance in presenting the flow duration curve with values of $R^2=0.992$, $RMSE=5.47 \text{ m}^3/\text{s}$ and $MAE=4.38 \text{ m}^3/\text{s}$. The results of different structures of Neural Network showed the best model (2 neurons for hidden layer) was obtained with values of $R^2=0.997$, $RMSE=3.91 \text{ m}^3/\text{s}$ and $MAE=3.30 \text{ m}^3/\text{s}$. Also the performance of RBF kernel of Support Vector Machine Showed this model has the best ability in simulation of flow duration curve, so that this model has lowest error values of $RMSE=2.98 \text{ m}^3/\text{s}$, $MAE=2.66 \text{ m}^3/\text{s}$ and highest value of $R^2=0.998$.

Comparison the results between the intelligence models showed that each three models have proper performance in determining the discharge values of flow duration curve. From the practical view, M5Tree Model has more applicability in derivation of flow duration curve because of the simplicity of the proposed equations and calculations.

Keywords: Duration, Discharge flow, Aras River, Error Value, Intelligent models.

Analysis of the Relationship Between the Villagers' Expectations Level and Rural Development (Case study : Rural Areas of Sistan)

Dr. Mahmoud Reza Mirlotfi

Associate Professor of Geography & Rural Planning
University of Zabol

Dr. Seyed Amirmohamad Alavizadeh

Assistant Professor of Geography & Rural Planning
Payame Noor University, Tehran

Meysam Bandani

Department of Geography & Rural Planning
University of Zabol

Azam SheybaniShad

M.Sc of Geography & Rural Planning
University of Zabol

Masumeh Kamanbaz

M.Sc of Geography & Rural Planning
University of Zabol

The objective of rural development is to improve the villagers positions in all economical, social and environmental aspects. So that, lower expectations and living conditions (the situations which exists in developing regions) creates expectations and aspirations of low and at the same time higher living conditions (developed areas) creates higher expectations and aspirations. Hence, the present study was made with the aim to investigate the relationship between the level of expectations of villagers and rural development in rural areas of Sistan. This study has made by Descriptive- Analytical method based on library sources, field surveys and questionnaires .The volume of sample society were 400 heads of households in 40 villages and obtained randomly by proportional allocation method and the gathered information from the Spearman and ANP tests were analyzed in SPSS software. Results of level of ANP model showed that the loge Bagh and Sefidabeh villages with normal score 0 .0442,0 .0378 have the highest level of expectation and Imamie and Noori village normal with normal score 0.031,0.049 have the lowest level of expectation, respectively. Among the effective indices on level of villagers' expectations from the rural development, environmental and social dimension indices with an average of 3.45 and 3.38 have the highest and lowest data respectively considered. Spearman test results also showed that the level of villagers' expectations from development the villages of Sistan area, there is a statistically significant relationship. So that with increasing level of expectations, the increased rural development conversely, with a low expectation of villagers positions, the rural development decreases. The Kruskal-Wallis test results showed that between level of expectations from of rural development, there are significant differences in Sistan region.

Keywords: Expectations, Rural development, Villagers, Sistan.

Tectonic-Geomorphology Analysis in Dorungar River

Saeidh Azam Mabaqi

M.Sc of Geomorphology

Ferdovski University of Mashhad

Dr. SeyedReza Hoseinzadeh

Associate Professor of Geomorphology

Ferdovski University of Mashhad

Dorungar River Basin is located at Koppet Dagh Mountains in the north of Khorasan Razavi. Basin. Geomorphologic evidences show the continuousness of neo-tectonic activities in the Polio-Quaternary era. The purpose of this study is to evaluate active neo-tectonic area and to compare the results of geomorphic index and geomorphologic evidences such as Modern fault escarpments, lack of foothill, premorse and translocation alluvial fan, drainage basin asymmetry in Dorungar River, rejuvenation terrace and river and its influence on the river drainage network. The study used Landforms' field visit, geomorphic index (Hi, Bs, AF, Smf, S, VF and SL), IAT classifying indices, topography & geology maps, Remote sensing images and Dem to analyze the neo-tectonic activities in the area. Results showed that the data acquired by geomorphic index and analyzed Geomorphologic evidence, proves that neo-tectonic in the area is active; and based on IAT classifying indices, the area is one of the active area neo-tectonically.

Keywords: Neo tectonic, Geomorphic index, GIS, Geomorphologic evidence, Dorungar River Basin.

Exploring the Role of Land Surface Temperature on Distribution of Snow Coverage in Iran by Remote Sensing Data

MohamadSadegh Keikhosravi Kinay

Ph.D Student of Climatology

Faculty of Geographical Sciences & Planning

University of Isfahan

Dr. Seyed Abolfazl Masoudian

Professor of Climatology

Faculty of Geographical Sciences & Planning

University of Isfahan

The aim of this study is to explore the role of land surface temperature on distribution of snow-covered days in Iran. Firstly, the land surface temperature data were obtained from NASA for 2003 to 2014 in the spatial resolution of 1×1 km. MODIS Terra and MODIS Aqua data were also downloaded from 2003 to 2014 in the spatial resolution of 500 * 500. After preparation of the data in MATLAB software, Digital Elevation Model of the country was applied to calculate the annual LST for each of the elevations grouped by 1 meter. The findings of this study revealed that in the extents of the country which annual LST is below 30 ° C the environmental condition is suitable for the accumulation of snow cover. And it was also found that the LST is 30 ° C for the elevations above 1700 m. findings also revealed that there is no snow-covered day for the extents that LST is 37 ° C and the most number of snow-covered days can be seen in the regions that LST is 0 ° C.

Keywords: Land surface temperature, Snow-covered days, MODIS Terra, MODIS Aqua, Iran.

Neotectonics Analysis in the Basin of the North West Slopes of Sahand (East Azerbaijan)

Nasrin Samandar

Ph.D Student, Geomorphic Risks

University of Tabriz

Dr. Shahram Roostaei

Professor of Geomorphology

University of Tabriz

Jila Skandari

M.Sc of Hydrogeomorphology

University of Tabriz

The evaluation of active tectonics in each region is important. Several faults in the Sahand mountain range provide a suitable basis for studying tectonic activities in the basins of this region. Eskochai and Azarshahrchay basins are located on the northwest of Sahand Mountain. The geomorphologic evidence of the basins under discussion suggests the continuation of neo tectonic activities during the Plough Quaternary period. The purpose of this study was to evaluate the relative activity of the tectonics of the area using formometric analysis and comparing the results obtained from geomorphic indicators and geomorphologic evidence. In this research, various geomorphologic indices (AF, BS, T, SL, S, VF), topographic maps and geology maps, Arc GIS software, Arc maps, global mapper have been used for analyzing Neotectonic activities of the region. The results of the study indicate that the values obtained from geomorphic indices and the study of geomorphologic evidence suggest the neotectonic activity with different degrees in the whole range of study, so that tectonic activity in both studied basins is high. And basins are classified according to the classification of the IAT index in class 2. Numerical quantities obtained from geomorphic indices by geomorphologic evidence such as extreme changes in longitudinal river profiles, vertical wall over the river, main river asymmetry, drainage network asymmetry, length of the waterway on the river side, change in depth and width of the river bed Deep valleys are confirmed. The results of the observed indices and geomorphologic evidence indicate that the river system of the river basin is more influential than the young neo tectonic movements. According to these analyzes, the results indicate that the neo tectonic activity in the region continues, and in total, both basins were detected in terms of active tectonic activity.

Keywords: Neo tectonic, Geomorphic indices, Eskochai basin, Basin Azarshahrchay, Sahand slopes.

**Measurement the Mentality of Residents of the New Districts and Planned
in Relation with the Quality of Life Components
(Case study: Jahed Neighborhood of Mashhad)**

Dr. Fatemeh MohamadNiayeQaraee

Assistant Professor of Urbanism

Islamic Azad University of Mashhad

Marzieh Teimouri

M.Sc of Urban Planning

Imam Reza International University of Mashhad

Mohammad Ali Khanizadeh

M.Sc of Urban Planning

Imam Reza International University of Mashhad

Paying attention only to the growth of cities and to avoid developing developmental approaches toward cities has led to the emergence of macrocosmic phenomena, which has a direct impact on the quality of life in cities. A remarkable point in dealing with quality of life is to consider it in all dimensions (subjective and objective), so that it can be comprehensively evaluated. Therefore, the present article aims to analyze and evaluate the quality of life (two objective and subjective dimensions) in urban planning areas seeking to improve the quality of life in these neighborhoods by increasing the environmental components. The study area is Jahed Shahr in 12th district of Mashhad. The criteria and indicators for the objective and subjective quality of life in four levels have been developed hierarchically. The method used is objective and applied in terms of descriptive-analytical method. Data were collected using library and field studies. Using the Cochran formula, 372 individuals were selected as sample size and questionnaires distributed as simply randomized. Data analysis was done using SPSS and AMOS software. Results: The quality of life in Jahed Shahr Neighborhood was assessed moderate to weak level (only in the good transportation sector) and the objective quality of life is moderately upward (only in the components of social security and leisure).

Keywords: Quality of life (objective and subjective), Planned communities, Neighborhoods Jahedshahr.

**Youth Migration, Indeed, what's the Problem? Local Communities and Prospects for
Shaping Rural Settlements (Case study: Khoy County, west Azerbaijan Province)**

Dr. Reza KhosrobeigiBozchelouie

Assistant Professor of Geography & Rural Planning
University of Hakim Sabzevari

Dr. Seyed Hadi Tayyebnia

Assistant Professor of Geography & Rural Planning
University of Sistan & Baluchestan

Why migration of rural youth to cities - in spite of the significant progress that has been made in the past two decades in the country- continues? In the study records, many aspects of immigration have been mentioned, two aspects of which are new and can be considered in the current context: forecasting and prescribing service requirements for the village's future based on simple and past stereotypical patterns of development and disregarding the role of citizens' participation in the process of rural development. In this article, the needs of young people of Khoy city for future of rural areas according to the new models of servicing and development, multiple experiences, different residential settings in three phases of livelihood, residence and lifestyle, classified areas of the city, suburbs, Rural centers and remote villages have been identified. The goal is to provide a methodological solution for the identification of rural youth mentality and their settlement preferences, and thereby preventing the increasing trend of immigration. The method of this study is qualitative and its purpose is applied. 87 structured interviews with rural youth aged 18-39 were targeted. The results show that the personal future of Khoy young people is in line with the multidimensional and diverse demands: the diversity of employment, residence and lifestyle, including work in factories and offices with fixed salary, having second job and mostly service works, and frequent traffic to the city center, proximity and neighborhoods, large houses and gardens, self-livelihoods, and social engagement and friendship. At the same time, the countless and far more complex demands of young people in distant rural areas were far worse than others.

Keywords: Youth, Migration, Future expectations, New patterns, Local communities, Rural, Khoy County.