An Application of Analytical Network Process (ANP) in Tourism Planning
Case Study: Western Mountain Region of Guilan Province

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Extended Abstract

Introduction
Access to tourism destinations and ranking of them are the main aspects of tourism development planning. Although the Analysis Network Process (ANP) is based on Analysis Hierarchy Process (AHP) but network structure or feedback is dominated in decision making of the options. This article tries to respond to following questions in order to prove the main goal of the research as selection of the best tourism target in west of Guilan mountainous region: What are the tourism destinations in west of Guilan mountainous area? What indices and criteria are considered for investigation and evaluation of these destinations? Rural development strategy (RSD) is investigated in this article. Thus, it is the city development strategy (CDS) with only the difference in case of study. The main goals of RDS are promotion of the villagers lifestyle, environment quality, offering appropriate services and energy resources efficiency, promotion of rural location form and foundations, providing financial resources for rural development and promotion of management plans in the rural areas. Although RDS components and elements change according to different characteristics and conditions of the villages, but the main elements are including

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designing and evaluation involving organizational formations for proceed of village situation (current situation), plans and strategies involving setting long term plans and strategies, implementing and supervision involving implementation of the plan, institutionalization of RDS, and control of implementation by appropriate approaches. The expected results of application of this approach are: management of mental and institutional changes, investment plans (social, cultural and principles foundation), institutionalization of supervision mechanisms.

Methodology
In order to collect the data and investigate the statistical population half of the population was selected as sample (200 from 400 persons) for interview. The population includes tourism sector managers, experts and counselors, mountaineers and natives. Simple sampling method is used and the required data were collected by investigation of the documents, resources and questionnaire and interview. Cronbach test was used for measuring validity and reliability of the questionnaire. The reliability of ANP model was confirmed by ratio of pair wise comparison matrix compatibility. The used compatibility ratio is based on incompatibility and random indices. In order to prioritize the tourism destinations, goals, and determination of the studied indices, two questionnaires were prepared. The counselors, experts, mountaineers and the native residents were asked to respond. The first questionnaire involved prioritization of the tourism destinations and its recognition and development trend. In this questionnaire, five grades were considered by attention to qualitative indices according to Likert scale. The fifth grade is about superior and the other grades are good, fair and very bad, in order. After survey of the questionnaires and compilation of the tourism destinations for prioritization, the second questionnaire was prepared based on ANP of the tourism destinations. It was distributed among statistical population.

Results
At first the problem is defined as hierarchical structure of sub-factors and strategy options. Tourism target is selected in the first level in model ANP. Ecotourism
criteria, semi nomadic lifestyle and foundations situations are in the second level. The third level involves tourism destinations proposed options. The proposed options in the mentioned matrix are following villages: A1: AGH EVLAR, A2: LOMEH DASHT, A3: SARAGHA, A4: SOBATAN A5: HEYRAN A6: RENDANEH A7: DASHT DAMAN. Clusters inner and outer relations with elements are also defined. There is an inner relationship between all clusters and criteria, except target cluster. The target cluster has outer relation with all clusters and there is an external relationship among ecotourism criteria and clusters, historical monuments and options cluster. There is an interactional relationship between option cluster and criterion cluster. Options of AGHE VLAR, LOMEH DASHT, SARAGHA, and DASHT DAMAN as tourism destinations of west Guilan mountainous zone have inner relations. All pair wise comparisons and matrix of all criteria and clusters are defined by 1-9 using prioritization scale or importance of judgments. Rate should be less than 0.1. This level of error is acceptable by considering number of judgments and result error of interviews. According to judgments, Software Super Decision proposes 0.8123 as the best value for incompatible judgments. According to final importance and normalized results (WANP), the three criteria of semi nomadic lifestyle (8C=0.198), access to lake view (6C=0.483), and using healthy drinking water (16C=0.109) are the most important with significant effect on prioritization. The main tourism destinations of west Guilan mountainous zones are EVLAR %38.23, SARAGHA %34.23 and SOBATAN %8.16 as the first, second and third priorities, respectively. The managers, tourists and native residents were interviewed about the results. The results were confirmed by %98.20 indicating reliability of the ANP model. The Cronbach alpha was used for validity of the model by %98.52 indicating validity of the model. It can be inferred that ANP model is highly accurate and it can be based on priority of tourism destinations. It should be noted that the results of this process is conformed to the results of intuitional insight.

**Conclusion and Implications**

The results show that RDS is not dominated in tourism planning since the expected results from application of this approach are not obvious in one of the management,
institutional, and investment plans. Thus, this condition indicates lack of identification and introduction of these intact areas and lack of allocation of financial resources for development, lack of clear polices plans and management of tourism industry in this region.

**Keywords**: AHP, ANP, Super decisions software, Tourism planning, West of Guilan.

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