

## Site Selection of Tourism Village in Mahabad Dam Shore Using AHP, GIS and SWOT Techniques

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### Extended Abstract

#### 1. INTRODUCTION

Nowadays tourism activities are one of the most important stimuli for economic, social and cultural development of communities. Human hand-made attractions like dams can be a great opportunity for achieving such purposes. Suitable site selections to provide the services needed by the tourists, is one of the most important steps for tourism planning in the form of tourism village based on the identification and analysis of the various criteria and indicators. Today it is attempted to select sites in more realistic or scientific way by using GIS or other integrated methods. So a planner should seek integrated models and methods of geographic information systems in tourism issues. Tourism villages are parts of a province which enjoy natural, cultural and historical attractions for attracting tourists and require special services, establishments and informing.

Mahabad dam Lake as one of the beautiful tourist attractions in Western Azerbaijan province, attracts many tourists each year especially during the holidays, while lacking necessary amenities and facilities for the development of tourism commensurate with the needs of tourists. This dam despite of enjoying enough potential for growth and development of tourism, has not been studied yet by researchers. In the present research, it is attempted to select the best site in mahabad dam Lake by studying, analyzing and comparing of present criteria in terms of site selection. So the main questions of the present study are as follows:

- What are the best criteria in site selection of tourism villages?
- What are the best proposal places for selecting the tourism village in Mahabad dam?

- What are the weaknesses, strengths, opportunities and threats of proposal places in order to select the best place for building tourism village in Mahabad dam?

- What kind of strategies can be offered for building and developing of tourism village in Mahabad dam?

#### 2. THEORETICAL FRAMEWORK

Ecotourism is a new concept that sparked in the beginning by the idea of rebuilding the real nature. Ecotourism is a responsible form of tourism which conserve natural environment and strengthen local community's welfare. According to the definition of world and Iran tourism organizations, tourism village are the places which enjoy natural, cultural and historical attractions. However, such places need to build services, establishments and informing for tourism development.

#### 3. METHODOLOGY

In the present study, firstly, effective criteria and sub criteria determined for selecting a suitable site which offering services to tourists, and due to differences in the effectiveness of the indicators, using the technique (AHP) paired comparison of these components was carried out by 25 tourism experts, and the final weight of each item is calculated. Then according to the number of criteria and the final weight of sub criteria, layers has been created in the Geographic Information system (GIS) Environment, in order to select the best site of tourism village on the edge of the Lake dam. Then by using SWOT technique, Site A was identified as the best site of tourism village.

Finally appropriate strategies (SO, ST, WO, WT) based on SWOT methodology were offered for tourism development in the study area.

#### 4. DISCUSSION

In this study, all of the information layers are combined with each other after determining their values and then the area was classified in 5 categories

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in terms of capability of building tourism village. Since the land dedicated to create tourist village should be appropriate in terms of area and shape, the very small and also far away locations from the dam removed and finally 3 places selected and introduced as the suggested places for building tourism village. The suggested locations analyzed by SWOT model in order to compare them with objective reality, and they analyzed separately to determine the best and suitable sites. Finally, the total points of each site summed to determine the best site for building tourism village. The results of scores in each site indicates that site A is the best site for building tourism village. Observation and field studies show that site A is the best site for building tourism village because it enjoys a proper vision of the dam as well as having the proper slope and also being away from the agricultural fields and the gardens. Finally site A with total points of 52 introduced as the best site for building tourism village.

#### References (in Persian)

1. Arslan, O., & Deha, I. (2008). SWOT analysis for safer carriage of bulk liquid chemicals in tankers. *Journal of Hazardous Materials*, 154(1), 901–913.
2. Biranvand, A. (2008). *Analysis of ecotourism attractions in Khorramabad County* (Unpublished Master's thesis). University of Isfahan, Isfahan, Iran. [In Persian]
3. Boo, E. (1990). *Ecotourism: the potentials and pitfalls: country case studies*. Washington, D. C.(USA): World Wildlife Fund Press,
4. Dey, P., K., & Ramcharan, E. K. (2008). Analytic hierarchy process helps select site for limestone quarry expansion in Barbados. *Journal of Environmental management*, 88(4), 1384-1395.
5. Dwyer, L., Edwards, D., Mistilish, N., Romanc, C., & Scott, N. (2009). Destination and entries management for a tourism future. *Tourism management*, 30(2), 63-74.
6. Faraji Sabokbar, H. (2007). Site selection of commercial services units using AHP (case study: Torghabeh district in Mashhad township). *Journal of Geographical Researches*, 37(51), 125-138. [In Persian]
7. Forozandeh Shahraki, G., Kahrom, A., & Leghayi, H. (2011). Site selection and designing of tourism village in love valley. *Journal of Science and Technology of Environment*, 13(50), 83-99. [In Persian]
8. Gthinji, M. W. (2006). *An evaluation of the use of eco- labeling within the eco-tourism sector*. Norwich (UK): University of East Anglia.
9. Guan, H., & Wu, L. L. Y. (2011). A GIS-based approach for information management in ecotourism region. *Procedia Engineering*, 15(1), 1988-1992.
10. Gumus, F., Eskin, I., Veznikli, A. N., & Gumus, M. (2007). Availability of rural tourism for Gallipoli villages: the potentials and attitudes. *International Tourism Biennial Conference*, Istanbul, Turkey. Retrieved November 20, 2013, from <http://akademik.comu.edu.tr/>
11. Hashemi, M. S. (2009). *Designing of Nature and View shed of Tourism Village, Case Study: Ghamsar* (Unpublished Master's thesis). Tehran University, Tehran, Iran. [In Persian]
12. Higgins, F. (2006). More than an industry: The forgotten power of tourism as a social force. *Tourism Management*, 27(6), 1192–1208.
13. Khorshid Doust, M. A., & Adeli, Z. (2009). Application of AHP for finding best site of landfill (case study: Bonab City). *Journal of Environmental Studies*, 35(50), 27-32. [In Persian]
14. Liang, L., K., Chih Huang, W., & Yuan Teng, J. (2009). Locating the competitive relation of global Logistics Hub using quantitative SWOT analytical method. *Qual Quant*, 43(1), 87–107.

#### 5– CONCLUSION

In this study, the best sites identified for building tourism village by overlaying 12 layers in GIS environment and finally 3 sites were proposed. To select the best site among 3 sites, SWOT analysis were used. Finally by using SWOT technique the best site (site A) with total score of 52 was determined to create the tourism village. The site A is located in the southern heights overlooking the dam, and enjoys the proper vision of the dam as well as having the proper slope and also being away from the agricultural fields and the gardens. Finally appropriate strategies (SO, ST, WO, WT) were offered for developing of tourism village in the study area.

**Key words:** Site Selection, Mahabad Dam, Tourism Village, GIS, SWOT.

15. Mahalati, S. (2001). *An introduction on tourism*. Tehran: Shahid Beheshti University Publications.
16. Makhdom, M. (2000). *Basics of land use*. Tehran: Tehran University Publications. [In Persian]
17. Makhfi, G., Rounyasi, N., Sobhaniye Ardakani, S., & Yalpaniyan, A. (2012). Site selection of tourism capable areas in Hamadan County. *Journal of Geography and Environmental Studies*, 1(2), 79-94. [In Persian]
18. McDonald, M. H. B. (1993). *Marketing plans*. Oxford: Butterworth-Heinemann. onizle.php?cvno=A-1511.
19. Ozkan, H., Akbulak, C., Kelkit, A., Tosunoğlu, M., & Ismet, U. (2009). Ecotourism Potential and Management of Kavak Delta (Northwest Turkey). *Journal of Coastal Research*, 25(3), 781-787.
20. Rezvani, A. A. (2006). *Geography and tourism industry*. Tehran: Payame Nour Publication. [In Persian]
21. Rezvani, M. R., Arvaji, H., Alizadeh, M., & Najafi, M. S. (2013). Site selection of ski slope from tourist's perspective, case study: northern part of Tehran province. *Journal of Regional Planning*, 3(10), 27-44. [In Persian]
22. Rostami, SH., & Abkar, F. (2012). Site selection of tourism land uses using geographic, information, system (case study: Shadi Park in Kish Island). *Journal of Geography and Urban Land Use*, 2(5), 35-48. [In Persian]
23. Sabbaghi Kermani, M., & Amirian, S. (2000). Study of tourism economic effects in Iran using input-output analysis. *Journal of Trade Study*, 4(16), 57-83. [In Persian]
24. Safari, H. (2010). *Feasibility of Building Forestry Park in Tang Chaho for Developing Ecotourism* (Unpublished Master's thesis). University of Isfahan, Isfahan, Iran. [In Persian]
25. Sarvar, R. (2004). Application of AHP in geographical site selection (Case study: Site selection for developing of city future in Miandoab). *Journal of Geographical Researches*, 36(49), 19-38. [In Persian]
26. Sheybani, et al. (1998). *Complex of Touristic and Cultural of Mahabad Dam*. (Unpublished Master's thesis). University of Shahid Beheshti, Teheran, Iran. [In Persian]
27. Taghvayi, M. (2011). *Feasibility of building beach tourism villages, case study: Caftar Lake Beach*. (Unpublished Master's thesis). University of Isfahan, Isfahan, Iran. [In Persian]
28. Tavalayi, S. (2007). *A Review on tourism industry*. Tehran: Tarbiat Moallem University Publications. [In Persian]
29. Thampi, S. P. (2005). Ecotourism in Kerala, India: Lessons from the eco-development project in Periyar Tiger Reserve. *International Ecotourism Monthly*, 13(6), 10-26.
30. Tourism Region's Organiization. (2002). *Tourism villages network project in Iran*. Retrieved Nov 6, 2013, from <http://www.tao.ir/village.htm>. [In Persian]
31. Tribe, J. (2009). *Philosophical issues in tourism*. Bristol (UK): Channel View Publications.
32. Weaver, D. (2001). *The encyclopedia of ecotourism*. Wallingford: CABI Publishing.
33. Yuksel, I., & Dagdeviren, M. (2007). Using the analytic network process (ANP) in a SWOT analysis – A case study for a textile firm. *Information Sciences*, 177(16), 3364–3382.
34. Zebardast, E. (2001). Application of AHP in urban and regional planning. *Journal of Fine Arts*, (10), 13-21. [In Persian]

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