Planning of Rural Ecomuseums in Forest Rurals in Mazandaran Province, Iran

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Abstract

Rural ecomuseum is a natural and dynamic site, representing the unique and precious identity of a rural area. Ecomuseums introduce, manage, and preserve the cultural and natural heritage of the local communities. Therefore, in this paper zoning is carried out by multi-criteria evaluation method for developing rural ecomuseums in Mazandaran province rural areas. First of all, based on both local and foreign experiences, influential criteria in the zoning process were identified. In the next step, the criteria were prioritized with the help of Delphi method and AHP method. Then, given the criteria of paramount importance and the indicators of their constraining sub-criteria, potential countryside area for developing rural ecomuseums were determined by eliminating the regions with constraining criteria. Last of all, after analyzing the potential countryside areas, they were prioritized for creating rural ecomuseums. In the present study, 6 criterion groups, 20 main criteria, and 77 sub-criteria were used in the zoning process, the most important criteria being tourist, environmental, anthropological, aesthetic, architectural, and economic criteria. The findings show that the sites of priority for creating ecomuseums are Barase, Garsmasar, Lavij, Ab-e-Ask, Lajim, Kojoor, Kandelous, Ab-e-Garm, Veresk, Javaher-Deh, Asiab-Sar, Yoosh, Oskoo-Mahalle and Imamzadeh Abdullah, Hendoo-Kola, Farah-Abad, Kord-Kola, and Gol-Mahalleh.

Keywords: rural ecomuseum, planning, criterion, sub-criterion, indicator, Delphi, AHP methods

1. Introduction

Ecomuseum is considered as a new and specialized field of study in ecotourism and is believed to lead to sustainable development in tourist industry, while preserving natural, cultural, and spiritual heritage and the rural and tribal contexts. Development of ecomuseums was first introduced in countries with developed tourist industry, in order to create a variety of tourism activities and provide job opportunities for local communities. Remarkable achievements were made in the field with accurate and coherent planning. Our country, having various rich natural resources also, has great opportunity for establishing and developing ecomuseums, which have a considerable influence in preserving natural and cultural heritage for the next generations while creating job opportunities for local residents. There exist various definitions for ecomuseum and different interpretations are made about it. Ecomuseum is known as a place portraying the past rural life of a certain geographical area by old instruments and some customs and rituals. The concept does not have a single definition and is formed based on cultural-environmental facilities, features, and requirements. In general, ecomuseum is an organization appreciating, maintaining, and developing natural, historical, cultural, and industrial heritage. Ecomuseum is a specific type of museum which is formed based on a community agreement. It is a dynamic manner in which communities preserve, interpret, and manage their heritage for a sustainable development. Indeed, ecomuseum is a natural and dynamic site, representing the unique and precious identity of a rural area whereby local communities introduce, manage, interpret, and preserve the cultural or natural heritage in order to achieve sustainable development (Reale, 2003). The four elements that must be considered in the definition of ecomuseum include: 1) the dynamism of the site (local communities must exist in the area); 2) architecture

consistent with nature; 3) considerable and unique natural and cultural features and attractions; 4) preservation value (Reale, 2004). Museum and ecomuseum are different as far as physical form, collection philosophy, and presence of people is concerned. Ecomuseum has a larger domain than museum and does not suffice to presenting the things that belong to the past as a museum does. It rather relates to the life of local people, their culture, and anything relevant to them and is aimed at changing and improving the life of the locals by encouraging their cooperation. The location of an ecomuseum is the realm of society and is determined by geographical factors and the target audience and is not confined to a certain building (Rivard & Corsane, 2006, Boylan, 2006; Davis, 1999; 1988). The three crucial elements in forming a museum are location, objects, and people. In traditional museums: location is the museum building; objects are the documents and collections; people are the visitors and experts. Whereas in an ecomuseum, location is the life domain of people; objects include natural and cultural documents and the existing industries in that domain; and people are those involved in these activities and the local residents (Rivard, 1984). According to the characteristics mentioned for ecomuseums, we should consider Mazandaran rural ecomuseum project as the first project with an extensive approach carried out through the country.

2. Methodology

Mazandaran province, with a surface of 23756 square kilometers and 2602008 people population, is bounded in the north by Caspian Sea, from west by Gilan province, from south by Semnan and Tehran provinces, and from east by Golestan province. There exist 15 towns, 46 cities, 43 districts, and 110 villages within Mazandaran province, with 43 percent of the area located in the coastal border of Caspian Sea. Mazandaran is the only province linked to the capital with three paths of Haraz, Kandovan, and Savadkooh.The process of zone planning and zoning a land use is the first step in implementing land development planning management approach (Colin et al, 2005). In this phase, the appropriate areas for development in a land use are determined based on their characteristics and requirements. Multi-criterion location evaluation can be used to implement this process. According to this method, the appropriate areas for development of a land use are identified by exploring the effective criteria for the zoning process of a land use and analyzing them (Wong & Fung, 2007; Sepasi, 2007). Since creating an ecomuseum requires devotion of a natural area or domain, the aforementioned method is utilized for zoning rural ecomuseums in Mazandaran province. In the first step, the effective criteria in rural ecomuseum zoning process were identified based on the local and foreign experiences. Next, in order to prioritize and estimate the weights of the main criteria and the criterion group gathered for zoning rural ecomuseums, Delphi method (Hatzichristos & Giaoutzi, 2006) and hierarchical analysis (Saaty, 1980; Ghodsipour, 2005) were used respectively. To carry out this job, Expert Choice 11 software was made use of. Regarding the objectives of creating an ecomuseum in order to carry out its functions, zoning process must be implemented in a way that the selected areas are able to represent these functions actually and potentially. In the next step, having identified the important criteria and taking into account their constraining sub-criteria, and also determining the influence weight of the indicators of each criterion and their constraining sub-criteria, potentially appropriate places for creating ecomuseums were identified by eliminating areas with constraining indicators. Finally, the potential countryside areas were prioritized based on the sum of the indicator scores.

3. Results

3.1 Selecting the Criteria and Indicators

Zoning a rural ecomuseum as a land use with historical, cultural, and tourism functions, requires considering the effective criteria in forming this set in practice. Thus, 6 major criterion groups, namely, environmental, anthropological, economic, aesthetic, architectural, and tourist criterion groups and their sub-criteria were taken into account. The criteria and sub-criteria of each indicator group is presented in Table 1. According to this table, 20 major criteria, and 77 sub-criteria were used in the zoning process. The managerial status of the main criteria is also presented in the table form of capabilities and constraints. Based on the importance of the criteria and their score in the method of prioritizing criterion groups, the indicators of tourism criterion group are presented as an example in Table 2.

Table 1. Main criteria, sub-criteria, and their managerial status

Criteria group	Main criteria	Sub-criteria	Managerial status	
			capability	constraint
Environmental	climate	temperature, rain, wind, moisture	✓	✓
	land form	height, slope, direction	✓	✓
	water resources	access, variation, quality, quantity	✓	✓
	flora	flora type, density, crown flora	✓	✓
	critical habitat	preserved environments	✓	
	environmental hazards	active faults, liquefaction, deep water, erosion		✓
Anthropological	cultural characteristics	food and clothes provision, performing costumes and rituals, conducting mourning, dialect, local games, handicrafts, life instruments, tribes, religion	✓	✓
	demographic characteristics	population size, population transformation, gender mix of the population, literacy, healthcare, immigration, income, job type, unemployment	✓	✓
Economic	access	access to the main road, level 1, level 2, forest road, dirt road, bridle path	✓	✓
	land uses	The situation from the neighboring land use	✓	✓
	fundamental arrangements	Power and energy transmission lines, network lines	✓	✓
	livelihood activities	agricultural activity, animal husbandry, fishing, other activities	✓	✓
Aesthetic	landscape	landscape variety, sight depth, sight angle	✓	✓
	land form variety	microtopography, slope, height, and direction changes	✓	✓
	aesthetic value	natural and artificial attractions, flora	✓	
Architectural	rural structure	rural context, rural elements' interaction, alley forms, public service	✓	✓
	architectural typology	materials, environmental adaptation, building architecture	✓	✓
Tourist	tourist attractions and sights	natural attractions, human attractions	✓	
	access to tourist paths and places	nearness to the target tourism villages, access to the attractions and paths	✓	✓
	tourism infrastructures	access conditions, accommodation, services	✓	✓

Table 2. Indicators of tourism sub-criteria and their scores

sub-criterion	indicator	score
natural tourist attractions	There is one natural attraction in the village.	1
	There are 2 to 3 natural attractions in the village.	2
	There are 3 to 5 natural attractions in the village.	3
	There are 5 to 10 natural attractions in the village.	4
	There are more than 10 natural attractions in the village.	5
human tourist attractions	There is one human attraction in the village.	1
	There are 2 to 3 human attractions in the village.	2
	There are 3 to 5 human attractions in the village.	3
	There are 5 to 10 human attractions in the village.	4
	There are more than 10 human attractions in the village.	5
nearness to the target tourism villages	The village is more than 30 km far from the target tourism village.	1
	The village is 10 km to 30 km far from the target tourism village.	2
	The village is 3 km to 10 km far from the target tourism village.	3
	The village is less than 3 km far from the target tourism village.	4
	The village is the target tourism village.	5
access to tourist paths	The village is more than 30 km far from the tourism path.	2
	The village is 10 km to 30 km far from the tourism path.	4
	The village is 3 km to 10 km far from the target tourism village.	5
	The village is less than 3 km far from the tourism path.	3
	The village is next to the tourism path.	1

3.2 Prioritizing the Criteria

The criteria were included in a questionnaire which was handed to the experts and professionals in ecology, tourism, economics, anthropology, architecture, and design (18 experts) and the results were analyzed. Priorities of the criterion group in the hierarchical analysis are depicted in Diagram 1. According to this diagram, tourist, environmental, anthropological, aesthetic, architectural, and economic criterion groups are of greatest importance in the zoning process accordingly.
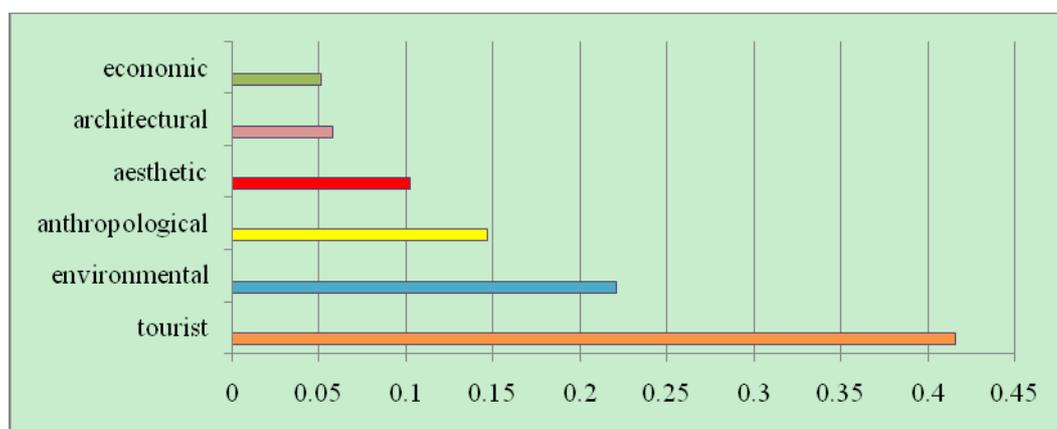

Diagram 1. Priorities of the zoning criteria group

3.3 Selection and Prioritization of the Potential Villages

Based on the results of the hierarchical analysis, it can be concluded that the sub-criteria of each criterion group in the mentioned order has a greater constraining effect in eliminating the inappropriate villages concerning the criteria. In other words, the sub-criteria of the tourism criterion group have an exclusive effect in rejecting or

accepting a village as an ecomuseum. Thus, in the first phase, considering the sub-criteria of the tourism criterion group, potentially appropriate and inappropriate villages were identified and in the next step, environmental, anthropological, aesthetic, architectural, and economic sub-criteria were taken into consideration. In this respect, all the villages of the province were eliminated except those which were potentially appropriate regarding tourism criterion group. Sum of the scores in 6 criteria groups is depicted in Table 3.

Table 3. The scores of criteria group for the potential villages

target village	Environmental	Anthropological	Architectural	Economic	Design	Tourism	sum	Priority
Gol-Mahalle	9.98	2.21	0.88	2.23	0.4	0.62	16.34	17
Veresk	12.6	3.54	1.76	2.23	0.51	0.57	20.67	9
Asiab-Sar	10.4	3.57	1.47	2.65	0.34	0.62	19.45	11
Hendoo-Kola	10.4	3.54	0.88	2.33	0.4	0.68	18.23	14
Farah-Abad	9.98	2.65	1.03	2.33	0.51	0.78	17.28	15
Lajim	12.89	3.54	2.06	2.01	0.8	0.73	22.03	5
Kord-Kola	9.98	2.21	0.88	2.23	0.4	0.68	16.38	16
Ab-e-Garm	11.65	3.54	1.76	2.97	0.74	0.67	21.33	8
Barase	14.4	4.64	2.35	2.65	0.74	0.73	24.54	1
Ab-e-Ask	10.82	5.66	2.35	2.44	0.8	0.62	22.69	4
Kandelous	12.48	3.54	2.64	2.01	0.51	0.73	21.91	7
Kojoor	13.72	3.98	0.88	2.44	0.4	0.57	21.99	6
Javaher-Deh	13.31	3.31	0.58	2.22	0.45	0.52	20.39	10
Yoosh	12.89	1.54	1.47	2.43	0.51	0.52	19.36	12
Lavij	13.73	3.98	1.76	2.33	0.63	0.68	23.11	3
Garsmasar	11.65	4.64	2.64	2.97	0.8	0.57	23.27	2
Oskoo-Mahalle and Imamzadeh Abdullah	12.06	2.65	1.03	2.12	0.46	0.78	19.1	13

4. Conclusion

Mazandaran province has a high potential for various tourist activities due to its historical background, tribal, climate, topographical, ecosystem, livelihood system, cultural and social variations, and nature- and history-based tourism capacities. It is one of the few provinces capable of planning different tourism forms, such as beach tourism, sea tourism, water tourism, mountain tourism, forest tourism, wildlife tourism, rural tourism, agricultural tourism, ecotourism, sports tourism, historical tourism, urban tourism, and cultural tourism. Designing different tourism units such as various types of natural parks, bird parks, butterfly parks, botanical gardens, wildlife parks, water parks, civilization parks to sample areas of historical and rural tourism in this province, is associated with economic output, entrepreneurship, and poverty alleviation regarding significant amount of local and foreign tourists. Ecomuseum can be considered as a new form of tourism experience along with the country's culture and nature which has appropriate grounds in this province. The necessity of creating ecomuseums in Mazandaran province can be viewed from cultural, social, economic, political, educational, and technical-preservation approaches. According to the findings of the current study, the 5 first priorities for designing rural ecomuseums in Mazandaran province include 1) Barase, 2) Garsmasar, 3) Lavij, 4) Ab-e-Ask, and 5) Lajim.

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