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THE EVALUATION OF CAPABILITIES AND EFFECTIVE FACTORS ON INVESTMENT IN THE ECOTOURISM AREAS IN SHIRVAN TOWN BY AHP METHOD

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ABSTRACT

The population growth and immigration of villagers to cities make it inevitable diversifying of the rural economy. The aim of this study is to help to the policy makers, decision makers and practitioners in the field of rural economy and prioritizing of the effective factors on investment in ecotourism areas of Shirvan Town, a sector that has the enough potential for investment and growth of the ecotourism industry that can cause the demand for agricultural production and rural industries on one hand and the seasonable and permanent unemployment and the rate of rural immigration to urban areas is reduced by transferring the agricultural force to the tourism service sector, on the other hand. In this study which is done by survey method, four standards: social, infrastructure, security and natural standard is applied to determine the investment priorities. The population includes rural areas in Shirvan Town and the sample is eight ecotourism areas in this town. It's applied the analytical hierarchy process (AHP) technique which is multi standard evaluation method, in order to analyze the data and it's applied the interview and questionnaire in order to collect the data and the required information. The results show that to investors, four important standards are: the security standard with 0/394 coefficients, the natural standard with 0/394 coefficient, social standard with 0/134 coefficient and infrastructure standard with 0/088 coefficient. Also the results show that among the rural ecotourism areas, Galil, Gelyan, and Zoeram has been identified as the best ecotourism areas in Shirvan town for the investment.

Keywords: *Ecotourism, Investment, Shirvan Town, Capabilities, AHP*

INTRODUCTION

Tourism is one of the innovative economic sources that have had the significant growth in the last decades. The tourism industry is usually known as the largest and the most diversified economic industry in the world. Many countries have applied this potential industry as the main source of income, employment, the private sector growth and their infrastructure development in a wide range. The tourism industry has received much attention around the world, especially in the developing countries that lack the other economic sources. However, the opportunity of applying this source is not the same for all countries (Jabari, 2007).

According to the available information, the tourism industry is the second largest source of income in more than 49 developing countries and it's considered as a strategy to increase the income and fighting with poverty in these countries (Saghaie, 2006).the economic aspect is the main aspect of tourism effectiveness. That's why it has received much attention internationally. According to the studies of the World Tourism Organization, it's been predicted that the number of tourists will reach to one billion people to 2015 year. In this case, they gain over 1/550 billion dollars annually. The employment process in this sector is more than two times faster than the other economic sectors (Saghaie, 2006).

A very important part of tourist activities in the world is based on enjoying the nature that is called Ecotourism today (Farajzade, 2008). In general, the geography situation of our country and the diversity of its different areas are considered as a striking attraction collection, naturally (Mohammadi, 2008).

Ecotourism or ecological tourism is a form of tourism in which tourists travel to visit the natural non-residential areas, plants, birds, fishes, and the other creatures (Wikipedia 2008). The ecotourism is considered as a tourism management in which the ecological systems of areas is protected (Taghvaie,

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2008). Among the various options of tourism, ecological tourism with the environmental protection is an option that is more compatible with the concept of sustainability (Abdollahi, 2007).

Among the different kinds of tourisms, ecotourism or ecological tourism grows faster. While the World Tourism Organization has predicted the tourism growth between 3/4% and 6/7% till 2015 year. The ecotourism with an annual growth of 30% to 40%, have the most growth among the other tourism sectors. The Global Ecotourism Society has predicted that to the late 2015, about 50 percent of all tourists will be owned to the nature tourism (Namazi, 2006).

The expansion of ecotourism or rural tourism not only causes the citizens' mental and physical gentleness, but also leads to self-efficiency and local economy development, further investment in the rural communities, strengthening the cultural tradition and etc (Rezvani and Safaie, 2005).

The tourism has a significant role in home culture and community and also in the tourist's society. The tourist is origin of culture expansion and development, the reduction of extremism feelings, breaking down the ethnocentrism boundaries, increasing the cultural mood, peace loving and the positive cultural changes (Hashimoto, 2002). It's said that tourism introduces the humanity's culture and civilization, strengthens the human's social and cultural relationship, prevents of hostility, thinks over the world peace and makes the human life balance. With increasing the economic development process and to create the employment in different sectors, it'll been created the conditions to provide the possibility of organic growth of involved nations (Belmaky and Barati, 2004).

On the other hand, there are some reports that indicate the ecotourism has caused a great loss on natural sources (Zahedi, 2003). The privation of welfare benefits for the home population, the demand pressure for rare sources such as water... and improper behavior, non sensitivity of some tourists and etc. are the losses of the tourist's presence in rural areas (Rezvani and Safaie, 2005).

Basically, there's a direct and strong relationship between the tourism, peace and security. The communities that have understood well the tourism, have realized this fact well that the tourism process and applying of its lots benefits dependent on security and peace that governs on the society. So it is obvious that the development of tourism especially in home community leads to the politic changes in the line with the security expansion, peace, rising on the liberal and democratic parties, political stability and like that (Smith, 2003).

The Question

The population growth has had many effects on the economic-social structure of the country, especially in rural area, in the last decades. Due to the limited sources, the villages can't meet the people's demand. So that the sources are increasingly depleted and the developing of rural community is facing with serious challenge. Villagers come to cities to meet their needs and cause social and environmental problems for cities. Unfortunately this process has been exacerbated in the result of not to benefit from the presenting potentials, the weak economy in these areas, and not enough attention to growth fields in the villages. One of the approaches that have been recently considered in most countries is the development of tourism in deprived areas with the needed potential for tourism development (Ghaderi, 2007). The presenting studies and reports show that in the last years besides the increasing the internal traveling within the country borders; an intense competition has been occurred between the countries around the world in order to earn additional income through the tourism industry. These countries make great investments to attract tourists and to provide the appropriate services (Lickorish, 1997). Now many governments are expecting to earn income through development of tourism industry and are trying to benefit more from it (Alvani, 2006).

According to the studies done, it's been created 2 or 3 jobs directly by the coming each tourism. Averagely, the cost of creating a new job in the industrial sector is 12 to 25 thousand dollars while the cost of creating job in the tourism sector is very low and most tourism jobs focus on the medium immigration and family activities and are generally needless of direct government aid and investment (Samadyar, 2008). In some countries in the world, such as Bahamas and Tunisia, the tourism is their only source of income. In 2004, nearly 17 million people and in 2005, 20 million people visited the Turkey. There are some countries in the world that their area is smaller than North Khorasan Province and don't have the climate variability like this province. However, their tourism income is great (Alvani, 2006).

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Research Goals

Ecotourism is a branch of tourism industry that can have an important role in revitalization, job and income creation, protection of natural, historical and cultural heritage and finally the integrated and sustainable rural development, due to the natural and cultural capacities in the villages (Rezvani, 2008).

The third goals are followed in this study:

- Examining the investment priority in ecotourism areas of Shirvan Town
- Distinguishing the tourism and ecotourism capabilities to attract the tourist
- Examining the effective factors on investment in ecotourism sector

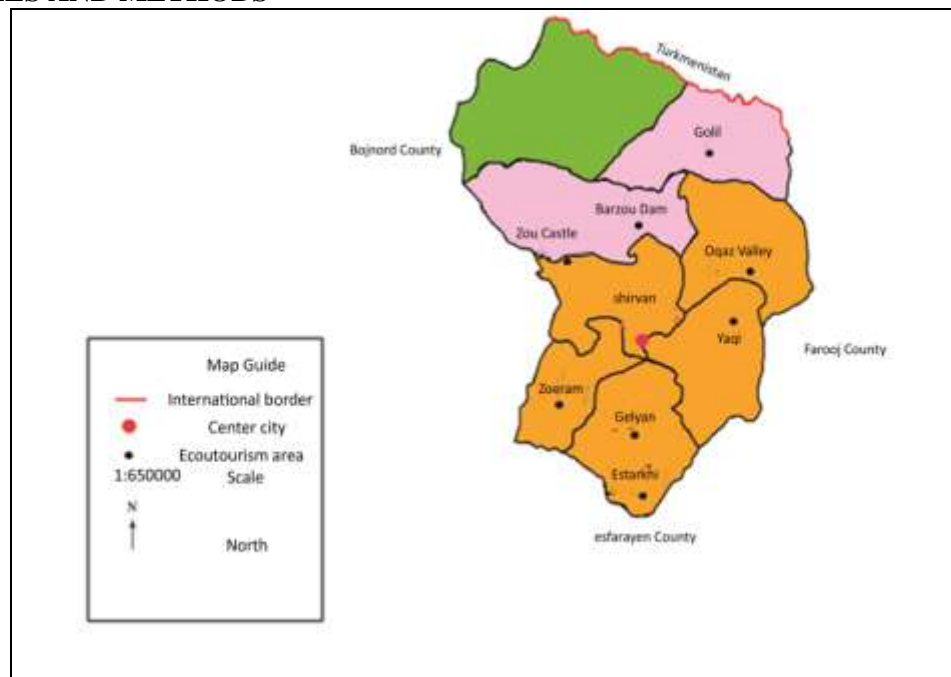
Literature Review

Sabalious Laskourin is the first person who has applied the term of ecotourism. According to his definition, ecotourism is a travelling in order to study, admire, praise, and enjoy from the nature, visiting the plants and animals and getting familiar with the cultural features of local communities in the past and the present (Niyazmand, 2003).

Yavari and Toghyani (2004), has investigated the barriers and problems of tourism industry in Iran and the tourism condition in rural areas. They paid attention to inadequacies of the transportation industry as the tourism infrastructure and believe that its shortcomings are particularly effective in the quality of services (Madhoushi and Naserpour, 2003). Making-decision centers consider three factors that have caused tourism undevelopment, they are: poor marketing, poor infrastructure facilities, services and rural tourism services, and the weak culture of tourist acceptance.

To develop the tourism in small village (Lavasanat), Eftekhari (2006), by applying SWOT model proved that it's very high the vulnerability threshold of rural areas due to tourism and it needs revision and providing the appropriate policies to overcome the restrictions. Motamedi (2006) examined the capabilities of rural tourism of Anzali Town and indicated that despite of high tourism potential in the rural areas of the town, it's been fewer taken into consideration and to benefit from it, its needed planning management from down to up.

MATERIALS AND METHODS



Source: the cultural heritage, handicraft and tourism office of Shirvan 2012

Map 1: Ecotourism area situation of Shirvan County

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Research Method

In this research, the required information is collected by researcher's questionnaire, interview with tourists, officials and experts, based on the planned goals, and then according to the comparative nature of research, "Analytical Hierarchy Process" is applied to analyze the collected information. "Analytical Hierarchy Process" is a flexible and simple method that is applied to make decision in the conditions that contrast making decision standard makes it difficult to choose among the options. Analytical Hierarchy Process begins with the identification and prioritization of making decision elements. The next four stages in Analytical Hierarchy Process including weight (importance coefficient), standards (and sub-standards if there are), options, calculating the final scores and examine the logical compatibility of judgments (Hekmatnia, 2011). As such, it's first identified the standards and sub-standards that have direct relationship with making decision about the investment in ecotourism area and then it's been assessed and compared the each area prepared for investment divided in terms of standards and sub standards and finally the priority of each area is specified in terms of investment in the field of tourism by Expert Choice Software. This research has been identified and compared from the tourists, experts, and officials' view in eight tourism areas of Shirvan Town in North Khorasan Province including: Zu Castle, Yaqi, Oqaz Valley, Gelyan, Barzou Dam, Zoeram, Estarkhi, Galil. Map number 1 shows the position of ecotourism area studied in Shirvan Town.

Investment Priorities

It's applied the AHP technique in order to measure the extent of investment priority in the different ecotourism areas of Shirvan Town. To assess the investment priority, the main focus was on non-economic standards that usually an investor considers about the tourism before investigating in an especial area. According to surveys and interviews conducted, traditionally four variables are considered as standards before investigating. These standards are:

Social Standard

The reaction of local people and government agencies to investment has been examined by four indexes: tourists' interest extent to visit the area, the extent of hospitality and good behavior, and generally the extent of tourists' acceptance by the local people, the extent of cooperation among the local people and government support from the investment in area.

Infrastructure Standard

To get the information from existence of initial infrastructure to invest, the following factors have been studied: access to water, electricity, and the communication availability and quality, distance from the capital city, accommodation and catering facilities.

Security Standard

To examine the security quality of the case area, four indexes have been studied including the stabilization of micro, macro and regional policies and mental, physical and natural security in the investment areas.

Natural Standard

To aware from the natural and ecotourism attractions, the areas have been studied by three aspects: the region climate, landscapes and vegetation (green).

RESULTS AND DISCUSSION

The Results and Findings

To answer to this question that which factor has the more important role to determine the investment priority, it's been got the answers by figure 1. According to variance table, the score of each standard is calculated.

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Table 1: The variance of standards scores

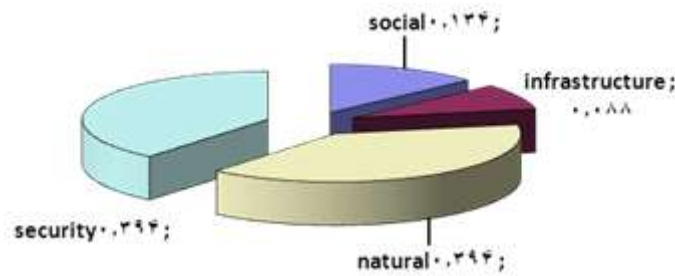
$$\begin{bmatrix} 1 & 5 & 3 & 1 \\ \frac{1}{5} & 1 & 3 & 1 \\ \frac{1}{3} & \frac{1}{3} & 1 & \frac{1}{5} \\ 1 & 1 & 5 & 1 \end{bmatrix}$$


Figure 1: comparison of the standards to determine priorities in ecotourism areas in the form of pair with each other

It's been considered that respondents don't prefer examined factors the same. The security and natural standards have the highest rate with 0/394 and the social standard have the second rate with 0/134. Incompatibility rate is 0/07 and given that this rate is less than 1/0, so the standards compatibility is accepted and valid.

Security Standard

In order to get aware of the security variables affecting on making decision, it was asked the respondents to specify the effectiveness of each variable. Figure 2 indicates the effectiveness of security parameter in the ecotourism areas of Shirvan Town.

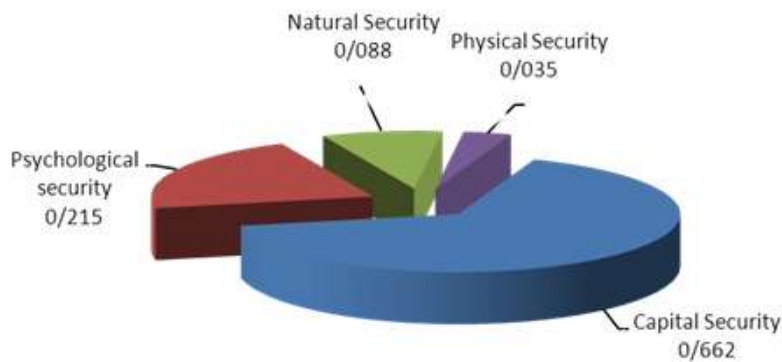


Figure 2: The security standard in ecotourism areas of Shirvan Town

The results indicate that to audiences, the capital security or keeping the capital and returning it (project profit) have dedicated the first priority with 0/662. The mental security in the region with 0/215 has the second priority and finally, the natural and physical security with 0/088 and 0/035 coefficient has dedicated the lowest importance and the last rate.

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As in the case areas, the same condition is ruled over three physical, mental and natural security variables, so we don't examining them and analyze just one parameter (capital security) that had a different state in different areas. According to respondents, capital security (it means the extent of capital returning and project profit) in Galil and Barzou Dam have the first and the second priority with 0/705 and 0/202. Gelyan has the 3rd priority with 0/023 coefficient. Among these area, Zu Valley and Yaqi have the 7th and 8th places. According to findings of the study, the case areas have the lower priority for investment rather to the other areas.

Social Standard

The social infrastructure is a factor that affects on investment. Does a tourist tend to visit the area in the case of investigating or no? Do the local people have a good mood to visit the tourists or no? Does the government present sufficient incentives and supports to invest in the specified area or no? And finally, do people in the area have the ethnic solidarity or conversely there's a tension and differences among them? There are the important questions that make the investor's mind busy before investigating. Figure 3 shows the importance coefficient of each above question to the investor's view.

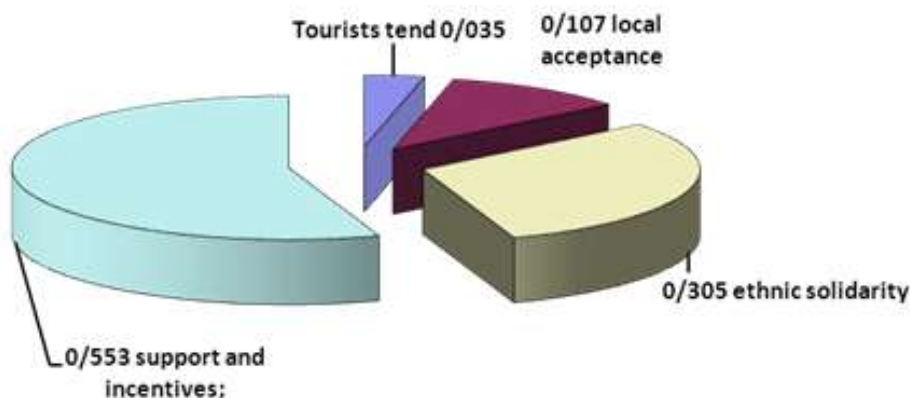


Figure 3: The comparison of social sub standards with each other and to determine priority each of them

The analysis of data show that the most impact belongs to support and incentive to invest with the coefficient of 0/553 and in the second place it belongs to ethnic solidarity with 0/305 coefficient and the other variables are placed in the next steps.

So the ethnic solidarity, support and incentives variables have the important and determining role to attract the investment and investors to invest in these areas. The questions and indexes mentioned above about each area show that:

- The respondents tend the most for Zoeram and Barzou Dam and Galil and Oqaz Valley with 0/264 and 0/214 coefficient and tend the least for Rou Castle with 0/001 coefficient. Tourists' tendency to Zoeram and Barzou Dam is probably because of easy access to vegetation and green area.
- The results of the study show that Galil and Gelyan with the 0/744 and 0/081 coefficient have the most acceptance and people in Yaghi, Estarkhi, and Rou Castle with 0/0006 coefficient have the least tendency to visit the tourists in the areas.
- The results show that Barzou Dam and Galil with 0/478 and 0/413 coefficient have the highest extent of ethnic solidarity.
- The results show that Galil with 0/683 coefficient and Gelyan Village with 0/12 coefficient have the first and the second priority in terms of support and incentive. The areas including Estarkhi, Zoeram, Oqaz Valley, Yaghi, and the good climate area, Rou Valley have almost the same coefficient. Probably Galil has the first place due to the natural attractions. The respondents have stated that the reason that Rou Ali Valley has the least support despite of the natural beauty of the area can be not to be aware of this area and even the distance of it.

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Infrastructure Standard

Among the six studied infrastructure variable in this study, the access to water variable with 0/698 coefficient has the first priority and the most important variable and the communicate road with 0/219 coefficient has the second priority. Access to electricity variable has the next priority.

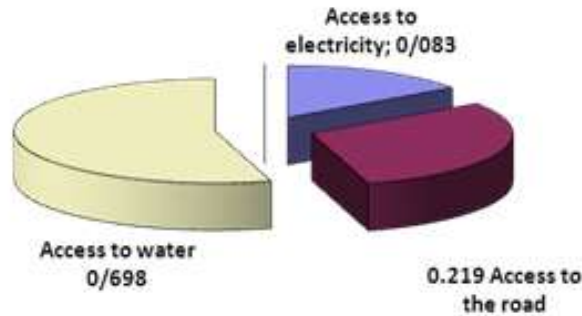


Figure 4: Infrastructure facilities standard of the studied areas

As you see in Figure 4, the results of analysis the data show that:

- The extent of access to water in Zoeram with 0/314 coefficient and in Gelyan and Oqaz Valley with 0/276 coefficient has the most importance extent and in Galil and Barzou Dam has the least importance extent.
- In terms of access to electricity, the areas including Gelyan, Yaqi, Estarkhi, Rou Castle with the 00/197 coefficient have the first priority and Galil and Yaqi with 0/004 coefficient have the next priority.
- In terms of the communication roads in areas including Galil, Yaqi, Estarkhi, and Rou Castle, a part of them isn't asphalt, there isn't any restriction in the other areas in terms of communication roads and most of them are asphalt.

The Natural Standard

The God given gifts, such as climate, landscape, green, and vegetation, are the requirements of ecotourism.

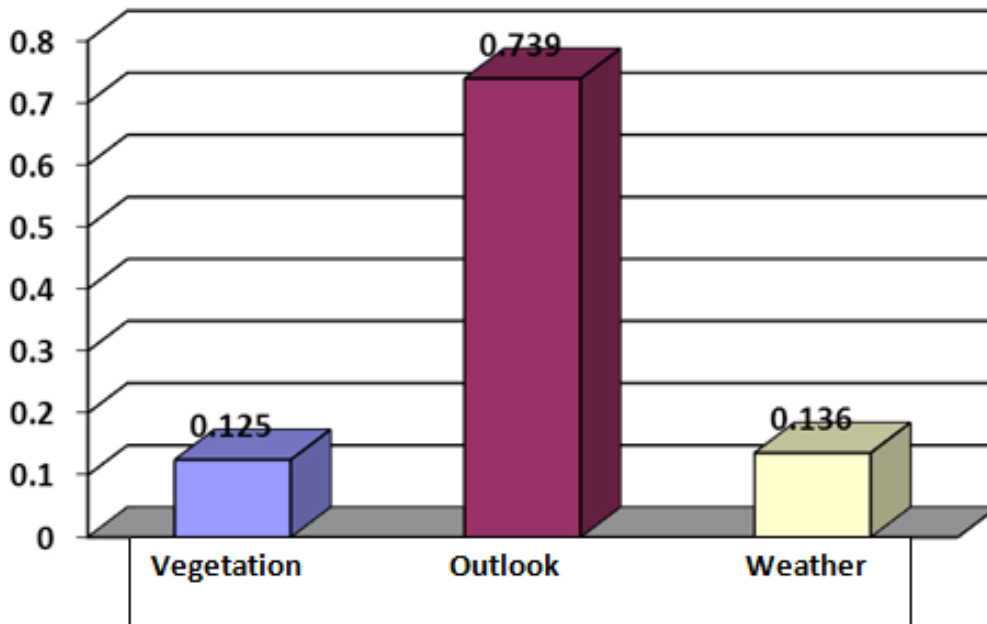


Figure 5: The comparison of the natural sub standards

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As you see in Figure 5, the vegetation, landscape and climate variables are compared in pair. To respondents, the landscape with 0/739 coefficient has the first priority, the climate with 0/136 coefficient has the second priority and vegetation with 0/125 coefficient has the third priority.

The findings obtained from the situation of natural variables show that the areas including Gelyan, Galil and Estarkhi have a better climate rather than the other areas. Compared with the other studied areas in this study, the areas including Yaqi with 0/004 coefficient and Rou Castle with 0/009 coefficient have the less priority and have placed in the lower rates.

- According to the findings, Galil, Gelyan and Zoeram with 0/217 coefficient have the first priority, and Yaqi and Rou Castel in terms of landscape and views have the last priority.

- According to the results, in terms of vegetation, Galil, Gelyan, Zoeram, and Estarkhi have the highest scores (0/241) and the first priority. Ro Castle and Barzou Dam have the lowest vegetation and therefore have placed at the end of the Figure.

The Final Results of Four Standards

In this part, the results of all calculations conducted in different sections of study have been presented in the form of synthesis which represents the investment priority in each ecotourism area. Figure 6 shows the priority of each studied area.

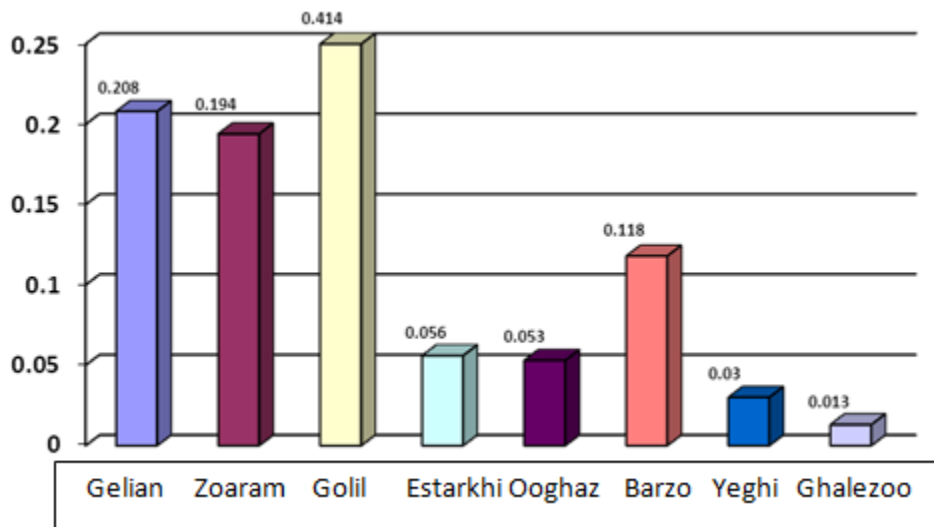


Figure 6: The analysis of sensitivity and result of criteria and options with each other

In Figure 6, the case areas are presented in order to the investment priority. According to obtained results, Galil with 0/414 coefficient has the most priority rather than the other tourism places, and in order, Gelyan with 0/208, Zoeram with 0/194, Barzou Dam with 0/118 and the natural resort Estarkhi with 0/056 coefficients, have placed the second to fifth priority. The tourism areas including Yaqi and Oqaz Valley and Rou Castle have sixth priority.

The results of this study have been assessed by total incompatibility index to determine the extent of validity and reliability. These indexes that indicate the extent of coordination and cohesion of applied indexes in this study show the validity extent of study. It can involve the numbers between zero and one. To experts, if the overall incompatibility index is less than 0/1, it's optimal; otherwise the study doesn't have the required validity. In this study, the index has been calculated 0/07 that it indicates the sufficient validity of the results.

Conclusion

Shirvan Town has the natural attractions, rich cultural heritages and the long time reputation in hospitality, so that many tourism fields have been provided in this town, but unfortunately, its ecotourism treasures is still unknown. It should be taken the effective actions. The results show that four mentioned standards for investment in order to the importance are: security and natural with 0/394 coefficient, social

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with 0/134 coefficient and infrastructure with coefficient 0/088. Also the results show that among the rural ecotourism areas, Galil, Gelyan and Zoeram have the most potential for tourism in Shirvan Town.

So it's needed the following cases to be noted for official's plans and policies in Shirvan Town:

- 1- Promoting the natural and historical attractions of the county through the mass media.
- 2- Creating the favorable conditions for government and private investment and investment in productions such as rural handicraft which is attractive for tourists.
- 3- The development of required tourism infrastructures such as transportation and communication
- 4- Encouraging and guiding the investors toward investigating in potential and prioritized areas.
- 5- To create the appropriate and standard residential centers and to educate the proper customer-friendly behavior.
- 6- To create the convenient transportation network between the urban centers and target villages.

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