Optimal Strategy Formulation for Ecotourism the Sustainable Development Management System by Consolidated Benefits of Techniques SWOT - IEM,QSPM (Case Study :Varjin Protected Area of Tehran Province, Islamic Republic of Iran)

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ABSTRACT

Today, ecotourism is considered as a strategy for preservation of natural ecosystems. Whatever is expected of ecotourism is having economic benefits, training opportunities and incentives for natural resource conservation. Varjin Protected Area is located in Tehran province & Shemiranat county which it has high ecological capabilities and environmental value. Ecotourism potential of the area was used to determine the SWOT model that it is based on identifying strengths and weaknesses (internal factors) and opportunities and threats (external factors) the results of it was presented in tables analysis of internal and external factors. Total weighted scores internal strategic factors was determined equal to 2/428and total weighted scores external strategic factors was determined equal to 2/964. This issue suggests that despite area abundant natural potentials to attract tourists due to lack proper infrastructures and systematic planning. In order to ecotourism development in terms of internal factors, it has weaknesses and also serves about use of opportunities and counter of the threat. After providing strategies and strategies was used to determine status of region of IE matrix. IE matrix results show that Region is in conservatively Status. So should be used strategies WO (weaknesses- opportunities) minimum / maximum. For final analysis and strategies prioritization was used of quantitative strategic planning matrix (QSPM). Strategy SWO (allocate more funds in order to management and conservation of region and also to carry out research projects) was placed in the first category with a score of 12.895. In a general conclusion it can be said that a successful and sustainable ecotourism in Varjin protected areas needs to Management and planning principled to limit environmental impact, creating favorable infrastructure, Participation of local communities and the correct training zone.

INTRODUCTION

Today, the tourism phenomenon in many countries is considered as an important developing tool and the deprivation and that’s why the profitability, a huge investment is done in this field. The tourism industry targets simultaneously different economic, security, political and cultural goals in national space of any country. Ecotourism is critical as one of the major tourist attractions in geographic areas with high potential of the natural environment. Iran is among the countries with the specific and unique attractions that can attract tourists in addition to its historical and cultural backgrounds. As UNESCO acknowledged, our country in terms of eco-tourist attractions and climate variability is among the five first countries in the world. However, from the grace of God, did not explorein an appropriate method.

Statement of the problem:

Development Planners and policymakers refer to tourism industry as a pillar of sustainable development and believe that tourism is considered as a multi-valued subject of some important strategies for achieving sustainable development.Iran countryterms of nature of environmental, Important natural resources, climate geography, and biodiversity them has the best field to attract tourists at national and international level. But announced Statistics show that during past years that only 2.2% of total tourists entered into country have been Ecotourism.
It specifies that ecotourism has a marginal role in the national economy. This shows that this industry needs to do more researches and for accurate planning is important for ecotourism in our country.

**Necessity and importance of the issue:**

Varjin Protected Area is a mountainous region with an area of 26,907 hectares, 15 kilometers northeast of Tehran, located on the southern slopes of the Alborz is the most important central Alborz sheep habitats. Average annual temperature of 5 °C and rainfall of 700 mm has led region have warm Mediterranean climate semi humid temperate and in term of the political divisions, located in Shemiranat county of Tehran Province. The region because of natural enormous capabilities is one of the most attractive areas of Tehran province. Therefore it seems ecotourism development and progression in the area is realized based on determining the potential for ecotourism and coherent planning and reducing internal weaknesses. In this way, we can minimize the damage and ensure the sustainability of ecotourism in the area. For development of ecotourism in protected areas should be noted that area is protected and should be use of Sustainable Development Topic in order to avoid damage to the area and we can keep it for future generations. It needs to identify people the potential and carrying capacity of indigenous of the area.

**Research purposes:**

*The main purposes:*
1. Formulation and Preparation of appropriate strategies for development of ecotourism in Varjin protected areas using SWOT, IEM, QSPM models.
2. Preparation and compilation natural sustainable tourism development in Varjin protected areas within the framework of sustainable development paradigm.

*Sub-Purpose:*
1. Identifying strengths, weaknesses, opportunities and threats in Varjin protected area for Ecotourism Management
2. The development of ecotourism activities in Varjin protected area.
3. Identifying natural tourism potential including natural landscapes, wildlife and plants of Varjin protected area aims to introduce attractions of the area to attract ecotourism.
4. Approaches for ecotourism development in the area.
5. Informing officials and planners toward aspects of stability and instability of tourism, and efforts to develop and strengthen aspects of sustainable and reduction or elimination of instabilities
6. Optimum use of local resources and use of unused resources and has the potential in the field of tourism activities.

**Research hypothesis:**

Hypothesis 1. Varjin protected area have the potential for ecotourism development
Hypothesis 2. Effective methods for compilation strategies and management of ecotourism in the area are consolidated benefit of the techniques of SWOT, IEM and QSPM.
Hypothesis 3. Presented strategies for achieving sustainable ecotourism development of tourism in study area have not similar attractions.
Hypothesis 4. It seems management strategies for natural tourism sustainable development have more important.

**A review of internal references:**

[1] Kahrom Ismail in 1374 a book entitled "ecotourism" was translated and published by EPA in which benefits and problems of tourism industry has been investigated for the environment.
[2] Fattahi Ibrahim was investigated in 1381 in relation to management of ecotourism in Sarein,. His emphasis on solid waste and pollution created by the tourists in the area. He also investigated the various types of solid waste and presented strategies for collecting and reducing their productions.
[3] Derbice Mazdak has done his master's thesis entitled "Environmental management formulation of ecotourism in stereoscopy protected areas " in 1383, in which is discussed planning for development of ecotourism in the area using SWOT model.
[4] Absalan in relation to management of ecotourism at khayer national park has done investigative reports. He identified aspects of ecotourism in the area and also Presented programs to attract tourist, habitation and leisure facilities for them.
[5] Charkhchian et al wrote an article entitled "Introduction to Flora of Alamut area of Qazvin province. They during ten years, collected and identified area species and a result of this investigations discovered a new species called Lathyrus alamutensis.
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[6] Dehcheshmeh and zangiabadi (1386) conducted a study entitled "Feasibility Study of ecotourism capabilities where ecotourism was identified as most stable tool of tourism development factors and they have done planning in order to sustainability of this new industry emerged.

Overview of foreign reference:

Chen [17] was investigated economic value of Fushan botanical garden in Taiwan through method of cost of travel. The garden is one of famous recreational areas in in northeastern Taipei City. The results obtained of this study showed that average profit gains for each of Local inhabitants at a rate of $ 409 America and overall profit of recreation is estimated about 23 million dollars per year.

Sherstha using the method of cost of travel studied visitor demand for nature-based recreation in the river apalachicola florida. Results of this study showed that on average visitor to $ 18/74 They spent for each day of stay that had income is about 56/484 million dollar per year for area.

Fleming and Cook Mchesney Lake have done recreational value using travel cost method, This lake that is located in Australia, Daily on average have 2,000 visitors. In this study is predicted for Mcchesney Lake, recreational value between 2/19 to 2/44 million Australian dollars per year.

Bader has done a study entitled "Analysis of ecological tourism industry in the area kerala where have been used of SWOT model to investigate internal and external strategic factors of area, appropriate strategies Formulation for management of tourism industry in the area with regard to environmental considerations.

Hong, chern, chan-negai have done an analysis of the strengths weaknesses opportunities and threats to Penang national parks (America), where using SWOT performed strategic management planning of the area and compilation of suitable ecotourism strategies.

Liu, lee, T.H have done a study entitled "strategy formulation Ecotourism recreation areas in Taiwan using SWOT where Management strategies for tourism development of recreational areas has been determined.

The study area:

Varjin Protected Area is a mountainous region with an area of 26,907 hectares, 15 kilometers northeast of Tehran, located on the southern slopes of the Alborz and is from the most important central Alborz sheep habitats.

By elevation range of 1700 to 3900 m, average annual temperature of 5 ° C and precipitation of 700 mm, the region has a Mediterranean climate of semi-humid warm temperate.

The area under the Environment Protection Council Act No. 89 On 21.06.1361, declared as Protected Area and in the political divisions, located in Shemiranat Province of Tehran County. Map 1 shows the location of Varjin protected area.

Animal and plant biodiversity features is from the region’s attributes. 577 plant species and 162 animal species have been identified in Varjin among the major types of vegetation Juniper, willow, ash, Tangras Damavand Astragalus, thyme, rhubarb Vervain, borage, Mir Hasan Damavand Kolah, and a variety of millet; can be noted.

Animal species in the region include: Alborz Ram and Sheep, goats and Pazan, leopard, wild boar, hyena, Quebec, Quebec Derry, desert eagle, Alborz ASP, ASP Damavand, red and black spotted Salmon.

The region plays a special role as the connecting way between Central Alborz and Lar national park, for species specially Ram and Sheep. Habitat features and high biodiversity of the area, made it as natural laboratory for researchers. Numerous springs, watery rivers, summery weather, vegetation diversity, exquisite landscapes and proximity to Tehran city, are the basis to attract tourists to the area more than its capacity.

MATERIALS AND METHODS

SWOT model is an inappropriate method to develop management strategies for the sustainable development of ecotourism and in this study, the determination of ecotourism potentials of Varjin Protected Area would be a good way, by using SWOT matrix and exploiting IE and QSPM model and by SWOT technique, can identify
threats and opportunities in the external environment of a system and recognize internal strengths and weaknesses and achieve relevant strategies. To identify the system conditions, the IE matrix and then to prioritize the strategies, QSPM model can be used.

The findings:
In order to assess the development of ecotourism in Varjin protected areas and present management solutions, four-types factors (SWOT) including strengths, weaknesses, opportunities and threats, and rate of each one is necessary to provide strategies. To achieve optimal strategies for the region first, weaknesses (11 items), strength (14 items), opportunities (9 items) and threats (10 items) with collaboration of regional experts and field visits, revealed. On this basis, a prepared questionnaire presented to experts and specialists to be weighted and scored. After normalization of the given weights, weighted score for each factor was calculated and finally, the evaluating matrix of the internal and external factors was made. Tables 1 and 2 show the evaluating matrices of internal and external factors (/ EFEIFE).

Table 1:

<table>
<thead>
<tr>
<th>Strategic factors</th>
<th>Normalized Weight</th>
<th>Rating status quo</th>
<th>Weighted Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengths</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existence of unique mammals such as sheep, Central Alborz Ram.</td>
<td>0.045</td>
<td>4</td>
<td>0.18</td>
</tr>
<tr>
<td>Existence of salient birds such as hawk family, hawks and eagles and migratory birds from other areas, as well</td>
<td>0.04</td>
<td>4</td>
<td>0.16</td>
</tr>
<tr>
<td>The potential biodiversity and species richness</td>
<td>0.045</td>
<td>3</td>
<td>0.135</td>
</tr>
<tr>
<td>Habitat diversity and the species diversity in the region</td>
<td>0.045</td>
<td>3</td>
<td>0.135</td>
</tr>
<tr>
<td>Easy access to the region</td>
<td>0.04</td>
<td>3</td>
<td>0.12</td>
</tr>
<tr>
<td>Suitable climate for tourists</td>
<td>0.04</td>
<td>3</td>
<td>0.12</td>
</tr>
<tr>
<td>Existence of beautiful natural scenery and abundant springs, waterfalls, and rivers</td>
<td>0.045</td>
<td>2</td>
<td>0.09</td>
</tr>
<tr>
<td>Existence of abundant water resources in the region</td>
<td>0.045</td>
<td>2</td>
<td>0.09</td>
</tr>
<tr>
<td>Appropriate zoning and demarcation of the area around the parameters</td>
<td>0.04</td>
<td>2</td>
<td>0.08</td>
</tr>
<tr>
<td>Opportunity to conduct research on the region wildlife</td>
<td>0.04</td>
<td>2</td>
<td>0.08</td>
</tr>
<tr>
<td>Existence of monuments and historical sites in the area</td>
<td>0.045</td>
<td>2</td>
<td>0.08</td>
</tr>
<tr>
<td>Advertising and Information</td>
<td>0.037</td>
<td>2</td>
<td>0.074</td>
</tr>
<tr>
<td>The official declaration of the area as the Varjin Protected Area since 1381 and implementation of laws relating to this matter.</td>
<td>0.045</td>
<td>1</td>
<td>0.045</td>
</tr>
<tr>
<td>Existence of the local population interested in ecotourism</td>
<td>0.03</td>
<td>1</td>
<td>0.03</td>
</tr>
<tr>
<td>Weaknesses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental and ecological sensitivity of the area</td>
<td>0.045</td>
<td>4</td>
<td>0.18</td>
</tr>
<tr>
<td>Lack of clear planning and policy in the region</td>
<td>0.04</td>
<td>4</td>
<td>0.16</td>
</tr>
<tr>
<td>Lack of manpower and equipment in the area</td>
<td>0.045</td>
<td>3</td>
<td>0.135</td>
</tr>
<tr>
<td>Inadequacy of intended funds for the region</td>
<td>0.04</td>
<td>3</td>
<td>0.12</td>
</tr>
<tr>
<td>Lack of relevant facilities and infrastructure for tourist accommodation</td>
<td>0.03</td>
<td>3</td>
<td>0.09</td>
</tr>
<tr>
<td>The lack of strong laws for the Varjin protection zone</td>
<td>0.045</td>
<td>2</td>
<td>0.09</td>
</tr>
<tr>
<td>The low level of training for local people</td>
<td>0.031</td>
<td>2</td>
<td>0.062</td>
</tr>
<tr>
<td>The region has became as a island because of high construction and blocked migration routes</td>
<td>0.045</td>
<td>1</td>
<td>0.045</td>
</tr>
<tr>
<td>Hand-Feeding wildlife in winter due to obstruction of migration routes from summer to winter</td>
<td>0.045</td>
<td>1</td>
<td>0.045</td>
</tr>
<tr>
<td>Existence of enormous mines in the area</td>
<td>0.045</td>
<td>1</td>
<td>0.045</td>
</tr>
<tr>
<td>Limited estimation about identification and classification of biological and non-biological factors of the region.</td>
<td>0.037</td>
<td>1</td>
<td>0.037</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>2</td>
<td>2/428</td>
</tr>
</tbody>
</table>

The results of internal factors evaluation matrix (IFEM):
The strengths and weaknesses of Varjin Protected Area were weighted and valuated after recognizing with experts. After normalizing the given weights, weighted score for each factor was calculated and finally, the internal factors evaluation matrix (IFEM) was formed. This table contains an internal strategic factors - normalized weight - status quo score and weighted points. The total weights of internal strategic factors equal to a weighted sum of the coefficients points is equal to 2/428 and that’s why the IFE final score is less than 2.5, this means that the development of ecotourism in Varjin has some weaknesses as the internal factors.

External factor evaluation matrix (EFEM):2
Opportunities and threats in Varjin Protected Area were identified after weighting and scoring by experts. After normalization of the given weights, weighted score for each factor was calculated and finally, the external factor evaluation matrix (EFEM) was formed. This table contains a column of external strategic factors - weight normalized – and the status quo and weighted points. The sum of external factors weights equals 1 and
multiples total weighted score was equal to 2/964, since this number is greater than 5.2, means that Varjin ecotourism development in the use of the opportunities and deal with threats has acceptable performance.

Table 2: External Factor Evaluation Matrix (EFE).

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Weight</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>The possibility to be posed to the international community through appropriate</td>
<td>0.063</td>
<td>4</td>
</tr>
<tr>
<td>advertising and attract foreign tourists</td>
<td></td>
<td>0.252</td>
</tr>
<tr>
<td>The existence of a large population pole near the region</td>
<td>0.056</td>
<td>4</td>
</tr>
<tr>
<td>Abutting with the Lar national Park and Central Alborz Protected Region and</td>
<td>0.056</td>
<td>4</td>
</tr>
<tr>
<td>Attracting these regions Tourists</td>
<td></td>
<td>0.224</td>
</tr>
<tr>
<td>The existence of many aspects and areas to undertake research in the area</td>
<td>0.063</td>
<td>3</td>
</tr>
<tr>
<td>Creating environmental awareness through education for tourists</td>
<td>0.056</td>
<td>3</td>
</tr>
<tr>
<td>Creating a sustainable income for the region and local communities through</td>
<td>0.05</td>
<td>4</td>
</tr>
<tr>
<td>ecotourism</td>
<td></td>
<td>0.15</td>
</tr>
<tr>
<td>Increased knowledge about the biological and non-biological values in regional</td>
<td>0.056</td>
<td>2</td>
</tr>
<tr>
<td>communities</td>
<td></td>
<td>0.112</td>
</tr>
<tr>
<td>Increase the protection level by locals</td>
<td>0.05</td>
<td>2</td>
</tr>
<tr>
<td>Generating revenue by creating satisfaction among tourists to pay an entrance</td>
<td>0.044</td>
<td>2</td>
</tr>
<tr>
<td>charge</td>
<td></td>
<td>0.088</td>
</tr>
</tbody>
</table>

Threats

<table>
<thead>
<tr>
<th>Threats</th>
<th>Weight</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotourism ad hoc growth that leads to infection and environmental,</td>
<td>0.05</td>
<td>4</td>
</tr>
<tr>
<td>cultural and ecological risks for the region</td>
<td></td>
<td>0.2</td>
</tr>
<tr>
<td>Environmental threats and damages to natural, historical and cultural</td>
<td>0.05</td>
<td>4</td>
</tr>
<tr>
<td>heritages and risk of destroying natural landscape forms</td>
<td></td>
<td>0.2</td>
</tr>
<tr>
<td>Ignoring the constraints for ecotourism development and regional</td>
<td>0.05</td>
<td>4</td>
</tr>
<tr>
<td>carrying capacity</td>
<td></td>
<td>0.2</td>
</tr>
<tr>
<td>lack of knowledge and awareness of tourists about nature and natural</td>
<td>0.056</td>
<td>3</td>
</tr>
<tr>
<td>resources</td>
<td></td>
<td>0.168</td>
</tr>
<tr>
<td>The change of the behavior and spatial distribution of wildlife</td>
<td>0.056</td>
<td>3</td>
</tr>
<tr>
<td>(Excessive accumulation of tourists in the area-photography and stress)</td>
<td></td>
<td>0.168</td>
</tr>
<tr>
<td>Lack of proper training in the field of tourism in the region</td>
<td>0.05</td>
<td>3</td>
</tr>
<tr>
<td>The increase of uncontrolled or undirected tourists</td>
<td>0.04</td>
<td>3</td>
</tr>
<tr>
<td>0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of community participation in ecotourism projects</td>
<td>0.05</td>
<td>2</td>
</tr>
<tr>
<td>Lack of community participation in ecotourism projects</td>
<td>0.044</td>
<td>2</td>
</tr>
<tr>
<td>Some tourists are ignoring the culture and values of the community</td>
<td></td>
<td>0.088</td>
</tr>
<tr>
<td>Illegal arrival of hunters and poaching</td>
<td>0.063</td>
<td>1</td>
</tr>
<tr>
<td>0.063</td>
<td></td>
<td>0.063</td>
</tr>
<tr>
<td>Total Sum</td>
<td>1</td>
<td>2/964</td>
</tr>
</tbody>
</table>

The results of the analysis of external factors using the SWOT analysis matrix:

In the view of experts, presenting to the international communities through appropriate advertising and attract foreign tourists with 0/252 weight score, recognized as the most important opportunities facing the region for ecotourism development. Also as the experts notions, the ad hoc growth of ecotourism leads to pollution, ecological, environmental and cultural risks for the region. Environmental threats and damage to the natural-historical and cultural works and the risk of demolition of landscape forms and ignorance of the constraints for ecotourism development and regional carrying capacity with a weighted score of 0.2, investigated as the most important threats facing the development of ecotourism in the region.

Results of Internal and External Factors Evaluation Matrix IE:

Fig. 1: Results of external and internal factors evaluation matrix IE.

By attention to drawing IE Matrix and the impact of internal and external factors, WO strategies recommended. Therefore, by using the strategies (WO: conservative), the ultimate efforts to compensate weakness and disability of the region by using environmental opportunities to develop sustainable ecotourism, most be applied. Figure 1 shows the internal and external factors assess Matrix IE.

Determining strategies for ecotourism development in Varjin Protected Area:

Strategy development is often called the long-term strategic planning too, is the design of the mission and policies set, strategy development begins with a situational analysis, is to find a strategy or strategic balance between opportunities (exterior) and strengths (internal) due to threats (external) and weaknesses (internal) in order to overcome them. At this point, each one of the strengths, weaknesses, opportunities and threats are analyzed and with interact to each other, the appropriate strategies to each situation presented.
**WO Strategies:**
- Creating a framework for future researches in the field of biological and non-biological factors to identify and classify in the region.
- Take the necessary measures in order to minimize the negative effects of mining in the area.
- Briefing meetings and training courses for local people.
- To explain the goals of ecotourism in the region with the goal of community involvement in conservation and ecotourism development.
- Innovation in the field of marketing techniques and the introduction of regional capacity.
- To attract tourists who are planning to travel to surrounding points.
- Allocate more funds for the management and conservation of the region and also to carry out research projects.
- Increase the number of peacekeepers in the area and education for the development of tourism in the region.
- Introducing the region's potentials by using brochures and catalogs that introduce Natural Area by description of the access, travel time and other useful information that is essential information for tourists.
- Development of infrastructure and facilities such as temporary and permanent camps as residence in the area for tourist to stay.

**Quantitative Strategic Planning Matrix (QSPMWO):**
Implementation of the proposed strategies all together to manage a variety of goals including ecotourism management, is impossible. For this reason, the best approach is ranking of proposed and prioritizing strategies.

At this stage, for determining the priority of the strategies, a strategic planning matrix was used as the QSPMWO. To make this matrix the results of the SWOT matrix and IE are used. Table 3 shows Quantitative Strategic Planning Matrix QSPMWO.

**Review of Research hypotheses:**

**Review of Hypothesis 1:**
IFE final score is less than 2/5: this means that development of ecotourism in Varjin terms of internal factors have weakness.
EFE final score is greater than 2/5: That means that Varjin ecotourism development have acceptable performance in regarding the use of opportunities and deal with threats. This assumption has been conditioned to eliminate the weaknesses of the system and after removing the weaknesses of the system, Varjin area have ecotourism development capabilities.

**Review of Hypothesis 2:**
SWOT technique is a simple and efficient technique of high flexibility. It is used particularly in cases in need of a fast and simple analysis for the management and strategic planning. In other words, this model has been used successfully for Ecotourism Research. On the other hand, this model was successfully done for Ecotourism Research. The prominent point in the SWOT model is that using this model should achieve to quantitative results with the SWOT matrix and the weight value to make a decision by the quantities achieved.
Therefore, IE is used to determine the area condition to get to know what state the current situation in the region is and which strategies should be employed and is used in the next step of Bordeaux QSPM matrix. This method is used in many studies in management and strategic planning especially in environmental planning and management. It was found in this method that which of selected strategic options are available and in fact, these strategies will be prioritized. So, taking advantage of a combination of SWOT, IEM and QSPM techniques are appropriate methods to devise the strategy and management of ecotourism in the region.

**Review of hypothesis 3:**
According to the results of matrix IE and QSPMWO matrix privileges, it was proposed that the proposed strategies have weighted differently and are not equally attractive in order to achieve sustainable ecotourism development of tourism in Study area.

**Review of hypothesis 4:**
According to the results of QSPM matrix wo strategies are recommended and WO5 strategy with more allocation of funds for the management and conservation of the region to conduct research projects with a score of 12.895 was placed in the first place. So, management strategies are more important for natural tourism sustainable development.
### Table 3: Quantitative Strategic Planning Matrix (QSPMWO).

<table>
<thead>
<tr>
<th>Weighted Score</th>
<th>WQ1</th>
<th>WQ2</th>
<th>WQ3</th>
<th>WQ4</th>
<th>WQ5</th>
<th>WQ6</th>
<th>WQ7</th>
<th>WQ8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengths</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1</td>
<td>0.045</td>
<td>0.18</td>
<td>0.153</td>
<td>0.089</td>
<td>0.096</td>
<td>0.18</td>
<td>0.18</td>
<td>0.085</td>
</tr>
<tr>
<td>S2</td>
<td>0.12</td>
<td>0.36</td>
<td>0.12</td>
<td>0.12</td>
<td>0.48</td>
<td>0.24</td>
<td>0.24</td>
<td>0.48</td>
</tr>
<tr>
<td>S3</td>
<td>0.18</td>
<td>0.72</td>
<td>0.2</td>
<td>0.36</td>
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Proposed projects of special regional tourism development of Varjin:

No doubt, the Varjin Protected Area just by providing adequate facilities and tourism products, and tourism infrastructure can be presented as an ecotourism pole in the internal and foreign markets. That’s why following development projects are proposed:

**Proposed projects in the infrastructure sector and transport:**
- Installation of road traffic counter
- Improving internal access routes
- Building parking and multi- floors parking
- Organizing the river
- Build and equip a gas station
- Mobile rescue station
- furnishing and installing trash cans
- purchase of semi-heavy carrying waste vehicles
- Installation of restroom trailers

**The proposed project for facilities and services:**
- Accommodation cottages and suites
- Identify and equip rural rental homes
- Construction and Equipment
- Build and equip inter-roads complex
• Construction of Tourist Complex  
• Construction of Beach Park (river margins)  
• Construction of Sports and Recreation Complex  
• Construction of Winter Park  
• Equipment and development of mountain shelters  
• Creating health village  
• Creating Visitor Center  
• Construction of camping  

Heritage projects:
• Holy Sacred Defense Museum and Village Park  
• Museum of Anthropology  
• Restoration of some historic buildings  
• Reconstruction and rehabilitation of historic buildings demolished  
• Explore some of the areas with historic value

The religious sector projects:
• Development of User Privacy tombs of saints  
• Restoration of Religious Buildings  
• Planning of marketing activities  
• Installation of billboards introducing regional attractions  
• Printed advertising items including Province tourism books, booklets, brochures, maps and CDs  
• Working with tour-leaders in the field of religious tourism, ecotourism, the environment and sport  
• Organizing seminars and an annual conference to introduce eco-tourism and the environment in the Province and Varjin Area.  
• Tourism seasonal festivals held (two festivals per year)  
• Construction of Tourist Information Centers in the city entry  
• Enable mountain base in cooperation with the General Directorate of Cultural Heritage and Environment

Research projects:
• studying the feasibility of Latyan Park with considering the necessary infrastructure priorities  
• Determining the leisure and tourism uses in the Rural  
• Preparation of enumerations of tourists and visitors to the different axes of Varjin region  
• Review of the garbage and waste collection and transfer of regional tourist areas of Varjin region.

Proposed projects in human resources:
• Establishing Strategic Tourism Development Committee of Varjin  
• survey of human resource and catering facilities near of Varjin  
• Educating programs about manner of deal with tourists, for councils, police, administrators of concerned institutions  
• Organizing the participatory plan of local residents in the tourism development of Varjin area  
• Training needs assessment of the region's tourism industry of Varjin region  
• Presenting ecotourism field in PNU of Lavasan  
• Training of employees and managers of residential and catering parts

Formation of NGOs about environmental protection, ecotourism and sustainable development of tourism in the Province.

REFERENCES


