Study of strategies for sustainable tourism development in Bamu National Park using SWOT model

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ABSTRACT
Tourism is one of the largest and most popular activities in the developing world. Development activities in this industry, especially in natural areas such as national parks and protected areas has caused, trends in pandemic planning and management activities should be taken to ensure ecological balance also plays an important role in supplying the demand of recreational of the people. Bamu National Park because of its beautiful scenery and rich biodiversity of the high power nature has to attract tourists. The aim of this study was to identify weaknesses, strengths, opportunities and threats as well as nature study area is the development strategy for hiking in the area. To achieve this goal, the matrix method is used to assess the internal and external factors. After the first field visit frequently, weaknesses, strengths, opportunities and threats were identified and then hiking in the area, based on questionnaire prepared by the relevant authorities, tourists and these were prioritized. The results show that in the region of 9 to 13 internal strengths internal weaknesses and external opportunities 7 vs. 8 external threats can be identified. The four competitive strategies - aggressive (SO), diversity (ST), Weekly (WO) and defensive (WT) was presented by the development of tourism in the region.

KEYWORDS: tourism, analysis, SWOT, Bamu National Park, development.

INTRODUCTION
Tourism is one of the largest businesses in the world. Tourism activities are widespread in many parts of the world and particularly the rapid expansion of the industry has resulted in positive and negative effects that are neglected in (Sugiarti et al, 2003). Protected areas as one of the most attractive tourist destinations of the most critical, yet stable and unplanned tourism are most vulnerable. Protected areas need tourism, and tourism also needs them. Although the relationship is complex and sometimes contradictory, but always Tourism is a major factor in the establishment of protected areas and their management (Dorbeygi, 2008). Natural attractions in the tourism industry are of great value (Ebrahimi Fini, 2008). Tourism has many forms which vary depending on environmental conditions is one of the most important forms of Nature based Tourism. There is confusion about the word nature, for example Oramz (1995) and Hongard (1994) argue that the term nature emerged in the late 1980s, while others have attributed the emergence of the term to the end of 1970 (Oladi Ghadikolaei, 2009). Hiking travel to natural areas with different motives and refers to all activities that are conducted in nature, regardless of whether they are sustainable. Many words associated with nature are sometimes mistakenly used instead and some sources define the identity of the true nature means to travel and visit the natural areas (Dadvarkhani and Niksrat, 2010). Hiking in natural areas is done without any protective measures while the various elements integrated ecotourism and nature is a regular program of this nature will impact on natural areas (Ranjbar, 2009). Find the protected areas for the conservation of certain types of processes or physical conditions - such as population biology, wildlife habitats, landscapes, natural or cultural heritage such as cultural traditions emerged. Tourists who visit this region to region because it has been established that the value of that knowledge. Purposes of planning and development nature of the revolving nature of the interest thus increase economic opportunities and protection of natural and cultural heritage and improve the quality of life of all stakeholders (Dorbeygi, 2008). In this study, the term
nature as a form of tourism has been done in the context of nature. Today, it is accepted that a global scale nature related to ecology, conservation and proper utilization of the prolonged nature is associated with minimal changes in the balance of the natural environment. According to this definition, any tourism program that includes the following four major parts can be hiking into account is dependent on the nature, ecologically sustainable, educational activities and interpretation of environmental values, culture is the most important part of tourism and contribute to local communities and host it. Understanding scientific analysis of this phenomenon could provide a secure framework for planning nature. In the field of nature management as part of the tourism industry, various models can be used. Among the different models of SWOT analysis is actually the abbreviation of four elements which are the strengths, weaknesses, opportunities and threats of qualitative models. In fact, analysis of strengths, weaknesses, opportunities and threats analysis of the internal environment and the external environment that will provide support for decision-making (Violin and Hangr, 1995). Bamu National Park has the potential nature of the environment and natural potential to attract itinerant nature that should be utilized in the planning area abilities. This study has tried to study Bamu National Park as one of the protected areas and assess strengths and weaknesses, opportunities and threats in the SWOT analysis is to provide guidelines for the development of regional nature.

MATERIALS AND METHODS

In this study, matrix method is used to assess the internal and external factors. After the first field visit frequently, weaknesses, strengths, opportunities and threats hiking in the area were identified and then prioritized based on these factors were tourists and authorities. For data analysis, SPSS and Excel software was used for the data and methods - descriptive and inferential statistical analysis was performed.

Sampling Method

Cochran formula used to determine the sample size. Since the aim of this study was to develop solutions hiking in Bamu National Park, SWOT analysis is used in order to achieve the above objectives; two types of questionnaires were prepared for these groups. Due to the revolving nature of the groups responsible for each of the groups in this study used a sampling method. According to officials in those organizations and individuals involved in various sectors for the homogeneous and easily access them from random sampling and the rotating nature of the non-homogeneous with respect to those of a simple random sampling method is used. Population and sample size

The population studied in this research are intended to explore the national parks are turning to nature, as well as officials of the National Park system and related institutions. In order to select a sample of a revolving nature during a week's estimate of the amount of the revolving nature of the entrance to the area was obtained from the relevant authorities and then according to the number of visitors (target population, which is 965 people) using Cochran formula, 138 subjects were selected by the authorities because of the low number of samples are samples of about 20 people. Cochran methods abide by the following formula.

\[ n = \frac{t^2 pq}{d^2} \times \left( \frac{N}{N - 1} \right) \]

n: sample size required
N: Number of target population
t^2: % chance that the accuracy of speech (here the significance level of the test is equal to 0.05 against 1.96).
P: probability of trait
q: probability of no adjectives
d^2: sampling error or confidence level of 0.05 (Mahdavi, 2003).

According to the above formula, n is equal to the value of 158 is obtained that given the time –
economic constraints of number of formula (2), we use the corrected formula:

\[ m = \frac{n}{\sqrt{1 + \frac{n}{N}}} \]

(Madhoushi and Niazi, 2010), in which case the value will be 138 m according to the following equation with the formula:

\[ m = \frac{158}{1 + \frac{158}{965}} \]

Selection of the relevant authorities

In this section, given that the aim of the interview and the question is relevant authorities, institutions and instruments in the nature of the study area and questionnaire was prepared by the staff of these agencies are:

Table 1. List of relevant authorities in the area of nature

<table>
<thead>
<tr>
<th>Row</th>
<th>Respondents</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Relevant officials in the Directorate General for the Environment of Fars Province</td>
<td>7 people</td>
</tr>
<tr>
<td>2</td>
<td>Guards of Bamu National Park</td>
<td>5 people</td>
</tr>
<tr>
<td>3</td>
<td>Authorities in Iran's Cultural Heritage</td>
<td>3 people</td>
</tr>
<tr>
<td>4</td>
<td>Authorities in Municipality of Shiraz</td>
<td>2 people</td>
</tr>
<tr>
<td>5</td>
<td>Authorities in Zarghan county</td>
<td>3 people</td>
</tr>
</tbody>
</table>

Study area

Bamu National Park near the easternmost Mediterranean climate was warm and dry, and the average annual rainfall is approximately 400 mm (Culture of Dareh Shouri, 1983). Bamu National Park with an area of approximately 48,000 acres and peripheral length of approximately 200 kilometers north of Shiraz and within very close proximity to the city and even can be said is located in the city. And between circuits 29 degrees 36 minutes and 24 seconds and 29 degrees 53 minutes 12 seconds north latitude and 52 degrees 54 minutes 12 seconds east longitude, is located. Road Shiraz – Marvdasht, the park is split into two parts, East and West makes up the bulk of the park. The park, like most areas of the province along the Zagros mountain range is located. Bamu National Park is rich in underground aquifers. There is also plenty of small faults within the park have caused high numbers of low flow springs arise in different parts of the park but do not rush to agriculture that are responsive to watering (Geography of Fars Province, 2006). Overall Bamu National Park has 36 springs that most of them are:

- Fil Fountains
- Chero Fountains
- Chenar Fountains

Wells: Water parks are also a number of sources as well as in the past it has been used for livestock drinking and water are removed from the rope and container.

Aqueducts: The park's water resources can be noted that the subterranean water table in the park has been used for agricultural purposes were parked outside. These canals are: Aqueduct of Hossein Abad, Mahmoud Abad, Chah Mahaki, Doudej, Ab Barik,
Kotak and Chah Sorkh, also, this is no permanent river or lake in Bamu National Park and the surrounding space (Javdan Shahre Pars Consulting Engineers, 2008). Bamu National Park, located in the southern part of the Zagros mountain range and the special conditions of topography and climate and a good shower of rain and snow with vegetation is desirable that more than 30 years of continuous protection time limit is reached climax due to numerous species of plants, especially scarce and rare plants is considered as one of the most important and most valuable genetic reserve. Given the relatively good breadth and height of mountains and plains in many different climatic conditions in the region in terms of height and tilt the soil type factors in the emergence of a variety of plant communities and plant species that can grow in the park. Bamu National Park has six regional malls that are suitable as a regional license. Bamu regional nature conservation area has unique species of animals and plants. The area is great for hiking. Nature of the major attractions can be mentioned the following attractions: Bamu mountain ranges in narrow waters, woods, valleys, glacial valleys, canyons Indian Wells Valley Corridor, dose valleys, plains, benchmark wells, and pillows Sofia plain, plains, dry valleys, springs Haj Mehrab, Fil fountains, springs, nuts, springs Abul, Indian wells, benchmark wells, canals Hossein Abad, benchmark wells and subterranean aqueduct, Mahmoud Abad (Javdan Shahre Pars Consulting Engineers, 2008).

Analysis

SWOT analysis process to develop long-term plans in order to effectively respond to environmental threats and opportunities, according to the organization's strengths and weaknesses (Huben et al, 1999). This approach is instrumental in the early stages of a project from one side to the other as a pioneer and as a strategic management tool designed to be used (Srivastava et al, 2005). It also provides a basis to fine-tune and selection strategy (Chang and Hong, 2005). Complete a SWOT matrix and formulating various strategies to guide future system takes place. In other words, SWOT is strategic tools to match the strengths and weaknesses within the system. SWOT analysis provides a model system to identify these factors and choose the strategy that provides the best match between them. For this purpose, strengths and weaknesses and the opportunities and threats in general four SO and WO, ST and WT are the links between them are selected and options strategies. To create a matrix of threats, opportunities, weaknesses, strengths should include observational eight stages (Ebrahim Zadeh and Aghassi, 2009):

- Prepare a list of opportunities available
- Prepare a list of the major threats
- Prepare a list of local strengths
- Prepare a list of the major points of internal weakness
- The internal strengths and external opportunities and placing the result in the SO Strategies in the Home
- Compare internal weaknesses with external opportunities and placing the result in the WO Strategies
- The internal strengths with external threats and placing the result in the ST Strategies
- Compare internal weaknesses with external threats and placing the result in the WT strategies

Quantitative analysis can determine which of these factors have a greater impact on decision-making processes. In order to quantify this analysis can be used for hierarchical analysis technique using Expert Choice software is paid to weight and prioritize the factors. The strategy will concentrate on the most important influencing factors (Zand Basiri and Ghazanfari, 2010). SWOT analysis is a useful tool in the study of positive and negative co-decision-making processes and factors that influence the decision. In order to quantify the positive and negative consequences presented in this analysis can be compared to the comprehensive evaluation and analysis of decision-making processes can be made in different situations (Shrestha et al, 2004). The analysis of internal strengths and weaknesses and external opportunities and threats analysis are examined. External variables in the analysis of ecological, economic, social, geographical, technological, political, legal and outside of the organization or its programs are in effect are indicated (Zand Basiri and Ghazanfari, 2010). SWOT model normally consists of a table is a two-dimensional coordinates of each of the four regions that represent each class has a set strategy, ie the strategy is considered in this model (Shojaii et al, 2007).
Table 2. SWOT matrix and to determine strategies

<table>
<thead>
<tr>
<th>W Weaknesses</th>
<th>S Strengths</th>
<th>SWOT Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>WO Strategies</td>
<td>SO Strategies</td>
<td>O Opportunities</td>
</tr>
<tr>
<td>WT Strategies</td>
<td>ST Strategies</td>
<td>T Threats</td>
</tr>
</tbody>
</table>

Summary of opinions and provide final priorities of SWOT analysis

According to the results of the SWOT matrix was acting up table that this table indicates the priority ranking for each of the indicators of the views and opinions of the two groups of respondents in this study. In order to prioritize the internal and external factors affecting the nature of development in the study area based on the views of officials in each of the two groups and the rotating nature of the coefficient between 0 and 1 for their intended here that the factor responsible for the nature of the rotary coefficient of 0.6 and 0.4 were considered. And the corresponding coefficients are calculated according to the deeds done in the final table was formed. As can be inferred from the table, there are beautiful landscapes in the region as the most important component strength and easy access and suitable for nature tourists to the area known as the least strength.

Components as inappropriate accommodation

Table 3. The weaknesses, strengths, opportunities and threats from the perspective of both participants and the nature of the battalion staff

<table>
<thead>
<tr>
<th>Priority</th>
<th>Strengths</th>
<th>W Weaknesses</th>
<th>S Strengths</th>
<th>SWOT Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There is beautiful scenery ...</td>
<td>Many mountains and peaks ...</td>
<td>There are many springs in the area</td>
<td>Easy access and convenience</td>
</tr>
<tr>
<td>4</td>
<td>There are beautiful landscapes in the area</td>
<td>Authorities believe the employment opportunities</td>
<td>Having a calm and serene environment</td>
<td>Allows you to watch the wildlife in the area</td>
</tr>
<tr>
<td>3</td>
<td>Near the city of Shiraz</td>
<td></td>
<td>Area is prone to ...</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
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<tr>
<td>5</td>
<td></td>
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<td>2</td>
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</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SWOT analysis results show that the total internal factors affecting the development of nature in the region 9 as the strengths and weaknesses of the 13 factors have been identified and assessed. The analysis also shows that among the external factors influencing the nature of development in the study area 7 factors as external opportunities and external threats facing the eight factors as these areas were identified.

Results of quantitative aspects, weaknesses, strengths, opportunities and threats to the internal and external factors influencing ranking table of the respondents indicated that:

- The vulnerability of the region of high nature
- Considering the needs of the low level of threat and high opportunity
- Competitive strategies - aggressive (SO)
  The guidelines focus on internal strengths and external opportunities is based on the following:
  - the potential of the region to attract nature tourists hikers
  - Creation of a genetic reserve wildlife species live in the plains and mountains of the region and the production of surplus and hunting wildlife populations become the hunting ground
  - the opportunities of proximity to the city center (near Shiraz and Marvdasht ) in order to exploit the tourist attractions of the region and create jobs
  - Use the edge of the area to compete with rival recreational areas their ability to comply with conservation issues and fence - plumbing Park area and respect the local culture

### SWOT Analysis Results

<table>
<thead>
<tr>
<th>Priority</th>
<th>Opportunities</th>
<th>Threats</th>
<th>Weaknesses</th>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Existence Shiraz city center</td>
<td>Near MARVDASHT</td>
<td>Inappropriate communication path</td>
<td>Compete strategies - agressive (SO)</td>
</tr>
<tr>
<td>5</td>
<td>Increased incentives for the private sector</td>
<td>Increased government attention</td>
<td>Inappropriateness and inadequacy</td>
<td>The guidelines focus on internal strengths and external opportunities is based on the following:</td>
</tr>
<tr>
<td>10</td>
<td>Increased government attention</td>
<td>Failure to provide proper facilities</td>
<td>Inappropriateness and inadequacy</td>
<td>- the potential of the region to attract nature tourists hikers</td>
</tr>
<tr>
<td>13</td>
<td>More motivation</td>
<td>No proper facilities</td>
<td>Inappropriateness and inadequacy</td>
<td>- Creation of a genetic reserve wildlife species live in the plains and mountains of the region and the production of surplus and hunting wildlife populations become the hunting ground</td>
</tr>
<tr>
<td>8</td>
<td>Wearing located in the communication path</td>
<td>Lack of parking, no shopping mall</td>
<td>The lack of light</td>
<td>- the opportunities of proximity to the city center (near Shiraz and Marvdasht ) in order to exploit the tourist attractions of the region and create jobs</td>
</tr>
<tr>
<td>7</td>
<td>Lack of deck and Chair</td>
<td>Lack of parking, no shopping mall</td>
<td>The lack of light</td>
<td>- Use the edge of the area to compete with rival recreational areas their ability to comply with conservation issues and fence - plumbing Park area and respect the local culture</td>
</tr>
</tbody>
</table>

### Strategies Codification

The guidelines focus on internal strengths and external opportunities is based on the following:

- The potential of the region to attract nature tourists hikers
- Creation of a genetic reserve wildlife species live in the plains and mountains of the region and the production of surplus and hunting wildlife populations become the hunting ground
- the opportunities of proximity to the city center (near Shiraz and Marvdasht ) in order to exploit the tourist attractions of the region and create jobs
- Use the edge of the area to compete with rival recreational areas their ability to comply with conservation issues and fence - plumbing Park area and respect the local culture
Construction of visitor center with an educated workforce and help in different parts of the promenade

Variety of strategies (ST)

Diversification strategy that focuses on the strengths of internal and external threats include the following:

- Development of information networks and information services and educational nature
- Strengthen publicity and awareness activities about the nature of the region in the Shiraz Province
- Plan for sustainable nature conservation value of the future generations of local and national culture on the one hand and the other hand to be guided in all areas is planned.
- Determine the optimal population density in different areas of the park in order to prevent destruction and damage plants and wildlife
- Hiking secure locations to prevent violations of social
- Diversifying the facilities, activities and services
- Comprehensive and insightful information to the public and the authorities pay more attention to the cultural dimension, advertising, content and nature

Weekly Strategies (WO)

- Product improvement nature (scientific - Touring) governmental and joint ventures - particularly in the fields of infrastructure and also advertise products nature
- Develop and improve communication path
- Use the power of people's participation in all stages of planning and nature
- Rational utilization of institutions, laws and regulations, and providing support for the development of infrastructure and facilities in the area
- Planning for the benefit of private and public participation in line with service facilities, sanitation and accommodation in the study area in order to capture the nature of round

Defensive strategies (WT)

Defensive strategy based on the internal weaknesses and external threats is based on include the following:

- Public participation in the promotion, protection and sustainable enjoyment of natural resources, nature area and prevent environmental degradation.
- Educate and inform people on how to deal with the revolving nature and nature in order to avoid conflicts between people and nature Battalion.
- Prepare and encourage the private sector to develop infrastructure facilities in the region
### SWOT Analysis

#### Defensive strategies (WT)
- Public participation in the promotion, protection and enjoyment of natural resources for sustainable nature tourism.
- Educate and inform people on how to deal with nature in the region.
- Investment in development meetings organized by various nature.
- Use their expertise for the use of state-sponsored development of nature tourism.
- Prepare and encourage the private sector to develop infrastructure facilities in different regions.
- Draw up regulations to prevent pollution damage and the loss of resources in the region.

#### Opportunities (O)
- O1 of the city near the area
- O2: near the historic town near Shiraz.
- O3 increased incentives for private sector investment in nature.
- O4 improved government attention to the investment nature.
- O5 possible failure to provide proper facilities to the tourists in resort areas challenger.
- O6: Increase incentives for tourism and recreation in the city and suburbs.
- O7: a city located in the communication path.

#### Diversification strategy (ST)
- Development of information networks and information services and educational nature.
- Strengthen publicity and awareness activities about the nature of the region in the province.
- The sustainable nature conservation values of national culture on the one hand and for future generations.
- Determining the optimum population density in different places to avoid....
- Social security in place to prevent fraud.
- Construction of the zoo, according to the greenbelt would fit in Bamu National Park.
- Variety of facilities, activities, and tourism for nature tourists.
- Create Tvirgavan the appropriate local agency office that has experts fluent in the park....
- Comprehensive and insightful information to the public and the authorities pay more attention to....

#### Aggressive competitive strategies (SO)
- Using the potential of the region to attract sports tourists.
- Creation of a genetic reserve wildlife species live in the plains and mountains....
- Construction units such as the construction of parks, recreation, camping and recreational zone....
- The opportunities of proximity to the city center (near Shiraz Shiraz)....
- Use of the advantages of the study area, entertainment area compete with rivals.
- Create culturally appropriate authorities and institutions to satisfy....
- Construction of a visitor center, an educated workforce and help in different parts of the promenade.

#### Threats (T)
- T1: failure to provide a facility licensed by the state to extend hiking.
- T2: increased willingness of tourists to travel to other nearby recreation areas.
- T3: the loss of trees and vegetation.
- T4: contamination of soil and water resources.
- T5: the destruction of wildlife in the area of animal.
- T6: lack of sufficient awareness of environmental issues.
- T7: increasing social offenses tourists.
- T8: excessive population density.

#### Strategies Weekly (WO)
- To improve product nature (scientific, recreational) and state joint venture....
- Develop and improve communication path.
- Use the power of people's participation in all stages of planning and nature.
- Rational utilization of institutions, laws and regulations, and providing support for the development of infrastructure.
- Planning for the benefit of the private sector and the participation of the people....

#### External

#### Internal

#### Strengths (S)
- Despite the beautiful scenery in the region S1.
- S2 heights and multiple peaks for mountain climbing.
- S3: There are numerous springs in the area.
- S4: easy and convenient access to the region for tourists.
- S5: Authorities believe the job....
- S6: Proximity to city.
- S7: a calm and serene environment.
- S8 possible to watch the wildlife in the area.
- S9: susceptibility region for investment and planning.

#### Weaknesses (W)
- W1: poor communication path.
- W2: inappropriate accommodation and welfare facilities.
- W3: inappropriate and inadequate health facilities.
- W4: Lack of proper lighting and lighting....
- W5: lack of shopping malls and local markets.
- W6: lack of parking in a spectacular location.
- W7: Lack of bench seat platforms....
- W8: lack of know how and a medical guide hiking in various locations.
- W9: lack of adequate green space.
- W10: the reluctance of the private sector to invest....
- W11: lack of planning and public investment....
- W12: improper distribution of tourists in different seasons.
- W13: inappropriate facilities and sports equipment.
CONCLUSION

Nature is new trend in the tourism industry. Nature’s beautiful landscapes and tourist attractions are the focus of this type of tourism, thus giving importance to its role in protecting the environment is essential to achieve sustainable development. Industry not only contributes to the cycle of nature in many residential centers will bring prosperity but also nature tours, hiking and need pollen to the multiple possibilities for majority as well as employment will be created. Nature causes poverty, improve living standards and reduce rural to urban migration. According to the theoretical research and field studies have been conducted to provide development strategies hiking in Bamu National Park by the technique of SWOT capabilities and limitations hiking area was demarcated and answers and practical strategies for developing nature of the study area provide such were the results can be presented:

The results of the qualitative aspects of each of the internal and external factors identified suggest that:

- Level of vulnerability in the development of high nature.
- Features and capabilities of the area as a resort location are ideal for hiking.
- Reallocation of resources in the study area due to the abundance of weaknesses is essential.
- According to the results in inappropriate accommodation facilities weaknesses - welfare is a priority that in this context, the necessity of adopting a single management and public participation as well as the private sector seems to be necessary.
- In addition, the increased attention to external opportunities and private sector planning and investment in conjunction with the nature of public sector investment in this area would hope to develop a nature area.

REFERENCES


