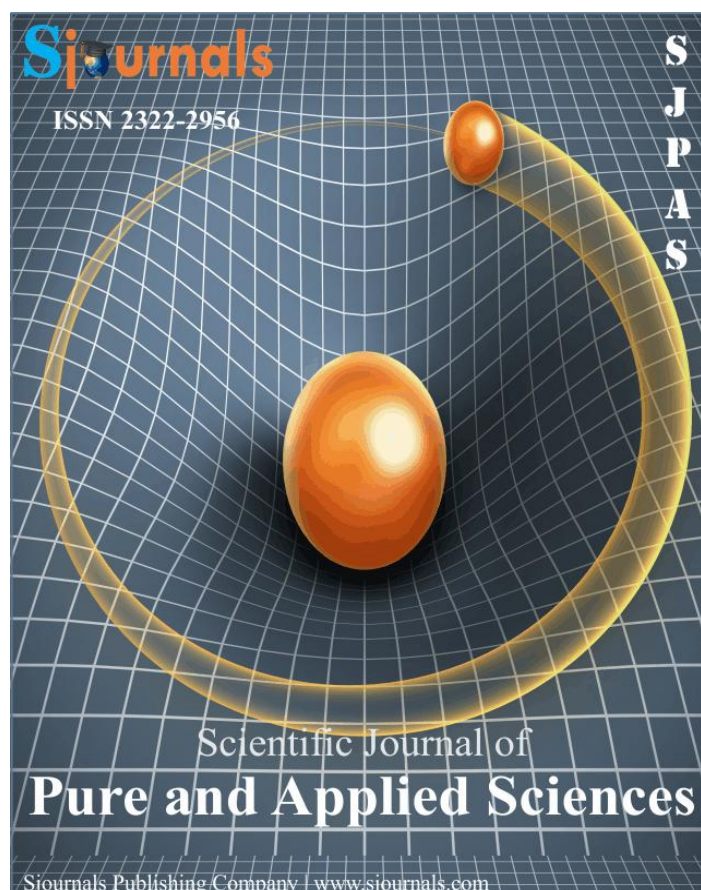


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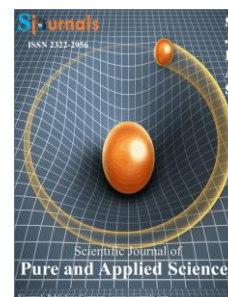
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Review article

Strategies for biodiversity maintenance value at recreation area by SWOT model

Hasan Karimzadegan*

Department of Environmental Management, Faculty of Environment and Energy, Science and Research Branch, Islamic Azad University, Tehran, Iran.

*Corresponding author: Drkarimzadegan@gmail.com

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ABSTRACT

This research, strategies for biodiversity maintenance at recreation area by SWOT model in Iran, is a field study for determining strength/weak points and also any opportunities and threats by SWOT method through presenting required strategies for recognition of tourism promotion strategies and maintenance of biodiversity at Recreation area. According to data analysis, it is concluded that 67.5% of tourists prefer spring and 27.4% of them prefer summer, 4.7% prefer autumn and 0.3% prefer winter for their trips. This is based upon weak facilities of the area which makes it difficult for tourists to have any trips at cold season. In case of a correct programming, it is possible to modify managerial organizations and powerful advertisement by mutual cooperation of concerned organizations and authorities with tourism and people. The above-mentioned factors are the most important strategies of promotion for maintenance of biodiversity in this area.

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1. Introduction

Tourism is one of the major bases in developing communities. It is also known as "Smoke-free industry" which is a sign of its great role in development of societies (Papeli, 2006). Ecotourism in Iran, as one of the five countries with most biodiversity in the world and one of the reservoirs of biology, we have higher estimated

advantages than other branches of tourism (Rezvani, 2009). Natural tourism means a process for further success in ecology and economy without any damages to biology. Then it is necessary to apply a good strategy for maintenance of biodiversity (Bookbinder et al., 1998), otherwise natural tourism is a threat for biodiversity and wildlife in itself (Mohammad Zadeh and Haji Gholikhani, 2010). Kurdistan province is located on Zagros belt with more than 82% of mountains and foothills. This is a natural characteristic of Kurdistan province, which makes it separate from other provinces of country from viewpoint of natural landscapes and biodiversity. Because of a mild and favorable climate, Kurdistan province has lots of tourism aspects than other provinces (Tourism Organization, 2008). Palangan is one of the villages of Javroud rural district and affiliated of Kamyaran city at Kurdistan province. It is located on 48Km of northwest of Kamyaran and in Tangivar valley. This village is located on hillside with two valleys in both sides and stone houses on stepped mode. It means the roof of lower house is the yard of upper one. Rather than beautiful architecture, Palangan has mountain ecosystems, rivers, springs, falls and a nature full of exclusive beauties with great variety of vegetables and animals. All of mentioned properties accompanied with Tangivar River and Fish complexes at the top of this village may attract lots of tourists accordingly (Bahrami, 2010). As a result, it is a need to have suitable strategies for promotion of tourism and maintenance of biodiversity at Palangan area. In case of a suitable strategy at natural tourism promotion in area, it is possible to control any bad effects of which on variety of vegetables and animals.

1.1. Goals of research

- ✓ Specifying any natural tourism potentials at Iran recreation area
- ✓ Specifying any weak/strength points, threats and opportunities for maintenance of biodiversity of area according to SWOT model
- ✓ Recognition of required strategies for promotion of natural tourism in area and reduction of its bad effects on aerial environment

1.2. Research question

This research intends to answer the following question:

- ✓ Which one of strategies has better priority for promotion of natural tourism and maintenance of biodiversity at Iran recreation area?

1.3. Geographical situation of concerned area

Case study, Palangan village is located at northwest of Kamyaran city. It has geographical position of 46^o, 36' of longitude and 35^o, 4' latitude among Shahoo mountain and Dejan castle. It is located on 48Km of Kamyaran city with a distance of 5km from main road. This village was included in Marivan city since 1986 and was named as Western Javroud rural district.

1.4. Generalities of concerned area

Palangan is located at the beginning of Uraman district. It is one of the most beautiful stepped mode villages with specific architecture and a different nature at various seasons. It is located besides Tangivar River, which joins to Sirvan River. This village has been divided into two parts due to the presence of Tangivar River, which passes from among the village. Furthermore, there are 29 springs at Tangivar valley with cold and clear water pour to Tangivar River and also beautiful falls.

1.5. Research method

This research is made in field form and by the use of SWOT method. Firstly, all required information (Weak points, strength points, opportunities and threats) are collected about the area for further analysis as well. Followings are the relevant methods for finding required information: Library studies, Questionnaire and Field observations. In library method firstly it was trying to take required notes for finding a general knowledge about the subject. For this purpose all necessary information were collected by referring to specific books and magazines, referring to libraries of Islamic Azad University - Sanandaj Branch, Cultural Heritage & Handicrafts and Tourism Organization of Kurdistan province, Environment Maintenance Department of Kurdistan province, Natural Resources Department and other organizations and internet. The questionnaires were divided into 4 Tables. Statistical community includes relevant tourists, managers and specialists selected by random including 379

tourists and 48 managers and specialists as the statistical sample. They received considered questionnaires. Data analysis was made by the use of questionnaires and also SPSS software.

In addition, questionnaire options were classified according to the relevant weights along with submission of required strategies at the end. Respondents were requested to select a grade for strength/weak points, opportunities and threats in five groups of very high, high, middle, little and very little. Since the subject of this thesis is "Recognition of tourism promotion strategies for maintenance of biodiversity of Palangan Tourism area, some of the questions were based upon the title of "Maintenance of Biodiversity of Palangan area". For instance, some of the strength points are "presence of various types of goats and cats in area", some of the weak points are "Destruction of living place and biodiversity and natural scenes in area", some of the opportunities are "Pay attention of relevant organizations to biodiversity of area" and in threats are "Reduction of biodiversity and natural resources due to lack of a program and management of tourism".

In field method, the major part of research information were applied for required data collection through visiting, observing, taking photo from tourism facilities and biodiversity of area and interview with local managers, tourists, persons in charge and tourism specialists. Finally, after data collection, we made required data analysis by the use of SWOT model for all possible strategies and submission of suitable guidelines for promotion of natural tourism at Palangan recreation area.

1.6. SWOT technique

SWOT is a combination of various terms including Strength, Weakness, Opportunity and Threat. It is a recognition process for evaluation of effective and potential environmental variants. SWOT model is an applicable tool for comparing of inter-organization strength & weak points and outer-organizational opportunities and threats. This is a useful tool for applying at preliminary steps of decision making and as an introduction in applicable programming. In fact, it is a tool for putting together all findings of domestic pressures (Strengths & weak points) and external pressures (Opportunities and threats) (Afrakhteh, 2008).

SWOT analysis is a regular method for recognition of different factors (Weak & strength points, opportunities and threats) and writing a strategy for making a suitable harmony among them. It means a suitable strategy for maximizing opportunities and chances and minimizing of weak points and threats. For this purpose, we have four modes of WT, ST, WO, SO as mentioned below with an applicable option for them.

- ✓ Competitive, attacking strategies (SO) which may focus on internal strength points and external opportunities
- ✓ Diversity strategies (ST) which may focus on internal strength points and external threats
- ✓ Revising strategies which not only focus on internal weak points, but also try to benefit from external opportunities for removing any weak points of tourism
- ✓ Defensive strategies (WT) for fighting with internal weak points and external threats (Rezvani, 2008)

SWOT in this paper has been presented in the form of various tables as follows:

- ✓ Preparing a list of any threats, weak/strength points along with relevant definition and interpretation of lists, threats, weak/strength points in SWOT model. Generally, we have following SWOT analysis framework in this research

Table 1
General framework of SWOT analysis matrix.

| Internal factors | External factors | |
|------------------|---|---|
| | Opportunities | Threats |
| Strength | SO | ST |
| | How is it possible to use opportunities for benefiting from current opportunities? | How is it possible to use opportunities for fighting with any threats? |
| Weakness | WO | WT |
| | Which activities are applicable for removing any weak points and benefiting from opportunities? | How is it possible to reduce any weak points for fighting with threats? |

(Nastaran and Houshmand Far, 2010).

2. Analysis of applicable strategies of tourism promotion by SWOT method

This model is one of the used methods for organizing of external factors in the form of opportunities, threats and internal factors such as weak points and strength ones.

2.1. External factors analysis summary

The real goal of this step is evaluation any effects of external environment for recognizing any opportunities and threats related to tourism promotion strategies. According to the previous studies, Tables 2 and 3 illustrate total opportunities and current threats.

Table 2

Analysis of external factors in opportunities.

| No. | Opportunities | Managers & Specialists | | | Tourists | | |
|-------|---|------------------------|------|-------|----------|------|-------|
| | | Weight | Rank | Grade | Weight | Rank | Grade |
| 1 | Training of tourists for collection of wastes & transfer to landfills | 0.057 | 4 | 0.228 | 0.058 | 4 | 0.232 |
| 2 | Pay attention of relevant organizations to biodiversity of area | 0.055 | 4 | 0.221 | 0.055 | 3 | 0.166 |
| 3 | Increasing the motivation of private sector to investment in tourism | 0.053 | 3 | 0.158 | 0.053 | 3 | 0.159 |
| 4 | Increasing of local public knowledge about biodiversity of area | 0.058 | 4 | 0.233 | 0.056 | 4 | 0.226 |
| 5 | Localization of area in the way of two Kamyaran & Sarvabad cities | 0.048 | 3 | 0.143 | 0.045 | 2 | 0.089 |
| 6 | Programming for promotion & upgrading of culture of tourism in area | 0.053 | 3 | 0.158 | 0.056 | 3 | 0.167 |
| 7 | Providing required facilities & residing services along with required welfare conditions for tourists at different levels | 0.057 | 4 | 0.228 | 0.057 | 4 | 0.228 |
| 8 | Making required studies and environmental evaluation for prevention from any environmental damages | 0.058 | 4 | 0.232 | 0.057 | 4 | 0.228 |
| 9 | Presence of hosting feeling | 0.05 | 3 | 0.151 | 0.055 | 3 | 0.165 |
| 10 | Revising relevant rules of hunting in area | 0.054 | 4 | 0.216 | 0.055 | 3 | 0.165 |
| 11 | Making more coordination and participation of governmental organizations and private sector | 0.055 | 4 | 0.22 | 0.052 | 3 | 0.155 |
| 12 | Introducing of area as a research priority for students and interested researchers | 0.056 | 4 | 0.223 | 0.058 | 4 | 0.232 |
| 13 | Increasing of tourists motivation for repetition of trips to area with regard to current natural attractions | 0.058 | 4 | 0.231 | 0.06 | 4 | 0.241 |
| 14 | Development of tourism as a promotion strategy | 0.057 | 4 | 0.228 | 0.055 | 3 | 0.166 |
| 15 | Establishment of wastes system management for collection of any wastes besides Tangivar River | 0.058 | 4 | 0.231 | 0.059 | 4 | 0.236 |
| 16 | Economic development of villages & maintenance of historical identity | 0.055 | 4 | 0.218 | 0.051 | 3 | 0.153 |
| 17 | Increasing of environmental knowledge of native people and tourists for better maintenance of environment | 0.06 | 4 | 0.24 | 0.059 | 4 | 0.235 |
| 18 | Performing environmental management for created projects | 0.059 | 4 | 0.236 | 0.057 | 4 | 0.23 |
| Total | | 1 | | 3.769 | 1 | | 3.473 |

Table 3
Analysis of external factors in threats.

| No. | Opportunities | Managers & Specialists | | | Tourists | | |
|-------|---|------------------------|------|-------|----------|------|-------|
| | | Weight | Rank | Grade | Weight | Rank | Grade |
| 1 | Aerial & environmental disorders | 0.078 | 4 | 0.312 | 0.081 | 4 | 0.323 |
| 2 | Pollution of water & soil resources | 0.078 | 4 | 0.312 | 0.081 | 4 | 0.325 |
| 3 | Lack of integrated & efficient management | 0.079 | 4 | 0.318 | 0.076 | 3 | 0.227 |
| 4 | Lack of enough knowledge about environmental issues among tourists | 0.076 | 4 | 0.304 | 0.076 | 3 | 0.227 |
| 5 | Lack of continuous & income jobs for public people | 0.07 | 3 | 0.209 | 0.071 | 3 | 0.212 |
| 6 | Lack of wastewater purifying system & Tourism wastes management | 0.083 | 4 | 0.33 | 0.083 | 4 | 0.331 |
| 7 | Entrance of attacking types | 0.069 | 3 | 0.208 | 0.069 | 3 | 0.208 |
| 8 | Reduction of biodiversity & natural resources due to the lack of a tourism programming & management | 0.078 | 4 | 0.312 | 0.08 | 4 | 0.319 |
| 9 | Lack of an authority for organizing of ecotourism facilities at Palangan recreation area | 0.08 | 4 | 0.321 | 0.078 | 4 | 0.313 |
| 10 | Weak Information & marketing and advertisement for introducing of the area | 0.077 | 4 | 0.307 | 0.075 | 3 | 0.225 |
| 11 | Presence of non-harmonized activities with environment and ecosystem | 0.078 | 4 | 0.312 | 0.075 | 3 | 0.224 |
| 12 | Non-enough ecological & environmental knowledge about responsible organization in maintenance of biodiversity | 0.076 | 4 | 0.302 | 0.079 | 4 | 0.315 |
| 13 | Complete economic attitude about the area without any attention to natural resources | 0.079 | 4 | 0.316 | 0.078 | 4 | 0.311 |
| Total | | 1 | | 3.861 | 1 | | 3.559 |

According to Table 2, followings are the most important chances for promotion of natural tourism at Iran's recreation area from viewpoint of tourists: Parameter "Increasing of tourists' motivation for repeating their travel to the area with regard to current natural attractions" with a weight of 0.06 and weight grade of 0.241 as the most important opportunity and also parameter "location of area in the way of two cities of Kamyaran & Sarvabad" with a weight of 0.045 and weight grade of 0.089 as the least external opportunity for promotion of natural tourism at Palangan recreation area. Furthermore, according to the viewpoint of managers and specialists we have the parameter of "Increasing environmental knowledge of native people and tourists for assisting the environment maintenance" with a weight of 0.06 and weight grade of 0.24 as the most important external opportunity and parameter of "Location in the way of two cities of Kamyaran and Sarvabad" with a weight of 0.048 and weight grade of 0.143 as the least important opportunity.

In addition and according to Table 3, the most important threats for promotion of tourism from viewpoint of tourists is the parameter of "Lack of a purifying system for wastewater and tourism wastes management" with a weight of 0.083 and weight grade of 0.33 as the most important external threats and also parameter "Entrance of attacking types" with a weight of 0.069 and weight grade of 0.208 as the least important external threat in promotion of tourism at Palangan recreation area.

2.2. Internal factors analysis summary effective on Palangan area

The real goal of this step is evaluation any effects of internal environment for recognizing any weak and strength points.

According to Table 4, the most important strength points from viewpoint of tourists are "natural attractions and exclusive landscapes" with a weight of 0.086 and weight grade of 0.346, the most important internal strength point is "presence of various types of boats and cats in area" with a weight of 0.066 and weight grade of 0.197 as the least important strength point in tourism.

Also, we have the parameter of "natural attractions and exclusive landscapes" from viewpoint of managers and specialists with a weight of 0.088 and weight grade of 0.351 as the most important internal strength point and parameter "authorities beliefs in entrepreneurship via promotion of tourism industry" as an active and income making industries with a weight of 0.063 and weight grade of 0.19 as the least importance internal strength point in promotion of tourism. In addition and according to Table 5, the most important weak points in accordance with viewpoint of tourists is parameter "Lack of suitable wastes management & distribution of wastes in environment" with a weight of 0.076 and weight grade of 0.304 as the most important weak point and also parameter "Contrast culture of tourists and native people" with a weight of 0.058 and weight grade of 0.175 as the least important weak point. In addition and according to the viewpoint of managers and specialists we have the parameter "Lack of a suitable advertising program for absorption of tourism in area" with a weight of 0.076 and weight grade of 0.303 as the most important internal weak points and also parameter "contrast culture of tourists and native people" with a weight of 0.054 and weight grade of 0.214 as the least importance of internal weak point.

2.3. Final classification

According to the obtained results out of SWOT analysis and also Tables 2, 3, 4 and 5, it was possible to make Tables 6 and 7 for explaining relevant classification of indexes and ideas of tourists, managers and specialists. Then we may write various strategies SO, ST, WO and finally WT.

Table 4
Analysis of external factors in strength points.

| No. | Opportunities | Managers & Specialists | | | Tourists | | |
|-----|--|------------------------|------|-------|----------|------|-------|
| | | Weight | Rank | Grade | Weight | Rank | Grade |
| 1 | Historical & cultural value of Palangan | 0.079 | 4 | 0.316 | 0.078 | 4 | 0.31 |
| 2 | Readiness of the area for any investment in tourism industry and optimized benefit from natural resources | 0.085 | 4 | 0.34 | 0.079 | 4 | 0.318 |
| 3 | Natural attractions and exclusive landscapes | 0.088 | 4 | 0.351 | 0.086 | 4 | 0.346 |
| 4 | High rate of interests of tourists for visiting the area | 0.079 | 4 | 0.316 | 0.078 | 4 | 0.314 |
| 5 | Suitable heights for mountain climbing | 0.08 | 4 | 0.319 | 0.075 | 3 | 0.225 |
| 6 | Presence of various types of boats and cats | 0.069 | 3 | 0.208 | 0.066 | 3 | 0.197 |
| 7 | A calm and smooth environment for relaxation of citizens and tourists | 0.072 | 3 | 0.215 | 0.077 | 3 | 0.23 |
| 8 | Presence of Tangivar River for swimming & fishing | 0.074 | 3 | 0.221 | 0.073 | 3 | 0.218 |
| 9 | Variety of vegetables and animals for any scientific & educational researches | 0.079 | 4 | 0.315 | 0.079 | 4 | 0.317 |
| 10 | Required social safety in area | 0.071 | 3 | 0.213 | 0.074 | 3 | 0.221 |
| 11 | Great beliefs of authorities in entrepreneurship through promotion of tourism industry as one of the active and income making industries | 0.063 | 3 | 0.19 | 0.072 | 3 | 0.217 |
| 12 | Presence of various springs in area like Khatoon Spring, Emarat Spring | 0.08 | 4 | 0.321 | 0.082 | 4 | 0.329 |
| 13 | Presence of various herbal medicines and industrial vegetables like Sysymbrium, Pennyroyal, Licorice, Rhubarb | 0.082 | 4 | 0.327 | 0.081 | 4 | 0.323 |
| | Total | 1 | | 3.651 | 1 | | 3.564 |

2.4. Competitive/Attacking strategies (SO)

The focus of internal strength points and external opportunities in these strategies are based upon the following cases:

- ✓ Optimized benefiting from any increase in tourism at citizenship level for better utilization of attractions and native products for entrepreneurship and more incomes and also prevention from environmental destruction by native citizens
- ✓ Development of constructions as a recognition strategy in promotion of tourism in area

2.5. Variety strategies (ST)

It is focusing on variety of internal strength points and external threats as follows:

- ✓ Establishment of photo fairs, festivals of vegetation types (Herbal and industrial like Sysymbrium, Pennyroyal, Licorice, Rhubarb and...), native-local sports, handicrafts for recognizing them and making more tourism fields
- ✓ Providing suitable conditions and facilities for hosting and servicing to tourists with a variety attitude in order to provide more services to a range of people from family groups, friends and students

Table 5
Analysis of external factors in internal factors (Weak points).

| No. | Opportunities | Managers & Specialists | | | Tourists | | |
|-----|--|------------------------|------|-------|----------|------|-------|
| | | Weight | Rank | Grade | Weight | Rank | Grade |
| 1 | Lack of suitable wastes management & distribution of wastes in environment | 0.074 | 4 | 0.294 | 0.076 | 4 | 0.304 |
| 2 | Lack of required strategies for respecting of tourism environmental comments | 0.072 | 4 | 0.28 | 0.07 | 4 | 0.28 |
| 3 | Differences and converse relation between tourists' culture and native people | 0.054 | 3 | 0.214 | 0.058 | 3 | 0.175 |
| 4 | Lack of benefiting from public participation in maintenance of biodiversity | 0.07 | 4 | 0.282 | 0.072 | 4 | 0.289 |
| 5 | Unsuitable and enough W.C. and services | 0.072 | 4 | 0.289 | 0.074 | 4 | 0.294 |
| 6 | Lack of required credits for promotion of relevant activities related to tourism activities | 0.075 | 4 | 0.299 | 0.073 | 4 | 0.292 |
| 7 | Lack of correct programming in benefiting from facilities and abilities of area | 0.074 | 4 | 0.297 | 0.071 | 4 | 0.284 |
| 8 | Lack of specific forces in the field of ecotourism and biodiversity | 0.075 | 4 | 0.299 | 0.073 | 4 | 0.292 |
| 9 | Lack of residing facilities on permanent or temporary basis at recreation area for residence of tourists | 0.075 | 4 | 0.299 | 0.073 | 4 | 0.292 |
| 10 | Grazing of rural animals more than usual in grasslands and poverty of vegetation | 0.067 | 4 | 0.269 | 0.07 | 4 | 0.28 |
| 11 | Destruction of living places and natural scenes throughout the area | 0.072 | 4 | 0.287 | 0.073 | 4 | 0.292 |
| 12 | Great number of visitors on holidays | 0.072 | 4 | 0.287 | 0.073 | 4 | 0.292 |
| 13 | Lack of knowledge of tourists and local communities with ecological & economic values of area | 0.072 | 4 | 0.287 | 0.073 | 4 | 0.292 |
| 14 | Lack of a suitable advertising program for attraction of tourism in area | 0.076 | 4 | 0.303 | 0.071 | 4 | 0.284 |
| | Total | 1 | | 3.998 | 1 | | 3.942 |

2.6. Revising strategies

It has been tried in this strategy to promote internal weak points by the use of current opportunities in external environment.

- ✓ Mutual relationship between district authorities and organizations and relevant departments of tourism
- ✓ Performing of environmental management for created projects for prevention from destruction of environment and natural landscapes of the area
- ✓ Revising and promotion of organizations and better studies for training people and tourists in order to have optimized benefits from profits and positive effects of natural tourism

2.7. Defensive strategies (WT)

This is applicable for fighting with internal weak points and external threats.

- ✓ Increasing of economic development infra-structures besides pay more attention to environmental issues
- ✓ Determining of permitted tourism directions and prevention from entering of people to biological environments for maintenance of vegetation and animals of the area

Table 6

Final classification of effective factors (Weak & strength points) in recognition of natural tourism promotion and maintenance of biodiversity.

| Priority | Classification of strength points | Priority | Classification of weak points |
|----------|--|----------|--|
| S1 | Natural attractions and exclusive landscapes | W1 | Lack of suitable wastes management & distribution of wastes in environment |
| S2 | Presence of various herbal medicines and industrial vegetables like Sysymbrium, Pennyroyal, Licorice, Rhubarb | W2 | Lack of residing facilities on permanent or temporary basis at recreation area for residence of tourists |
| S3 | Presence of various springs in area like Khatoon Spring, Emarat Spring | W3 | Lack of specific forces in the field of ecotourism and biodiversity |
| S4 | Readiness of the area for any investment in tourism industry and optimized benefit from natural resources | W4 | Unsuitable and enough W.C. and services |
| S5 | Variety of vegetables and animals for any scientific & educational researches | W5 | Lack of required credits for promotion of relevant activities related to tourism activities |
| S6 | High rate of interests of tourists for visiting the area | W6 | Destruction of living places and natural scenes throughout the area |
| S7 | Historical & cultural value of Palangan | W7 | Great number of visitors on holidays |
| S8 | Suitable heights for mountain climbing | W8 | Lack of knowledge of tourists and local communities with ecological & economic values of area |
| S9 | A calm and smooth environment for relaxation of citizens and tourists | W9 | Lack of a suitable advertising program for attraction of tourism in area |
| S10 | Presence of Tangivar River for swimming & fishing | W10 | Lack of correct programming in benefiting from facilities and abilities of area |
| S11 | Required social safety in area | W11 | Lack of benefiting from public participation in maintenance of biodiversity |
| S12 | Great beliefs of authorities in entrepreneurship through promotion of tourism industry as one of the active and income making industries | W12 | Lack of required strategies for respecting of tourism environmental comments |
| S13 | Presence of various types of boats and cats | W13 | Grazing of rural animals more than usual in grasslands and poverty of vegetation |
| | | W14 | Differences and converse relation between tourists' culture and native people |

Table 7

Final classification of effective factors (Weak & strength points) in recognition of natural tourism promotion and maintenance of biodiversity.

| Priority | Classification of strength points | Priority | Classification of weak points |
|----------|--|----------|---|
| O1 | Increasing of environmental knowledge of public people and tourists for environment maintenance | T1 | Lack of wastewater purification system & tourists wastes management |
| O2 | Increasing the motivation of tourists for repeating their trip to area with regard to current natural attractions | T2 | Pollution of water & soil resources |
| O3 | Making a wastes system management for collection of wastes besides Tangivar River | T3 | Disorders in environment balance |
| O4 | Performing of environmental management of created projects | T4 | Lack of an authority for organizing ecotourism opportunities at Palangan recreation area |
| O5 | Training of tourists for collection of wastes and transfer to landfills | T5 | Reduction of biodiversity & natural resources due to lack of programming and tourism management |
| O6 | Making required studies and preparing an evaluation environmental plan for prevention from any environmental damages | T6 | Absolute economic attitude to area without any attention to natural resources |
| O7 | Increasing knowledge level of local people in maintenance of biodiversity of area | T7 | Lack of ecological & environmental knowledge of responsible organization for biodiversity |
| O8 | Making required facilities and residing, hosting and welfare facilities for tourists at different levels | T8 | Lack of presence an integrated and efficient management |
| O9 | Introducing of area as a research priority for students and interested researchers | T9 | Presence of non-harmonized activities with environment & ecosystem |
| O10 | Promotion of tourism as a suitable strategy of development | T10 | Weak Information & marketing and advertisement for introducing & recognizing of the area |
| O11 | Pay more attention to relevant organizations of biodiversity | T11 | Lack of enough knowledge about environmental issues among tourists |
| O12 | Revising of relevant rules of hunting in area | T12 | Lack of continuous job for people |
| O13 | Coordination & participation of governmental organizations and private sector | T13 | Entrance of attacking types |
| O14 | Economic promotion of villages and maintenance of historical identity | | |
| O15 | Programming for improvement & upgrading the culture level of tourism | | |
| O16 | Increasing the motivation of private sector in investment in tourism | | |
| O17 | Creation of hosting feeling | | |
| O18 | Located in the way of two cities of Kamyaran & Sarvabad | | |

3. Conclusion

According to the results of tourists' questionnaires, it is obvious that Palangan is one of the important tourism centers of Kurdistan province. About 67.5% of tourists may visit the area only in spring. Also, due to the lack of a

suitable residing place, most of tourists may reside in area just for one day. In addition, most of tourists prefer to visit Palangan in spring because of more beauties and favorable climate. According to the current situation and specifying any strength points and opportunities for natural tourism in area and also some weak points and threats in tourism promotion process, the effective strategies of this process with regard to SWOT mode is that tourists have no more information about maintenance of natural resources and wildlife. Therefore, there is a lack of benefiting from local potential for maintenance and utilization of environment, therefore we should consider their ideas in any programming especially for tourism.

Upon evaluation of climatic condition and current situation of Palangan area, it is obvious that entrance time of tourists is according to warm seasons especially in spring and summer. This may refer to weak infra-structural & residential facilities of area which make it difficult for tourists to have any visits and/or reside in cold seasons. Undoubtedly with a correct programming in welfare and servicing parts, it is possible to increase residing time of tourists throughout the year and increase residing power of the area.

Regarding fourth hypothesis of this research, any lack of benefiting from strength points of natural tourism promotion may cause losing any opportunities for natural tourism. Lack of knowledge of tourists in current situation from one side and also local society on the other will endanger the area for destruction. Any presence of tourists in spring and summer, which is simultaneous with growing of vegetables in area without any infrastructure and facilities may cause severe destruction of environment. As a result it is necessary to have a revision and submit suitable policies for removing any weak points and/or threats by the use of strength points and opportunities.

References

- Afrakhteh, H., 2008. An introduction on programming the rural residing places. Ganje Honar Press.
- Bahrani, R., 2010. Evaluation of facilities & bottlenecks of rural tourism promotion at Kurdistan province. 4th International Congress of Geographers of Islam World, Zahedan.
- Bookbinder, M., Dinerstein, E., Rijal, A., Cauley, H., Rajouria, A., 1998. Ecotourism's support of biodiversity conservation. *Conservat. Biol.*, 12, 1399-1404.
- Mahallati, S., 2001. An introduction on tourism. Shahid Beheshti University Press.
- Mohammad Zadeh, M., Haji Gholikhani, 2010. The role of ecotourism in maintenance of biodiversity. National Conference in Biodiversity & its Effects on Agriculture & Environment, Urmieh.
- Nastaran, M., Houshmand Far, S., 2010. Strategic programming for organizing a part of old content of Urmieh city. *Geography & Environmental Studies Bulletin, Islamic Azad University - Najaf Abad Branch*, 1st year, No. 3.
- Papoli Yazdi, M.H., Vosghaei, M., 2006. Tourism (Nature & concepts). Samt press.
- Rezvani, A.A., 2008. *Geography & Tourism Industry*.
- Tourism Organization, 2008. Annual report of internal tourists, Sanandaj.

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