

Measuring the possibilities and capacities of ecotourism in Iran-Turkmenistan border; using SWOT method (Case study of Golestan Province)

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Abstract

In recent years, tourism industry and especially ecotourism has been introduced as a new method of generating income and drawing human being's attention to the importance of nature as a source of income which is not renewable. Golestan Province has a remarkable natural variation. In this province there are many different natural phenomena such as sea, mountain, jungle, desert and moor each of which can attract tourists. In this article we tried to evaluate and measure the possibilities and potentialities of the ecotourism industry of the province using SWOT model. The findings shows that because Golestan is not much far from two crowded provinces of Tehran and Khorasan-e-Razavi, and also because it possesses temperate climate, thick jungles and hospitable people, ecotourism industry can be one of the most profitable and sustainable industries of the province. However, regarding ecotourism, lack of a suitable and inclusive programming and management along with localization are the main weakness of and hindrance to development of this industry in the province. The searching method used here was descriptive- analytic and the needed data and information were collected using field study observation and library research through interviews and questionnaires. At the end, it was aimed to find ways of improving the status of ecotourism in the province by systematically regarding and perceiving the weak and strong points along with opportunities and threats of this industry.

Keywords: *tourism, ecotourism, Golestan province*

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Introduction

In contrast to the views which consider tourism a new industry, tourism has a very long history. In the past, most of tourists aimed to gain income, to have adventures, and to acquire knowledge and experience but today most of tourists only seek to spend their leisure time. More attention has been paid to this industry since the industrialization and urbanization of human life. Among different branches of tourism, ecotourism is favored more by tourists due to its contradiction with urban industrialized life. By going into nature, city dwellers relax and leave the stresses of modern life. In other hand, ecotourism is a management approach with economical, social and environmental goals. By suitable rules and regulations and by cooperation between citizens and authorities, ecotourism directly and indirectly results in preservation of nature (Zahedi, 2003: 12). In fact, ecotourism is a subcategory of tourism which is based on an aimed travel to natural scenes in order to study and enjoy from the vegetation, wildlife and cultural aspects of the area (Majnunian, 2002: 5). Acknowledgment of the notion of sustainable development and the value of natural heritage in many different countries resulted in the creation of ecotourism. Ecotourism is a combination of ecology and tourism. In mutual interaction with local societies, this subcategory of tourism can result in perennality of natural resources (Tavalaee, 2007: 122). Generally, ecotourism depends less on residential facilities and more on human resources. Therefore, in comparison with other categories of tourism, ecotourism have less impact on the development of infrastructures such as roads, hotels, etc. while every 5 incoming ecotourists are influential in creating one job opportunity (Mahmudi, 2006: 35-36). Moreover, after visiting the natural scenery of the area and its ecological features, ecotourists leave the place without damaging or devastating it, so that others can have the opportunity of using the place. Therefore, ecotourism preserve the ecosystem, and produce job opportunities while gaining knowledge about natural areas (Hemati et al. 2011: 282)

Iran is considered one of the five countries with complete biological diversity (four seasons and main animal and plant biological species). Moreover, the largest lake of the world, 1200 kilometer coastal line in the Persian Gulf, 50 lakes among which 18 are a part of International

Ramsar Convention, and Uromiyeh Lake which has been acknowledged as one of the 59 bio reserves of the earth are all located in Iran. The remaining of 10 thousand year old Hircania jungles in the north west of Iran, Iranian deserts with impressive fabulous scenes like Kalut in the west border of Dasht-e Lūt (Lut desert) which is known as the largest clod city of the world, international pools (Mian kale peninsula, Gorgan bay, Parishan lake and etc.), caves, waterfalls, mineral springs and villages with special attractions (Kandovan, Masule, etc.) are all parts of the unique ecotourism potentialities of Iran (Karim poor, 2009: 35). Golestan province has a unique climatic diversity in Iran. This has resulted in diversity of animal and plant species in the province. Foreign and domestic tourists can see bio diversity of the whole country in Golestan province with less time and less expenses. Taking advantage of the writer's knowledge of the area and its ecotourism potentialities, the present article focuses on the weak and strong points, threats and opportunities of tourism in Golestan province.

Literature review:

According to the World Tourism Organization, in 2020 the least developed countries in tourist attraction will gain more than 20 billion dollars from the industry while the average income of the countries heavily dependent on tourism will reach 50 billion dollars. Investing in ecotourism, Iran can easily gain the predicted income. 14 different climates, 12 thousands plant types, 163 species of mammals, 174 species of fish, 20 amphibious species, and 500 species of birds which is equal to the bird diversity of the whole Europe can lead Iran to its real share in ecotourism. Based on the statistics, every ecotourist brings an average of 1000 to 1500 dollar to his/her destination and 50% of the world ecotourists spend 8 to 14 days in their destination on average (Saraee et al. 2010: 3). The largest part of the income of Golestan province must come from attracting tourists, due to its adjacency to the largest lake of the world, presence of the vastest Iranian national park with the most bio diversity in the province and many other potentialities. Only a few scientific investigations have been performed on tourism in Golestan province. The aims of these studies were to introduce the tourism potentialities of the province and

to encourage the authorities to prepare an integrated plan for the province's tourism industry. For example, the following studies have been performed about the province: *Ecotourism with a Focus on Tourist Attractions of Golestan Province* by Tavalaei (Geographic research, vol.85, 2006), *Preserving the Caspian Sea by Development of Ecotourism* by Takrimi (Payam-e Darya monthly, Vol. 163, 2007), *Geomorphotourism of Southern Coasts of the Caspian Sea , Challenges and Threats* by Zomorodian (Geographic and local development Journal, number 5, fall and winter, 2005) and *Golestan Encyclopedia* which is a more comprehensive reference of the natural, cultural and social features of the province. However, regarding the superiorities and potentialities of the province in tourism and ecotourism, the number of studies in planning and development in these realms has been very limited.

Golestan province shares the climatic features and geographic location of its adjacent province (just like Mazandaran province it is adjacent to both sea and mountain), but in comparison to Mazandaran province, Golestan is not recognized as an ecotourism resort. Therefore these research questions are proposed: 1) why tourism is not considered one of the profit making industries of Golestan? 2) Do the external threats and internal weaknesses overcome the internal strong points of the province? 3) Is the present status of Golestan's tourism industry a real status? Thus the research hypotheses will be as follows: 1) no integrated planning has been prepared for the province. 2) The opportunities and strong points of tourism industry development in Golestan outnumber the threats and weaknesses. 3) The current status of the province in tourism is not appropriate regarding to the regional opportunities.

Method

Statistical Group and Research Method

The present study is application oriented and takes advantage of a descriptive-analytic research method. The necessary information was collected using library research and field observation. In the first method, references were studied and notes were taken and in the second one, a questionnaire was prepared and field observation was performed. The questionnaires were distributed among tourists in

main resorts of the province (sea, jungle, parks, waterfalls and even gas stations) in spring (April) and summer (July, August, September, every Thursdays and Fridays). The statistical group includes all passengers entering the province all over the year. However the precise number of these passengers is not identified. The sample in descriptive and measuring researches must contain at least 100 persons (Hafez nia, 2005: 138). In a study performed by Michel and Carson sample size in large populations is determined using a comprehensive table. According to this table, with 90% of certainty in a sample size of 160, the calculated quantity will have only 20% difference with the real quantity (Ranjbarian 2007: 71). Thus 160 questionnaires were distributed among 160 tourists in Golestan province.

SWOT Model

SWOT is an acronym of four words: strength, weakness, opportunity, and threat (Zangiabadi, 2007: 2). This model is the best approach to strategic planning. The resulting analysis in this article takes the form of a list of opportunities, threats, strong and weak points, and their analysis based on SWOT model. This model is one of the important strategic management tools for conforming internal strong and weak points with external opportunities and threats. SWOT proposes a systematic analytic method for identifying these factors and choosing the best strategy for conforming them (Fisher, 1989: 157)

SWOT analysis is used in strategic decision making, and its most prevalent usage is in preparing a logical framework for systematic leading of discussions about system, different strategies and at last for choosing a strategy. SWOT is also used for systematically comparing key external weak and strong points with internal weak and strong points. This comparison is aimed at identifying one of the following patterns for conforming internal and external situations.

A) Strength and opportunity (SO): the system has a number of environmental opportunities and many strong points which encourage benefiting from the opportunities. In the current situation growth strategies are advised.

B) Strength and threat (ST): the system has key strong points but is facing a threatening environment. In this situation, strategies take advantage of the strong points to form long term opportunities.

C) Weakness and opportunity (WO): the system is facing an opportunity while suffering from some internal weaknesses.

D) Weakness and opportunity (WT): the system is facing many internal weaknesses and external threats. Depreciating strategy will be the best strategy in such a situation (Hekmatnia, 2006:293)

Theoretical Foundation:

Tourism

The word tourism was first used in 1811 in an English magazine (Sporting). At the time, tourism referred to a trip with the aim of visiting historical and natural scenes for seeking pleasure (Bezi, 2010: 4). The World Tourism Organization, call the activities done out of the person's local environment with the aim of spending leisure time in less than a year, tourism.

Ecotourism

Depending on the environmental situations, tourism has different types. Ecotourism is a new approach to tourism in nature introduced in last few years. In 20th and 21th century, tourism gained such an importance that UN called the present century ecotourism century. Ecotourism is accompanied by sustainable development and preservation of environment. Actually, it is a kind of responsible tourism whose main aim is preservation of the environment. This spatial pattern encompasses different types of tourism like environmental tourism, marine tourism, sport tourism, hunting and fishing tourism, plant collecting tourism and so on and so forth.

The next definition says ecotourism is a kind of tourism in nature which takes part in preserving species and rarely affects the environment and natural resources. (Fenel, 2006: 63)

Research Objectives

The present study aims to identify the potentialities, and strong and weak points of ecotourism in Golestan province. Considering the opportunities for and threats to development of tourism in Golestan, some strategies are proposed using SWOT model.

A brief introduction of Golestan Province

Golestan province is located in North Temperate Zone between $36^{\circ} 24'$ and $38^{\circ} 5'$ northern latitude and $53^{\circ} 51'$ and $56^{\circ} 4'$ eastern longitude. Golestan is adjacent to Turkmenistan in the north, Semnan province in the south, northern Khorasan in the east and Mazandaran and the Caspian Sea in the west. The southern and eastern parts of the province are covered by the continuation of Alborz mountain system. These mountains start in Mazandaran and Golestan (Galugah) provinces, take the form of a hemicycle and join Aladagh, Binalud and Hezar Masjed mountains in Khorasan province. Shahkuh, Derazno, Pirdar Kuh, Qale Muran mountains are among important elevation points of the province. Kahkeshan summit with 3813 m height is located between Golestan and Semnan provinces. It is considered one of the highest summits of Iran.



Map1: Administrative divisions of Golestan province

Moving from west to east, humidity and rain decreases due to longer distance from the sea, so that minimum mean humidity reaches 17 and maximum mean humidity reaches 100. In Gorgan, mean annual temperature is 17.9, frost lingers 13 days and there are 114 rainy days. In Maravetape, there are 20 days of frost and 84 rainy days. Absolute maximum temperature in Gorgan is 41.8 and in Maravetape is 43.6. Also absolute minimum temperature in the first is -1.2 and in the latter is -6.6. The south west of the province with 1000 mm has the maximum raining, and its north with 150 mm has the least. Therefore, the average annual raining of the province is estimated 550mm. With 95 km coastline in the Caspian Sea from which 10km in the southeastern coast is convenient for use, this province has rich marine and land ecosystems. (National Bank website)



Map 2: Ecotourist attractions of the province

Generally, the following natural phenomena can attract tourists to Golestan province:

- 7-1 Mountain and mountainsides
- 7-2 Plain and plateau
- 7-3 Sea and coasts
- 7-4 Pools and bays
- 7-5 Jungles and forest parks
- 7-6 Waterfalls, rivers and springs
- 7-7 Mud volcanoes

All of these natural phenomena are influential in the beauty of the province's natural environment and so can play a major role in attracting ecotourists to Golestan. In this way, Golestan can turn into Iran's major ecotourist province. What follows is a brief explanation of the phenomena:

Mountain and mountainsides: over 30% of the province is covered by mountains and mountainous areas. 300 kilometer of eastern Alborz Mountain is located in this province (Dorbeiki, 2009: 59). The mountainous part of the province expands in the south and east of the province and is covered by jungles. The mountain systems are in the

west-east direction and then continue to the north east. In the direction of the west to the east, the altitude of the summits decreases (Riyahi, 2009: 18).

The mountains of Golestan are covered by pasture lands and jungles, so a wide range of plants and animal species live there. For example, over 107 plant species can be found in Ziyarat mountainous area. The mountains of Golestan, especially in central and western parts, are considered one of the most popular places of the province because of their beautiful mountainous sceneries, natural structures like caves and convenient climate. Moreover, some of the mountainous areas of the province have the potentiality for being used in health tourism (Dorbeiki, 2009: 59). In winter, these areas are covered with snow and provide a very beautiful scene.



Picture 1: mountainous areas in Golestan province

Plains and plateaus: in comparison with other provinces adjacent to the Caspian Sea and Alborz Mountain, Golestan province possesses more flat areas. Gorgan plain with 150km length and 60 to 80km width is located in the northern part of the province. This plain which is a part of the Middle East's great desert, borders Atrak River in the north and Shah marz- the border line between Persians and Turkmens- in the south. Although, Gorgan plain is rather flat, there are some hills and high grounds in it, such as Qaretape, Shahtape, Soltan Dovin, Saliantape, BibiShirvan, Oujtape and Abadantape.



Picture 2: Pastoral areas in Golestan province

Sea and coasts: with 378400 or 386400 km² area, the Caspian Sea is the largest salt lake in the world. Some parts of this great lake are located near the west borders of Golestan province. Many famous aquatic animals live in the Caspian Sea and more than 100 species and subspecies of fishes have already been identified in it, among which whitefish, salmon, acipenser are the most valuable ones (Dorbeiki, 2009: 59).

Ponds and bays: regarding inner marine ecosystems, Golestan province is considered very rich. Four ponds located in this province are internationally identifies for their importance in providing regional and immigrant birds with habitat. In 2006, number of immigrating birds in ponds of this province reached 234593 which is near the population of Gorgan city. (Dorbeiki, 2009: 59).



Picture3: Bays of Golestan province

Alagol, Ajigole and Almagol located in northern border of the province, are among the first international ponds in Golestan and were internationally registered in 1975. These ponds with overall 1400 hectares are considered inland ponds in which many immigrant aquatic animals live.

Gomishan is another pond of the province which is located in its west and is surrounded by Gorganrud in the south and the Caspian Sea in the west. This pond is one of the important habitat of birds and also a valuable place for spawning, infancy, overwintering of various types of the Caspian Sea fishes. Therefore along with Anzali pond, it is the most ecologically valuable pond in Northern provinces of Iran (Dorbeiki, 2009: 59).

Gorgan bay is the next sea related phenomenon in Golestan province. The south eastern part of the Caspian Sea ends into a bay called Gorgan bay or EstarAbad bay whose point is in the western part. For years, this bay had been under imperial influence of Iran's powerful neighbor, Russia, since it was considered the safest harbor in the Caspian Sea and some strategic places like Ashuradeh was located near it. Many famous aquatic animals live in the Caspian Sea and more than 100 species and subspecies of fishes have already been identified in it, among which whitefish, salmon, acipenser are the most valuable ones. Some of these fishes enter the shallow coastal areas of Gorgan bay for spring spawning. (Dorbeiki, 2009: 59).

Jungle and forest parks: a margin of 1847886 hectares with 800 kilometer length and 20 to 70 kilometers width covers the southern part of the Caspian Sea. About 451705 hectares of this green margin is located in Golestan province. With a length of 260km, jungles of the province start in Galugah in the west and ends in Golidaq in the east. 80species of phylldes, 4 types of indigenous pine needles, and 50 shrubs exist in the Hircania jungles of the province. Chestnut oak is the prevailing tree in the east of the province. Valuable species like yew, box tree, and cedar are among the genetic resources of the province.

Among 59 forest parks of the Northern provinces 6 parks are located in Golestan province. Theses parks which are managed by department of natural resources are mainly scattered in the central region of the province. Some of these parks are as follows:

Alangdare forest park in Gorgan, Qoroq forest park in the margin of Gorgan-Mashhad road, Daland forest park within 10km of Azadshahr and in the margin of Gorgan-Mashhad road, Imam Reza forest park in Kordkoy, Kabudval nature park in Aliabad, Shriabad nature park in Shirabad, Nahar khoran forest park in the south of Gorgan.

Waterfalls, rivers and springs: Waterfalls, rivers and springs have made Golestan province popular in Iran. Kabudval waterfall in Aliabad Katul county, the beautiful Shirabad waterfall in Khanbin, springs and seasonal and permanent rivers can attract tourists to the province.

Mud Volcanoes: are important morphologic phenomena usually in the form of conical hills. They are often created due to the pressure of hydrocarbon gases and perhaps water steam, coming from the depths of earth to the ground (Negareh, 1998: 185). Naft-e Lije near Gomishtape, Qarniaq and Inche in Aq Qala in the west of province are famous Mud Volcanoes that attract many tourists.

Results

Descriptive results

In the questionnaires we tried to find the weak and strong points, opportunities and threats in tourists' opinions. The following data was driven from the questionnaires:

89% of those filling in questionnaires were male and 11% female. 16% were between 15 and 24, 30% between 25 and 34, 26% between 35 and 44 and 24% between 45 and 54 years old. Around 4% were 55 years old and above.

Table 1: frequency of age range and gender

Age range (year)	Frequency of genders		male	female
	male	female		
15-24	21	4	25	16
25-34	43	5	48	30
35-44	37	4	41	26
45-54	35	4	39	24
55 an upper	6	1	7	4
total	142	18	160	100

Source: field observation and author's understanding

26% of the tourists enter Golestan from Mashhad and 22% of them from Tehran, thus about half of the tourists come from these two cities. 33% of the tourists' destination is Khorasan, especially Mashhad, 20% journey to Mazandaran and 23% to Golestan. Interestingly, 100% of the tourists from Western and Eastern Azerbaijan and Ardebil aim for Mashhad. Actually, 67% of the tourists are just passing the province to reach their destination or origin.

Table 2: origin and destination of tourists entering Golestan province

origin	Number	percent	destination	number	percent
Mashhad	42	26	Golestan	37	23
Tehran	35	22	Khorasan-e Razavi	53	33
Others	83	52	Mazandaran	32	20
total	160	100	Others	38	24
			total	160	100

Source: field observation and author's understanding

40% of the tourists enter Golestan province in spring and 56% do so in spring and summer. Therefore, it is necessary to take actions for an appropriate reception of tourists in these two seasons.

Table3: Frequency of seasons in tourists' traveling

season	number	Percent (%)
Spring	64	40
Spring and summer	90	56
Others	6	4
total	160	100

Source: field observation and author's understanding

22% of tourists stay in the province for only a few hours, 18% reside for 1 day, 29% for 2days, 9% for 3days, and 22% stay for more than 3 days. Actually, 60% of the tourists visit the ecotourist attractions of the province and continue their travel. The remaining 40% choose to stay for 1day.

Table 4: Duration of stay in Golestan province

duration	number	percent
Some hours	35	22
1 day	29	18
2 days	46	30
3 days	15	9
More than 3 days	35	22
total	160	100

Source: field observation and author's understanding

83% of the tourists reported the aim of their trip to be recreational, 4.5% recreational-commercial, 4% visiting family, 8.5% visiting family and recreation. That is to say, the main part of the tourists travels to the province in order to recreate and enjoy nature. Thus, it is necessary to provide better facilities for tourists so that they can reach their goal.

Table 5: Frequency of goals for traveling to Golestan

goal	number	percent
Office affairs	0	0
Recreational	133	83
Commercial	0	0
Recreational-Commercial	7	4.5
Pilgrimage	0	0
Visiting friends and family members	6	4
Recreational- Visiting friends and family members	14	8.5
total	160	100

Source: field observation and author's understanding

In answer to "which attractions of the province do you prefer to visit?" 11% answered historical and ancient buildings, 85% answered natural sceneries, and 1.5% chose public places and 2.5% chose human, social and cultural factors. Around 85% of the tourists only wanted to visit natural sceneries of the province but 40% of them were dissatisfied about the low level of cleansing in these areas. In this way a strong point turns into a weak point due to weak planning.

Table 6: Frequency of tourists' tendency for visiting each attraction

Kind of attraction	number	percent
Office affairs	0	0
Historical buildings	18	11
Natural sceneries	136	85
Holy shrines	0	0
Recreational places	2	1.5
Humanistic, social and cultural factors (celebrations and rituals)	4	2.5
Bazaars and commercial centers	0	0
total	160	100

Source: field observation and author's understanding

45% of the tourists were informed about the tourist attractions of the province by their friends and acquaintances, 17% by media and advertisements, 28% by accident, and 8% by other ways. Therefore, it seems there are not enough advertisements about this province in media. Not using the opportunity of advertisements for tourism expansion of the province is a major weak point.

Table 7: Frequency of ways of receiving information about attractions of the province

Ways	number	percent
Friends and acquaintances	74	45
Advertisements and media	26	17
Accidentally	44	28
Others	16	10
total	160	100

Source: field observation and author's understanding

To the question “how did Golestan citizens behaved toward you” 36.5% answered very good, 53.5% answered good, and 10% chose average. It can be concluded that 100% of the tourists were content with the citizens’ behaviors which is considered a strong point for tourism industry of the province.

8-1-9) 42% of the tourists stayed in accommodation stations, 23% in personal tents, 2.5% in inns, 7% in hotels, 2.5% in organizational places, and 19.5% in the house of their friends and family members. Tourists prefer staying in personal tents and accommodation stations. Thus, authorities need to allocate necessary budgets and increase such facilities.

Table 8: Frequency of tourists based on type of accommodations

Type of accommodation	number	percent
accommodation stations	67	42
personal tents	37	26
inns	4	2.5
hotels	11	7
organizational places	4	2.5
house of their friends and family members	31	19.5
others	6	3.5
total	160	100

Source: field observation and author’s understanding

To the question “what is your main dissatisfaction from your travel to Golestan?” only 80% answered, from which 4.5% chose the citizens’ behaviors, 32% chose roads and their safety, 6% answered hotels and inns, 39% answered cleansing and health care, 4.5% chose lack of recreation facilities, and 14% answered high expenses of their overnight stay. The least dissatisfaction was from Golestan citizens’ behavior and the most dissatisfaction was from road safety and cleansing and health situation.

Table 9: Scope of tourists’ dissatisfaction

Type of dissatisfaction	number	percent
Citizens’ behavior	6	4.5
Roads’ status and safety	41	32
Inappropriate hotels and inns	7	6
cleansing and health care	50	39
recreation facilities	6	4.5
high expenses of overnight stay	18	14
total	128	100

Source: field observation and author’s understanding

To the question “what in the province attracts you more?” 11% answered mountain and mountain side, 13.5% answered plains and plateaus, 11% chose sea and coasts, 2.5% chose ponds and bays, and 17% answered waterfalls, rivers and springs. None of the tourists chose mud volcanoes and deserts. Around half of the tourists believe jungles and forest parks attract them most. This is the strength of Golestan province in attracting tourists. With this strength and with reducing weaknesses like inappropriate situation of health and cleansing, and increasing accommodation facilities in forest parks, more tourists can be attracted to the province.

Table 10: Frequency of tourists' views about the most beautiful attraction of Golestan

Type of dissatisfaction	number	percent
mountain and mountain side	18	11
plains and plateaus	21	13.5
sea and coasts	18	11
ponds and bays	4	2.5
Jungles and forest parks	72	45
waterfalls, rivers and springs	27	17
mud volcanoes	0	0
deserts	0	0
total	160	100

Source: field observation and author's understanding

The final question is open-ended and asks “in your opinion, what is the most influential factor which can reduce number of tourists in the province?” To this question, 30% answered inappropriate planning in providing health care, 23% answered narrow and crowded roads and 28% answered shortage of accommodation facilities. It can be concluded that narrow roads between Golestan and northern Khorasan and Golestan and Semnan, inappropriate planning in providing health care and shortage of accommodation facilities are the main weak points of Golestan province and an impediment to development of tourism industry in the province.

Analytic findings

According to the information received from the questionnaires and field observations, the strength, weakness, opportunities and threats are identified as comes in table 12.

Strong points

1-Mild temperature 2)jungles and beautiful forest parks 3)sea and coast 4)mountain and mountain sides 5) waterfalls and rivers 6) hospitable and kind citizens 7) beautiful international ponds

Opportunities

1-Being located between two important and crowded cities of the country: Tehran and Mashhad 2) being located on the pilgrims road to Imam Reza's shrine 3) having marine borders with neighboring countries 4) location on the international road connecting east, west, north and south of Alborz mountain 5) being adjacent to Mazandaran 6) having border with Turkmenistan 7) linguistic and cultural similarities with Turkmenistan

Weaknesses

1-Insufficient roads and railroads in the province 2) lack of qualified inns and hotels 3) lack of integrated tourism planning 4) hotels inability in providing appropriate service for ecotourists 5) insufficient highways in the province 6) low level of advertising in the province tourism industry

Threats

Being located adjacent to Mazandaran province (regarding ecotourism, Mazandaran is considered a rival of Golestan province)

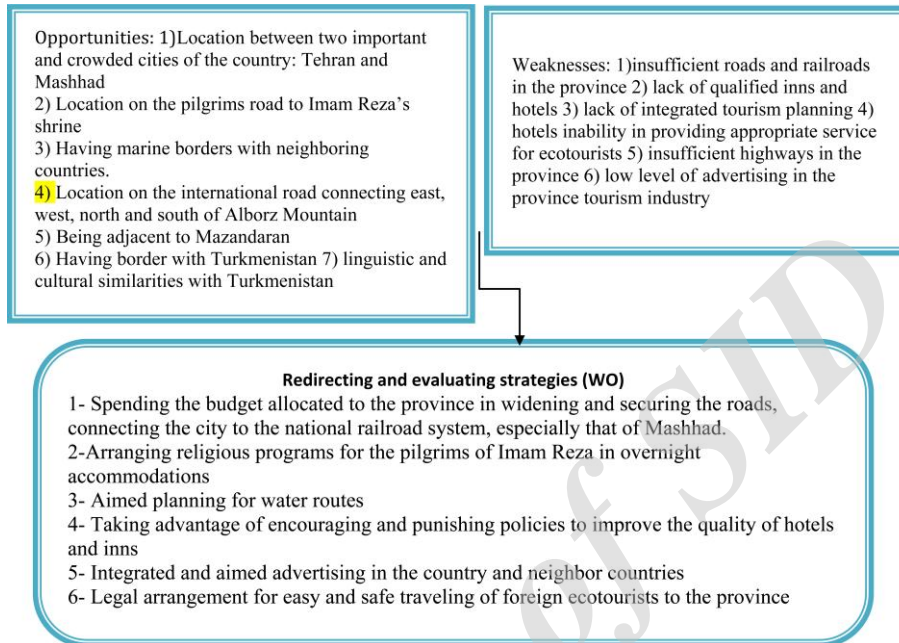
Based on the above mentioned findings, it can be concluded that the first hypothesis is proved: no comprehensive and integrated tourism-related planning has been prepared in Golestan province and most of tourists believed that weaknesses of the province results from lack of appropriate planning. The second hypothesis is also proved: strong points and opportunities of the province regarding tourism are more than two times greater than its threats and weak points. In regard of the second hypothesis, table 2 shows that half of the tourists enter Golestan province with the aim of going to its neighbor, Mazandaran province. Thus, Golestan with similar ecotourist features with Mazandaran is not the ultimate goal of ecotourists traveling to the north of Iran.

Table 11: Matrix of internal and external factors in ecotourism development of Golestan

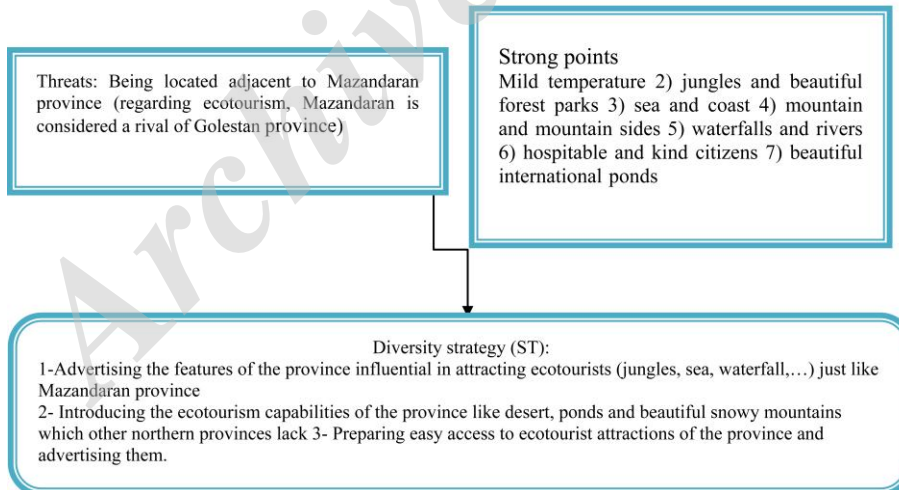
threats	opportunities	weaknesses	Strong points
Being located adjacent to Mazandaran province (regarding ecotourism, Mazandaran is considered a rival of Golestan province)	linguistic and cultural similarities with Turkmenistan	Insufficient roads and railroads in the province	Mild temperature
	having borders with Turkmenistan	lack of qualified inns and hotels	jungles
	having marine borders with neighboring countries	lack of integrated tourism planning	Coastal line
	Location between two important and crowded cities of the country: Tehran and Mashhad	hotels inability in providing appropriate service for ecotourists	Various ponds
	location in the pilgrims road to Imam Reza's shrine	insufficient highways in the province	Having all four seasons
	being adjacent to Mazandaran	low level of advertising in the province tourism industry	Existence of mountain
	location on the international road connecting east, west, north and south of Alborz mountain	Narrow Roads	Existence of deserts
			Hospitable citizens
			Beautiful rivers and waterfalls
			Mild temperature in spring

Influential strategies for the improvement of ecotourism in Golestan province:

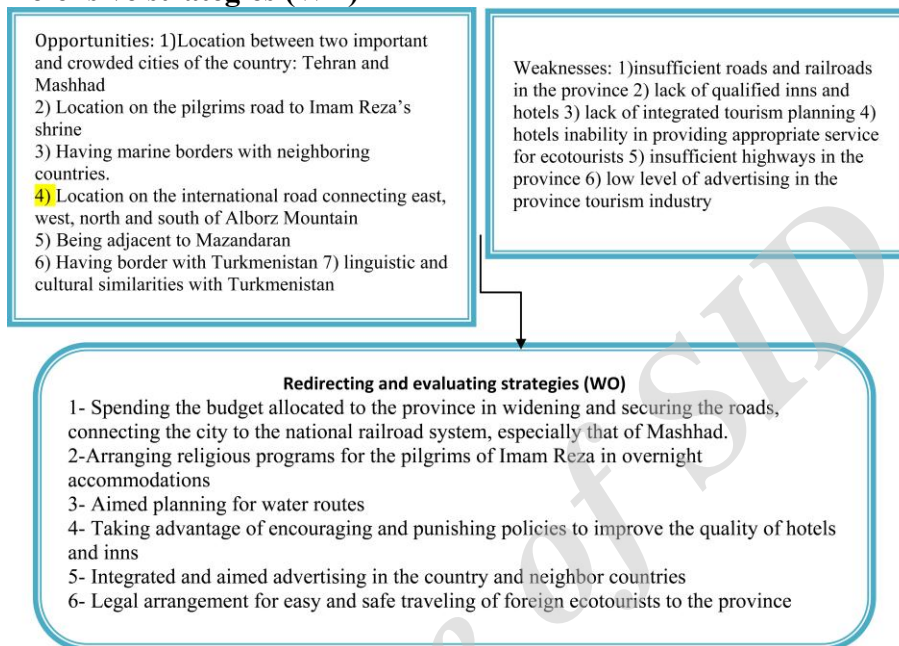
9-1) Comparative-aggressive strategy (SO):



Diversity strategy (ST)



Defensive strategies (WT)



Prioritizing the strategies by quantifying them

To prioritize the strategies, the importance of each weak point, strong point, opportunity, and threat is quantified (Arabi, 2009:45)

As apparent in what follows, the resulting quantity of weak and strong points was normalized. The quantity of opportunities and threats was also normalized.

The next step was evaluating the influence of mentioned strategies on opportunity, threat, weakness and strengths. This relation is shown in table 15:

Table (15): relation between strategy and internal and external factors (Arabi 2009)

<i>Quantity</i>	relation between strategy and internal and external factors
0	no influence
1	Serious threat
2	Ordinary threat
3	Ordinary opportunity
4	Serious opportunity

Accordingly, the following matrix is prepared for the relation between these points and strategies:

Table 16: relation between strategy and internal and external factors

	Description	coefficient	Strategy Number											
			1	2	3	4	5	6	7	8	9	10	11	12
Strength	1-Desirable weather during the year	0.0834	3	2	2	2	4	3	3	4	0	3	4	3
	2-Crowded jungles	0.0625	3	0	3	2	4	4	3	4	0	3	4	3
	3- Coastal border	0.0625	3	4	2	4	1	1	1	3	0	3	4	2
	4- Various ponds	0.0417	2	4	2	3	1	1	1	2	2	2	2	2
	5- Four seasons, interesting for tourists	0.0625	3	2	3	1	3	3	3	4	0	3	3	3
	6- Mountains	0.0625	3	0	3	2	4	2	2	3	3	3	3	3
	7- Deserts	0.0208	1	0	1	0	2	1	0	1	3	1	1	1
	8- Hospitable people	0.0417	1	1	1	1	2	2	2	2	2	2	2	2
	9-Beautiful rivers and waterfalls	0.0625	3	2	3	2	3	2	2	3	3	3	3	3
	10-Mild climate in spring	0.0625	2	2	2	1	3	3	2	3	0	3	3	3
weakness	1-Lack of sufficient roads and railways	0.0625	3	1	3	2	4	3	3	4	3	3	3	4
	2- Lack of qualified inns and hotels	0.0625	2	0	3	2	1	3	3	3	3	4	3	2
	3-Lack of integrated planning of tourism	0.0833	2	2	3	4	4	4	4	4	4	4	4	4
	4-Inappropriate service in hotels and inns	0.0417	2	3	3	1	1	3	3	2	3	3	3	2
	5-Shortage of highways	0.0625	3	3	3	3	3	3	3	3	3	3	3	3
	6-Shortage of advertising for tourism	0.0625	2	3	2	3	3	4	4	4	3	3	3	2
	7-Narrow roads compared to the number of tourists	0.0625	4	3	3	3	3	3	3	3	3	2	3	3
total		1												
Opportunity	1-Linguistic and cultural similarities with Turkmenistan	0.0667	1	1	1	1	0	0	3	3	0	2	1	2
	2-Having foreign borders	0.0667	1	1	1	1	1	0	3	3	0	0	1	2
	3-Having marine borders with neighboring countries	0.0667	1	1	3	1	3	1	2	1	0	0	1	2
	4-Location between two important and crowded cities of the country: Tehran and Mashhad	0.2	4	4	3	3	2	2	1	2	3	3	2	3
	5-Location on the pilgrims road to Imam Reza's shrine	0.2	4	4	3	3	2	2	1	2	3	3	2	3
	6-Being adjacent to Mazandaran	0.1333	1	1	1	1	2	0	0	0	0	1	1	2
	7-Location on the international road connecting east and west of Iran	0.2	4	4	3	3	2	2	1	2	3	2	2	2
threat														
1-Being located adjacent to Mazandaran province (regarding ecotourism, Mazandaran is considered a rival of Golestan province)	0.0667	1	1	1	1	1	0	0	0	0	1	1	2	
total		2												

The importance value of each opportunity, weak point, strength and threat was multiplied by their relation with strategies. The score for each strategy was calculated by summing its results. This score shows the relational importance of each strategy in comparison with others.

Table 17:

Description	Strategy number											
	1	2	3	4	5	6	7	8	9	10	11	12
desirable weather all over the year	0.25	0.167	0.167	0.167	0.333	0.25	0.25	0.333	0	0.25	0.333	0.25
Crowded, deciduous jungles	0.188	0	0.188	0.125	0.25	0.25	0.188	0.25	0	0.188	0.25	0.188
coastal border	0.188	0.25	0.125	0.25	0.063	0.063	0.063	0.188	0	0.1888	0.25	0.125
various ponds	0.083	0.167	0.083	0.125	0.042	0.042	0.042	0.083	0.083	0.083	0.083	0.083
four seasons, all interesting for tourists	0.188	0.125	0.188	0.063	0.188	0.188	0.188	0.25	0	0.188	0.188	0.188
mountains	0.1888	0	0.188	0.125	0.25	0.125	0.125	0.1888	0.1888	0.1888	0.1888	0.1888
deserts	0.021	0	0.02	0	0.042	0.02	0	0.06	0.02	0.02	0.02	0.02
hospitable people	0.042	0.04	0.04	0.04	0.083	0.083	0.08	0.08	0.08	0.08	0.08	0.08
Beautiful rivers and waterfalls	0.1888	0.125	0.188	0.125	0.188	0.125	0.125	0.1888	0.1888	0.1888	0.1888	0.1888
Mild climate in spring	0.125	0.125	0.125	0.063	0.188	0.188	0.125	0.188	0	0.188	0.188	0.188
lack of sufficient roads and railways	0.1888	0.06	0.188	0.125	0.25	0.188	0.188	0.25	0.188	0.188	0.188	0.25
lack of qualified inns and hotels	0.125	0	0.188	0.125	0.063	0.188	0.188	0.188	0.188	0.25	0.188	0.25
Lack of integrated planning of tourism	0.167	0.167	0.25	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Inappropriate service in hotels and inns	0.83	0.125	0.125	0.042	0.042	0.125	0.125	0.083	0.125	0.125	0.125	0.083
Shortage of highways	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.125	0.188	0.188
Shortage of advertising for tourism	0.125	0.188	0.125	0.188	0.188	0.25	0.25	0.25	0.188	0.188	0.188	0.125
Narrow roads compared to the number of tourists	0.25	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.125	0.188	0.188
linguistic and cultural similarities with Turkmenistan	0.067	0.067	0.067	0.067	0	0.2	0.2	0	0.13	0.067	0.13	0.067
having foreign borders	0.067	0.067	0.067	0.2	0	0.2	0.2	0	0	0.067	0.13	0.067
having marine borders with neighboring countries	0.067	0.2	0.067	0.4	0.067	0.133	0.067	0	0	0.07	0.133	0
Location between two important and crowded cities of the country: Tehran and Mashhad	0.8	0.6	0.6	0.4	0.4	0.2	0.4	0.6	0.6	0.4	0.6	0.6
location on the pilgrims road to Imam Reza's shrine	0.8	0.6	0.6	0.267	0.4	0.2	0.4	0.6	0.6	0.4	0.6	0.6
being adjacent to Mazandaran	0.133	0.133	0.133	0.4	0	0	0	0	0.13	0.13	0.267	0.13
location on the international road connecting east and west of Iran	0.8	0.6	0.6	0.07	0.4	0.2	0.4	0.6	0.4	0.4	0.4	0.6
Being located adjacent to Mazandaran province	0.067	0.067	0.067	0.067	0	0	0	0	0.067	0.067	0.133	0.067

By summing the values of each strategy, their scores for prioritizing are calculated.

Table 18: Prioritizing the strategies

Rank	Strategy description	Score
1	Design and accomplishment of an integrated plan for this industry. Preventing parallel working	5.566667
2	Widening roads in the province. Beautifying the entrance roads	5.3833333
3	Advertising the influential features (jungle, sea, waterfall,...) of the province in attracting ecotourists	5.05
4	Using the state budget for widening and securing the roads, connecting the city to the national railroad system, especially that of Mashhad. Informing the authorities of the importance of this.	4.925
5	Increasing the number of accommodations and gas stations on the roads of the province, and improving their quality.	4.7625
6	supporting private sector in construction of high quality hotels and inns	4.4958333
7	legal arrangement for easy and safe traveling of foreign ecotourists to the province	4.3125
8	developing facilities for marine tourism of foreign ecotourists to the province	4.25
9	constructing appropriate roads to ecotourist attracting areas far from the main road	4.141667
10	Constructing road along with the Caspian Sea for an easier access to the sea to compete with Mazandaran province	4.0708333
11	Introducing the ecotourist attractions in the province which the two other northern provinces lack, for example desert, mud volcano, ponds, and mountains	3.9333333
12	Advertising the ecotourist attractions of the province in neighboring countries especially Turkmenistan	3.925

Conclusion and suggestions

Based on the gathered information and the SWOT-based analysis of them, the following suggestions are proposed for development of ecotourism industry in Golestan province:

- A comprehensive planning for garbage collection from public places. Placing garbage cans in these areas.
- Regarding the fact that one of the major dissatisfaction of tourists was about roads and their safety, widening main roads and changing them into one-way roads can increase the number of tourists to a great degree.
- Increasing the quantity and quality of accommodations and gas stations.

- Increasing the quantity and quality of rest rooms in accommodations
- Focus more on preparing recreational facilities and temporal accommodations, for example places for praying, rest rooms, bowers and platforms for tents in forest parks. About 45% of tourists called jungles and forest parks the best attraction of the province.
- Increasing the quantity and quality of advertisements in the country and in neighboring countries, using new cheap technologies.
- Introducing other attractions of the province which does not exist, or is very rare, in other provinces. For instance mud volcanoes, deserts and salt deserts.
- Focusing on religious and cultural programs for tourists in order to expand the culture of environment preservation.
- Putting signs on the way to ecotourist stations. Providing tourists with ecotourist map of the province.
- Investing and encouraging people to invest in ecotourism sector, for example in construction of hotels or recreational areas.
- Arrangement for easy traveling of foreign tourists to the province.
- Providing the tourists with safety and security
- Emphasizing money earning along with preservation of environment in the expansion of ecotourism industry
- Special planning for new year and summer
- Integrated and comparative plans for tourism of the province in order to avoid parallel working and localization and to make the tourist perspective of the province clear.

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