

ORIGINAL RESEARCH PAPER

A presentation of SWOT strategies for the sustainable tourism development on the Caspian Sea coast of Gilan province, Iran

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Abstract: Coastal areas are of the most important natural ecosystems around the world, continuously influenced by various human activities, in particular tourism development leading to instability in some coastal areas. The coastal areas of Gilan province in Iran as an important tourist destination have been attracting always special attention of many tourists, investors and operators of tourism. Given the need for the environmental protection regarding the coastal tourism development, the present descriptive-analytical study aimed to identify coastal tourism potentials in the Gilan province by analyzing satellite images and field surveys and provide relevant promotional strategies through SWOT analysis. The results revealed that a majority of coastal areas had developmental constraints, and only one-third of these coasts, including Amirkalaye and Talesh, had the tourism development potential. Moreover, total score of internal factors calculated less than 2.5 (i.e., 2.11) highlighted a relative weakness for the coasts of Gilan province in terms of tourism capabilities. The results of the SWOT analysis also showed that the coastal tourism in this region was in a defensive state environmentally. In conclusion, the factors affecting coastal tourism development based on our developed SWOT matrix were found to be domestic and foreign investments, administrative coordination, detection of coastal capacity, tourism development and environmental tourism planning.

Keywords: Sustainable tourism, development strategies, SWOT analysis, Caspian coast, Gilan



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1. Introduction

Tourism and ecotourism are considered as goals of sustainable development, in which sustainable and long-term achievements in this field, rather than short-term achievements, lead to the conservation of natural and cultural values. (Garrod; 2003; Hosseini Dinani et al., 2020). In this type of industry, the culture of the host community is concerned as a tourism investment, and any change, including the opening of tourists to the region, needs to be considered in any application (Ohadi et al., 2013), and even cultural resources are considered as one of the tourism attractions (Weaver; 2002; Moharamnejad et al., 2012).

Coastal tourism is globally known as an important tourist attraction and is a natural tourist subsection (Fennel; 2003). Coastal tourism entails traveling from one place and focusing on the marine environment (Fataei et al., 2016). Beaches have provided an irreplaceable role in the economy, transportation, energy and access to recreation for a growing number of people. Although the growth of coastal tourism has brought many benefits to coastal areas, uncontrolled expansion of this industry has

led to negative consequences for the environment and the ecological imbalance (Needham & Szuster; 2011).

Tourism should consider all environmental aspects along with possible process damage and should be avoided if there are no solutions. Particularly in coastal areas, which are mostly full of tourist resorts, potential damage and also soil, coastal and water pollutions should not be overlooked, and special projects should be implemented to prevent or eliminate created pollutions (Samadi et al., 2014; Zaeimdar and Bahmanpour, 2014).

Tourism services and development depend on multiple factors (Fataei & Meftahpoor, 2011). The acceptance of tourism and its potential in the tourism environment depends primarily on its carrying capacity, population density, impacts and consequences, and its characteristics (Hasanpour Kourandeh and Fataei, 2013; Bahmanpour and Laghaei, 2012). In the event of adverse effects and low carrying capacity, the management of coastal tourism areas needs a major overhaul (Needham & Szuster 2011). It should be noted that the largest and most diversified projects have reportedly failed in many countries because the proposed management plan and

related prescriptions were set regardless of the natural conditions and the local community and the relationship between the behavior and ecology of different regions (Richards, 2000).

Iran, with the Persian Gulf in south and the Caspian Sea in the north, is prone to the coastal tourism development. Gilan province, located along the Caspian coastline from the border of Astara to Chaboksar, is one of the main destinations for tourists due to the main roads and favorable weather conditions, beautiful nature, lush forests, accessible mountains, many rivers, wetlands, attractive and thriving shopping centers, handicrafts and historical and recreational facilities in different seasons specially in summer, and tourist attractions and beaches. Proper access and communications infrastructure along the coasts of the province are important factors in the development of tourism in coastal regions. Therefore, the coastal tourism development is important from the perspective of environmental conditions in Gilan.

In the past decade, several national and international studies have been carried out in the field of coastal tourism and coastal features of Gilan province. One of the most fundamental studies on the tourism development in the coastal environment was conducted by Apostolopoulos et al. (2007) who believed that environmental impacts, including coastal water pollution, solid waste accumulation, illegal fishing, dumping of supplies for cruises, restrictions on the use of nutritious food in coastal waters, excessive imports of services to tourists, become apparent when tourists enter the coastal areas of islands, especially small islands. Needham and Zoster (2011) assessed the measure of coastal tourism and leisure management strategies on the island of Hawaii, and considered the individual actions and tourism facilities. Donald and Stephen (2016) believe that the greatest growth in the tourism sector is related to the beaches visited by many tourists due to the wide range of attractions and recreational activities in these areas. Takeshi (2020) in a study sought to establish a link between coastal management and environmental management.

In the domestic studies, several studies have been conducted on the strengths and capacities of environmental assessment for tourism activities. Rychagv (1980) found that significant fluctuations and permanent water level in the Caspian Sea during the Holocene period could not be caused by climate change. In this theory, tectonic levels have no significant impact on the surface water. According to Rasekhi and Mohammadi (2015), the human activities have an important and effective role in the sea level. Nemati Kutenaee et al. (2011) investigated engineering parameters related to flood control on the north-eastern shores of the Caspian Sea, and analyzed the effect of wind over the years and more than 15 kilometers of the land surface covered by seawater for several days. Awan (2013) discussed the role of rising Caspian Sea level in coastal erosion. Filizadeh (2010) found that the occurrence of floods caused by human activities on the

Volga River was a secondary factor, and the main cause was related to non-seasonal changes in the long-term level of the Caspian Sea. Studies have been performed in the field of the coastal tourism in Gilan province. With respect to the issue and the literature review, there was a need for the evaluation of the potentials in the coastal tourism development. It should be noted that the protection of the environment and natural resources of Gilan province should not hinder the development of the tourism economy in these areas. The beaches of this province have great potentials for tourism development. Coastal protection in terms of environmental and natural resources provides life for humans and other species, and can be a strategy for tourism development, economic diversification and local community development. Fluctuations in the Caspian Sea water level, misuse of coasts, sedimentation in ports, coastal erosion and coastal land degradation, unfavorable development of urban and rural areas of the coastal strip are the important barriers to the sustainable development of coastal tourism in the Gilan province. Accordingly, the environmental and tourism indicators should be simultaneous taking into account the interests of each sector. Tourism primarily needs tourist attractions.

The beaches in Gilan have multiple sources of tourism and can be turned into tourist attractions if protected and planned. Thus, the background of this issue is initially the protection of sources and then changing the attractions and helping to develop the local economy. First, the threats, opportunities, strengths and weaknesses must be identified, and then plans and strategies must be developed. However, there are problems in this context, such as the water status of the Caspian Sea, the sea pollution, the situation of environmental neighbors, legal restrictions on the coast and the occupation of some beaches in the province, hereby emphasizing the need for further research in this area (Figure 2). Therefore, the main objectives of this research were to collect basic information on the recognition of the natural ecosystem of the coasts in the Gilan province, determine different bio-users on the coast and identify strengths and weaknesses and the potential opportunities and threats to coastal tourism from the perspective of environmental parameters. This study sought to answer three main questions about coastal assessment to identify strengths and weaknesses in the region's tourism and coastal tourism development strategies:

1. Is it possible to identify and classify the strengths and weaknesses of the coast of natural resources of Gilan province to improve the livelihood and tourism?
2. What is the strategic position of coastal tourism in Gilan province from the perspective of environment potential?
3. What strategies can be effective in the future development of coastal tourism?

According to the research questions, hypotheses have been formulated as follows:

1. Scientific knowledge of the coasts in the Gilan province can play a role in the biological strengths and weaknesses and attract tourism activities.
2. It seems that the coastal tourism strategy of province is in a defensive state from the environmental point of view.
3. Coastal tourism development strategies seem to focus on increasing investment and the use of natural and environmental potentials for the development of tourism activities.

2. Study Area

Caspian Sea is the largest lake in northern Iran and southern Russia, with an area of 436,340 square kilometers. Along the Caspian Sea coast, the border of Gilan to the last border is about 320 km, with a width of 50 km at the widest point of the plain and 100 m at the narrowest point of the plain. Although the water of the lake is salty, its salinity does not exceed 18 grams per thousand. Gilan province has a temperate humid climate in all parts of the plains and low coastal regions from Roudsar to Astara beaches. Regional winds are generally air currents as a result of air flow around the Earth originated from distant centers in some seasons across the Gilan province, which affect the climates. Except for the coastal and plain areas, the rest of the province includes part of the mountainous region and is relatively colder. Cloudiness, humidity and precipitation on the coast of Gilan are extremely significant. The coastal region between the coastal part of Astara-to-Punel and Punel to the border of Mazandaran province (neighboring province) can be investigated due to coastal sediments and sand. The geomorphic landscape of the northern coasts of Iran is affected by various geological and climatic conditions, and hydrodynamic phenomena and sediment transport through land, sea sedimentation, waves and marine currents have been effective in their formation. Sand dunes on the coast of Gilan province are in Leskokalaye, Astane, Anzali, Astara and Talesh as well as free sand zones. Each of the strips parallel to the hills show an ancient coastal line in the Quaternary. In the coasts of Gilan province, the sand dunes expand in Leskokalaye, Astane, Anzali, Astara and Talesh. The coastal plain of Gilan province from the late former Quaternary and with water recession of Caspian Sea and formation of the oldest part of the coastal plain of Gilan have formed many wetlands. The coastal wetlands arise from the expansion of sand fields and the separations of the sea from the fields. Changes in the environmental conditions of wetlands and the possibility of living have gradually altered the public perceptions, providing suitable habitats for plants and animals, especially aquatic animals. Other geomorphologic phenomena in the coasts of Gilan are Sefidrud delta and sand dunes. The beaches of Gilan province are deprived in terms of protecting their beaches and are only structurally protected at some points due to rising sea level. The built structures are few and all have the same pattern. In addition, these structures are unable

to prevent the development of water on the beach, and have fundamental weakness in terms of design principles. The extent of the geographical configuration of the coast of Iran on the one hand and the lifestyle and livelihood on the other hand caused different ecological conditions. The northwest coast of Gilan province is the center of population and people are engaged in agriculture and fishing. Employments of central coasts are mainly based on tourism and fishing, and the eastern coasts of the province's economy are concentrated on agriculture, tourism and fishing (Department of Environment Gilan, 2014).

3. Materials and Methods

The purpose of this survey is applied, and its method is descriptive – analytical design. In this study, the required data were collected from library and field documentations. According to the information obtained, the attractions, facilities and services in tourism management and planning and the overall state of the environment and tourism satellite Landsat images 8 2013 + ETM were used to identify natural and man-made features in the study area. This research has been carried out by searching the Internet, library and information journals, and a set of articles surveying the coasts of Astara to Chaboksar area, all natural and biological cases. In addition to providing natural and man-area data, we prepared natural statistical data (climate, water, soil, air, vegetation, environmental statistics and tourism) and provided relevant equipment. The statistical population of the research from the perspective of internal and external analyzed factors of coastal tourism are all the experts who understood the situation and conditions of the tourism coast of Gilan province. Eventually, 30 experts were determined for final evaluation. The data collected in the first phase was analyzed by interpreting satellite images of coastal areas and beaches and then positioning and reviewing coastal tourism development strategies from environmental point of view and using internal and external factors of the SWOT analysis.

The SWOT analysis is a strategic planning technique, recognized to be useful in the 1980s for theorists (Tayebi Sani et al., 2018). The scope of this technique is in the realm of private institutions in the field of planning and urban planning management in the public realm and programs and compliance with requirements (Hosseinezhad & Akbari, 2018). The analysis identifies all factors involved in a project and classifies internal and external factors assessing the environmental conditions (Liu et al; 2011). The SWOT analysis determines internal factors (strengths and weaknesses) and external factors (opportunities and threats) (Jackson et al; 2003), which are evaluated and ranked by experts (Alizadeh, 2012) to determine the position of organization or any matrix (Pourahmad et al., 2013) by assessing these four aspects (Mahdavi et al., 2010). There are four types of strategies for combining internal and external factors.

Strengths-Opportunities (SO) or aggressive strategy: the strategies that are designed and built based on reviewing the ways, in which one can take an advantage of their strengths and opportunities (Samadi et al., 2014). Strengths-Threats (ST) or diversification strategy, the strategies in which the strengths are used as a way to avoid the threats. Weaknesses-Opportunities (WO) or review strategy: the strategies that take advantage of opportunities by overcoming the weaknesses of complex. Weaknesses-Threats (WT) or defensive strategy: the strategies that essentially emphasize on minimizing weaknesses and avoiding threats (Alizadeh, 2013). Finally, the combination of identified environmental potentials of tourism with factors and strategies affecting tourism development was used to analyze the overall position of coastal tourism in the Gilan province from the environmental perspective.

4. Results and Discussion:

The unique features of the coastal areas create many attractions for life, work and recreation. In such circumstances, the coastal regions have capabilities to establish admirable opportunities in accordance with existing potentials to attract people and activities. Understanding the environmental potentials in this area can be pursued in order to enjoy the features mentioned above. According to the satellite images and the GIS maps applied to the entire coastline of Gilan province as well as field surveys and identification of complications, the coastal tourism and environmental aspects of the case were considered in this study. The coastal area of the Caspian Sea from Astara to the border of coasts of Mazandaran province with temperate climate features, the presence of flat coastal and pelagic landforms such as wetlands, which provide conditions for recreation and tourism and the establishment of White River delta, having fertile soil on the ground and providing expansion of economic activities, especially agriculture, have great impact on the manifestation of positive properties. Now this part of the coast of Caspian Sea is faced with massive amounts of tourists, so that the relevant organizations can have a significant impact on the economic growth and development of the area residents with regard to the sensitivity of the coastal environment and not damaging to the beach and landforms and ecological zones in order to consider the welfare measures of tourists. The natural potential of the coastal strip of the Caspian Sea and the existence of the pelagic and sandy beaches provide conditions for various sporting and entertainment activities. In this regard, the creation of spaces such as playgrounds and parking lots would be desirable. Swimming is intended activity of many people, which requires the development of healthy areas (currently very limited); the conditions must be provided for this activity, which reduces the exposure to hazards such as drowning that every year happens because of swimming in areas out of control. One of the regional landscapes that characterizes this part of the coastal Caspian Sea is

existence of wetlands such as Boojagh and Amir Kalaye. These areas due to the presence of various plant and animal species and other natural features not only having great entertainment and attractions, but also are prone to do research in different fields. Boojagh National Park with beautiful natural scenery and landscapes has different species of plants, animals, natives and immigrants. There are a variety of wetland habitats, coasts, rivers and sea, grasslands and Sefidrud River crossing through the park, giving a beautiful scene to the regions. These characteristics are considered as the region's potential to build recreation centers, establish camps and provide the conditions for visitors. According to the environmental experts and the rules related to the zoning of the region provided by the DOE Office of Gilan, three regional lands are eligible, with a total area of promenades of about 81.1 hectares. About 358 hectares of sea area in the eastern part of the park can be exploited for recreational activities such as swimming, water skiing and boating. The eastern part of the park can be considered as the major resort center, which is used not only by people of Kiashahr, Amyrkyasr and the surrounding villages, but also by residents like Rasht, Lahijan and Langrood. Boojagh National Park is also potential habitats for the Siberian Crane (Dehkar, 2002). For this purpose, an area in the vicinity of Sefidrud police station has been considered for keeping birds, so that completing and equipping this site can make it a suitable place for visitors. Attractions and natural beauty of Lahijan Amyrklayh pond has made this place as one of the most important tourism centers in the province, which is of special importance due to biodiversity, waste absorption and climate pollution reduction, diversity of plant and animal species and consolidation of cultural and natural heritage. Kiashahr wetland is a natural landform that has been registered as one of the important international wetlands in the Ramsar Convention due to its valuable biological features, aesthetics and international resort. More than 52 plant species have been identified in the wetlands belonging to different ecological groups. In autumn and winter, one can see the diversity of migratory birds in the area, which has a great potential to attract tourists.

(1) General map of Gilan coast users

The government ownership of the coast of Gilan province has been obtained according to the users found above and using satellite images and interpretation of complications and based on field survey and recording control points by the Global Positioning System (GPS) and preparing maps by GIS, separately given below. There are three parts in terms of tourism development, including coasts with limitations (natural conditions, government restrictions and agricultural lands), occupied coasts (occupied by public and private institutions and organizations) and coasts with development potential (development of recreational facilities, recreation centers, hotel, shopping center, etc.). The coastal conditions of Gilan province are separately given in Table 1.

Table 1. The coastal conditions of Gilan province from the perspective of tourism development

Type of user	Area (square kilometers)	percent
Limited coasts	160.149	33.19
Occupied coasts	178.375	38.82
coasts with development potential	144.001	29.84

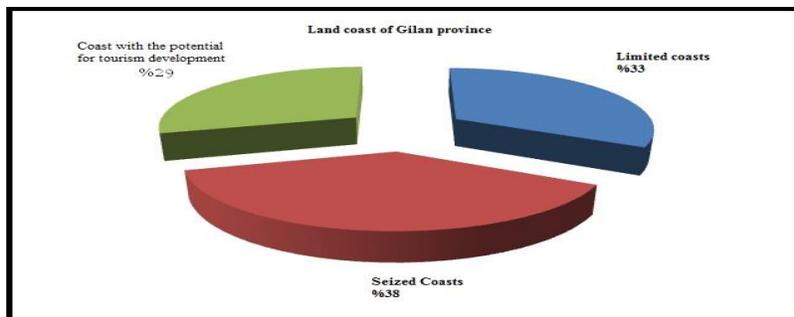


Figure 1. Tourism potential of coast (Reference: findings)

As it is clear from the results and chart in Figure 1, less than a third of Gilan coast has tourism development capabilities. More than 38% of coastal constructions and other activities are captured by other activities and the rest of the coast is under restrictions. After the survey was

carried out through field studies and the interpretation and classification of satellite imagery, the coasts of Gilan province were classified according to their environmental capabilities in terms of coastal tourism potentials (Figure 2).

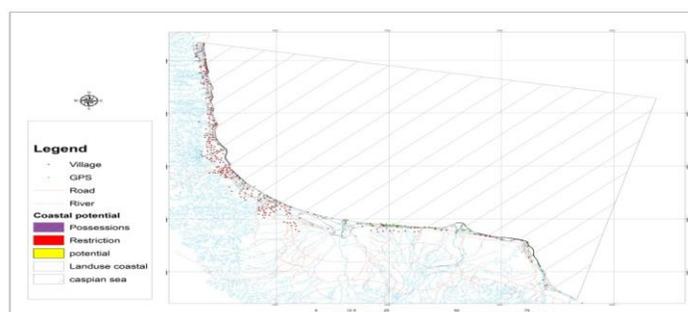


Figure 2. A map for potential navigation of the coasts of Gilan (Reference: findings)

Field studies specified the data and maps produced by the environmental potentials of tourism development along the coasts of Gilan province. To this end, 17 coastal areas of the province were surveyed. Most of the coasts of Astara have the tourism development potential, but the development restrictions are increasing more slowly to the south and the coast of Khotbesara, and only a small part of the coast has ability to develop tourism. Development conditions are favorable on the Lamir coast, but gradually to Lisar coast, the beaches have legal restrictions for the development and whole coast of Lisar suffers from these restrictions. From Isalam to Talesh coasts, the conditions for tourism development are appropriate in terms of the environmental conditions and Talesh coasts have the potentials for tourism development. Along coast to the east of the province, it is added to the extent of the coast that do not have development conditions because of natural or human causes (political and legal) and being captured by

institutions and activities, so that the conditions are unfavorable for the development of tourism and beaches miles from Talesh to the beaches of Kiashahr, due to restrictions or seizure. Possession of Anzali coasts is very high and then increases to the coast of Haji Bkndh. A significant part of this coast has development restrictions. Conditions for the development of ecological tourism on the coast of Kiashahr have slightly improved, and the development of tourism, the limitation of beaches and possessions are equal on the coasts of Boojagh and Langrood Kiashahr. Along Amir Kalaye coast, the desirability increases so that the Amir Kalaye coast has a desirable development. Subsequently, however, the tourism downturns because the whole coasts of Roudsar and Sangachin are occupied by institutions and activities and there are no conditions for tourism. This situation reaches to relative mode (development potential) on the beach of Shirabad. Table 2 shows the coast of Gilan province in terms of tourism development potential.

Table 2. the potential of tourism development on the coast of Gilan province

Development condition	coasts
potential of tourism development	The entire coast of Talesh and Amir Kalaye
	A significant part of the coast of Astara, Lamir, Kiashahr
	Part of the coast of Khotbesara, Islam, Langrood and Shirabad a limited part of the coast of Lisar and Boojagh
Development limitation	A significant part of the coast of Khotbesara, Lisar Caspian
	Part of the coast of Astara, Lamyr, Isalam, Shafaroud and Shirabad
	A limited part of the coast of Anzali, Boojagh and Langrood
Occupied coasts	The entire coast of Haji Bekandeh, Roudsar and Sangachin
	A significant part of the Anzali coast
	Part of coast of Shafarood, Caspian, Kiashahr and Boojagh A limited part of the coast of Isalam and Langrood

(Reference: The findings)

After reviewing the potentials for coastal tourism, the SWOT analysis was used for strategic planning for coastal tourism. First, the internal factors including their strengths and weaknesses and the external factors including the

opportunities and threats were identified through interviews with experts and field studies. These factors were then weighed and ranked through expert opinions.

Table 3. Results of the analysis of internal factors affecting the development of the coasts in Gilan province

Score	rank	Importance Coefficient	Internal factor	Strengths points
0.09	3	0.03	high potential for Investment in tourism	1S
0.06	3	0.02	Centered Communications Bandar Anzali, Astara, Gilan East to various parts of the country	2S
0.12	4	0.03	Pristine landscapes with diverse morphological structure	S3
0.12	4	0.03	The lack of restrictions on coast land for use tourism	4S
0.03	3	0.01	Free Trade Area of the Caspian	5S
0.06	3	0.02	Near to the capital	6S
0.12	4	0.03	Temperate and pleasant climate	S7
0.06	3	0.02	Proximity to Central Asian countries	8S
0.16	4	0.04	International Wetlands	9S
0.02	4	0.05	240 km long of coastal strip	10S
0.03	3	0.01	Business relations with the countries around the Caspian Sea	S11
0.06	3	0.02	The potential for water sports	S12
0.09	3	0.03	Airport Rasht	S13
0.09	3	0.03	Diverse vegetation in coastal shore	S14
0.09	3	0.03	Extensive river network with residential shore	S15
0.03	3	0.01	fisheries centers On the coastal shore	S16
		0.41	Total strength	
score	rank	Importance coefficient	Internal factos	Weakness points
0.05	1	0.05	The entire coast of Talesh and Amir Kalaye	W1
0.05	1	0.05	A significant part of the coast of Astara, Lamir, Kiashahr	2W
0.06	2	0.03	Part of the coasts of Khotbesara, Islam, Langrood and Shirabad	W3
0.06	1	0.06	A limited part of the coasts of Lisar and Boojagh	4W
0.02	2	0.01	A significant part of the coasts of Khotbesara, Lisar Caspian	W5
0.02	2	0.01	Part of the coasts of Astara, Lamyr, Isalam, Shafaroud and Shirabad	6W
0.08	2	0.04	A limited part of the coasts of Anzali, Boojagh and Langrood	W7
0.05	1	0.05	The entire coast of Haji Bekandeh, Roudsar and Sangachin	8W
0.05	1	0.05	A significant part of the Anzali coast	W9
0.06	2	0.03	Part of the coasts of Shafarood, Caspian, Kiashahr and Boojagh	10W
0.05	1	0.05	A limited part of the coasts of Isalam and Langrood	W11
0.04	1	0.04	The entire coast of Talesh and Amir Kalaye	W12
0.05	1	0.05	A significant part of the coast of Astara, Lamir, Kiashahr	13W
0.03	1	0.03	Part of the coasts of Khotbesara, Islam, Langrood and Shirabad	W14
0.04	1	0.04	A limited part of the coasts of Lisar and Boojagh	15W
2.11		1	total	

(Reference: The findings)

Table 4. Results of the analysis of external factors affecting the development of the coast in Gilan province

score	rank	Importance coefficient	External factors	The opportunity
0.28	4	0.07	High potential for investment in tourism	O1
0.12	3	0.04	Centered Communications Bandar Anzali, Astara, Gilan East to various parts of the country	O2
0.2	4	0.05	Pristine landscapes with diverse morphological structure	O3
0.2	4	0.05	No restrictions on coastal land for tourism use	O4
0.09	3	0.03	Free Trade Area of the Caspian	O5
0.2	4	0.05	Near to the capital	O6
0.12	3	0.04	Temperate and pleasant climate	O7
0.09	3	0.03	Proximity to Central Asian countries	O8
0.06	3	0.02	International wetlands	O9
0.06	3	0.02	240 km long coastline	O10
0.2	4	0.05	Business relations with the countries around the Caspian Sea	O11
0.07	1	0.07	The potential for water sports	1T
0.14	2	0.07	Rasht Airport	T2
0.07	1	0.07	Diverse vegetation on coasts	3T
0.07	1	0.07	Extensive river network with residential shore	4T
			Fisheries centers on the coasts	
0.07	1	0.07	High potential for investment in tourism	5T
0.12	2	0.06	Centered Communications Bandar Anzali, Astara, Gilan East to various parts of the country	6T
0.06	1	0.06	Pristine landscapes with diverse morphological structure	7T
0.08	1	0.08	No restrictions on coastal land for tourism use	8T
2.3			total	

After reviewing and evaluating internal and external factors, the total values of these factors were used

to determine the current status of coastal tourism in Gilan from an environmental perspective (Figure 3).

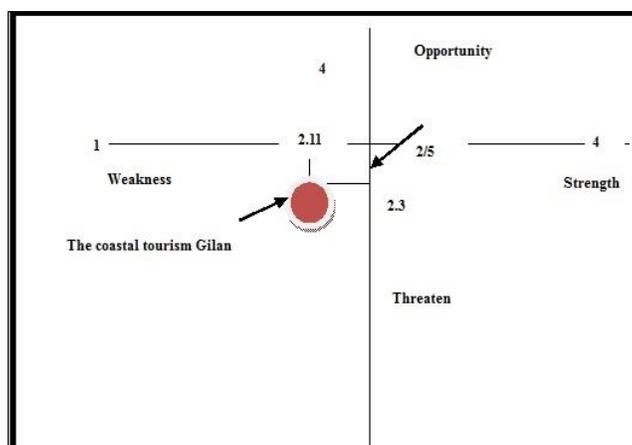


Figure 3. The coastal tourism potential in the matrix analysis of internal and external environments (source: research findings)

The total score of internal factors was calculated to be 2.11; given that the number is less than 2.5, so the coasts of Gilan province are facing relative weaknesses in terms of tourism capabilities. We need to adopt strategies and policies to turn infrastructure weaknesses into strengths. For this purpose, the SWOT analysis presented below offers proposed mechanisms to

overcome the weaknesses of the region. Table 5 lists guidelines in detail, which generally emphasize on issues such as attracting investment, shortages in tourism service, use of the environment and climate, strategies to prevent the destruction of natural resources and administrative coordination between different sectors.

Table 5. The coastal tourism potential in the matrix analysis of internal and external environments strategies SO strategies WO

strategies SO	strategies WO
SO1: The use of virgin areas for investment and job creation with an emphasis on the power of the tourist area (S3, S7, S9, S10, O1, S11, S15, S16)	WO1: Removal of deficiency for places and catering for all people involved in the construction of residential villas and hotels around the coast (W1, O1, O5, W12, O4)
SO2: The use of high potential for investment in tourism and tourism potential in Tehran with regard to building Tehran - north highway and Rasht airport (S1, S13, O11)	WO2: Attracting domestic investors with respect to the potential of the Caspian free zone, Astara, Shafarood, and large transit companies and building Tehran- North highway and north railway (W8, O2, O3, O6, O7, O8 , O10, O11)
SO3: The use of a mild and pleasant climate and long coastal strip to develop sports tourism and build hotels in coastal areas with suitable weather (O4, S12, S10, S7, S5)	WO3: Resolving the shortage of welfare facilities, services and infrastructure with the aid of private sector investors (W12, W3, W2, W1, O6, W10, O1, W8)
SO4: Shopping tourism potential due to the construction of a new pier and proximity to Central Asian countries (O10, O9, O8, O7, O3, O2, S8, S5, S2)	
ST Strategies	strategies WT
ST1: Increased local and foreign investments in the tourism sector using high potential for investment in coastal areas (T1, S1, T6, S3)	WT1: Issuing licenses to exploit people and institutions to prevent the destruction of coastal areas to achieve sustainable tourism development (W4, T4, T7, T8, T2)
ST2: Preventing the destruction of pristine natural landscapes by building culture and education among locals and tourists (S3, S9, S10, S14, S15, T2, T7, T8, S16)	WT2: Preventing monopoly of the coast by the government to increase investments and resolving the shortage of residential facilities and proper catering (W1, W2, W3, W5, W6, W8, T1, T3, T5, W11, W12)
ST3: Determining the tourism climate comfort zone to eliminate improper distribution of seasonal tourism due to the favorable climate and tourism using seminars, conferences, and congresses during not visiting seasons (T6, S7, S9, S3, S6, S12)	WT3: The need for coordination between government departments involved in the environment, natural resources and tourism to prevent the destruction of the coast natural resources, environmental pollution and sustainable tourism development and the reduction of multiple decision-making centers (W11, W9, T4, T7 , T8)

5. Conclusion

Based on the evidence, in general it can be said that Gilan province has the potential to attract tourists from all over the country and even foreign countries., due to its coastal position as well as its strategic and commercial position. In this case, advertising and the target markets should be considered as capital because primarily foreign tourists spread from Tehran to other parts of the country. On the other hand, more people are crowding in Tehran and the proximity of Gilan to Tehran is a tremendous advantage. Existence of international wetlands, tourist attractions and the 240 km long beach can develop tourism and attract more tourists, and help the province's tourism planners. However, the concern is that a large portion of the coast of the province has no tourism development potential and is facing development constraints or has been seized by other activities for various reasons such as legal restrictions, economic activity, and public and private institutions, and only one-third of the coast has development capability. With regard to the issue of environmental protection and sustainability, the need to address this issue is vital. Planning should be done in a

such way that we can convert constraints to the development and decrease incompatible users. The results suggested the strategies of another part of the coastal tourism conditions. The existence of four offensive strategies indicated that the province could take advantage of its strengths and opportunities. Most strategies were developed in this section. In the sub-factors of weakness, the lack of accommodation and catering facilities is due to the lack of investment and the presence of exclusive institutions and government organizations, which could make it difficult for future of tourism in the region. Besides, organizing the reception centers should be considered by planners. Destruction of natural resources by locals and tourists to the beaches is another factor that must be resolved by creating a cultural base. In this, education can play a more effective role. Multiplicity of decision-making centers in the province is another factor that, if eliminated, sustainable development may be guaranteed. Advertising is one of the important factors in the tourism development. Advertising in the right places can also reduce costs, and be more efficient. One of the best places for reasonable and cost-benefit advertising is

Tehran province. Policymakers and planners need to pay further attention for the marketing more than this. Tourism planners in the Gilan province should use the opportunities ahead to reduce threats. One of the tourism opportunities in the region is the special attractions of the province, and this pristine area is appropriate for investment. Opportunities facing such as construction of the north railway or Tehran-North highway and the possibility of trade with the countries of the Caspian region can provide an alternative opportunity for planners. Threats consist of system-independent factors, but they can be minimized using appropriate solutions. One of the most important tourism threats is the existence of strong rivals such as Mazandaran province. The destruction of the tourist attractions is another facing threat. Because the sustainable development of tourism must be carried out in each region, the tourism thrives according to the carrying capacity of each region. Uncontrolled development of tourism in the province could lead to the destruction of the tourist attractions. For example, the coastal area of the province, which is used during the spring and summer days by locals and tourists, sees a sign of environmental destruction. Creating problems for the locals due to the presence of tourists is one of the major threats to tourism in the province. Some of the measures and programs that can be used to develop coastal tourism included preparing and approving a comprehensive plan for organizing and conducting tourism in the framework of the approved project, the need for advertising through mass media, creating awareness of tourism in the region, developing tourism fairs, paying more attention to security in tourism, improving transit services (services between towns and villages), relieving the shortage of accommodation facilities, planning education and promoting knowledge of officials and managers, increasing the level of tourism awareness about the importance of the environment, and resolving the problem of seasonal tourism. It should be noted that the activities and programs should be made taking into account the principles of environmental sustainability.

Conflict of interest

The author declare that they have no conflict of interest.

Additional Information And Declarations

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Author Contributions

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