

Designing a model for developing an ecotourism strategy in Iran using SWOT method

Gholamhassan Heidari*, Mahdi Nouria, Khal Nazar Mohabbatof

Department of Geography, Sadruddin Eini State University, Tajikistan, Dushanbe, Tajikistan

Abstract

Today, the speed of technological innovations has caused the formation of social changes and the emergence of leisure time as one of the basic needs of humans. This has led to the development of the tourism industry, tourism and finally the effort to determine tourism destinations on local, national and international scales. Considering the diversity and natural and cultural richness as well as the existence of important potentials and climate diversity in the country of Iran, the need to determine the appropriate strategy for ecotourism of this ancient land and use the economic, social and cultural capacities of this industry in the new order of the global economy, despite It has made oil and gas revenues very vital. Therefore, in this study, using a descriptive-analytical method and using the SOWT analysis approach, the most appropriate strategy for Iran's ecotourism was identified and formulated according to the opinions of 16 experienced experts in this industry in Iran. The results of this study showed that the most appropriate strategy for Iran's eco-tourism is a competitive-aggressive strategy, during which important strategies such as: using climatic diversity and natural attractions to attract eco-tourists; Using Iran's strategic location to attract tourists; use of young and trained workforce; The use of the opportunities created by the Arab spring and finally the use of new technologies should be implemented in order to serve Iran's economic development as a completely clean industry.

Keywords: ecotourism, tourism, strategy, SWAT analysis, Iran
2020 MSC: 91D20

1 Introduction

Considering Iran's strong dependence on oil revenues and the need to revise it, considering the exhaustibility of this resource and its extreme price fluctuations in the past few years, the need to change the country's macro-planning to use and apply alternative resources to Emancipation from the single-product economy is felt more than ever in the country. In this regard, considering that the tourism industry has become one of the top industries in the world and the country's potential in this field, tourism and especially ecotourism activities can be mentioned as one of the best options to replace the income from oil [16].

Natural attractions and different geographical climates have brought precious resources to humans in the field of economy, which definitely requires the provision of various conditions that depend on the stability of the tourism sector. One of the different forms of tourism is ecotourism or walking in nature [22]. Ecotourism is a responsible trip to natural areas that leads to the preservation of the environment and improves the quality of life of local people. Ecotourism, which is also called ecological tourism, is a form of tourism that focuses on ecological and unique social

*Corresponding author

Email addresses: ghassanheidari2015@yahoo.com (Gholamhassan Heidari), nouri@iaut.ac.ir (Mahdi Nouria)

attractions. Ecotourism will include programs that leave the least negative effects on the environment that are seen in conventional tourism. At the same time, it will improve the culture of the local people. Therefore, in ecotourism, not only important environmental and cultural factors are evaluated, but advanced and complete programs for recovery cycles from nature, energy efficiency, protection of water resources and creation of economic opportunities for local communities are also seriously considered. attention [11].

The vast land of Iran is evident as the land of four climates and four seasons. It has a very strong and wide potential in the ecotourism sector and it is the answer to ecotourists in every season of the year, which can be a suitable alternative to provide part of the foreign currency needed by the country. What doubles the value of Iran's ecotourism as a vast and diverse land is the acceptance of the people of this land to the eye-catching nature of Iran. Currently, various ecotourism programs are being implemented at the domestic and foreign levels through various tourist and tourism centers and companies, and being in the lap of nature is a significant part of the leisure time of the people of Iran and the world. The experts of the World Travel and Tourism Council estimated the direct contribution of the tourism industry in Iran's gross national product according to the surveys conducted in 2011 at about 10,462,000 dollars, which is equal to 2.3% of the country's gross national product. According to these experts, this amount of share will increase by 3.4% growth every year until 2021 by 15,890,000 dollars, taking into account the stability of prices [15]. Therefore, Iran's successful presence in the global tourism market is possible and accessible due to the set of natural, historical and cultural potentials of the country. But it should be kept in mind that moving towards the sustainable development of tourism and using the benefits of ecotourism, due to its special importance and the potential positive and negative economic, social, cultural, political and environmental effects it can have, is not possible without careful planning. And it will not be unattainable [23]. But since any planning and efficient use also requires knowing and then determining the strategy and finally the appropriate solutions, therefore in this research we will try to find out the strengths, weaknesses, opportunities and threats facing ecotourism within the framework of the SWAT analytical model. To examine Iran in order to identify the appropriate strategy of Iran's ecotourism and present the strategic strategies of this area. The question raised here is which strategy can represent Iran's ecotourism in the best possible way, for which this study tries to provide an appropriate answer.

2 Theoretical foundations

2.1 Eco-tourism/nature tourism and characteristics of nature tourism

Ecotourism is the abbreviation of Ecological Tourism, which is known as environmental tourism or nature tourism in Persian literature. In one of the existing definitions, ecotourism is a type of tourism for the purpose of visiting wildlife and getting a close understanding of the untouched areas of nature and all the geographical and human elements in it [21].

Eco-tourism (nature tourism) is travel to natural areas or cultural and historical value and environmental protection and community sustainability at its best. Therefore, it is a type of tourism in which tourists travel to visit uninhabited and untouched natural areas of the world and watch plants, birds, fish and other animals. The name "eco-tourist" or "eco-tourist" has been given to such tourists who visit the environment and nature. Many countries get a huge part of their income from foreign tourists. There are large groups whose hobby is to travel to far places and search and sit in ambush to see rare animal species and birds and take pictures of them. Many others go to the depths of the sea and dive. The main activity of nature-based tourism is, according to the definition, a responsible trip to natural areas that preserves the environment and improves the quality of life of the local people. Basically, eco-tourism causes minimal damage to the nature and culture of the region [13].

Estimates of the Ecotourism Society (TES) show that nature lovers are in certain age groups depending on the motivation of their trip: a group of nature lovers are looking for adventure, visiting pristine lands and sports tourism, which is less than 40 years old. And most of them are in the age group of 19 to 35 years. However, the group that engages in eco-tourism with the aim of enjoying nature and meeting wildlife, etc., is in the age range of 35 to 54 (of course, it should be noted that this study considers international eco-tourists and National and local naturalists generally cover a wider age range. Basically, ecotourists do not have a special gender composition and often their gender ratio is 50:50 (but it is expected that due to some restrictions that exist for female nature lovers in Iran, this list will change to some extent in favor of men). TES surveys also show that more than 80% of international nature walkers have higher education. This number is close to 100% for nature walkers interested in touching nature and visiting its attractions. But since the adventurous nature walkers are generally young, they are often students or even high school students. Estimates also show that the largest group of nature walkers (about 60%) prefer group trips. 15% are interested in family trips and 13% often travel alone. The average travel time of about 50% of nature walkers is between 8 and 14 days. Most hunting tours on an international scale are longer than 20 days and adventure tours

are closer to 30 days. Surveys conducted on ecotourism show that nature lovers spend more money than other groups of travelers [18].

2.2 Benefits, reasons and objectives of eco-tourism development

By examining the existing theoretical literature, several benefits and reasons for eco-tourism have been presented, among the main reasons for it, we can point to things such as: response to the desire of modern humans to be close to nature, protection of local culture, protection of the natural environment. Among its benefits are things like: protection of historical, cultural and ecological resources of the country, optimal use of water resources, energy and other infrastructures, obtaining sources of income to preserve cultural heritage and existing natural resources, attracting income and especially foreign investment, preserving the natural environment and recognizing the importance of local ecosystems, etc.

A variety of goals have been considered for the development of eco-tourism, including: responsibility for preserving biodiversity, spreading the culture of nature tourism in the region and expanding it in line with sustainable development, providing a basis for educating visitors on the level of environmental awareness, strengthening job creation. Through activating micro-organizations and providing related services, generating income and obtaining economic benefits for the environmental organization and related institutions, participation in providing the welfare of local communities, the possibility of cultural exchange between nature tourists and local communities [13].

2.3 Essential elements of ecotourism

Basically, ecotourism needs to protect natural and cultural resources for its prosperity. Governments cooperate with non-governmental organizations (NGOs) to implement and protect natural areas. While local communities protect their range and area to attract and develop ecotourism, organizations, NGOs, companies, and private individuals are often tasked with maintaining and implementing ecotourism. They create private areas. Ecotourism has the potential to reduce environmental, cultural and economic threats through monitoring, local actions, employment, cultural exchange, environmental education, justification of the protected area and celebration of visitors [7]. Ecotourism needs serious and comprehensive planning as well as management along with understanding this potential.

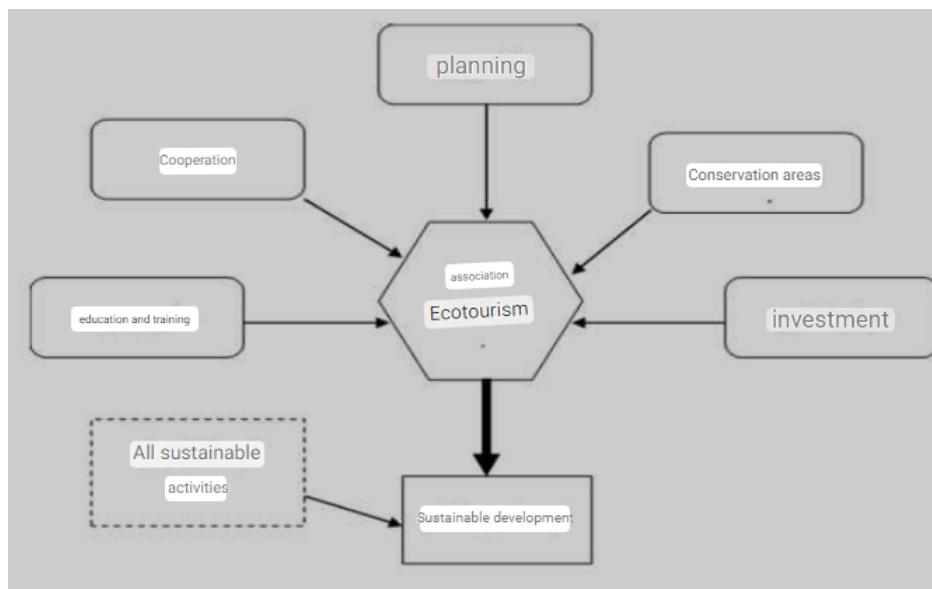


Figure 1: Necessary elements for ecotourism in a society [7]

The international community, especially developed countries and countries that are leaders in tourism in general and in ecotourism in particular, follow the development and promotion of the tourism industry and its consequences with special sensitivity, considering the essential elements of ecotourism. So far, many international and national associations and institutions have been formed and every year extensive programs in the fields of education and human resource development, advertising, marketing, promotion, standardization such as environmental labels and codes of conduct, empowering different sectors, especially the host and local communities and non-governmental organizations

will be implemented. Following the statement of the international meeting of ecotourism in 2002 in Canada, which was called the world year of ecotourism, every year meetings and conferences are held at different national, regional and global levels regarding the subject of ecotourism, which evaluate the performance and success rate of the course. Previously, they recommended and promoted successful experiences to other countries and discussed new standard guidelines and solutions [1].

2.4 National and regional governments and their role in the development of ecotourism

Governments play a very important role in the development of ecotourism. But their role has complications and should be defined by experts. Some countries have special ecotourism strategies. The first national ecotourism program in the world was prepared by the Australian government in 1994, which is the most important example of national ecotourism programs. The Brazilian government also published guidelines for the national ecotourism policy, which contained practical indicators for that country. Due to the great emphasis on the development of suitable infrastructure for tourism and the necessary capacity for the development of tourism in natural areas with high commitment to rural people, these programs have become classic examples of ecotourism planning. The commitment to developing a national ecotourism program in Australia and Brazil is very high. Because the tourism economy of these countries largely depends on the good conditions of their natural ecosystems [26].

Basically, the successful components of ecotourism projects are highly dependent on the development of sustainable infrastructure. These include currency exchange facilities, transportation systems, peace and security of the region, and suitable telecommunication-communication systems. Different departments of the government and different ministries should be united for the development of such infrastructures and their cooperation is very important for the development of ecotourism like other sectors of international trade.

2.5 Ecotourism and policy making

In many countries of the world, the ecotourism industry is going through the stage of determining, interpreting, evaluating and justifying the relevant laws and regulations. Those involved in this industry are aware of the need to establish coordination and cooperation between the political and economic-social dimensions of this industry for its growth and development. Fennel confirms the reports of the Center for Tourism Policy Studies and states that government policies and laws are one of the most important and effective factors in supporting the development of tourism. Basically, government policy-making causes balance and harmony to be established between development and protection, supply and demand, interests and costs of people and the environment. As a leader and pioneer, the government should acquire management skills and specialized and general knowledge in the field of providing the required budget and create a suitable environment for the easy and effective activity of the private sector in the development of the tourism industry [10].

ecotourism is often considered as a potential strategy to support the conservation of natural ecosystems while also promoting local sustainable development. From the above definition in the form of introducing ecotourism, it is evident that natural areas and local populations are united with each other in a systematic relationship, therefore, the ecosystem can be used as a means to protect natural areas through production and income as well as bio-education. The environment and the participation of local communities should be considered in both areas of decision-making and benefit sharing. Therefore, eco-tourism is an important means through which conservation and development can be promoted in a sustainable way [5].

It is said that eco-tourism has three very important aspects, which are: tourism, community and conservation. Therefore, these three aspects should be considered together in all decisions and policies so that none of them have a negative aspect. Therefore, the ideal situation would be to benefit from all three aspects, while not being deprived of any of them. Therefore, including management, policies of protected areas and involving a wide range of organizations, including non-governmental organizations, environmental protection non-governmental organizations and development aid organizations. In this regard, they add This fourth aspect merely plays a facilitating role among the three main aspects and as a result; They maintain a systematic relationship to ensure stability.

2.6 Ecotourism and successful global experiences

Considering their natural and cultural talents, different countries have tried to manage the sustainability of ecotourism by compiling goals, strategies and executive policies. Among the developed countries, they emphasize compliance with national and international standards (such as: environmental labels, ethical codes, range capacity, etc.), diversification of tourism packages and increasing the quality of services, and strict rules. They also apply. Developing

countries that have managed to organize their national document or ecotourism macro program, often focus on one or more of their main natural and cultural attractions, such as: Nepal for mountaineering and mountaineering, Mongolia for traditional and nomadic life, Kenya , Tanzania and Madagascar on wildlife and in the laws and regulations of all these countries, the protection of the environment with the participation of local communities and the protection of indigenous culture have been given more attention than other parts [1].

Ecotourism is a multi-disciplinary phenomenon that is considered a part of the tourism industry and inevitably plays a role in sustainability and sustainable development. In order to get familiar with the goals and policies adopted in the field of development and promotion of ecotourism culture in different countries, it seems necessary to use the experiences of others. Mandatory environmental duties, applying labels and using ethical codes (Code of Conducts) and strict regulations are part of the development and management strategy of ecotourism in developed countries. This process has found the necessary rhythm and order in developing countries, but the efforts of some of them are worthy of attention. Fundamental planning, legislation, development of education and promotion of successful or continuous practices are necessary to ensure that the demand for ecotourism or any other recreational activity does not destroy and threaten resources and ecotourism [1].

2.7 Ecotourism and effective factors in attracting the cooperation of local communities

Local communities have a very important contribution in the proper development of ecotourism in their region and their participation is necessary in doing the work. The economic, social and cultural effects of tourism are many. Researchers believe that if ecotourism projects are carried out with the informed consent of the people of the region and people participate in the development of tourism and participate as an effective element in planning, many negative effects can be prevented. If governments, private sector and non-governmental organizations intend to make ecotourism an efficient part of sustainable development, they should involve local communities in the development process. The existing initial guidelines have provided solutions for the participation of communities. It is necessary to try to understand and evaluate the society in the initial stages and before starting any kind of partnership or development [26]. Points to be observed in attracting the cooperation of the local community, among which the following can be mentioned:

A- Understanding the role of the local community: Communities should play a role in controlling their own growth and development, in many cases they need specialized help, reforms and training to make appropriate decisions. They must have enough time, capital and access to experienced people. Don't let communities feel weak and powerless in providing development models.

B-Giving powers to local communities: The concept of community participation is beyond just generating income for communities. Although creating employment is important, it does not replace assuming the responsibilities and powers of the project. Local communities must be truly involved in the decision-making process, and this is not limited to a simple consultation, and communities must ensure that they can succeed in developing and using their resources wisely.

P- Establishing a connection between the profits and protection: it is necessary that the connection between the profit from ecotourism and the protection goals should be a direct and independent connection. Employment income and other benefits should all be in the direction of protection.

T- Encouraging communities to participate in ecotourism projects: the amount of projects should identify local leaders, local organizations, important community priorities, opinions, expectations and concerns in the community. To collect this information, the people of the community can be used and the results of the research should be published. Discuss and exchange opinions about them, and at the same time, other sources of information such as government statistics from the trade market or regional development programs are also brought up.

D- Proper distribution of benefits: It should be ensured that the proper distribution of benefits from the project between society and individuals is ensured.

C- Recognition of local leaders: The opinions of local leaders should be recognized and taken into account in the planning and implementation of projects. These leaders, whether male or female, should represent different sections of the society. Sufficient information about the social structure of the region is required in every project [26].

3 Research background

Due to the importance of tourism and ecotourism in the whole world, several studies have been conducted regarding various issues related to tourism and ecotourism at the national, regional and local levels. Among the domestic studies

available in this regard is the study of Karoubi [13], which was conducted with the aim of investigating nature tourism and the need to support it in Iran, during which he introduced nature tourism as an inseparable part of sustainable development and then By enumerating the current characteristics of Iran such as absolute and relative poverty, the number of unemployed, the age groups of jobseekers and their proportion in the country's population, some false assumptions that have deprived the country of significant incomes, abundant employment and the very valuable benefits of tourism, especially nature tourism. criticizes Rakhshani Nesab and Zarrabi [20] also investigated the challenges and opportunities facing Iran's ecotourism in a study. The results of this survey show that climatic diversity, maritime and coastal location as well as Iran's geomorphological location including opportunities and lack of infrastructure facilities in eco-tourist areas, lack of understanding, identification and introduction of potential, problems related to issuing visas and centralization of the program Reeses are among the challenges of developing eco-tourism in Iran. Aminian et al [2] in an article with the aim of investigating the opportunities and challenges of sustainable development of ecotourism in Iran, in line with the goal of introducing ecotourism and the role of ecotourism activities in the sustainable development of the environment and natural resources, and reached this conclusion. They believe that eco-tourism should be developed with a systemic approach and have both dynamics and reliability. Solutions are also provided in this study. In another research by Arjamandi et al [3], in a research with the aim of developing an ecotourism development strategy in the Alamut region of Iran using the SWOT method, they concluded that the strategies of holding meetings and conferences to express the value of the region at the regional and national level Public culture through education to prevent the destruction of the environment of the region and the establishment of hotels and comfort places for ecotourists in the region are the main priority.

From the foreign studies, the research of Wenjun [25] in a study aimed at investigating environmental management indicators for eco-tourism in natural reserves of China (a case study of Tiangmaha natural reserves) states that the development of sustainable eco-tourism in China depends on management Successful environmental depends. Therefore, for the management of eco-tourism, he introduces a set of warning indicators, especially to show environmental changes in tourist places. Tosun [24], in a study, emphasizes the challenges of developing sustainable tourism in third world countries. It has examined the country of Turkey and concluded that these countries need the support and cooperation of international institutions and organizations to achieve sustainable development of tourism. Of course, it should be noted that the use of analytical techniques such as SWOT in relation to how to manage, plan and develop ecotourism is a relatively new method that has been used in different parts of the world. This technique has been used for analysis in the Victoria site in Australia, in the Madid National Park in Bolivia, and in the American National Park in 2000-2007 [17].

4 Brief introduction of the geographical territory and ecotourism capacities of the region under investigation

4.1 The geographical location of Iran

The land of Iran is a large part of the Iranian Plateau, which is located in Southwest Asia between latitude 25 to 40 degrees north and longitude 44 to 63 degrees east. Therefore, in terms of the general geographical divisions of the earth, the southern half of Iran is located in the near-orbital region and its northern half is located in the northern temperate region [4]. From the north, Iran is limited by the countries of the Republics of Turkmenistan, Azerbaijan, Armenia and the Caspian Sea, from the south to the Persian Gulf and the Sea of Oman, from the east to the countries of Pakistan, Afghanistan, and from the west to the countries of Iraq and Turkey.

What is defined today as the country of Iran in the concept of political geography and on geographical maps is a part of a mountainous and higher land called the Iranian Plateau. The borders of the Iranian Plateau are in the south, the Persian Gulf and the Oman Sea, in the west the Mid-Radian Plain and the western slopes of the Zagros Mountains, in the north the Caspian Sea and the Turkmen Plains, and in the east the Indus River Plain and the Pamir Mountains. This mountain plateau, which is located in the southwest of Asia, offers distinct geographical characteristics due to the direction and height of its mountains, which has left significant effects not only in the natural landscape, but also in its livelihood and biological landscape [19]. Considering the vastness of Iran's geographical body on the one hand and the complexity of its structural configuration on the other hand, the geographical environment of Iran has different types of natural and biological landscapes. In this figure, there are generally three main types of natural environment forms. These three main types are the mountain type, the coastal type, and the central plateau type of Iran with closed internal areas that mainly form deserts and deserts [19].

Due to its geographic location and its vastness, the land of Iran has been placed in the center of many different sects [14]. The country of Iran is made up of three main zones of natural landforms, namely mountainous and highlands,



Figure 2: Geographical area of Iran

the central plateau including closed internal basins (deserts and deserts), coastal areas in the north and south of the country, as well as an important regional and scattered zone of vegetation and forests. has been found

4.2 Iran’s ecotourism situation at a glance

A wide collection of human attractions and scattered natural resources, including geographical landscapes, works and natural reserves, etc., constitute Iran’s nature tourism assets. The natural geographical survey of Iran as well as the economic feasibility of ecotourism attractions that can be invested in Iran show that “ecotourism” in Iran is a unique and potential economic resource. Iran’s ecotourism position is primarily due to its topographical conditions near the high-pressure area of the subtropical region. The countries that are located in this high-pressure area have a dry and semi-arid climate and the biological landscape caused by this climatic phenomenon. Geological factors, which include a series of folds, have caused Iran to become one of the highest plateaus in the world [12].

Two high and wide mountain ranges, Alborz and Zagros, in the heart of a dry and desert region, have created a series of mountain and forest landscapes with moderate climatic conditions along with permanent glaciers. This geographical diversity has provided the environment for many different plant and animal species in Iran. So much so that Iran is one of the five countries benefiting from complete biodiversity (having four seasons and the main plant and animal species) in the world [18]. The existence of the world’s largest lake in the country, the existence of 50 lakes in the country, among which 18 lakes are among the lakes of the international Ramsar Convention. Lake Urmia, which is known as one of the 59 biological reserves of the planet, is part of Iran’s potential natural resources. Dense forests in the north of the country, vast deserts, deserts, as well as a diverse range of customs and ways of life and livelihood in accordance with climatic conditions, including nomadism, are among the other assets of nature tourism in Iran. Therefore, nature tourism in Iran, as one of the five countries with the most climate diversity in the world and one of the most important reserves of biodiversity on the planet, has a relative advantage over other branches of tourism. Table 1 shows examples of Iran’s ecotourism attractions.

Table 1: Examples of ecotourism attractions in Iran

Poles and important attractions	Subfields	Main fields
The peaks of Sahand, Sablan, Damavand, Taftan, Alam Kouh, Alvand, Biston, Shirkuh and Ali Sadr caves, Katle Khor, Delijan	Rock climbing, ice climbing, caving, kitesurfing, research, planned station walks	Climbing and caving
Sarein hot springs, Sarab, Esi Su, Mahalat, Qochan hot spring, Zanjan hot spring, Sk...	Water therapy, mud therapy, summer resorts	nature therapy
Desert National Park, desert caravanserais (Bahram Palace, Ain Al-Rashid, etc.), Lut desert and the imaginary city of Lut, desert areas of Yazd, Kerman, Balochistan provinces, etc.	Caravan tours, skiing and boating on the sand, research and research - camel riding	desert tour
North and south coasts, lakes, important rivers such as Karvan and its tributaries, Zayandeh River, Sepid River, Simreh and...	Swimming, sailing, skiing and sand boating, research, crossing raging rivers with inflatable boats.	Beach and water sports
16 ski slopes and snow-covered heights of Zagros, Alborz	Sailing, water skiing, diving, fishing, snow festivals, skiing, sledding, snow climbing	winter sports
Koch nomads (Bakhtiari, Qashqai, Ilson, Ler, Sangsari, etc.) historical villages	Koch tourism, customs tourism, village tour, research and camel riding	Anthropology
ram, deer, leopard, bear, wolf, boar, sheep, goat, fox, rabbit, deer, pheasant, partridge, dragon, tiho, hubre and...	Hunters and birds, fishing, research	hunting and fishing
Different heights and ranges	Visiting wildlife, visiting natural sights and monuments, education and research in nature, recreation and change of mood, planned station walks	Mountain climbing
protected areas	Visiting wildlife, having fun and spending free time, watching animals and birds using open vehicles	Natural parks and wildlife

(Source: researcher's findings)

5 Research method

This research is considered to be descriptive-analytical in terms of applied nature and in terms of study method. The method of collecting data and research information is two methods of library studies and a questionnaire, during which the necessary information related to Iran's ecotourism was collected. The statistical population of this research is all experts with experience in cultural heritage, handicrafts and tourism departments and organizations, and active experts in the field of tourism and tourism industry, as well as university professors related to the field of hotel management and tourism, and finally 16 of them as a statistical sample. They were purposefully selected and asked to express their opinions on the strengths, weaknesses, opportunities and threats of Iran's ecotourism in the form of a prepared questionnaire based on a Likert scale. The reliability of the questionnaires was confirmed by calculating Cronbach's alpha.

SWOT technique was used to analyze the collected data. Basically, the SWAT matrix is a tool for recognizing the internal weaknesses and strengths and recognizing the threats and opportunities in its external environment in order to measure the situation and formulate strategies and strategies to guide and control that system. This method is a direct result of Harvard Business School [16]. From the point of view of this model, a suitable strategy maximizes strengths and opportunities and minimizes weaknesses and threats. For this purpose, the strengths and weaknesses, opportunities and threats in four general states WT, ST, WO, SO are linked as below and strategy options are selected from among them. Based on this, the framework of the SWOT analytical matrix can be summarized in Figure 3.

Now, according to the introduced approach, we can show the model of the research concept in the form of Figure 4,

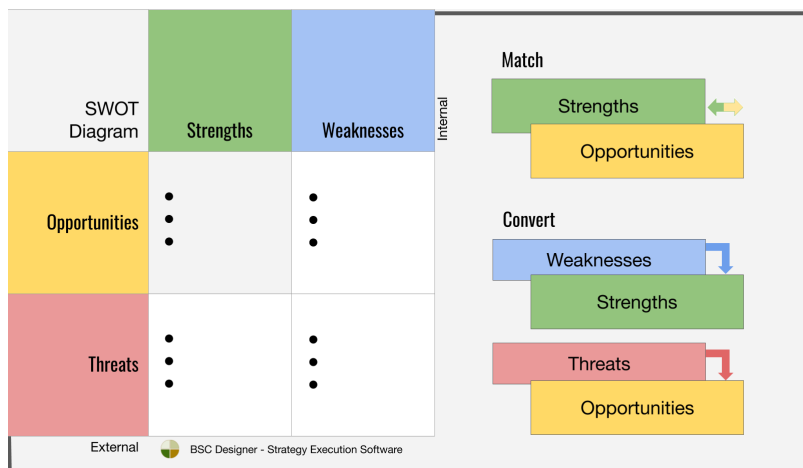


Figure 3: SWOT analytical matrix framework [9]

during which, at the end, quantitative strategic planning and suitable strategies for Iran’s ecotourism are determined.

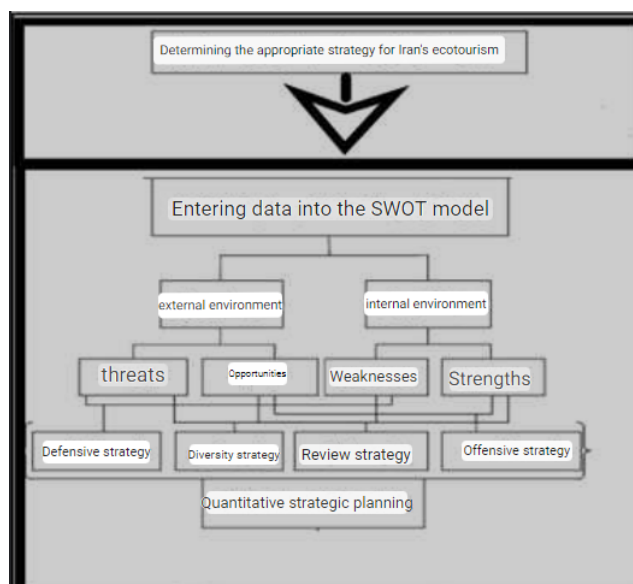


Figure 4: Research conceptual model

6 Findings

6.1 External factor evaluation matrix and internal factor evaluation matrix and its steps

Basically, strategic planners can evaluate economic, social, cultural, ecological, environmental, political, etc. factors by using the external factors evaluation matrix, and at the same time, by using the internal evaluation matrix, they can identify, evaluate, and Provide solutions for them.

After collecting data and ensuring their reliability by calculating Cronbach’s alpha of 0.91, it is time to perform analyzes and determine the rank and weight of each component of internal and external factors. In order to prepare and make a table of external and internal factors and how they affect Iran’s ecotourism functions and analyze it, the following five steps have been carried out:

1. In the first column, we compile the most important external (opportunities and threats) and internal (strengths and weaknesses) factors affecting the system.

2. In the second column, how much more weight is given to each of the external and internal factors based on their possible effect on the situation, its effect on the current and future situation of that system will be greater. We give a weight from 1 (most important) to zero (least important) to the current strategy of the system. In fact, the greater the weight, the greater its effect on the current and future situation of that system.
3. In the third column, we give each of the external and internal factors a grade from 4 (very good) to 1 (weak) based on the importance and current situation of the system. This ranking evaluates the position of each agent by the system.
4. In the fourth column, we multiply each of the external and internal factors and the weight of each factor by their rating to obtain its weighted score.
5. Finally, we have added the weighted points in the fourth column separately and calculated the weighted points of each of the external and internal factors. The total weighted score shows how a system responds to existing and potential factors and forces in its internal or external environment [8]. Basically, in the evaluation matrix, the sum of the final points of the system never reaches more than 4 and never less than 1. The average of this sum is 2.5. If it is higher than that, its importance is more and if it is less than that, it has less importance and influence.

In the matrix of the internal factors of Iran's ecotourism (Table 2), the final score of these factors is equal to 3.73. This shows that the ecotourism industry in Iran has had an acceptable performance in terms of internal factors. But the final score of the matrix of external factors is also 2.60, which means that compared to internal factors, Iran's ecotourism has had a weaker performance in the field of using opportunities and adjusting threats.

Table 2: Internal factors matrix (IFEM) of Iran's ecotourism

Internal strategic factors	Weight	ranking	weighted score	rank
Strengths:				
S1: tangible and intangible natural, cultural and historical heritage and being on the Silk Road	0.05	4	0.20	8
S2: Diversity of natural views and different climatic conditions and beaches	0.07	4	0.28	1
S3: The beauty of the Caspian Sea, the Persian Gulf and the Sea of Oman	0.05	3	0.15	16
S4: Being in the strategic region of Asia-Middle East in terms of political geography and proximity to European and northern countries	0.04	4	0.16	12
S5: The tradition of hospitality and the hospitality culture of the Iranian people	0.05	3	0.15	15
S6: Young and trained workforce in different levels of tourism	0.04	3	0.12	17
S7: Existence of unique and rare deserts for different ecotourism programs	0.06	4	0.24	2
S8: Existence of cultural and ethnic diversity	0.04	4	0.16	13
S9: Existence of capacity for the development of rural ecotourism	0.05	4	0.20	7
S10: Existence of potential investors	0.06	4	0.24	3
weak points:				
W1: Lack of statistical base and proper information about tourism	0.04	3	0.12	18
W2: Restrictive laws and administrative bureaucracy	0.05	4	0.20	9
W3: Antiquity and general weakness of air and rail transportation systems	0.06	4	0.24	4
W4: State ownership and management of tourism facilities	0.06	4	0.24	6
W5: Limitations of the global banking network and connection to global banking	0.05	4	0.20	10
W6: Absence of de-escalation policy with the international community	0.04	3	0.12	19
W7: Weakness in tourism infrastructure	0.06	4	0.24	5
W8: Weakness in marketing and advertising	0.05	4	0.20	11
W9: Weakness in education and creating skills in the field of eco-tourism	0.04	3	0.12	20
W10: Lack of public awareness and participation of local people in the development of eco-tourism	0.05	3	0.15	14
total	1	-	3.73	-

6.2 Strategic factors analysis summary

In this model, by using the analysis tables of internal and external factors and their combination, the most important strategic factors in Iran's ecotourism have been presented. In fact, by analyzing strategic factors, planners who make strategic decisions can narrow down strengths, weaknesses, threats, and opportunities to a smaller number of factors. This work has been done by re-examining the weights of each of the factors in the analysis tables of internal and external factors. In fact, the heaviest factors in these two tables in terms of weight should be transferred to the analysis table of strategic factors. This importance regarding the strategic factors affecting ecotourism is summarized

Table 3: External factors matrix (EFEM)

External strategic factors	Weight	ranking	weighted score	rank
Opportunities:				
O1: Maximum exploitation of events and revolutions in the region of North Africa and the Middle East, known as the Arab Spring, in attracting tourism.	0.05	2	0.10	12
O2: Privatization in major sectors of tourism, especially ecotourism	0.07	3	0.21	5
O3: Making maximum use of international exhibitions and providing ecotourism tourism packages	0.09	3	0.27	1
O4: Updating and rationalizing the laws governing the country's tourism industry	0.06	3	0.18	6
O5: Use of mechanization and new IT information technology	0.06	2	0.12	11
O6: Growing global demand for ecotourism	0.09	3	0.27	2
O7: Development of technologies and the possibility of providing online services	0.07	2	0.14	10
O8: Holding international events about Iran's ecotourism attractions	0.09	3	0.27	3
threats:				
T1: Foreign threats and the possibility of more international sanctions, especially from the United States	0.08	3	0.24	4
T2: Psychological feeling of insecurity in Iran, especially from western tourists	0.06	3	0.18	7
T3: The development of tourism, especially the development of coastal tourism in neighboring countries such as Turkey and the United Arab Emirates	0.08	2	0.16	9
T4: The existing tension with Western countries, such as the capture of the British embassy in Tehran and the burning of the Saudi consulate in Mashhad	0.06	3	0.18	8
T5: It is mandatory for female tourists to maintain and respect their needs	0.05	2	0.10	14
T6: The growth of ecotourism in Latin American countries and the Far East	0.04	2	0.08	15
T7: Natural disasters and climate changes such as droughts and floods and...	0.05	2	0.10	13
total	1	-	2.60	-

in Table 4. According to the results of this table, it is clear that for almost all the mentioned components; The need for short-term planning is strongly felt. After this, medium-term planning and then long-term planning are respectively the most actions that should be implemented for the listed strategic factors.

Table 4: Analysis of strategic factors (SFAS)

strategic factors	Weight score	ranking	weighted	planning		
				Short	medium	long
S1: Diversity of natural views and different climatic conditions and beaches	0.09	4	0.36	*		*
S2: Existence of unique and rare deserts for different ecotourism programs	0.07	3	0.21		*	*
S3: Presence of potential investors	0.09	4	0.36	*	*	
S4: The tradition of hospitality and the hospitality culture of the Iranian people	0.06	2	0.12	*	*	
W1: Age and general weakness of air, rail, ground transportation systems	0.08	4	0.32	*	*	
W2: Weakness in tourism infrastructure	0.07	3	0.21	*	*	*
W3: State ownership and management of tourism facilities	0.04	3	0.12	*	*	
O1: Making maximum use of international exhibitions and providing ecotourism tourism packages	0.08	4	0.32	*	*	
O2: Holding international events about Iran's ecotourism attractions	0.08	4	0.32	*	*	
O3: Growing global demand for ecotourism	0.08	4	0.32		*	*
O4: Development of technologies and the possibility of providing online services	0.06	3	0.18	*	*	*
T1: Foreign threats and the possibility of more international sanctions, especially from the United States	0.05	3	0.15	*	*	
T2: The development of tourism, especially the development of coastal tourism in neighboring countries such as Turkey and the United Arab Emirates	0.07	3	0.21	*	*	
T3: Psychological feeling of insecurity in Iran, especially from the western tourists	0.08	4	0.32	*	*	*
Total	1		3.52			

6.3 Matrix of SWOT strategies and executive priorities

Internal and external matrix is used for simultaneous analysis of internal and external factors. If in the matrix of four houses, the matrix scores of both internal and external factors are less than 2.5, the organization will have a defensive position in house 3. If the scores of both score matrices are higher than 2.5, the organization will be placed in house 2 and in an aggressive position. If the score of the matrix of internal factors is more than 2.5 and the score of the matrix of external factors is less than 2.5, the organization is in a competitive position, and finally, if the scores are the opposite of this, the organization is in a conservative position [6].

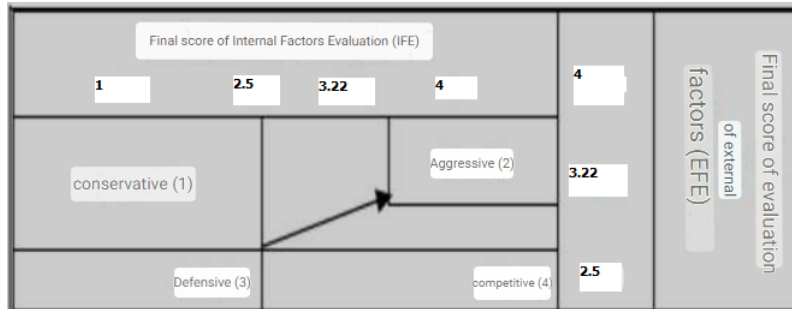


Figure 5: Four-house matrix for evaluating internal and external factors

Therefore, since the final score of both internal and external factors calculated is greater than 2.5, therefore, the position of Iran's ecotourism is in region 2, and its appropriate strategy will be to follow the offensive strategy (SO). Basically, the goal of implementing an offensive strategy is to use strengths to take advantage of opportunities.

6.4 Developing strategies

Now, with the interference of each of the factors on each other, we will develop different competitive/offensive strategies (SO), contingency or diversity (ST), revision or adaptation (WO) and finally defensive strategies (WT), which are as follows:

1. Competitive/offensive strategy (SO) (using strengths to take advantage of opportunities):

- 1-1 Using climate diversity and natural attractions to attract ecotourists. This strategy can include actions such as: designing and providing various ecotourism packages according to climatic conditions and different natural attractions; Focusing on coastal ecotourism in the Caspian, Persian Gulf and Oman coasts; Development of ecotourism and native residences in natural areas; To use the capacities of rural tourism.
- 1-2 Using the strategic position of Iran to attract tourists. This strategy can include measures such as: development of tourism and transportation infrastructure to facilitate the travel of tourists; Introducing Iran's ecotourism attractions in international exhibitions; cooperation with the countries of the region for the development of joint tourism; To use the capacities of diplomacy to facilitate the travel of tourists.
- 1-3 Using young and trained workforce. This strategy includes measures such as: improving the level of education and skills of activists in the ecotourism industry; Encouraging and supporting private sector investment in ecotourism; It is to use the capacities of universities and scientific centers for the development of education and research in the field of ecotourism
- 1-4 Using the opportunities created by the Arab Spring. This strategy includes measures such as: introducing Iran as a safe and attractive destination for tourists and focusing on attracting tourists from regional countries.
- 1-5 Using new technologies. This strategy includes measures such as: - developing and using online systems for reservation and providing tourism services; Using social networks for advertising and marketing; The use of new technologies to preserve and monitor the environment.

2. WO revision or adaptation strategy (turning weaknesses into opportunities):

- 2-1 Creating a database and a comprehensive tourism information system. This strategy includes actions such as: collecting and analyzing data related to tourists and the tourism industry; Use of data for planning and targeted development of ecotourism; Improving transparency and information, such as preparing a tourism atlas in Iran's tourism industry.

- 2-2 Amending laws and regulations governing tourism. This strategy includes measures such as: facilitating licensing and encouraging investment in the ecotourism sector; Creation of protective laws for the activists of this industry; Reduction of administrative bureaucracy.
 - 2-3 Upgrading transportation systems. This strategy includes measures such as: modernization of the air and rail fleet; development of transportation infrastructure in tourist areas; Facilitating public transportation for tourists
 - 2-4 Attracting foreign investment. This strategy includes measures such as: creating investment incentives to attract foreign investors; Partnership with foreign companies in the field of ecotourism development; The use of international financial resources.
 - 2-5 Eliminating banking restrictions. This strategy includes measures such as: developing relations with international banks; The use of alternative methods for currency transfer facilitates payment for foreign tourists.
 - 2-6 De-escalation in relations with the international community. This strategy includes measures such as: interacting with western countries and resolving misunderstandings; Introducing the peaceful and safe face of Iran to tourists and promoting tourism diplomacy and ecotourism.
3. contingency strategy or ST diversity (using strengths to deal with threats):
- 3-1 Creating and improving the sense of security for tourists. This strategy includes things such as: increasing the presence of police and security forces in tourist areas; providing the necessary training to tourism industry activists in the field of security; It is to improve tourists' trust in Iran's security.
 - 3-2 Introduction of Iran's historical and natural attractions. This strategy includes things like: focusing on attracting natural and historical tourists; Introducing Iran as a safe and attractive destination for nature tourists is introducing new Iran nature tourism packages.
 - 3-3 Creating suitable fields such as: reducing taxes or entry fees, travel discounts, etc.
4. WT defensive strategy (reducing weaknesses to deal with threats):
- 4-1 Planning to deal with sanctions. This strategy can include: finding new markets to attract tourists; Using new management and systematic methods in the field of eco-tourism
 - 4-2 Environmental protection and restoration, implementation of strict laws. This strategy can include measures such as: increasing public awareness in the field of environmental protection, dealing with violators in the field of eco-tourism and causing damage to the nature and natural geography of the country, investing in the preservation and development of the country's eco-tourism attractions.

7 Conclusion and suggestions:

According to the findings of this research, the country of Iran is known as a country of four seasons due to its favorable weather throughout the year, which has diverse natural and environmental attractions, which, in addition to this beautiful nature, is one of the special geo-attractions. It has a tourist and eco-tourism which, along with its rich and traditional culture and history, has created a collection of the best tourism and eco-tourism attractions in a wide area of Iran, which shows the high ability of this country to become a country is an example of eco-tourism in the region.

The investigation and analysis of this study show that the country of Iran, having very valuable natural and geographical attractions, can be one of the important axes of eco-tourism in the region. Considering the existing situation and identifying the strengths and opportunities of eco-tourism development in the region and on the other hand, the weaknesses and threats that exist in the eco-tourism development process of this region. Effective approaches to this process according to the SWOT model indicate that due to important weaknesses such as age and general weakness of transportation systems (air, rail, sea, land), weakness in tourist and tourism infrastructures and government ownership and management of tourism and eco-tourism facilities, the situation of eco-tourism in Iran is not very suitable and is always faced with several threats such as external threats and the possibility of more international sanctions, especially from the United States, the development of tourism and eco-tourism, especially the development of coastal tourism In neighbouring countries such as Turkey and the United Arab Emirates, and finally, there is a psychological feeling of insecurity in Iran, especially on the part of Western tourists, for which, according to the survey, there are several plans, especially in the short and medium term.

The final results of this study showed that Iran's eco-tourism strategy is a competitive-aggressive strategy, during which important measures should be taken to use the strengths to use the opportunities in this field. Therefore, the main strategies such as: using climatic diversity and natural attractions to attract ecotourists; Using Iran's strategic location to attract tourists; using of young and trained workforce; Taking advantage of the opportunities created by the Arab Spring; and the use of new technologies should be considered. Of course, each of the main strategies has sub-components, which together will portray the best strategy for Iran's eco-tourism. Therefore, choosing an aggressive strategy means the rapid and extensive development of ecotourism in Iran, which can serve Iran's economic development as a completely clean industry, and for the successful implementation of this strategy, detailed planning and coordination between different institutions are required. , and attracting the participation of the private sector and local communities and finally paying attention to the preservation and monitoring of the environment in all stages of the development of ecotourism in Iran is necessary.

Now, according to the appropriate strategy determined, in order to make optimal use of ecotourism and its economic, social and cultural benefits, suggestions are presented at different levels as follows:

- A- Political levels:**
- Compilation and approval of the comprehensive ecotourism law: This law should clearly and comprehensively define the framework of ecotourism development in Iran. The duties and powers of various government agencies and the private sector must be precisely defined in this law.
 - Establishment of the Supreme Council of Ecotourism: this council, with the presence of representatives of government agencies, the private sector, local communities and academic experts, can formulate and approve ecotourism policies.
 - Allocating sufficient funds for the development of ecotourism: the government must provide the necessary funds for the development of ecotourism infrastructure, education and research, and marketing in this area through the annual budget and other financial sources.
 - Creating investment incentives: The government should encourage the private sector to invest in ecotourism by providing tax exemptions, banking facilities and other incentives.

B- Application levels:

- Conducting training courses: Training courses should be held to improve the knowledge and skills of ecotourism industry activists in various fields such as tour guiding, ecotourism, and environmental protection.
- Development of ecotourism infrastructure: it is necessary to build ecotourism residences, environmentally friendly residences, and other infrastructures needed for ecotourists in different regions of the country.
- Marketing and advertising: In order to introduce Iran's ecotourism attractions to domestic and foreign tourists, extensive marketing and advertising programs should be carried out.

P-Executive levels:

- Creation and equipping of ecotourism model areas: In different regions of the country, a number of ecotourism model areas should be created and equipped in full compliance with the principles and criteria of ecotourism.
- Supporting local communities: local communities should be involved in the planning and development of ecotourism and benefit from its benefits.
- Environmental preservation and monitoring: In order to preserve and monitor the environment in ecotourism areas, detailed and comprehensive programs must be developed and implemented.
- Supervision of ecotourism activities: appropriate mechanisms must be established to supervise ecotourism activities and to properly implement rules and regulations.

T- Study and research levels:

1. Basic studies: which can include the following studies:
 - 1-1 Examining the capacities of Iran's ecotourism, such as: identifying and zoning potential areas for the development of ecotourism in Iran; Investigating the natural, cultural and historical attractions of each region; Evaluation of existing and required infrastructure for the development of ecotourism in each specific region of Iran.

- 1-2 Examining the current situation of ecotourism in Iran, such as: Examining the number of ecotourist tourists entering Iran; Investigating the status of accommodations and tourism services provided to ecotourists; Examining the challenges and problems facing the development of ecotourism in Iran.
- 1-3 Comparative studies, which can include things such as: examining the experiences of other countries in the field of ecotourism development;
- Identify successful models of ecotourism development and localize them for Iran.
2. Applied studies: which can include the following studies:
- 2-1 Presenting sustainable ecotourism development models, such as: developing ecotourism development models considering the economic, social, cultural and environmental conditions of Iran; Providing practical solutions for the participation of local communities in the development of ecotourism; Providing practical solutions to preserve and monitor the environment in ecotourism areas.
- 2-2 Providing solutions to improve the quality of tourism services, such as: training tour guides and ecotourism industry activists; Improving the standards of accommodations and tourism services; Providing tourism services according to the needs and tastes of ecotourists.
- 2-3 Providing marketing and advertising solutions, such as: identifying target markets to attract ecotourists; Using new marketing and advertising methods to introduce Iran's ecotourism attractions; Active presence in international tourism exhibitions.
3. Propulsion studies, which can include the following studies:
- 3-1 Examining the economic, social and cultural effects of ecotourism, such as: Examining the employment effects of ecotourism; Examining the effects of ecotourism on the well-being of local communities; Investigating the effects of ecotourism on preserving and revitalizing local culture and customs.
- 3-2 Examining the effects of ecotourism on the environment, such as: Examining the positive and negative effects of ecotourism on biodiversity; Investigating the effects of ecotourism on water and energy consumption; Providing solutions to reduce the negative effects of ecotourism on the environment.
4. Future research, which can include studies such as:
- 4-1 Examining the future trends of the ecotourism industry, such as: identifying future opportunities and threats of the ecotourism industry; Providing solutions to adapt to the future trends of the ecotourism industry.
- 4-2 Compilation of the future scenarios of Iran's ecotourism, such as: compilation of different scenarios for the future of Iran's ecotourism according to various factors; Choosing the desired scenario and providing solutions for its realization.

References

- [1] A. Akbari and M. Farokhlou, *Ecotourism is a New Concept in Tourism Geography*, Entekhan Publication, Tehran, 2009.
- [2] S. Aminian, I. Sadeghi, A. Faraji, and A. Naderi Gur Qala, *Examining the opportunities and challenges of the sustainable development of Iran's ecotourism*, Second Nat. Conf. Econ. Dev. Strategies Cent. Reg. Plann., Islamic Azad University of Sanandaj, Sanandaj, 2011.
- [3] R. Arjamandi, K. Saeb, S.A. Jozi, and S. Rezaei, *Compilation of ecotourism development strategy in Alamut region by SWOT method*, Quart. J. Sustain. Dev. Envir. **1** (2019), no. 4, 17–31.
- [4] J. Eyvazi, *Geomorphology of Iran*, Payam Noor Publishing House, Tehran, 1995.
- [5] F. Azizpour, *Designing a desert ecocamp for the development of ecotourism in Hassan Abad Damghan*, Master's degree in architecture, Semnan Branch, Islamic Azad University, 2017.
- [6] M. Dehghani, A. Jozi, and Q. Shokrizadeh, *Planning of the protected area of the Faroe Islands for the development of ecotourism*, Nat. Conf. Manag. Geo. Approach. Optim. Use Resources, Tehran, 2009.
- [7] A. Drumm and A. Moore, *Ecotourism Development: A Manual for Conservation Planners and Managers: An Introduction to Ecotourism Planning*, Nature Conservancy, 2005.
- [8] I. Ebrahimzadeh and A.A. Aghasizadeh, *The analysis of effective factors in the expansion of coastal region of Chabahar tourism through swot model*, Urban Region. Stud. Res. **1** (2009), no. 1, 107–128.

- [9] A. Roknaddin Eftekhari and D. Mahdavi, *The solutions of the rural tourism development with SWOT Methods (Case study: Lavasan-E-Koochak)*, J. Space Plann. Prepar. **10** (2006), no. 2, 1–31.
- [10] D.A. Fennell, *Ecotourism: An Introduction*, Routledge, 2003.
- [11] M. Jahanian and Z. Nad Alipour, *Tourism Management (Definitions, Nature and Components)*, Academic Jihad Publishing Organization, Tehran, 2008.
- [12] M. Karami, *Tourist geography of Iran*, Real. Tourism Employ. **17** (2006), 90–113.
- [13] M. Karoubi, *Nature tourism and the need to support it in Iran*, Envir. Sci. **4** (2007), no. 2, 15–26.
- [14] H. Majnounian, *Environmental Guide for Sustainable Mountain Development*, Environmental Protection Organization, Tehran, 2007.
- [15] A. Movahed and S. Kuhzadi, *Analyzing of determinant factors on Kurdistan's tourism development with swot model*, Res. Urban Plann. **1** (2010), no. 2, 85–102.
- [16] A. Movahedi, S. Kuhzadi, and F. Abdinzadeh, *Kurdistan's ecotourism development strategies with applied of swot and GSPM model*, J. Geograph. Sci. **14** (2014), no. 32, 181–204.
- [17] M. Nilsson, *Research and Advice on Strategic Environmental Assessment*, Stockholm Environment Institute Publications, Sweden, 2004.
- [18] *Organization of Cultural Heritage and Handicrafts of Isfahan*, The first volume, final report of the consolidation, general plan and theoretical foundations, 2008.
- [19] M.T. Rahmani, *Environmental Capability of Iran*, Danaei Capability Publishing, Tehran, 2010.
- [20] H. Rakhshani Nesab and A. Zarrabi, *Challenges and opportunities for the development of ecotourism in Iran*, Sci. J. Geo. Space Res. **9** (2009), no. 28, 41–55.
- [21] B. Ranjbarian and M. Zahedi, *Tourism Marketing, Chahar Bagh Publications*, Third edition, Tehran, 2010.
- [22] L. Sadeghi, A. Zoghi, and J. Bani Amrian, *Evaluation of ecotourism development in Kurdistan Province with SWOT strategic model*, Second Conf. Econ. Dev. Strategies Focus Region. Plann., Islamic Azad University of Sanandaj, Sanandaj, 2011.
- [23] M. Taghvaei, Gh.H. Ehsani, and A. Safarabadi, *The role and position of multi-dimensional planing in developing the tourism and ecotourism case study: Khoor and Tabas zone*, Geo. Envir. Plann. **20** (2009), no. 3, 45–62.
- [24] C. Tosun, *Challenges of sustainable tourism development in the developing world, the case of Turkey*, Tourism Manag. **22** (2001), no. 3, 209–303.
- [25] L. Wenjun, *Environmental management indicators for ecotourism in China's nature reserves: A case study in tianmushan nature reserve*, Tourism Manag. **25** (2004), no. 5, 559–564.
- [26] M.E. Wood, *Ecotourism*, CenOrt Belgrade, Serbia, 2002.