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# Sustainable tourism development based on a strategic approach using SWOT analytical model (Case study: Gorgan County)

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#### ABSTRACT

The SWOT technique provides strategies to improve the management situation by examining and evaluating strengths and weaknesses, opportunities, and threats. Therefore, the current research was conducted to provide a strategic plan for the management and sustainable development of tourism in Gorgan using the SWOT. So, a list of strengths, weaknesses, opportunities, and threats was identified and provided as a questionnaire with a Likert scale which was filled out by the experts. Then, their results were analyzed and weighted. Next, the SWOT matrix was formed based on internal (IFE) and external (EFE) factors, and the best strategies for tourism management in the study area were presented. According to the results, the existence of recreational areas such as Naharkhoran and Alangdareh near Gorgan City is considered the most important opportunity for tourism development in the study area. At the same time, the criteria of low level of sanitary conditions and lack of service facilities in recreational areas is the most important threat related to tourism development in the region. Also, from the point of experts' view, the existence of beautiful landscapes, numerous waterfalls, and unique forest areas in the vicinity of Gorgan city are the most important strengths in tourism development. On the other hand, the lack of entertainment for tourists and the lack of guarantee for the sustainability of investment in this industry are the most important weaknesses. In this research, strategies and suggestions were presented to improve the current situation and to manage sustainable and successful tourism in this region.

#### ARTICLE INFO

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#### 1. Introduction

Today, tourism has expanded and developed as one of the methods of spending leisure time (Talebi et al., 2021) and most planners and politicians have proposed the development of the tourism industry as an essential element of sustainable development (Moiniyan Miandoab et al., 2019). Its importance in the current era is mostly dependent on its economic cycle, which has a high capability in the field of local and international economic dynamics (Razmjooi and Zare, 2018). Iran as one of the most spectacular countries in the world, has numerous tourist attractions (Stange and Brown, 2010). Our country is among the top ten countries in the world in terms of cultural-civilizational tourism attractions, among the top five countries in the world in terms of the diversity of the natural environment for tourism, and among the top three countries in the world in terms of the diversity of handicrafts. At the same time, despite the great potential for the development of tourism, these capabilities have not been well identified and used according to the goals of sustainable development. In this regard, it is necessary to carry out suitable strategic planning based on the conditions of the region to develop tourism and manage tourism areas to use their recreation/tourism potentials.



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Strategic planning is a systematic method for making decisions and implementing activities regarding the formation of a system, its function, and its causes. There are various methods to identify strategic planning, one of the most efficient of them is SWOT analysis. SWOT analysis which is an abbreviation of the Latin words Threat, Opportunity, Weaknesses, and Strengths (Swangjiang and Kornpiphat, 2021), is one of the strategic planning techniques to match internal points of strengths and weaknesses of a system with external points of opportunity and threats of a system. According to this model, a suitable strategy maximizes strengths and opportunities and minimizes weaknesses and threats (Amalial et al., 2023). The SWOT technique is a management support tool for decision-making and is generally used for the systematic analysis of the internal-external environments of the organization to reach a systematic approach and achieve a specific goal (Konakglu and Kurdoglu, 2021). The formulation of strategy, which is often called long-term strategic planning, begins by analyzing the situation. Situation analysis means finding a strategy or strategic balance between opportunities (external) and strengths (internal) by regarding threats (external) and weaknesses (internal), to solve them. The strategic factors of a system are strengths (S), weaknesses (W), opportunities (O), and threats (T). These factors should not only help to identify the distinct characteristics or merits, special ability, existing resources, and the main method of using them but also should help in identifying the opportunities that the system currently lacks due to a lack of suitable resources (Groselj and Stirn, 2015). Therefore, in tourism development, it is possible to infer the topics and issues that have more priority and importance for the future using SWOT as well as the final goals and suitable strategies (Mehmood et al., 2013). Strengths and weaknesses are identified by evaluating the internal environment, and opportunities and threats are identified by evaluating the external environment (Moiniyan Miandoab et al., 2019, Purwaningsih et al., 2021, Zhao et al., 2023).

The characteristics that make it more valuable than other strategic models are mentioned as follows:

- This model, by considering and comparing internal and external factors and providing strategies according to them, has a comprehensiveness that other strategic management tools do not have.

- According to the review of the source, this model has the necessary flexibility to be used in manufacturing companies, service companies, and governmental and non-governmental organizations, as well as the analysis of the macro issues of societies and other issues.

- This model helps to solve a fundamental question in strategic choice; According to this model, the main purpose of this strategy is to use a situation or overcome a weak situation.

This model can show the relationship between different factors, and by increasing the number of factors and the complexity of the relationships, these relationships can be analyzed using the SWOT model (Sadeghi and Khanzadeh, 2018).

- SWOT analysis can evaluate the available resources related to the subject of study based on the existing and future limitations of the system (Swangjiang and Kornpiphat, 2021).

- SWOT analysis is a key tool in evaluating any issue. This technique helps to develop an effective strategy to maximize strengths and opportunities and minimize weaknesses and threats (Kelfaou, et al., 2021).

Using this technique in tourism management is a relatively new method that has been used in different parts of the world (Keshavarz et al., 2015; Razmjooi and Zare, 2018; Nori et al., 2019; Akbari saghaleksari and Pourramzan, 2014; Ghorbani et al., 2015; Groselj and Stirn, 2015; Kazemiyeh et al., 2016; Arsic et al., 2018; Ozdemir and Demirel, 2018; Purwaningsih et al., 2021; Chandra and Kumar, 2021; Konakglu Kurdoglu, 2021; Swangjiang and and Kornpiphat, 2021; Arco et al., 2021; Hasyimi and Azizalrahman, 2021; Bostanchi and Parchekani, 2022; Tjaija et al., 2022). For example, Hasyimi and Azizalrahman (2021) used the SWOT technique for the sustainable development of tourism in a region in Indonesia with the combined goals of regional protection and economic growth. The results showed that economy-oriented strategies should be used to motivate the private sector and invest in sectors such as improving the status of cultural heritage, transportation, and transportation systems, and training local communities in dealing with tourists for the sustainable development of tourism in the region. Bostanchi and Parchekani (2022) used the SWOT model to develop strategies for the sustainable development of tourism and ecotourism in the Solekhan and

Ken valleys. Using SWOT questionnaires, and forming matrices, they achieved the appropriate strategies for the sustainable development of ecotourism in the region. The results showed that the appropriate strategies for the development of ecotourism in Solegan and Ken Valley include "emphasis on the design of combined learning and nature tourism tours", "holding ecotourism and educational tours for tourists to experience the lifestyle of local executive society", "reviewing policies, cooperating with youth to launch new tourism businesses" and "using effective advertising tools to encourage them to take handicraft and tourism training courses.

According to the mentioned above, sustainable development has become one of the strategic issues in the tourism industry, and according to the review of the literature, it is clear that the SWOT approach can play an important role in identifying effective strategies in the development and sustainable management of tourism. Sustainability is an action that combines environmental, social, cultural, and economic concepts. The tourism industry has good benefits for economic and social growth. However, if not properly planned and managed, it can have harmful consequences for the environment. The purpose of this research is to strategies provide for the sustainable development of tourism in Gorgan City in Golestan province.

Considering the natural attractions such as waterfalls. springs, pleasant weather, mountainous conditions, and beautiful scenery, the studied area has excellent environmental potential for the sustainable development of tourism. However, the lack of a comprehensive strategic plan has prevented the optimal use of the ecotourism attractions and the environmental capacities, and the region is facing the challenge of sustainable development and management of tourism. So, to maintain the sustainability of the area in a way that makes an enjoyable experience for tourism as well as protect the region in the long term, using of SWOT analysis would be necessary. By adopting a comprehensive approach, the authors examined the current capacities and limitations of tourism in Gorgan County and introduced the strategies needed for the sustainable development of tourism in the study area, so that visitors and the local community can earn its benefits. In this way, to achieve the objectives of the research, the SWOT method has been used to identify effective strategies for the sustainable development of tourism and attract tourists in Gorgan County.

#### 2. Material and Methods

#### 2.1. Study area

Gorgan County is bordered by Agh Qola and Bandar Turkman from the north, Aliabad from the east, Kurdkouy from the west, and Shahkoh and Semnan province from the south. The studied area has various potentials and abilities for tourism development. Suitable geographical location (located on the Asian highway between Tehran and Mashhad), mild climate, unique vegetation (including the unique forest lands of Hyrkani, fields, and gardens), and the presence of rivers and springs around it are the potential of the region for tourism development.

In the vicinity of this city, there are natural tourist attractions (such as Alangdareh Forest Park and Naharkhoran) as well as cultural attractions (such as Ziarat tourist village).

The existence of these unique attractions in the vicinity of the study area shows the necessity of conducting a study regarding providing strategies for the development of tourism and attracting people to the region by preparing the satisfaction and their recreational needs. Therefore, in the current research, SWOT analysis was used to analyze the strengths and weaknesses of the region and to identify the opportunities and threats facing the region. Fig. 1 shows the location of the study area along with the location of some tourist attractions near the city.



Fig. 1. Location of the study area

#### 2.2. Methodology

Implementation of the SWOT technique requires knowledge of four factors to eliminate weaknesses and threats and improve strengths and opportunities. So, this research was conducted based on two descriptive and analytical methods. First, according to the available documentary sources and information and the investigations carried out on the effective internal and external environment in the region, a list of strengths and weaknesses, opportunities, and threats in the study area was prepared in the form of a questionnaire. This questionnaire was prepared based on the Likert scale (1 to 5) and after confirming the validity of the questionnaire, 30 questionnaires were prepared and given to officials related to tourism in various institutions (including university faculty members, cultural heritage organizations experts, and related experts in the municipality administration) to fill out. The 26 questionnaires were completed and received. Then, the SWOT analysis method was used to analyze the information and provide strategies and tactics for tourism development. For this purpose, the SWOT matrix was prepared from the interaction of internal and external environmental factors, and suitable strategies were presented to strengthen tourist attraction and tourism development in the region. Table 1 shows how the SWOT matrix works. Fig. 2 shows the stages of the research.

Table 1. How the SWOT matrix works

Internal factors External factors	Environmental factors List of strengths (S)	List of weaknesses (W)			
List of opportunities (O)	Area 1: Using opportunities using strengths (SO)	Area 2: Using opportunities to compensate for weaknesses (WO)			
List of threats (T)	Area 3: Using strengths to prevent threats (ST)	Area 4: Reducing losses caused by threats and weaknesses (WT)			



Fig. 2. The flowchart of the stages of the research

#### 3. Results and discussion

Many researchers such as Tjaija et al. (2022) believe that the tourism industry without careful planning and attention to ecological, local, cultural, and social capabilities will cause problems for every region; on the other hand, the planned and perfect tourism system will advance towards the appropriate use of the environment and various environmental, cultural, historical and similar resources in the region. Therefore, to sustainably tourism development, attract and strengthen tourism and successfully manage tourism, it is necessary to use proper planning using comprehensive methods of planning and management such as SWOT. In this context, Ghorbani et al. (2015) stated that the use of methods such as SWOT

can be a useful tool to identify the management strategies needed to improve the development and sustainable management of tourism. In this research, the SWOT technique was used for the development of tourism in Gorgan County. The results of this survey indicate the existence of many potential capacities in the field of tourism and recreation in the study area, which are presented as follows.

#### 3.1. Results of evaluation of external factors (EFE)

To organize external factors in the form of categories of opportunities and threats to the system, ranking factors according to the importance of each of the opportunities and threats and according to the degree of influence of each of them on the functions of the study area were calculated. According to the results, the most important opportunities that Gorgan County faces in the field of tourism/leisure development based on experts' opinions are: the existence of recreational areas such as Naharkhoran and Alangdareh near Gorgan city (0.22), the expansion of advertising media to make the region known at the national and international level (0.18) and creating tours to visit recreational areas with a guide (0.16) is the next priority. At the same time, the criteria of low level of sanitary conditions and lack of service facilities in tourism/recreational areas (0.2), loss of trees as a result of logging (0.172), loss of vegetation as the result of diseases and intentional and unintentional fires (0.156) and the increase in the desire of tourists to travel to other nearby recreational areas (0.14) are the most important threats related to the development of tourism in Gorgan County. Table (2) lists the most important factors.

## *3.2. The results of the evaluation of internal factors (IFE)*

From the point of respondents' view, the most important strengths that Gorgan County has in terms of tourism/leisure are the presence of beautiful landscapes (0.24), the presence of numerous waterfalls (0.192), and the presence of vegetation and unique forests near the city of Gorgan (0.168) in the region. On the other hand, the most important weaknesses of the region include the lack of various entertainment for tourists to stay longer (0.2), the lack of guarantee for the sustainability of investment in the tourism industry (0.172), and the cost of obtaining permits for investing in the tourism industry (0.16). Also, the most important internal factors influencing the development of tourism in the region are listed in Table 2.

#### 3.3. Strategic Factors Analysis Summary (SFAS)

Using the results obtained from the analysis of internal and external factors and their combination, the most important strategic factors in Gorgan tourism were extracted. For this purpose, the weights of each of the factors in the analysis tables of internal and external factors were re-examined and the heaviest factors in these two tables in terms of weight were added to the analysis table of strategic factors. Table 2 shows the strategic factors affecting tourism in Gorgan County and the type of suitable planning for each one.

	weights Priority	2	ty Scores	Planning		
Strategic factors		Priority		Long	medium	short
				term	term	term
$S_1$ = The presence of beautiful scenery in the area	0.06	4	0.24	*		*
$S_2$ = The presence of numerous waterfalls in the	0.048	4	0.192	*		*
area						
S <sub>3</sub> = The presence of unique forest vegetation in the vicinity of Gorgan city	0.042	4	0.168	*		*
$S_4$ = easy and suitable access to recreational areas for ecotourists	0.04	4	0.16	*	*	*
S <sub>5</sub> = Existence of tourism target villages in the vicinity of Gorgan city such as Ziarat village	0.037	4	0.148		*	
S <sub>6</sub> = Proximity of Gorgan city to Gorgan Bay and Caspian Sea	0.036	4	0.144	*		*
S <sub>7</sub> = Existence of historical places such as the Great Wall of Gorgan and its historical context	0.035	4	0.14	*		*
$S_8$ = distribution of hotels and accommodation places in the city of Gorgan	0.029	4	0.116	*	*	*
S9= holding cultural and sports competitions	0.028	4	0.112		*	
W <sub>1</sub> = lack of various entertainments for tourists to make them stay longer	0.05	4	0.2	*		*
W <sub>2</sub> = lack of guarantee for the sustainability of investment in the tourism industry	0.043	4	0.172	*		*
W <sub>3</sub> = Costliness of obtaining permits for investing in the tourism industry	0.04	4	0.16	*		*
W <sub>4</sub> = long and time-consuming permission to invest in the tourism industry	0.036	4	0.144	*		*
W <sub>5</sub> = Absence of specific guidelines for obtaining a license for investment in the tourism industry	0.035	4	0.14	*		*
W <sub>6</sub> = Inappropriate facilities and equipment in recreational/tourist areas	0.032	3	0.096	*		*
W <sub>7</sub> = inappropriateness of health facilities	0.032	3	0.096	*		*
O <sub>1</sub> = diversity of natural environments and various geographical features	0.07	4	0.28	*		*

Table 2. Strategic Factors Analysis Summary (SFAS)

	weights Prio		Weight scores	Planning		
Strategic factors		Priority		Long term	medium term	short term
O <sub>2</sub> = The presence of recreational areas such as Naharkhoran and Alangdareh near the city of Gorgan	0.055	4	0.22	*	*	*
O <sub>3</sub> = Improving the quality of health services in recreational/tourist areas	0.045	4	0.18	*	*	*
O <sub>4</sub> = Media advertising to make the region known at the national and international level	0.04	4	0.16	*	*	*
O <sub>5</sub> = Holding conferences and festivals to introduce recreational/tourism areas	0.037	4	0.148		*	
$O_6$ = preparing tours to visit recreational areas with a guide	0.029	4	0.116	*		*
O <sub>7</sub> = holding national ceremonies and festivals	0.035	4	0.14	*	*	*
T <sub>1</sub> = Low level of health and lack of service facilities in tourism/recreational areas	0.05	4	0.2	*		*
$T_2 = loss of trees as a result of logging$	0.043	4	0.172	*	*	*
T <sub>3</sub> = loss of vegetation as a result of diseases and intentional and unintentional fires	0.039	4	0.156	*		*
$T_4$ = increasing of tourists interested in travel to other nearby recreational areas	0.035	4	0.14	*		*
T <sub>5</sub> = Providing favorable facilities to tourists in competing recreational areas	0.03	4	0.12	*		*
$T_6$ = Pollution of water and soil resources in the area	0.028	4	0.112	*	*	*
T <sub>7</sub> = lack of attention to historical and cultural monuments in the region	0.025	4	0.1	*	*	*

With the interference of each of the factors together, different competitive/offensive (SO), diversity (ST), revision (WO), and defensive (WT) strategies were formulated. Table 3 shows the SWOT matrix and the strategies extracted

from the interaction of internal and external factors of the study area that have an impact on the sustainable development of tourism in the area.

Table 3. SWOT matrix: sustainable tourism development strategies in Gorgan city					
External factors Internal factors	<b>Opportunities:</b> $O_1$ to $O_7$ (Table 2)	<b>Threats:</b> $T_1$ to $T_7$ (Table 2)			
Strengths: S <sub>1</sub> to S <sub>9</sub> (Table 2)	<ul> <li>Competitive/offensive strategies (SO): <ol> <li>Developing natural tourism resources and attractions</li> <li>Developing cultural-historical and religious tourism resources and attractions.</li> </ol> </li> <li>Developing and improving tourism products with an emphasis on natural and cultural attractions. <ol> <li>Developing airlines for the transportation of passengers.</li> <li>Using the potential of the region to hold cultural and sports competitions and attract sports tourists.</li> <li>Developing recreational/tourism facilities such as accommodation facilities, hotels, and restaurants and the possibility of using beautiful and pristine forest areas to attract tourists and also create new jobs for the local society.</li> <li>Using the natural tourism potentials of the region at the national and international levels </li> </ol></li></ul>	<ul> <li>Diversity strategies (ST):</li> <li>1. Developing tourism information networks and information and educational services about the importance of protecting recreational/tourism resources.</li> <li>2. Providing suitable facilities in recreational areas to satisfy tourists and provide favorable recreational experiences for visitors.</li> <li>3. Improving and developing natural, historical, and cultural tourism areas.</li> <li>4. Continuous monitoring of the environment to protect and maintain natural resources and attractions such as vegetation in the area.</li> <li>5. Developing historical, cultural, and religious resources and attractions and monitoring their conditions</li> </ul>			
weak points: W1 to W7 (Table 2)	<ul> <li>Revision strategies (WO):         <ol> <li>Improving and promoting tourism services and products (scientific, therapeutic, commercial and recreational)</li> <li>Public-private joint investment to develop and improve recreational/tourism facilities in the region.</li> <li>Encouraging the private sector to invest in tourism by providing facilities and services to them and facilitating the process of obtaining a license to invest in tourism.</li> <li>Interaction and consensus between officials, organizations and departments related to tourism to promote tourism projects.</li> </ol> </li> </ul>	<ul> <li>Defensive strategies :(WT)</li> <li>1. Compilation of rules and regulations in the field of developing and reforming management institutions and the use of specialized management in tourism sectors.</li> <li>Y. Stability in management for the correct implementation of long-term plans by compiling and developing guidelines for developing tourism plans.</li> <li>3. Attracting people's participation in the promotion, protection, and sustainable use of the natural and historical-cultural tourism resources of the region and preventing its environmental and historical-cultural destruction.</li> </ul>			

External factors Internal factors	<b>Opportunities:</b> O <sub>1</sub> to O <sub>7</sub> (Table 2)	<b>Threats:</b> T <sub>1</sub> to T <sub>7</sub> (Table 2)
	<ul> <li>5. Using the power of people's participation in all stages of tourism planning and management.</li> <li>6. Developing recreational tours.</li> <li>7. Using a tour-guides in recreational areas.</li> </ul>	<ol> <li>Improving and developing facilities health services and recreational equipment.</li> <li>Attracting private investors by providing suitable facilities.</li> </ol>
		<ul><li>6. Improving and increasing the supervision of units providing tourism services.</li><li>7. Increasing diversity in tourism services.</li></ul>

According to the results, the existence of recreation areas such as Naharkhoran and Alangdareh near the city of Gorgan is considered the most important opportunity in the field of tourism development in the study area, and media advertisements are used to make the area known at the national and international level and create tours to visit the areas. Excursions with tour guides are the next priority. Therefore, the optimal management of these areas and ensuring the satisfaction of visitors can play an effective role in encouraging people to visit these recreational areas. In this context, it is essential to provide the necessary facilities to the extent of the environmental capacity. This issue has been confirmed by other researchers, such as Mirkarimi et al. (2015) in a study investigating the needs and preferences of tourists in Daland Park. They also stated that due to the increasing number of visitors to the forest parks, it is necessary to try to meet the visitor's needs. Also, the field visits of these areas showed that the variety of recreational activities provided in these areas is not enough in the current conditions and the possibility of performing more diverse recreational activities for a wide range of people with various goals and interests is present in these environments. On the other hand, extensive media advertising, national and international ceremonies and festivals in these areas can be effective in increasing people's awareness about these areas. The presence of guides and experts in recreational areas is also can mutually lead to providing enjoyable recreational experiences for visitors, especially nature lovers, as well as sustainable protection of the environment by increasing people's awareness through guides. At the same time, the standards of low levels of health and lack of service facilities in tourism/recreational areas, loss of trees as a result of logging, loss of vegetation as a result of diseases and fires, and increasing the desire of tourists to travel to other nearby recreational areas is one of the most important threats related to the development of

tourism in Gorgan County. Therefore, it is necessary to take necessary measures to improve the level of health and provide the service facilities needed by visitors in the region. In this context, Mirkarimi et al. (2015) stated that since parks and recreational areas are one of the needs of human life in the current situation and are built for the people, therefore, it is not possible to decide without getting to know the opinions of the people. It made a correct assessment of their optimal situation. Therefore, it is necessary to improve the conditions of recreational areas in the study area by knowing the opinions of the people. Using a questionnaire is one of the ways to know people's votes and opinions. On the other hand, planning to increase people's awareness about the protection of natural resources by carrying out educational and promotional activities to prevent the cutting of trees and the destruction of vegetation can play an important role in the sustainable use of natural resources and their protection for future generations. In this context, it can even determine regulations in recreational areas. According to the results of the survey of questionnaires, from the point of view of experts, the most important strengths of Gorgan County in the field of tourism are the presence of beautiful landscapes, numerous waterfalls, and unique forest areas in the vicinity of Gorgan city. Therefore, this county's possession of diverse natural attractions is one of the most important strengths of the region for tourism development, and it is necessary to pay special attention to these areas during planning for the development of tourism and also guarantee their protection in the long term. In this context, Tjaija et al. (2022) used the SWOT technique to prepare a sustainable tourism development strategy for a Bay in Indonesia. The results showed that the strongest points for the development of sustainable tourism are having quality coastal views, numerous natural beaches, the availability of marine tourism equipment for tourists, the possibility of observing unique biodiversity (including plant

and animal), and beautiful landscapes. The most important opportunities include the proper use of the regional airport and job creation in the field of tourism. One of the most important weaknesses of tourism is the lack of educational activities related to environmental values, the lack of facilities and infrastructure to attract tourists, as well as the lack of promotional activities related to the cultural-natural values of tourism in the region. The main external environmental threats that affected the marine tourism of Palo Bay were environmental pollution and the threat of natural disasters. strategies Finally, for the sustainable development of tourism were stated by creating a satisfactory experience for visitors, economic prosperity of local communities creating job opportunities. minimizing environmental impacts, and preserving the environment. The results of the SWOT analysis regarding the weaknesses showed that the most important weaknesses of the region include the lack of various entertainment for tourists to stay longer, the lack of guarantee for the sustainability of investment in the tourism industry, and expensiveness of the process of obtaining a license for investment in the tourism industry. In this regard, according to the natural attractions and capabilities of Gorgan County, it is possible to organize different activities and plan various nature tours according to the interests, motivations, physical abilities, and types of tourists. In general, this region by including diverse natural attractions as well as historical and cultural attractions can be considered as one of the tourism hubs of Iran and it can use tourism as a tool for economic prosperity at the local, regional, and national levels. For this purpose, the strategies obtained from the present research can be used for the development and management of tourism in this region. Also, it should be noted that natural attractions don't get boring and repetitive because of visitor's goals including using fresh weather, relaxation, and gaining mental and spiritual peace. Therefore, nature-based tourism (ecotourism) by having this superiority is more important than other types of tourism and it is necessary to have proper planning along with continuous monitoring to provide facilities, visitors' preferences and needs as well as to provide environmental stability. The increasing rate of visitors to natural and protected areas such as national parks and other protected areas is a good reason to confirm this issue. So, proper

plans are necessary to manage visitors in these areas to obtain simultaneous goals to maintain their stability and also provide a high-quality experience for visitor (Candrea and Ispas, 2009). In this research, the most important strategic factors in Gorgan tourism were extracted using the analysis tables of internal and external factors and their combination. The strategies and suggestions presented in this research could be effective in optimizing the current situation and organizing tourism in Gorgan County. Many researchers such as Keshavarz et al. (2015), Ghorbani et al. (2015), Groselj and Stirn (2015), Konakglu and Kurdoglu (2021) and Zhao et al. (2023) in their research have used the SWOT technique to develop implementation strategies to improve the tourism management of their study areas. For example, Keshavarz et al. (2015) used the SWOT model to achieve sustainable tourism development strategies in Khorram Abad County. First, they identified the factors influencing tourism in Khorramabad, then the four factors were examined according to the internal and external evaluation matrices and their relative importance with the opinion of tourism experts and regional managers. Then, the most important opportunities and threats, strengths and weaknesses of the county's tourism, as well as strategies for the sustainable development of tourism in the county were presented using SWOT analysis. The results of this research showed that the development of natural and cultural-historical tourism attractions, the expansion of communications, national conferences with the aim of further developing tourism, creating a context for private sector investment, establishing integrated management, creating unity in the performance of organizations involved in urban tourism and preventing waste Human, financial and technical resources, by providing better services to tourists, protecting and developing existing resources and facilities, will play a more effective role in achieving the goals of sustainable tourism development in Khorramabad. General, all the researchers have confirmed that the analysis of strategic factors provides strategic decisions for planners and managers, and therefore it can help to achieve the goals of sustainable development by preparing sustainable management of recreational areas by protecting the area and providing good recreational experiences for visitors.

#### 4. Conclusion

In this research, the SWOT technique was used to provide a strategic plan for the sustainable development of tourism in Gorgan County to prepare strategies for optimal management. According to the results, ecotourism or nature-based tourism is one of the most important issues for the implementation of sustainable development of tourism in the region due to the existence of various natural attractions. Field studies and analyses of the SWOT model show the following results:

- Natural capabilities including forests, rivers, and springs, have provided suitable climates and natural landscapes for tourists to spend their leisure time in the region.

- Easy access routes and the quiet and safe environment of this area have provided good conditions for the local people to go there and invest in tourism.

- Increasing income and additional employment is one of the positive aspects of tourism development in the region.

According to the results, the tourism industry in Gorgan County is facing weaknesses and threats, and some strengths and opportunities can be used to compensate for and reduce the weaknesses and threats. The existence of recreational areas such as Naharkhoran and Alangdareh near Gorgan City is considered the most important opportunity. At the same time, the low level of sanitary condition and lack of service facilities in tourism areas is the most important threat related to the tourism development in this area. Also, from the point of view of experts, the presence of beautiful landscapes, numerous waterfalls, and unique forest areas in the vicinity of Gorgan City is one of the most important strengths in tourism development. On the other hand, the lack of entertainment for tourists and the lack of guarantee for the sustainability of investment in the tourism industry is one of the most important weaknesses.

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#### References

Akbari Saghaleksari, Z. & Pourramzan, E., 2021. Agroturism and its Role in Promoting Growth Opportunities in Rural areas of Guilan province. *Geographical Association of Iran*, 5(9), 43-59.

- Amalia1, M.M., Kraugusteeliana, A., Sipayung, B., Rustiawan, I. & Bambang, I., 2023. Business Risk Management Using Strengths Weaknesses Opportunities Treats in Small Business. *Journal of Management Science (JMAS)*, 6(1), 125-131.
- Arco, A., Presti, L., Marino, V. & Maggiore, G., 2021. Is sustainable tourism a goal that came true? The Italian experience of the Cilento and Vallo di Diano National Park. *Land Use Policy*, 101, 1-12.
- Arsic, S., Nikolic, D., Mihajlovic, I., Fedajev, A. & Zivkovic, Z., 2018. A New Approach within ANP-SWOT framework for prioritization of ecosystem management and case study of national park Djerdap, Serbia. *Ecological Economics*, 146, 85-95.
- Bostanchi, A. & Parchekani, P., 2022. Formulating Creative Ecotourism Development Strategies (Case Study: The Suleghan & Kan Valley). *Tourism of Culture*, 2(7), 5-12.
- Candrea, A.N. & Ispas, A, 2009. Visitor management, a tool for sustainable tourism development in protected areas. Bulletin of the TransilvaniaUniversity of Braşov, 2(51), 131-136.
- Chandra, P. & Kumar, J., 2021. Strategies for developing sustainable tourism business in the Indian Himalayan Region: Insights from Uttarakhand, the Northern Himalayan State of India. *Destination Marketing & Management*, 19, 1-9.
- Ghorbani, A., Raufirad, V. & Rafiaani Azadi, H., 2015. Ecotourism sustainable development strategies using SWOT and QSPM model: A case study of Kaji Namakzar Wetland, South Khorasan Province, Iran. *Tourism Management Perspectives*, (16), 290-297.
- Groselj, P. & Stirn, L.Z., 2015. The environmental management problem of Pohorje, Slovenia: A new group approach within ANP–SWOT framework. *Journal of Environmental Management*, 161, 106-112.
- Hasyimi, V. & Azizalrahman, H., 2021. Economy-led sustainable touristic city: the case of Surakarta, Indonesia. *Tourism Futures*, 1-17
- Kazemiyeh, F., Sadighi, H. & Chizari, M., 2016. Investigation of Rural Tourism in East Azarbaijan Province of Iran Utilizing SWOT Model and Delphi Technique. *Journal of Agricultural Science and Technology*, 18, 1-13.
- Keshavarz, M., Qadiri Masoom, M., Ayashi, A. & Superintendent, H., 2015. Analysis of sustainable tourism development strategies based on the "internalexternal matrix" model and strategic SWOT analysis, case study: Khorramabad city. *Ahar Islamic Azad University*, 16(54), 21-46.
- Konakglu, S.S.K. & Kurdoglu, B.C., 2021. Evaluation of Amasya city tourism planning using SWOT analysis. *Forestry Faculty*, 22(1), 88-96.
- Mehmood, F., Hassannezhad, M. & Tahir, A., 2015. Analytical investigation of mobile NFC adaption with SWOT-AHP approach: A case of Italian Telecom. *Rocedia Technology*, 12, 535-541.
- Mirkarimi, S.H., Mohammadzadeh, M. & Galdavi, S., 2015. Social and recreational carrying capacity assessment of Daland Forest Park, Golestan, Iran. *Environmental Resources Research*, 3(2), 191-202.
- Moiniyan Miyandoab, G., Fathi, B. & Moiniyan, P., 2019. The requirements of urban management in the sustainable development of tourism with an emphasis

on economy (case study: Miandoab city). *Geography* and human relations, 2(4), 449-471

- Nori, Gh., Sarani, S. & Rostaei, M., 2019. Strategic planning of tourism tourism development in the spa springs Using the SWOT technique (Study: bacon banned hunting area). *Geography and Human Relationships*, 1(4), 364-383.
- Ozdemir, Y. & Demirel, T., 2018. Prioritization of Tourism Strategies in Turkey Using a SWOT-AHP Analysis. *International Journal of Business and Industrial Marketing*, 3(2), 34-45.
- Purwaningsih, M., Purwandari, B., Sunarso, F.P. & Setiadi, F., 2021. Harnessing E-Collaboration for Rural Tourism Recovery after COVID-19: Dual Analysis using SWOT and Porter's Diamond Model. International Journal of Academic Research in Progressive Education and Development, 5(4), 559-575.
- Razmjooie, H. & Zare, A., 2020. Investigating strengths in the development of the tourism industry in Yasouj city with the SWOT analytical model. *Tourism Research and Sustainable Development Journal*, 5, 33-44.
- Sadeghi, H. & Khanzadeh, M., 2020. Strategic Analysis of Agricultural Development by SWOT and QSPM Matrix: A Case Study of Urmia Lake Basin. Journal of Agricultural Economics and Development, 27, 87-118.

- Stange, J. & Brown, D., 2010. Tourism destination management achieving sustainable and competitive results, 142 p.
- Swangjiang, K. & Kornpiphat, P., 2021. Does ecotourism in a Mangrove area at Klong Kone, Thailand, conform to sustainable tourism? A case study using SWOT and DPSIR. *Environment, Development and Sustainability*, 23(11), 1-26.
- Talebi, M., Majnounian, B., Makhdoum, M., Abdi, E. & Omid, M., 2021. Predicting areas with ecotourism capability using artificial neural networks and linear discriminant analysis (case study: Arasbaran Protected Area, Iran). *Environment, Development and Sustainability*, 23, 8272-8287.
- The requirements of urban management in the sustainable development of tourism with an emphasis on economy (case study: Miandoab city). *Geography and Human Relations*, 2(4), 449-471.
- Tjaija, A., Nur Ali, M., Fadhliah, A. & Effendy, E., 2022. Development Strategy of Palu Bay Marine of Sustainable Tourism with the A'WOT Hybrid Method. *Interdisciplinary Studies*, 2(1), 269-279.
- Zhao, Y., Mei, X. & Guo, J., 2023. Influence of Sustainable Environment Based on a SWOT-PEST Model on Sports Tourism Service Integration Development. *Sustainability*, 15(2), 1-14.