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Evaluation of Destination Tourism Development in Sustainability Framework in West Azarbaijan Province of Iran

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Abstract

The present study aims to evaluate the sustainability of the tourist villages of West Azerbaijan Province in Iran according to the effective dimensions and indicators in sustainable rural tourism development. In this study, a barometer of sustainability and a radar (amoeba) chart are utilized to evaluate how much the studied villages of West Azerbaijan province in Iran progress towards sustainable tourism. To assess the sustainability of rural tourism in the studied villages, 95 indicators appropriate to the villages' structure studied and compatible with the rural environment, are obtained. To provide a suitable strategy for sustainable tourism development, a SWOT matrix is used. The statistical population includes the heads of households in four tourist villages in West Azerbaijan, Iran (N = 1160). The sample size was estimated to be 290 according to the Krejcie and Morgan Table. The results show that the socio-cultural and economic dimensions are more sustainable than the environmental dimensions and also, the tourist villages of West Azerbaijan province have moderate sustainability. The internal and external factors evaluation matrices indicate that the final scores of 2.86 and 2.475 obtained for the internal and external factors of rural tourism, respectively, are in quadrant 4 of the strategic position and action evaluation matrix (SPACE), so, the most suitable strategy for rural tourism development in the study villages is a competitive one.

The results indicate that the final averages obtained for internal and external factors are in quadrant 4 of the strategic position and action evaluation matrix. So, the appropriate strategy for rural tourism development in the study areas is S-T strategies. The S-T strategies (competitive strategies) extracted for rural tourism development in the study area are as follows: To develop agricultural tourism to properly exploit rural farms and gardens to earn income and prevent the destruction of farms and vegetation, to diversify and develop advertising programs to introduce environmental and human attractions, to diversify tourism facilities, activities, and services to increase tourist attraction and to emphasize the coordination of different sectors involved in tourism development and to particularly form a rural tourism coordination team in the province.

Keywords: Development; Rural Tourism; Strategy; Sustainability; SWOT Analysis

Introduction

The unequal distribution of resources, facilities, and national interests between urban and rural settlements, especially in developing societies, has caused problems in rural environments and income gaps between these population center (Shams aldini, 2010). The results of these problems and inequalities as well as the weakened traditional economic activities in rural areas such as agriculture over the past three decades, make it more necessary to adopt new strategies to strengthen the economic base of the rural regions (Byrd and et al., 2009). One of these strategies is to develop rural tourism as a part of the tourism industry in those villages with natural and historical capacities required for the development of this industry (Kazemiyeh, 2016). Tourism has become not only a potential means to change the abovementioned status, but also an integral element of the rural development strategy (Sharpley, 2002). Given the increasing trend of environmental degradation and declining agriculture in rural areas, rural tourism attempts to revive rural areas and provides many opportunities for excess labor forces with few skills (Holland and et al., 2003). Therefore, tourism can be introduced as the most important strategy for rapid employment in some areas (Yolanda, 2004).

There are different views and theories about tourism development in rural areas. According to the proponents and opponents of development, rural tourism is increasingly considered a panacea that enhances economic power, improves vitality in remote regions, revitalizes settlements, and improves living conditions in rural communities (Briedenhann and Wickens, 2004). Of course, it must be stated that tourism alone cannot meet all the needs of the villagers and must be closely linked to other economic sectors and applied with essential planning so that it can lead to good results for the development, and especially sustainable development, of rural areas. To have with him (Rezvani, 2008). On the other hand, it should be noted that in rural areas, tourism, as an economic activity, is not an elixir for all problems. Rather, it is only a growth strategy if there is a good situation or potential. If tourism development is not followed carefully, it will cause harmful consequences (Kazemiyeh, 2015).

Nowadays, tourism development has shifted from common economic-oriented approaches to the approach of sustainable development of local communities by influencing the three dimensions of social sustainability, economic sustainability, and environmental sustainability, it tries to reach local development while attracting the participation of local communities in the development of the national economy through the protection of potentials and support of environmental resources and the environment (Rokn Aldin Eftekhari et al., 2010). Considering the more delicacy and sensitivity of the social, cultural, and environmental dimensions of rural communities than other communities, it is important to apply the sustainable development approach in rural tourism, which systematically involves all aspects of the local community. In this regard, the primary method used in tourism development is to achieve sustainable development.

Today, the sustainability paradigm has emerged as an important and necessary issue and attracted the international community over the last two decades (Mensah, 2019). The emergence of this concept in tourism literature result from efforts to achieve sustainable development in all areas of development (Butler, 1999; Streimikiene, 2020). Today, sustainable tourism development policy is a general approach considered by governments to

make tourism ecologically acceptable in the long run, financially self-sufficient, and socially and morally useful, and promising for local communities (Altinay and Hussain, 2005).

West Azerbaijan Province in Iran, with its vast extent and eye-catching scenery, is one of the few places that enjoy various tourism facilities and gifts, including beautiful waterfalls and lakes, vast forests, high mountains, and green plains. In addition to these environmental features, various archeological and historical monuments provide a specific tourism potential to this province. It is worth noting that due to the morphology of the region and the presence of significant villages in this part of Iran, a substantial number of these tourist facilities and attractions are located in rural areas (Taghdisi et al., 2015).

West Azerbaijan province has four tourist villages¹, which attract many tourists annually due to their hot springs, historical sites, and many environmental attractions. However, the lack of specific management procedures and planning and monitoring systems defined by the local community and related institutions has led to no significant change in various social, cultural, and environmental indicators in the tourist villages despite the relative prosperity of tourism activities. Therefore, it is necessary to comprehensively evaluate the various dimensions of sustainability and related indicators in these villages with a systematic view and using a reliable methodology to provide strategies for sustainable rural tourism development based on the results obtained. The primary purpose of this study is to evaluate the tourism sustainability in the tourist villages of West Azerbaijan province to provide the platform for sustainable rural tourism development in historical-cultural and environmental villages and to establish a relationship between tourist attractions, activities, facilities, services, and tourism markets on the one hand to achieve a comprehensive sustainable rural development (Abdi, 2019).

The concepts of sustainability and the sustainability framework have been applied in the research on the tourism industry since the 1980s. Some of these studies have examined the relationship between sustainable development and tourism. Besides, some tourist studies have been conducted to assess tourism sustainability and sustainable rural tourism development.

Yarkova and Stoykova (2008) examined the sustainability of rural tourism in Bulgaria. The results of their study showed that: 1- In the studied areas, rural tourism has not reached the desired level of development; 2- Marketing methods require the development of complex tourism products according to the different needs of tourists; and 3- The environmental, geographical, human, physical, and economic factors of development are provided in the studied areas.

Okech (2012), in a study entitled "Rural Tourism as A Sustainable Development Alternative", concluded that the roots of economic and environmental problems could be sought in emerging crises caused by unsustainable consumption and new visions of sustainable development focused on holistic spiritual, moral, psychological, and physical human development rather than dominating consumerism, which is the need of the hour.

¹ A tourist village is a geographical area where there is one or a set of historical, natural, and cultural attractions motivating tourists to travel and stay. Determining this group of villages is one of the main approaches the government has adopted to eliminate deprivation and create incentives for development to achieve the goals set in Iran's 20-Year Vision Plan, i.e., to utilize the capabilities of deprived areas, especially villages, in the field of tourism

Sesotyningtyas and Manaf (2015), in their study, analyzed the sustainable rural tourism development in Kutoharjo Village. This study aimed to investigate the feasibility of tourism development in Kutoharjo. The elements evaluated in this study were socio-economic and economic feasibilities. The results showed that this village has sufficient infrastructure and tourism facilities. Unfortunately, the economic feasibility study indicated it was impossible to develop rural tourism to improve slums. Finally, considering people as the main issue of sustainable development, researchers presented various strategies for rural tourism development.

In the present study, the literature review shows that the growth of tourism as a strategy for sustainable rural development is a relatively new thought and local policymakers in rural communities have realized its importance but do not have enough experience to implement it. It is hoped that the present study represents a first step towards improving of tourism sustainability in the studied areas.

Material and Methods

The present study is descriptive-survey and applied research in which data were collected using a field study.

The present study aimed to evaluate the sustainability of rural tourism development in the tourist villages of West Azerbaijan province, Iran. This province has four tourist villages, including Saholan village in Mahabad, Nosratabad village in Takab, Baghcheh Jough village in Mako, and Hasanlu village in Naqadeh (Figure 1 shows a general map of Iran illustrating the location of the study area). Therefore, the statistical population included the heads of households in these four villages (N=1160). The sample size was estimated to be 290 according to the Krejcie and Morgan Table. The statistical samples were selected using a stratified sampling method.

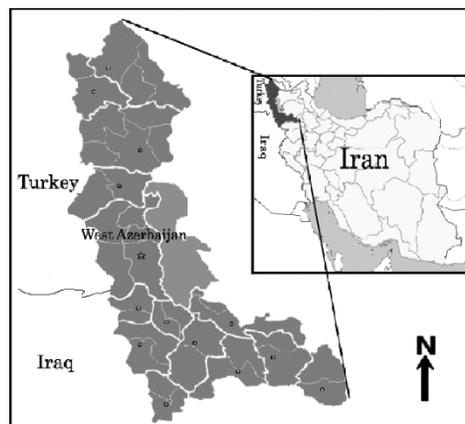


Fig. 1. A general map of Iran illustrating the location of the study area.

A questionnaire was used to collect the required data. According to the research objectives and the research background and literature of the research topic, a preliminary questionnaire was designed by consulting with professors and experts. Then, the final questionnaire was developed using the opinions of professors, experts of the Iranian Cultural Heritage,

Handicrafts and Tourism Organization, and the Housing Foundation of Islamic Revolution, as well as the field studies of the study areas.

Table (1) shows the Cronbach's alpha estimated for each section of the questionnaire.

Table 1-Cronbach's alpha calculated for each section of the questionnaire.

	Cronbach's alpha
Economic	0.77
Cultural-social	0.8
environmental	0.79

In this study, content validity was carried out by consulting the supervisor and advisor.

To assess the sustainability of rural tourism in the studied tourist villages, a total of 95 indicators appropriate to the structure of the villages studied and compatible with the rural environment, were obtained and applied (41 indicators for assessing social sustainability, 25 indicators for economic sustainability, and 29 indicators for environmental sustainability). After collecting questionnaires, the required statistics were calculated, unscaled, and adjusted with the same sign and the collected information was prepared for analysis and assessment. Next, the level of tourism sustainability in the studied villages was assessed using a barometer of sustainability and a radar (amoeba) chart.

To calculate the final sustainability index in each dimension, the various quantities obtained from the indicators were first converted to unscaled relative data. To do this, the minimum and maximum values of each indicator were determined to obtain the range of variations. Then, the product of the obtained value of each indicator minus its minimum value was divided by its range to obtain an unscaled relative value between zero and one. Finally, the relative values of all indicators in each of the three dimensions were averaged and the obtained value was considered sustainability index.

To achieve sustainable tourism development in the tourist villages, an appropriate strategy should be adopted for sustainability. To this end, the SWOT matrix was used. The SWOT matrix is a tool for identifying external threats and opportunities of a system and recognizing its internal strengths and weaknesses to assess the status quo and develop a strategy to guide and control that system. The SWOT model is one of the strategic tools matching the strengths and weaknesses within the system with the opportunities and threats outside the system.

Results and Discussion

About gender, the results showed that 69% (n=200) of the respondents were male and the remaining 31% (n=91) were females. The age distribution of the participated heads of households was as follows: 22.8% (n=66) aged 22-31 years, 32.4% (n=94) aged 32-41 years, 28.3% (n=82) aged 42-51 years, 8.3% (n=24) aged 52-61 years, and 8.3% (n=24) aged 62-66 years, showing the 52-66 years age group as the lowest frequency category (8.3%) and the 32-41 years age group as the highest frequency category (32.4%).

About the education of the heads of households participated, the results showed that 7.9% of the respondents were illiterate, 18.6% had primary education, 27.9% secondary education,

23.8% diploma, 4.1% at bachelor's degree, and 3.4% master's degree and higher. The highest frequency category was related to secondary education.

Descriptive findings of socio-cultural sustainability indicators

In this dimension, selected indicators included respect for human rights, improvement of living conditions and quality of life, support for social patterns and cultural heritage, and political and institutional development. As shown in table 2, totally, in the studied villages, the "support for social and cultural values and patterns" indicator had the highest average (4.11) and the "respect for human rights" indicator had the lowest one (2.65). The studied villages were not the same in various indicators. The average "respect for human rights" indicator varied from 2.65 in Hasanlu village to 3.25 in Nosratabad village. The average "improvement of living conditions and quality of life" indicator varied from 3.29 in Saholan village to 3.83 in Nosratabad village. The average "support for social patterns and cultural heritage" indicator varied from 2.93 in Hasanlu village to 4.11 in Nosratabad village and the average "political and institutional development" indicator varied from 2.96 in Saholan village to 3.32 in Baghcheh Jough village.

Table 2-Descriptive Findings of Combined Indicators of Social and Cultural Stability.

Village	Descriptive statistics	Status of Combined Indicators of Socio-Cultural Sustainability			
		Political and institutional development	Supporting social patterns and values	Improving living conditions and quality of life	Respect for human rights
Baghche jough	Frequency	136	136	136	136
	Mean	3.32	3.20	3.71	3.22
	standard deviation	0.53	0.58	0.52	0.66
Saholan	Frequency	18	18	18	18
	Mean	2.96	3.18	3.29	3.20
	standard deviation	0.75	0.58	0.47	0.58
Hasanlu	Frequency	16	16	16	16
	Mean	3.36	2.93	3.69	2.65
	standard deviation	0.83	0.63	0.87	0.98
Nosrat abad	Frequency	120	120	120	120
	Mean	3.21	4.11	3.83	3.25
	standard deviation	0.50	0.64	0.46	0.48

Descriptive findings of economic sustainability indicators at the sample population level

This dimension includes the obtained information on the selected indicators of "economic justice and welfare" and "economic stability". The analysis of items related to these indicators indicates different ranges for the average values of the indicators. As shown in Table 3, in total, in the studied villages, the "economic justice and welfare" indicator had the highest average value (3.50) and the "economic stability" indicator had the lowest one (2.99). The studied villages were not the same in these indicators. The average "economic justice and welfare" indicator varied from 3.15 in Nosratabad village to 3.50 in Baghcheh Jough village

and the average "economic stability" indicator varied from 2.99 in Hasanlu village to 3.16 in Saholan village.

Table 3-Descriptive Findings of Combined Indicators of Economic Sustainability.

Village	Descriptive statistics	Status of Combined Indicators of Economic Stability	
		Economic stability	Justice and economic prosperity
Baghche jough	Frequency	136	136
	Mean	3.04	3.50
	standard deviation	0.54	0.58
Saholan	Frequency	18	18
	Mean	3.16	3.41
	standard deviation	0.50	0.66
Hasanlu	Frequency	16	16
	Mean	2.99	3.29
	standard deviation	0.42	0.63
Nosrat abad	Frequency	120	120
	Mean	3.01	3.15
	standard deviation	0.43	0.46

Descriptive findings of environmental sustainability indicators

In this dimension, selected indicators including preservation of environmental resources and biodiversity and environmental management and policies are mentioned. As shown in Table 4, in total, in the studied villages, the "environmental management and policies" indicator had the highest average (3.51). The studied villages were not the same in these indicators. The average "preservation of environmental resources and biodiversity" indicator varied from 2.75 in Hasanlu village to 3.03 in Nosratabad village and the average "environmental management and policies" indicator varied from 2.73 in Hasanlu village to 3.51 in Nosratabad village.

Table 4-Descriptive Findings of Combined Indices of Environmental Sustainability.

village	Descriptive statistics	Status of Combined Indicators of Environmental Sustainability	
		Management and environmental policies	Conservation of resources and biodiversity
Baghche jough	Frequency	136	136
	Mean	2.97	2.81
	standard deviation	0.85	0.65
Saholan	Frequency	18	18
	Mean	3.04	3.02
	standard deviation	0.90	0.53
Hasanlu	Frequency	16	16
	Mean	2.73	2.75
	standard deviation	0.85	0.46
Nosrat abad	Frequency	120	120
	Mean	3.51	3.03
	standard deviation	0.65	0.55

Inferential findings

Tourism sustainability assessment in the studied villages

To convert quantitative values into qualitative ones, Prescott-Allen's Five-Sector Scale (the barometer of sustainability) presented in Table 5 was used.

Table 5- Five Classes of Prescott Allen Stability Assessment.

Condition	Equivalent	Value	Rating
Unstable	0-0.2	0-20	1
Potential instability (weak)	0.21-0.40	21-40	2
Medium	0.41-0.60	41-60	3
Potential stability (good)	0.61-0.80	61-80	4
Stable	0.81-1.0	81-100	5

The rural sustainability indicators were assessed in the sample population. For this purpose, first, the real values of each of the indicators mentioned earlier were calculated through primary and secondary data. Then, the average value of them was obtained to evaluate sustainability in various dimensions. The results are presented in the tables and diagrams below.

According to the values in Table 6 and Figure 1, from the perspective of the respondents, Nosratabad village has the highest sustainability rating with a score of 0.584 and it has the highest number of incoming tourists. In the next place is Baghcheh Jough village with a score of 0.540. It is the oldest village among the villages studied and has high sustainability, followed by Saholan village with a score of 0.531 and moderate sustainability. Due to the lack of tourism facilities and services and the small number of incoming tourists, Hasanlu village with a score of 0.447 has the lowest sustainability than other villages studied. According to the results, it was found that the studied villages have moderate sustainability according to the scores obtained for them. The highest score (0.584) is related to Nosratabad village and the lowest one (0.447) is related to Hasanlu village. The low score of Hasanlu village can be attributed to the unfavorable social situation, population aging, and the lack of tourism facilities and services in this village.

Table 6- Status of different dimensions of sustainability from the perspective of heads of households.

Respondents	Village	Socio-cultural sustainability		Economic sustainability		Environmental stability		Total stability	
		sustainability	Rating	sustainability	Rating	stability	Rating	stability	Rating
Households	Baghche jough	0.635	2	0.500	2	0.485	2	0.540	2
	Saholan	0.637	1	0.568	4	0.389	3	0.531	3
	Hasanlu	0.571	3	0.449	3	0.321	4	0.447	4
	Nosratabad	0.540	4	0.660	1	0.552	1	0.584	1
Total		0.596		0.544		0.437			

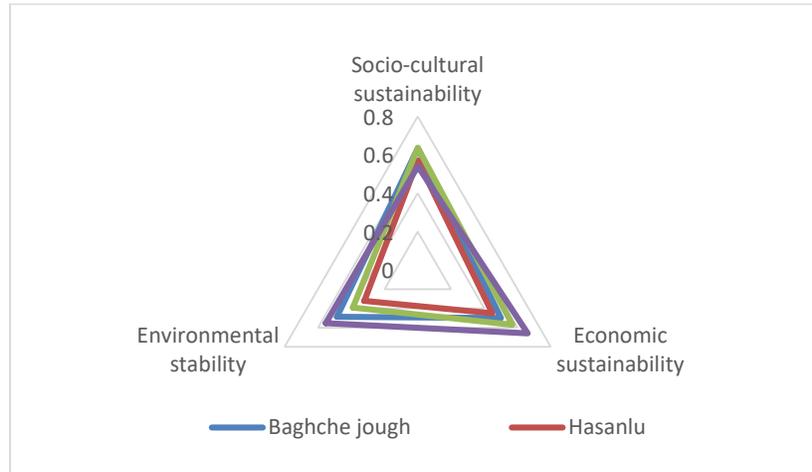


Fig. 2. Status of tourism sustainability dimension in the target villages of West Azerbaijan province in Iran.

The studied villages are in a better situation in terms of socio-cultural, and economic sustainability than environmental sustainability because of the destruction of historical monuments, attractions, and environmental resources and pollution of rural landscapes and sceneries. In total, all study villages have moderate sustainability, indicating moderate tourism sustainability in them. Thus, it can be said that many factors have played a role in the moderate sociocultural and economic sustainability of tourism development, among which one can mention the population' interest in tourism development and their satisfaction with it as well as the spirit of participation and economic empowerment, which had a great impact on tourism sustainability in the study villages. Therefore, it can be said that environmental factors, as factors interacting with social and economic factors, play a role in the sustainability of rural communities. In the following, the sustainability of villages is assessed in terms of tourism development, the scores are estimated for each village using a barometer of sustainability or a radar (amoeba) chart, and then, the obtained scores are combined under the two indicators of human well-being and ecological well-being.

Table 7: Assessing the sustainability of human and environmental welfare ecosystems in target villages.

	Village	Environmental ecosystem welfare			The welfare of the human system			Total stability		
		Status	Rating	score	Status	Rating	score	Status	Rating	score
Households	Baghche jough	Medium stability	3	0.500	Medium stability	1	0.561	Medium stability	2	0.530
	Nosrat abad	Medium stability	1	0.660	Medium stability	۲	0.556	Medium stability	1	0.608
	Saholan	Medium stability	2	0.568	Medium stability	۳	0.497	Medium stability	3	0.533
	Hasanlu	Medium stability	4	0.449	Medium stability	۴	0.416	Medium stability	4	0.433
Total				0.544			0.507			

Tourism sustainability assessment in study villages using a barometer of sustainability

The barometer of sustainability is a tool for simultaneously assessing different dimensions of rural tourism sustainability in the form of two general indicators of human well-being and ecological well-being. Therefore, using this tool, various data were collected and combined in the form of two indicators of ecological well-being and human well-being, the results of which are presented in the following tables and diagrams. According to Table 7, it is found that from the perspective of heads of households, in the human and ecological sustainability, Baghcheh Jough, Nosratabad, and Saholan villages have a higher score (0.530, 0.608, and 0.533, respectively) than Hasanlu village with a score of 0.433.

The results obtained on the number and percentage each village is placed at different levels of sustainability in both human and ecological systems show that from the perspective of heads of households, all studied villages have moderate sustainability in terms of ecological and human well-being. In general, the score of ecological well-being is lower than that of human well-being.

Assessment of sustainable tourism development indicators in study villages

According to the research methodology, the graphical tool of radar or Amoeba chart was used to analyze, combine, and display the values of sustainable tourism development indicators. As seen in Table 8, although the studied villages obtained above-average scores in some rural tourism indicators, their total scores were below average, meaning many practical measures have been taken to achieve sustainable rural tourism development in Iran and the studied villages are still significantly far from sustainable rural tourism. Moreover, such a gap is greater in the environmental indicators, indicating insufficient attention to environmental resources of villages, destruction of attractions, pollution of resources, the mismatch between the number of tourists and the land carrying capacity in the studied villages, and lack of sufficient facilities and services. Chart 2 shows the status of each of the studied indicators.

Table 8-Value of indicators of sustainable tourism development.

Dimensions of stability	Rural tourism sustainability indicators	
Sociocultural	Respect for human rights	0.469
	Supporting social and local patterns and values	0.557
	Improving living conditions and quality of life	0.527
Economic	Development and Institutional Policies	0.454
	Justice and Social Welfare	0.554
	Economic stability	0.524
Environmental	Resource conservation and biodiversity	0.526
	Management and Environmental Policy	0.411

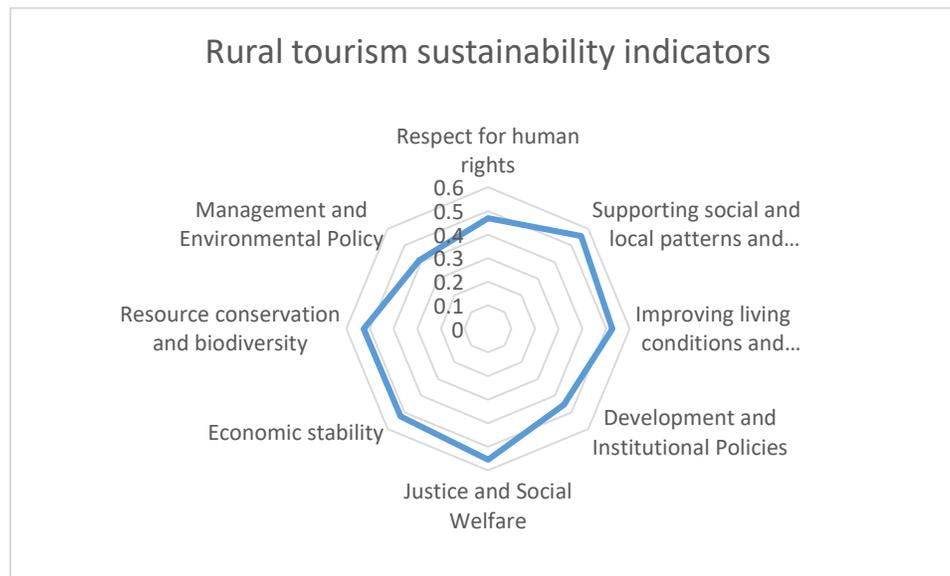


Fig. 2. Total radar of tourism sustainability indicators in target villages of West Azerbaijan province in Iran.

According to the heads of households, the studied villages obtained the highest score in the sociocultural dimension (a score of 0.596) of sustainability, followed by the economic (a score of 0.555) and environmental dimensions, respectively. The radar chart of tourism sustainability shows all the studied villages still have a long way to go to achieving sustainability. In the field of environment, this gap is greater so that the "environmental management and policies" indicator obtained the lowest score (i.e. 0.411), indicating insufficient attention to the environment of the villages, the presence of a large number of tourists in the tourism peak season in the studied villages, and lack of facilities and services available to tourists. Therefore, it is found that the paradigm of sustainable tourism development does not yet have a special place in terms of policy, plan, etc. in the studied villages.

In general, the results obtained from experimental and field studies and observations showed that:

1- Economic, social, and environmental dimensions and indicators play an effective role in explaining the sustainable development of the studied villages, and among which sociocultural and economic indicators have a greater share in the sustainability of studied villages.

2- Assessing tourism sustainability using a barometer of sustainability and a radar chart of sustainability, as valuable and efficient assessment techniques based on sustainability indicators, has allowed explaining socio-cultural, economic, and environmental sustainability conditions in an integrated manner and in the form of sustainable rural tourism development paradigm in the study areas so that the findings of field studies and observations were well consistent with the realities in the study villages.

3- In general, the results showed that the paradigm of sustainable tourism development does not yet have a special place in terms of policy, plan, etc. in the studied villages. It has not, however prevailed in scientific and executive rural tourism plans in Iran.

To determine and prioritize strategies, a questionnaire including the set of identified internal and external factors was designed and distributed among the heads of households (local people) and experts. Then, according to the gathered information and data, the Internal Factor Evaluation Matrix (IFE) and the External Factor Evaluation Matrix (EFE) were formed. These matrices represent the mean, weight, rating and weighted score of each of the weaknesses, strengths, opportunities, and threats from the perspective of local people and experts. Finally, the total weighted scores were calculated for internal and external factors and according to these scores, it was determined which type of strategy is proposed for the villages.

Internal Factor Evaluation (IFE) Matrix

Table 10 shows the internal factor evaluation matrix including factors affecting rural tourism in West Azerbaijan province, Iran.

Table (10) shows that among various strengths and weaknesses, "strong spirit of hospitality in the village" and "the existence of security in the village" with the same weight of 4.82 were recognized as the most important strengths, and the "lack of long-term study and project and planning" and "lack of proper reception and accommodation centers " with the same weight of 3.95 as the most important weaknesses for rural tourism development in West Azerbaijan province by the heads of households (local people).

Table 10-Matrix of evaluation of internal factors of rural tourism (n= 290).

	Rank	Factors	M *	Weight	Rating	Weighted Score
Strengths	1	Variety of crafts in rural areas	3.7	0.027	4	0.108
	2	Environmental potential	4.55	0.033	4	0.132
	3	Strong spirit of hospitality in rural areas	4.82	0.035	3	0.105
	4	The existence of security in the village	4.82	0.035	4	0.14
	5	Natural, historical and cultural Tourism zones	4.68	0.034	4	0.136
	6	Variety of local foods and souvenirs	4.73	0.034	4	0.136
	7	Variety of animal species	3.14	0.023	3	0.069
	8	Reasonable geographic distance from the province	4.77	0.035	3	0.105
	9	Active work force	4.73	0.035	3	0.105

Weaknesses	10	Local traditions and culture in rural areas	4.55	0.034	3	0.102
	11	related to tourism affairs	4.55	0.034	4	0.136
	12	Existence of local customs and culture in the village	4.09	0.030	4	0.12
	13	Significant indigenous population to strengthen local tourism markets	3.86	0.029	4	0.116
	14	Existence of basic and appropriate infrastructures and infrastructure related to the tourism industry	4.55	0.034	3	0.102
	15	Existence of pristine and protected areas in the village	4.45	0.033	4	0.132
	16	Local partnerships to enhance the quality and quantity	4.77	0.035	4	0.14
	17	Establishment or existence of accommodation centers in the village	4.64	0.034	4	0.136
	18	Favorable climate conditions	4.73	0.035	3	0.105
	19	Appropriate local management system	3.7	0.027	3	0.081
	20	Water, electricity and gas infrastructure	4.55	0.033	4	0.132
	1	Lack of information and extensional activities to introduce rural tourism attractions	3.68	0.027	1	0.027
	2	Lack of proper reception and accommodation centers	3.95	0.029	2	0.058
	3	Limited education and training villagers in how to deal with tourists	2.05	0.015	2	0.03
	4	Lack of financial resources for investment	3.5	0.029	1	0.029
	5	Inadequate accommodation facilities and services, adequate welfare	2.95	0.022	1	0.022
	6	Lack of specialized, knowledgeable and trained personnel in the field of tourism in the village	2.05	0.015	1	0.015
	7	Little knowledge and lack of fluency of local people in the official language as well as living languages of the world to communicate effectively	3.64	0.029	1	0.029
	8	Poor IT and electronic infrastructure in rural areas	3	0.022	2	0.044
	9	Weakness in the culture of the host society to achieve suitable conditions	2.41	0.018	2	0.036
	10	Low standard of village infrastructure	3.1	0.023	1	0.023
	11	A high percentage of the rural population is elderly	2.36	0.017	2	0.034
	12	Lack of study and long-term and planned projects	3.95	0.029	2	0.058
	13	Low quantity and quality of catering facilities and services	1.95	0.014	1	0.014
	14	Lack of participation of villagers in planning, implementation and operation of tourism projects	2.59	0.019	2	0.038
	15	Lack of regular and efficient organization in the field of infrastructure such as: transportation	3.23	0.023	2	0.046
	16	Low quality and quantity of energy resources available in the village, such as: drinking water and	2.64	0.019	1	0.019
	Total		135.43	1		2.86

* 1= Strongly disagree; 2= Disagree; 3= Uncertain; 4= Agree, 5= Strongly agree.

External Factor Evaluation (EFE) Matrix

Table 11 shows the external factor evaluation matrix including factors affecting rural tourism in West Azerbaijan province, Iran.

Table (11) shows that among various opportunities and threats, "employment in the field of tourism-related activities in the village, such as: working in offices, service units, public parking lots, tourist accommodation" with a weight of 4.6 was recognized as the most important opportunity and the "gradual extinction of plant and animal species and the degradation of the surrounding environment due to the intervention of tourists in the village" with a weight of 4.65 as the most important threat to rural tourism development in West Azerbaijan province by the heads of households (local people).

Table 11- Matrix of evaluation of external factors of rural tourism (n= 290).

Rank	Factors	M *	SD	Rating	Weighted Score
1	An increasing tends	3.76	0.036	4	0.144
2	An increasing attention by province management toward rural tourism	3.72	0.035	4	0.14
3	Investing in folklore such as music, local and traditional dress	4.06	0.038	3	0.114
4	Cultural heritage, handicraft & tourism organization's efforts to rehabilitate and repair historic and cultural buildings	3.67	0.035	3	0.105
5	An increasing interest to visit the rural tourism areas	4.41	0.042	4	0.168
6	Employment in tourism-related activities in rural areas such as: working in office, service units, public parking and ...	4.6	0.044	4	0.176
7	Appropriate legislation for the development of rural tourism	3.67	0.035	4	0.14
8	An increased advertising and marketing of rural tourism by tourism agencies	3.78	0.036	3	0.108
9	Identification of tourism target villages and preparation tourist development plan by cultural heritage, handicraft & tourism organization	3.77	0.036	4	0.144
10	Urban expansion to cause pollution in urban environments	3.73	0.035	3	0.105
11	An increasing the appropriate advertising to promote positive cultural interactions between local people and tourists	3.45	0.033	3	0.099
12	Tourists awareness of the cultural characteristics of the host community	3.8	0.036	3	0.108
13	The boom of the handicrafts with the help of cultural heritage, handicraft & tourism organization	3.38	0.032	3	0.096
14	Willingness to travel for visit relatives and friends	2.78	0.026	3	0.078
15	Strong link between rural and urban	3.71	0.035	3	0.105
1	Destruction and gradual extinction of plant and animal species caused by intervention of tourists	4.65	0.044	1	0.044
2	Demolition of historic village	3.66	0.035	1	0.035
3	Lack of attention to rural tourism by extension and rural development	3.66	0.035	1	0.035
4	Lack of or limited service providers or travel agents to visit	3.49	0.033	1	0.033
5	Lack of interaction between the agencies and the lack of efficient and coordinated management in province	4.63	0.044	2	0.088

6	Waste emissions and environmental damages	3.85	0.036	1	0.036
7	Lack of tourists responsibility in protecting the environment	3.97	0.038	1	0.038
8	Lack of state financial support of rural economic activities	4.33	0.041	1	0.041
9	Planning and projecting out of the village and the lack of attention to the needs and realities of rural	4.23	0.040	2	0.08
10	Negative publicity about the behavior of villagers	2.59	0.025	1	0.025
11	Vulnerability to natural hazards such as earthquakes, floods and etc.	2.33	0.022	2	0.044
12	Lowering the threshold of acceptance of rural areas for tourists	2.38	0.022	2	0.044
13	Mismatch between the needs of rural people and infrastructures status	3.11	0.029	2	0.058
14	Local traditions and culture changes for accommodating with culture of tourists	2.35	0.022	2	0.044
		105.52	1		2.475

* 1= Strongly disagree; 2= Disagree; 3= Uncertain; 4= Agree, 5= Strongly agree.

Provision of necessary strategies and solutions for rural tourism development using the SWOT matrix

The SWOT matrix consists of a two-dimensional coordinate table and each of its four quadrants represents a set of strategies, including:

- **S-O strategies (SO)**
- **S-T strategies (ST)**
- **W-O strategies (WO)**
- **W-T Strategies (WT)**
-

S-O Strategies

In S-O strategies (offensive), it is focused on internal strengths and external opportunities. The following offensive strategies are presented to benefit existing advantages to develop tourism in villages:

- To emphasize rural tourism development due to the existence of tourism capabilities and potentials
- To utilize the human resources of the host village to form non-governmental organizations to enhance tourist attraction rate
- To optimally and purposefully enhance the motivation to travel to rural areas to provide job and income opportunities for rural residents
- To hold festivals in villages and establish seasonal markets for the sale and display of agricultural products and handicrafts

S-T Strategies

In S-T strategies (competitive), internal strengths and external threats are focused. The following strategies are provided to meet some needs of rural areas to eliminate threats:

- To develop agricultural tourism to properly exploit rural farms and gardens to earn income and prevent the destruction of farms and vegetation

- To diversify and develop advertising programs to introduce environmental and human attractions
- To diversify tourism facilities, activities, and services to increase tourist attraction
- To emphasize the coordination of different sectors involved in tourism development and to particularly form a rural tourism coordination team in the province

W-O strategies (WO)

In W-O strategies (conservative), while emphasizing the internal weaknesses, it is attempted to take advantage of external opportunities to provide critical suggestions to remove the weaknesses of tourist villages:

- To revise how to plan and rationally use laws, regulations, and institutions to improve tourism facilities, and services as well as health-security facilities in the villages
- To revise and develop related institutions and organizations to educate people and increase their awareness in the field of rural tourism
- To revise existing plans and to implement advertising programs to introduce attractions
- To establish inns and hostels next to historical-religious monuments in villages for tourists to rest
- To construct appropriate and diverse catering units such as traditional restaurants, so on.

W-T Strategies

In W-T strategies (defensive), there is a focus on the removal of vulnerability to threats in the area and the following points are suggested:

- To attempt to empower rural people
- To preserve the environment and attractions
- To develop and organize infrastructure, accommodation, and catering facilities
- To extension and educate tourism by holding various classes and meetings with the people
- To coordinate different institutions, governmental sectors, people, and entrepreneurs by holding meetings and applying coordinating management measures to integrate rural tourism functions.

Strategic position and action evaluation matrix (SPACE)

The internal and external factors evaluation matrices indicate that the final scores of 2.86 and 2.475 obtained for the internal and external factors of rural tourism, respectively, are in quadrant 4 of the strategic position and action evaluation matrix (SPACE), so, the most suitable strategy for rural tourism development in the study villages is a competitive one.

Table 12: Final scores for internal and external factors

Total internal factors (strengths and weaknesses)	2.86
Total external factors (opportunities and threats)	2.475

The results indicate that the final averages obtained for internal and external factors are in quadrant 4 of the strategic position and action evaluation matrix. So, the appropriate strategy for rural tourism development in the study areas is S-T strategies. The S-T

strategies (competitive strategies) extracted for rural tourism development in the study area are as follows:

To develop agricultural tourism to properly exploit rural farms and gardens to earn income and prevent the destruction of farms and vegetation

- To diversify and develop advertising programs to introduce environmental and human attractions
- To diversify tourism facilities, activities, and services to increase tourist attraction
- To emphasize the coordination of different sectors involved in tourism development and to particularly form a rural tourism coordination team in the province

Conclusion

West Azarbaijan province in Iran had high potentials for rural tourism. In general, the results obtained from experimental and field studies and observations showed that:

Economic, social, and environmental dimensions and indicators play an effective role in explaining the sustainable development of the studied villages, and among which sociocultural and economic indicators have a greater share in the sustainability of studied villages.

Assessing tourism sustainability using a barometer of sustainability and a radar chart of sustainability, as valuable and efficient assessment techniques based on sustainability indicators, has allowed explaining socio-cultural, economic, and environmental sustainability conditions in an integrated manner and in the form of sustainable rural tourism development paradigm in the study areas, so that the findings of field studies and observations were well consistent with the realities in the study villages.

In general, the results showed that the paradigm of sustainable tourism development does not yet have a special place in terms of policy, plan, etc. in the studied villages and it has not however prevailed in scientific and executive rural tourism plans in Iran.

According to the heads of households, the studied villages obtained the highest score in the sociocultural dimension (a score of 0.596) of sustainability, followed by the economic (a score of 0.555) and environmental dimensions, respectively. The radar chart of tourism sustainability shows all the studied villages still have a long way to go to achieving sustainability. In the field of environment, this gap is greater so that the "environmental management and policies" indicator obtained the lowest score (i.e. 0.411), indicating insufficient attention to the environment of the villages, the presence of a large number of tourists in the tourism peak season in the studied villages, and lack of facilities and services available to tourists. Therefore, it is found that the paradigm of sustainable tourism development does not yet have a special place in terms of policy, plan, etc. in the studied villages.

One of the main methods used to achieve a sustainability plan and develop appropriate strategies for sustainability is the SWOT analysis. This analysis is one of the important tools for strategic planning to match internal strengths and weaknesses to external opportunities. Using this technique, these factors are identified and the most suitable strategies best matching them are provided. To achieve sustainable tourism development in the studied villages, the required information was collected and analyzed.

The results show that "strong spirit of hospitality in the village", "the existence of security in the village", are the main strengths. Studies by Khatoon Abadi and Rast Ghalam (2011) and Rohn Aldin Eftekhari and Mahdavi (2006) support this finding. "lack of long-term study and project and planning" and "lack of proper reception and accommodation centers" are the major weaknesses. This result is also confirmed by Madhoushi and Naserpour (2003). Lack of information and extentional activities to introduce rural tourism attractions is one of the major weaknesses. In this regard, the establishment of information centers is required in rural areas. Results from the present study and similar ones (Ashley, 2000; Bartsch, 2000) have shown that the following are the major opportunities: "employment in the field of tourism-related activities in the village, such as: working in offices, service units, public parking lots, tourist accommodation", "an increasing interest to visit the rural tourism areas" and "investing in folklore such as music, local and traditional dress".

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