Identification of the Relationship between Tourism Industry Development and Economic Growth of Zanjan Province

Esmael Nasiri Hendeh Khaleh*
Geography and Urban Planning, Payame Noor University of Alborz, Karaj, Iran
Faramarz Hadavi
Geography and Urban Planning, Payame Noor University of Tehran, Tehran, Iran
Mahdi Zamani
Natural Geography-Geomorphology, Islamic Azad University, Science and Research Branch, Tehran, Iran

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Abstract: Today, tourism industry, as a dynamic industry, has devoted an important part of production activities in the world by its development-oriented features. Hence its development in a country requires factors such as an appropriate strategy, planning and efficient management. In this paper, the status of tourism industry in Zanjan Province has been evaluated using SWOT technique and Input-Output table. The use of expert judgment of "Delphi" is used so that the judgment of the expert group a list of internal factors (strengths and weaknesses) and external (opportunities and threats) influencing the approach taken and the quantification was carried out .Methods of data collection and data analysis are applied and descriptive-analytical. According to the research findings, Zanjan province can become one of the big tourism hubs in the country because of its special geographical location and being between two industrial hubs of Tehran and East. Azerbaijan Provinces. Its strategy is defensive one, and strategies were proposed based on QSPM matrix at the end. Based on research findings in Zanjan province, tourism industry and its related sectors, in terms of linking with other sectors of the economy, can be considered as leading sectors in the economy of Zanjan Province. Therefore, this industry can boost the whole economy of Zanjan by supplying tourism services, demand for enjoying them, and producing tourism goods in other sectors. With regard to these potentials, tourism should be placed on the priority of the province planners in order to exploit them in line with the economy of this province.

Keywords: Tourism industry, Economy development, Zanjan province, Input-Output table, SWOT technique
JEL Classification: L83, O16, N35, C01

* Corresponding author: esmael.nasiri@yahoo.com

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1- Introduction

Today, cities become more complex as they expand and develop and they are changing affected by different human and natural factors. These changes sometimes turn cities into distinct and different areas that each of them has particular economic, social, and cultural features; particularly those cities that are more dynamic economically and they are places to find job opportunities. One of the sectors that has been the reason of fundamentally economic, social, and cultural changes in cities and today it is called as an economically dynamic industry is tourism. This dynamic industry is the main source of revenue, employment, growth of private sector and development of infrastructure in many countries (Dallen, 2014). Tourism industry has considerable role in economic development of different areas, it can create culturally, and socially important changes in destination, leading to social development and progress through revenue distribution, employment, and reducing poverty, and create public welfare and health. This industry has considerable impacts on economy and economic issues of cities, areas, and countries including employment, human resources, per capita revenue, international trade, payment balance sheet etc. (Landberg, 2010). The multiplier of tourism is measurement of ideally economic impacts of tourism. The multiplier impact is obtained by combination of direct spending (by tourists), indirect one (like re-supply), and induced costs (such as using wage) of tourists. The coefficient has measured tourism revenue leakage to outside of economy structure and created indirect impacts in economy and it states as a ratio. For instance, income multiplier is between 0.4 and 2 in most cases. In large economies that are various and wide revenue, multiplier is between 1.5 and 2 at the highest level and in less diverse economies, the coefficient is about 0.5 percent. In economic calculations of tourism, two increasing coefficients have been noted; the first one is revenue increase coefficient, and the other is employment increase ratio. Revenue increase coefficient leads to increase occupations in construction and servicing sectors (Doswell, 1990). The nature and volume of tourism industry have been changed in the last forty years. Today, tourism is one of the biggest economic activities in the world and their revenue is more than one hundred billion dollars that is more than oil, automobile, and chemical industries. It seems that its growth model is so that it will be the largest exporting industry by the end of this century. Any planning for development of tourism industry requires to be based on specific national, regional, and local conditions and circumstances that it needs to advanced models to analyze and plan. Existing potential in tourism in Zanjan Province with its old history indicates that its cities welcome tourists during the year; therefore, tourism industry and its boom at the level of Zanjan cities can prepare the ground for economic growth and development of cities directly. Visitors' presence in the cities of Zanjan Province leads to increase revenue and creates employment in different areas of the city since tourists' costs are considered as an economic income for community members. Revenue of tourism was 835214 million

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Rials in the cities of Zanjan Province in June, July, and August 2011. Totally, the number of direct jobs of tourists' entrance was more than 1200 people. If we count on indirect job opportunities, it will be a considerable figure (Management and Planning Organization of Zanjan Province, 2011). This is a good opportunity for economic investment and development in order to be used by residents and tourists by providing appropriate facilities. Thus, this research aims to evaluate, identify, and explain tourism potentials share of Zanjan Province as an economically important and profitable activity and tries to investigate the impact of this industry on economic dynamics of Zanjan cities. This paper aims to answer this question:

What is the economic role of tourism on economic growth of Zanjan Province?

Research hypothesis states that one of the main drivers of economic growth of Zanjan Province is development of tourism industry because of great potential in this Province.

2- Literature Review

During last years, many researches have been done in the field of tourism as a new industry. Their results indicate important role of tourism development in economic development of different areas and regions. Table1 represents some of the results of these studies in the field of tourism.

Table1. Summary and results of previous studies related to tourism

Researcher	Year	Title	Research summary and result
Noorbakhs and Akbarpoor	2010	The role of urban tourism on economic development of metropolises	In this paper, the process of urban tourism, tourism attractions, its types, and economic impact of urban tourism, particularly in metropolises have been examined. It aims to present a relationship between urban tourism and urban economy development.
Mehrabi Basharabadi et.al.	2011	Investigating the role of tourism on the economy of Kerman Province and physical development of its cities	In this research, the relationship between development of urban development and economic development in Kerman Province has been investigated. The index of physical development has been calculated by using Fuzzy Logic and based on 12 social and economic indicators and four components including economic, infrastructure, social, and cultural development of Kerman cities.
Movahhed and Kahzadi	2010	An analysis of effective factors on tourism development of Kurdistan Province	It has been stated in this research that development of tourism industry in Kurdistan Province is faced with some problems such as unemployment and it is of great importance. Thus, in order to diversify economic growth resources of Kurdistan Province and exchange earnings, and create new job opportunities in this province, development of tourism industry is of great importance.
Ranjbar and Jarfi	2012	Assessing the consequences of urban tourists by statistical method case study: city of Ahwaz	In this research, the results of economic impacts of tourists' presence in Nowrooz in the city of Ahwaz from perspective of economically direct activists including hoteling activities and restaurant, food and clothing industries, handicraft and transportation indicated that they had economically positive outcomes particularly in service sectors. Moreover, the results indicated that tourism in the city of Ahwaz has prepared the ground for employment and output in the economy of host society economically, and it has leaded to multi-economy in urban areas.
Landberg	2010	Tourism development in urban areas	Economic profit of tourism activity can be investigated directly and indirectly. Economically, revenue of tourism works as exporting for Italy.
World Tourism Organization	2012	Forecasting tourism by 2020	Economically, tourism is counted as the largest and most diverse industry in many provinces of Turkey. Tourism is one of the five important resources of earning foreign exchange for Turkey.
Weaver	2013	An introduction to the impact of tourism on urban economy	The results indicated that there is direct relationship between development of shopping centers and creating tourists; particular department stores by improving urban economy and development of other economic sectors in Brazil.
Haman	2014	Tourism and economic development	In this research, the relationship between tourism attractions and economic development of areas has been proved. This study was done in California, U.S. and it indicated that national value was increased and economy was strengthened in urban areas during 2011 to 2014 because of tourism resources in California. Thus, strengthening urban economy has been one of the direct results of investment in tourism industry.

Resource: (Researchers' findings)

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3- Theoretical Principles

Today, tourism has been changed into one of the biggest levers of socio-economic developments in human history in order that number of international tourists did not exceed more than 250 million people in 1950, but it reached to 594 million people in 1992. Moreover, according to the World Tourism Organization, it increased to one billion people in 2010 (Ghorbani, 2003). The findings of the World Travel & Tourism Council indicated that about 4 million and 260 thousand people in the world were employed in dependent jobs on tourism industry, because of demand via travel in 2011. The statistics indicate that today, travel and tourism are effective directly or indirectly more than 10 percent on creating jobs globally, nationally, and regionally (Goldener & Ritchie, 2003).

Attention to tourism issue is more important when tourism industry is counted as the second revenue resource in more than 49 developing countries according to the available statistics. However, according to the reports of the World Tourism Organization, more than 43 percent of employment was related to tourism sector in 2010 (Saghayi, 2006). Increasingly, tourism is used as one important component of economic development strategies and potentially, urban tourism may have income and a lot of job creation and it is regarded as a complement to attract investment. Direct advantages of tourism are related to job creation in facilities such as hotels, restaurants, and tourism centers, secondary consumption periods occur, subsidies and supporting industries are created, and local economy would take advantage of created impacts on household's revenue (Selby, 2004). In summary, the importance of tourism industry is of following issues; 1. It generates job 2. It leads to enter foreign exchange to the country (it increases foreign exchange revenue). 3. It increases tax revenues in the country 4. It facilitates redistribution of wealth (Kohn, 1998). Emergence of tourism as a process that can have a good position in the economy of industrial countries and change economy of these countries into servicing economy practically is one of the economically considerable issues is the last two decades. In grouping of the world touristic areas, progress of advanced western countries is evident at the top of the world tourism activities in a way that, these countries are in the first categories both in terms of tourism revenue and tourist attraction. According to the statistics of MasterCard Worldwide Company, twenty most visited tourism destinations in the world in 2013 are as diagram1:

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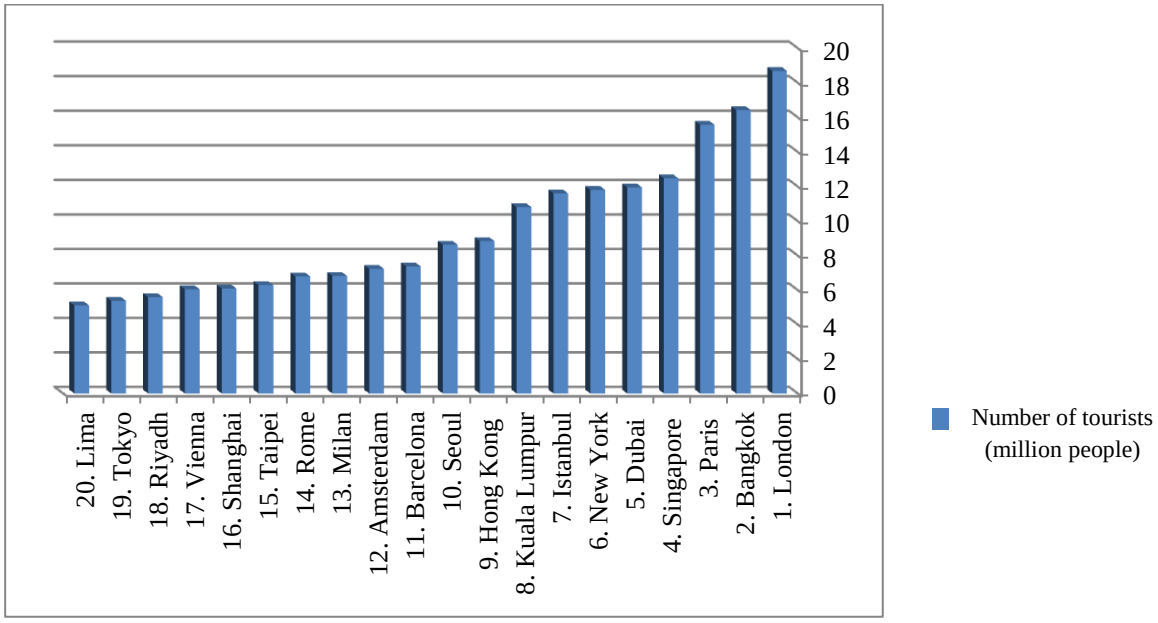

Diagram1. The world top 20 urban tourism destinations in 2013
Reference: (Hedrick-Wong & Choog, 2013)

According to the evidences and forecasts of the World Tourism Organization, it is expected that the Middle East will be the first rank with 6.7 percent by 2020 in attracting tourism; afterwards, South Asia and Africa are placed in next ranks. Moreover, it has been estimated that more than 1560 million people will visit around the world as tourists in 2020. However, development of communication network, particularly air transport, is necessary. In development of tourism industry at international level, those countries will be successful that produce tourism commodities effectively and the difference between primary sources of this industry have influential role. Those resources are known as relative merits and they can keep a country or region in ideally competitive conditions. In a subsistence economy, such as an economy that may be seen in a less-developed region, increase in the value of each new dollar will have a subtle multiplier effect. This kind of economy has a voracious appetite for imports. Thus, much intended money before having multiplier effects gets out of economy arena. In a developed economy such as Canada, the leakage is slight and dollars of tourism affect greatly about creating 2.5 dollars before they are fully used (i.e. multiplier impact at 2.5 percent). Figure1 and table2 represent multiplier process of revenue and coefficient multiplier effect of income derived from tourism for number of countries. These countries can be categorized according to their dependency rate on imports goods and services and their tendency to tourism imports.

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Table2. Tourism income multiplier

Source	Income multiplier	Destination	Income multiplier
Turkey	1.96	Northern Ireland	1.10
Britain	1.73	Island	0.64
Republic of Ireland	1.72	Hong Kong	1.02
Egypt	1.23	Dominican Republic	1.20
Jamaica	1.23	Cyprus	1.14

Reference :(Fletcher et al., 2013)

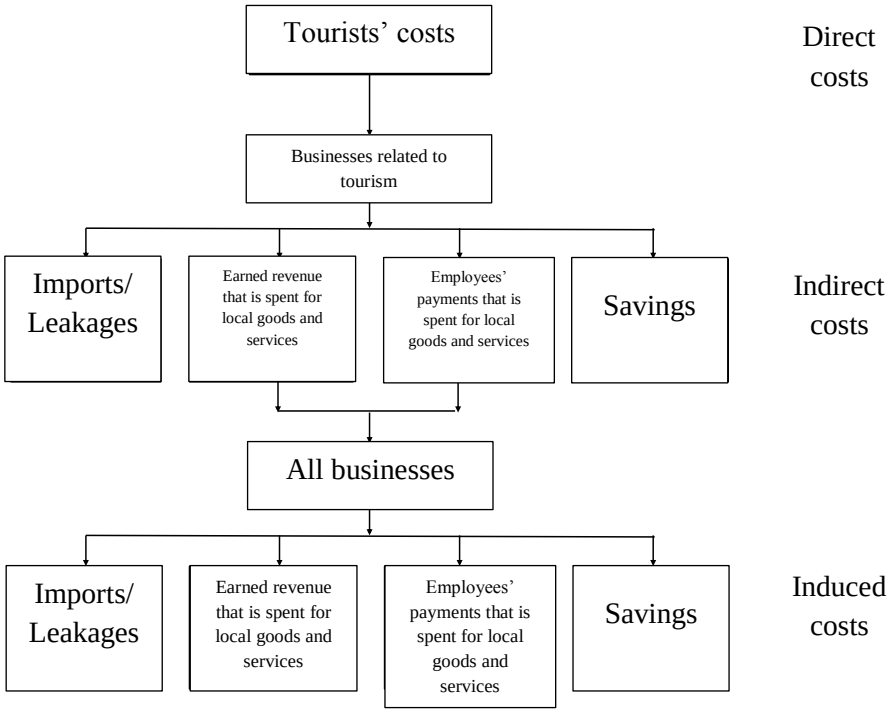

Figure1. The process of tourism income multiplier
Reference: (Sharply and Telfer, 2012)

Tourism Industry in Iran

In 1998, the World Tourism Organization stated in a report about tourism in Iran that although the industry in Iran increased 21 percent regarding international tourists and its revenues of this industry increased 22 percent, these figures are very slight comparing with potentials of tourism development in this country. Moreover, 73 percent of international tourists entered to Iran were from neighboring countries, 7 percent from other countries of the Middle East, and the other 20 percent was from rest of the world. In other words, according to the available statistics, the biggest market of Iran's tourism is neighboring countries. According to the statistics in 1999, Azerbaijan and Turkey were the biggest tourism market for Iran (Heydar and Hosseinzadeh Dalir, 2003).

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In the report of the World Tourism Organization journal in 2002, Iran ranked 67 in the world in terms of number of foreign tourists and ranked 72 in terms of revenue from tourism. In 2000, number of tourists entered into Iran is about 0.002 (about 0.2 percent) of tourists traveled in the world. However, revenue that Iran earned from tourism is about 0.001 (about 0.1 percent) of total revenue that different countries in the world earned from tourism. Iran ranked 7 in the Middle East in the field of number of entered foreign tourists and ranked 7 in terms of foreign tourists entrance (the World Tourism Organization, 2012). In terms of tourism and historical attractions, Iran is counted as top 10 countries in the world, but it could not obtain an appropriate share from international tourism. Despite monuments such as Persepolis, Naghsh Rostam, Chaghazanbil, and Historical Soltanieh Dome (in Zanjan Province) which have been registered on the UNESCO World Heritage List as well as diversity of climate and having four seasons, Iran has not been successful to give new life to the tourism industry.

4- Research Methodology

This research has qualitative and quantitative approach with applied method. Data were collected by library studies. Available resources provided information of the studied area that most of them are not available via field studies. In order to evaluate the role of tourism industry on economic development of Zanjan Province, input-output table and SWOT method were used. SWOT is a qualitative method, yet in order to obtain stronger results; it has been tried to use quantitative method as well. In order to use experts' view, Delphi method was used (Skulmoski et al., 2007). Statistical population includes all tourism experts and 300 of them were selected via Cochran formula as statistical sample. In the following, after experts' judgment, a list of effective internal factors (strengths and weaknesses) and external factors (opportunities and threats) on tourism industry was prepared. The following steps have been performed to quantify. In fact, analysis method of the mentioned model has been done in a four-step process as a hierarchy:

1. Evaluation of strategically internal and external factors of environmental and geographical structure of Zanjan Province: All internal and external factors of environmental and geographical structure of Zanjan Province were evaluated and important factors were identified and prioritized. To evaluate strategically internal and external factors, IFE and EFE matrixes were used.

2. How to determine the type of strategies on the coordinates: Based on the rating of the status quo for strengths and opportunities, the worst value is 1 and the best one is 5. In addition, for weaknesses and threats, the worst value is -5 and the best one is -1. Afterwards, they are multiplied on weighted index based on the importance. Finally, all strengths, weaknesses, opportunities, and threats were added separately, then, the scores were added on X-axis that include final score of strengths and weaknesses, thereupon, the scores were added on Y-

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axis that include final score of opportunities and threats.

3. Formulating quadruplet strategies of SWOT: Comparing strengths, weaknesses, opportunities, and threats in SWOT table and analyzing them, quadruplet strategies of SWOT have been presented. Through this evaluation, four types of strategies including WO, SO, ST, and WT were obtained (table3).

Table3- Quadruplet strategies of SWOT

External environment	**Internal environment**		
		Strengths (S)	**Weaknesses (W)**
	Opportunities (O)	Offensive strategy (SO) (Maximum-maximum)	Adaptive strategy (WO) (Minimum-maximum)
	Threats (T)	Contingent strategy (ST) (Maximum-minimum)	Defensive strategy (WT) (Minimum-minimum)

Reference: (Hekmatniya and Mousavi, 2011)

4. Prioritization of strategies by using QSPM matrix

Introducing the Studied Area

Zanjan Province is located in the Northwest of Islamic Republic of Iran between latitude of 35° and 35′ to northern 37° and 15′ and longitude of 47° and 10′ to 49° and 28′ East Greenwich. Zanjan is in the neighborhood of seven other provinces: from north with city of Khalkhal (from Ardabil Province), city of Roodbar (from Gilan Province) from the north, and from the east with city of Takestan, BoyinZahra, and Qazvin (from Qazvin province), from south with city of Hamedan (from Hamedan Province), from Southwest to the city of Bijar (from Kurdistan Province), from west with city of Takab (from western Azerbaijan Province), and from northwest with cities of Miyaneh and Hashtrood (from Eastern Azerbaijan Province) (map1). This province had 22164 square kilometers area, about 1.36 percent of Iran's area, in 2006. One of the effective factors on tourism industry in this province is its geographical location in the country. Its proximity to Iran's central developed region and capital, locating in the path of development, having transit road, passing the world airway from this province, locating in the path of important and large provinces such as Eastern Azerbaijan and Qazvin, and specific climatic conditions resulting from exposure to the southern slopes of Alborz are some of the effective factors on attracting tourism in this region.

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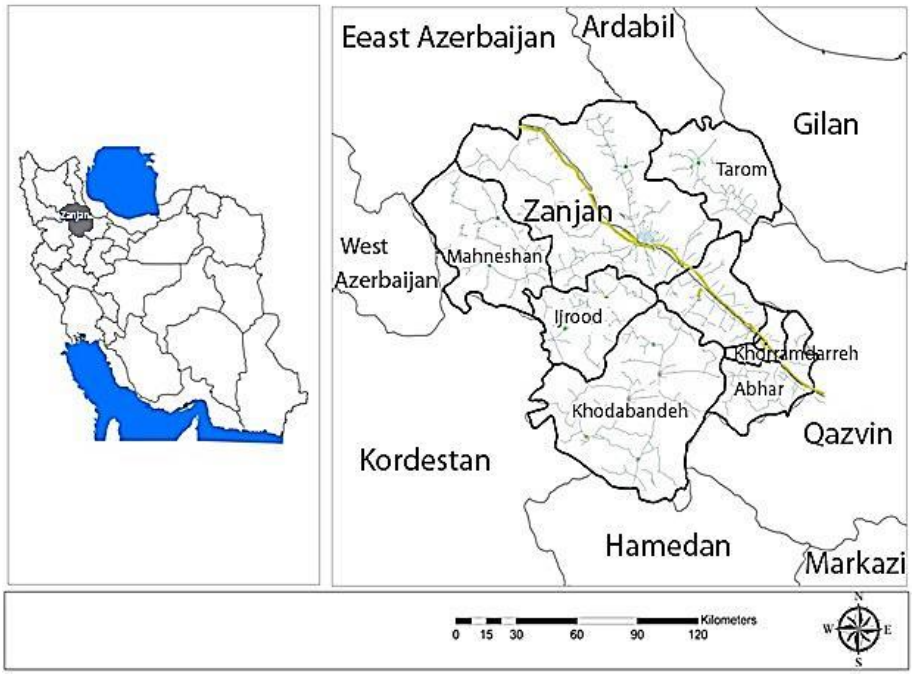

Map1. Location of the studied area and neighboring provinces
Reference: (Google Maps)

5- Research Findings

Tourism Potentials of Zanjan Province

Having historical, cultural, and natural attractions and specific geographical location, Zanjan Province can change into a tourism hub in the northwest of the country. Having monuments such as Soltanieh Dome, Rakhtshooy Khaneh Edifice, tombs, etc. natural attractions such as beautiful cave of Katale Khor, Soharin Plain, and moderate mountainous climate made Zanjan Province have particular position because of tourism potentials. Therefore, given four areas of Tarom, Soltaniyeh, Zanjan, and Garmab, tourism center can be drawn from Tarom to Hamedan. This center will be more important once we consider geographical location of the province, existing communication facilities, and appropriate rail and road communication network. According to table4, Zanjan Province has 583 registered tourism attractions among which 153 of them (26.3 percent) are cultural and historical attractions and 430 others (73.7 percent) are natural ones (Consultant engineers of Sabz Andish Payesh, 2004).

Tables 5 and 6 represent number of tourists visited Zanjan Province in recent years and statistics of tourists visited prominent tourism attractions in this province.

Table4. Distribution of tourism attractions of Zanjan Province

Type of attraction	Number	Percentage
Total	583	100
Natural	430	73.7
Cultural-historical	153	26.3

Reference: (Consultant engineers of Sabz Andish Payesh, 2004)

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Table5. Number of tourists visited the province in recent years

Year	Iranian tourists	Percent increase	*Foreign tourists	Percent increase	Total	Percent increase
1977	67300	0	3825	0	71125	0
1981	68000	0	1100	0	69100	0
1986	70000	0	1300	0	70130	0
1991	72742	0	290	0	73032	0
1996	78470	0	368	0	78838	0
1997	79141	1	446	17	79587	1
1998	81100	2	513	13	81613	2
1999	81837	1	763	33	82600	1
2000	82500	1	1100	31	83685	1
2001	83855	2	845	-30	84700	1
2002	85600	2	900	6	86500	2
2003	88500	3	865	-4	89365	3
2004	94600	6	1533	44	96133	7
2005	110400	14	2151	29	112551	15
2006	130200	15	2234	4	132434	15
2007	180500	28	2894	23	183394	28
2008	195000	7	3210	10	198210	7
2009	374003	48	2515	-28	376518	47
2010	281022	-33	1663	-51	282685	-33
2011	313962	10	1450	-15	315412	10
2012	286426	-10	1110	-31	287536	-10
2013	288661	1	1209	8	289780	1

*** According to the definition of the World Tourism Organization, settled tourists in the province have been counted.**

Reference: (Cultural Heritage, Handcrafts and Tourism Organization of Zanjan Province, 2014)

Table6. Statistics of tourists visited prominent tourism attractions of Zanjan Province

Year/ attraction	Soltanieh Dome (people)	Percent increase	Rakhtshooy Khaneh Edifice (people)	Percent increase	Saltmen (people)	Percent increase
2004	51507	0	28342	0	-	0
2005	59849	14	37946	25	-	0
2006	85965	30	39801	5	-	0
2007	105237	18	54264	27	-	0
2008	161122	35	88484	39	72435	0
2009	187020	14	202824	56	32495	-123
2010	165329	-13	88693	-129	41960	23
2011	134363	-23	65016	-36	51690	19
2012	112509	-19	46206	-41	54737	6
2013	116750	4	50858	9	63745	14

Reference: (Cultural Heritage, Handcrafts and Tourism Organization of Zanjan Province, 2014)

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Evaluation of Tourism Industry in Zanjan Province

Despite the position and importance of the fledgling industry of tourism and its role on economic development of Zanjan Province, representation of this role has remained descriptive and tourism industry is faced with some problems including infrastructure bottlenecks, communication and transport, residence, managing and organizing, informing, marketing, and environmental issues. Thus, in the first step of tourism investigation, prioritization of capabilities and limitations are of great importance. For this purpose, SWOT method was used (tables7 and8).

Table7. IFE matrix of tourism structure in Zanjan Province

	Internal strategic factors	Weight	Score of status quo	Weighted scores	Explanations
Weaknesses	W1- Lack of information about ecotourism of Zanjan Province in scientific and social communities of the province and country	0.063	1	0.063	Unknown many tourism attractions of Zanjan Province
	w_2- Lack of tourism infrastructure such as hotels and suitable accommodation and communication infrastructure problems	0.063	3	0.190	-
	W3- Water pollution around cities of the province	0.048	2	0.095	-
	W4- Increasing cold and frost period in the year and snowy areas	0.032	4	0.127	-
	W5- Flooding Ghezelozan river and lack of necessary equipment to control floods, and salt water in some areas	0.032	4	0.127	-
	W6- Inappropriate municipal waste recycling centers	0.048	3	0.143	-
	W7- Leaving the province early by tourists because of no accommodation and entertainment	0.048	3	0.143	-
	W8- Unfavorable climate in winter and dense fog in some months of the year	0.032	4	0.127	-
	W9– Inappropriate distribution of urban network of Zanjan Province	0.048	3	0.143	-
	W10- Imbalances in the urban hierarchy of Zanjan Province	0.063	3	0.190	-
Strengths	S1- Rare species of protected plant and animal in the deer-rich plains of Soharin in 25 kilometers of the province center with 1200 hectares and more than 1600 deer inside the protected area of Sorkhabad	0.063	4	0.254	-
	S2- Popular and high peaks for climbing enthusiasts at an altitude of 3332 m. in Angooran and Tarom areas with Papayi ski resort for skiers	0.048	2	0.095	The potential for attracting adventurous tourists
	S3- Katale Khor and Kharmanehsar caves as well as other unique natural caves counted as huge resource in attracting tourists to the province	0.048	2	0.095	-
	S4- Ghezelozan, Zanjanrood, Abharrod, Injehgolabar, Saremsaghloo rivers, Baklor wetland in Tarom and Khandaqlu in Mahneshan, Jamalabad natural dam in Tarom, Taham dam in Zanjan, and Sharshar waterfall	0.063	3	0.190	Preparing the grounds for water entertainment
	S5 -Two forest parks, a wildlife sanctuary and three protected areas in the province	0.079	3	0.238	The possibility of seeing pristine natural areas for tourists
	S6- Achieving to productivity indicators in the country in the water storage facilities and adjustment of surface water and irrigation canals and drainage	0.048	2	0.095	-
	S7- Historic fame of the Silk Road, Stone and Haj Dadash Caravanserais prepares adequate opportunity to develop tourism in the nature, particularly night tourism.	0.032	2	0.063	Rich historical geography of the area
	S8 - Hunting-forbidden areas of Khorasanlu, Gheydar, Kharmanehsar, and Fileh Khaseh with different animal types	0.048	3	0.143	-
	S9 - diversity of plant, forests, shrublands, and grasslands and habitat in the province	0.063	2	0.127	-
	S10- Appropriate lands near rivers in order to develop surface water in the province	0.032	2	0.063	-
	Total	1	-	2.714	-

Reference: (Researchers' findings)

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Table8. EFE matrix of tourism structure in Zanjan Province

External strategic factors		Weight	Score of status quo	Weighted scores	Explanations
Threats	T1- Changing agricultural land uses and natural resources	0.046	3	0.138	Declining natural face of the area as a result of too much human intervention
	T2- Grazing and cutting shrubs out of capacity	0.046	2	0.092	Soil erosion
	T3 - Lack of efficient utilization system to use created facilities	0.031	3	0.092	-
	T4- Inappropriate municipal waste recycling centers	0.046	2	0.092	Creating kinds of pollution and ugly sights
	T5 -Financial inability of most industry beneficiaries in the field of equipment and launching air pollution control systems and using wastewater treatment plant	0.062	2	0.123	-
	T6- No presentation of environmental evaluating plans in construction projects in some cases	0.077	2	0.154	-
	T7 - Irregular entry and exit of animals	0.046	3	0.138	-
	T8- Being on the international earthquake belt and vulnerable areas and districts of the province	0.046	2	0.092	-
	T9- Negative balance of groundwater in some plains between areas	0.046	3	0.138	-
	T10- Excessive use of resources and use more than bearable capacity of the natural environment	0.062	2	0.123	Destruction of natural resources
Opportunities	O1- Suitable conditions to reform and revive pastures in the northwest of the country	0.046	3	0.138	-
	O2 -The world famous protected areas and rare species of deer	0.062	4	0.246	-
	O3 - Geomorphological effects and phenomena in the province and creating Geopark to attract tourists	0.046	4	0.185	-
	O4- Suitable environment and conditions for localization development in different areas of the province	0.062	4	0.246	-
	O5- Proximity to cities of Tehran and Tabriz, as two tourism hubs, and neighboring with seven provinces has prepared the ground to attract tourists to this Province.	0.062	4	0.246	-
	O6 - Communication roads of Zanjan-Gilan, Zanjan-Hamedan, and Zanjan-Ardabil and diversity of its topography, climate and vegetation create enough opportunity for tourists.	0.046	2	0.092	-
	O7-High population of cities because of being near water resources and closeness to the roads	0.031	2	0.062	-
	O8 -There are considerable plains and lands in the main axis of Tehran, Zanjan, and agricultural activities in the northern lands and eastern of Khodabandeh near Ghezalozan, Zanjanrood, etc.	0.046	2	0.092	-
	O9- Available road access of the province to tourism resources (natural and cultural)	0.046	3	0.138	-
	O10- Locating cities of the province in a relatively flat area, expansion of provided communication network between and inside cities and direct and indirect influence sphere with a comprehensive network	0.046	3	0.138	-
	Total	1	-	2.769	-

Reference: (Researchers' findings)

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According to the above tables, the most important weaknesses, strengths, threats and opportunities are as follows based on weighted score that obtained from the importance and their status quo and environmental structure of Zanjan Province. The most important weaknesses include illegal hunting and fishing in the province (w2), imbalance in urban hierarchy of the province (w10) with weighted score of 0.190. The most important strengths are protected rare animal and plant species in Sohrain plain (S1) located in the 25 kilometers of province center with 1200 hectares area and with more than 1600 deer inside the protected area of Sorkhabad with weighted score of 0.254. The most important threat in some cases includes no presentation of environmental evaluating plans in construction projects (T6) with weighted score of 0.154. The most important opportunities are global fame of the protected area of the province and rare species of deer (O2), suitable environment and conditions Eco-tourism development (o6), proximity to Tehran and Tabriz, as two tourism hubs, and neighboring with seven provinces of the country (o5) with weighted score of 0.246. Location of strategy in environmental and geographical structure of Zanjan province is represented in figure 2. The score on X-axis is -0.146 and it is -0.28 on Y-axis indicating defensive strategy and it is not in a suitable situation locating in a risky status. The general purpose of defensive or minimum-minimum named, as survival model is to reduce system weaknesses in order to reduce and neutralize threats.

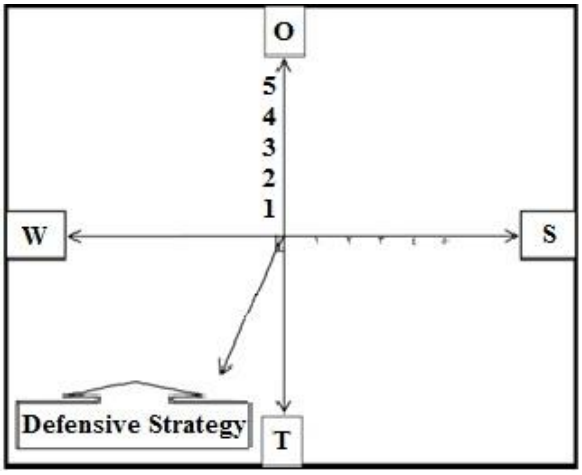

Figure2. Type of strategy to deal with tourism in Zanjan province
Reference: (Researchers' findings)

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Table9. Matrix of four SWOT strategies in tourism of Zanjan Province

Internal factors / External factors	Strengths (S)	Weaknesses (W)
Opportunities	SO1- Using and modeling experiences of successful countries and provinces to attract domestic and international tourists SO2 - preparing and formulating a comprehensive resource and database for tourism attractions of Zanjan Province SO3-Emphasizing on development of natural and local tourism because of relative advantages for development SO4- Using experienced experts' force to create public corporation bodies and promote tourism education through different forums and meetings with people SO5-Preparing the ground and utilizing private sector support to invest in tourism industry of Province through clarification government policies and local plans, tax collection method, subsidies, and banking facilities etc.	WO1- Formulating regulations to prevent destruction of historical and natural attractions WO2- Attention to domestic tourist (inside the province) as an influential factor on revenue distribution and creating regional balance WO3 -Revising governmental support and plan of tourism areas and using them logically, regulations, supporting rules to develop and equip infrastructures with different facilities in urban areas of the province WO4 - Revising distribution of tourism facilities and services and prioritizing redistribution of these facilities with high and average ability to attract tourists to this province WO5- It is necessary not only to review in taking advantage of public participation of development but also to prepare and implement projects and equip urban areas in terms of tourism facilities and services by experts and different bodies in order to revive and develop these areas.
Threats	ST1 -Preparing tourism plans for tourism hubs of the province considering to abilities and active and potential capabilities of all tourism areas of the province ST2- Building equipped recreational and residential complexes beside tourism places ST3- Economic use of tourism resources and attention to the issue of industrial-commercial tourism by constructing related factories ST4 - Accepting capacity and determining ideal limit of population density in different tourism places in the province to reduce extreme pressure and density to these places and attractions and preventing to destroy them ST5- Developing and equipping tourism paths and mounting signs and rules in these places and formulating guides for tourists and educating them	ST1- Preparing tourism projects for tourism hubs considering to actual and potential abilities of all tourism areas ST2 -Constructing equipped recreational and residential complexes beside tourism places ST3-Economic use of tourism resources and attention to the issue of industrial-commercial tourism by building related factories ST4- Accepting capacity and determining ideal limit of population density in different tourism places in the province in order to reduce extreme pressure and density to these places and preventing to destroy them ST5 - Developing and equipping tourism paths and creating signs and regulations in these places and formulating guide books for tourists and educating them

Reference: (Researchers' findings)

Analyzing Position of Tourism Industry in the Economy of Zanjan Province

The application of input-output table has undeniable functions in the field of types of economic analyses including production capacity, planning for economic growth and tourism (Dehghanizadeh, 2008). In order to analyze economic impact of tourism industry in Zanjan Province, the following input-output table has been presented:

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Table10. Ranking activities of hotels, dormitories, and restaurants based on the indicators of input-output table

Economic activity	Previous link	Rating of activity	Previous component link	Rating of activity	The integrity index	Rating of activity
Hotel and dormitory	0.28	3	0.22	6	0.23	1
Restaurant	0.19	6	0.05	25	0.15	20
Economic activity	**Dissemination index**	**Rating of activity**	**Sensitivity index**	**Rating of activity**	**Multiplier index**	**Rating of activity**
Hotel and dormitory	1.17	3	1.2	6	1.3	3
Restaurant	1.02	5	0.7	32	1.2	6

Reference: (Researchers' findings)

Hotels, dormitories, and restaurants are placed in the seventh and eights ranks with previous component coefficients of 0.28 and 0.19 among economic sectors of Zanjan Province. Previous linkages between these two sectors indicate that there is a direct relationship between demands of these sectors and tourist's entrance to Zanjan Province and it can have considerable role in economic boom of related activities with tourism industry through creating demand for its production, particularly in areas having tourism advantages. Thus, it should be mentioned that tourism development leads to expand production in the province. On the other hand, information in table11 about previous component linkage indicates that development of tourism strategies has significant role on economic development of Zanjan Province through supplying. Indicators of dissemination and sensitivity in the mentioned table indicate direct relationship between supply and demand i.e. development of tourism industry strategies has direct impact on development of hotels and restaurants' activities leading to increase demand of these sectors for production of other economic sectors of Zanjan Province. In other words, it prepares the ground for production in economic structure of Zanjan province. Moreover, table11 represents total revenues of tourism of Zanjan Province in 2011.

Table11. Estimating total revenues of tourism of Zanjan Province during July to September 2011 (figures are based on million Rials)

Title	Residence	Tourism attractions	Food	Transportation	Buying Souvenirs	Total
Revenue	134469	225507	15117373	18959357	131963	835214
Percentage	16.1	27.3	18.1	22.7	15.8	100

Reference: (Researchers' calculations based on the statics of Cultural Heritage, Handicrafts and Tourism Organization, yearbook of Zanjan Province, 2011)

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Quantitative Strategic Planning Matrix (QSPM)

By using quantitative strategic planning matrix (QSPM), all strategies were investigated and prioritized. In fact, every strategic factor is measured by strategy and it has been rated. Total scores were calculated, these numbers are strategy priority score. Therefore, different alternatives of strategies are determined and prioritized in environmental and geographical structure of Zanjan Province with numerical value and they can be compared with each other. Due to the high volume of matrix (QSPM) calculation tables, they have been ignored here and obtained strategies have been presented in conclusion.

6- Conclusion

One of the most important reasons of governments' attention to tourism industry is its economic impacts. The most important economic impacts of tourism at the level of country and province is to create foreign exchange earnings, balance of payments, employment, diversity to regional economy and development. Economic impacts of tourism have multiplier impact and they are expanded in different components of economic system. The value chain of tourism industry includes a wide range of production and service sectors. Thus, tourists' direct costs to receive tourism services include creating direct revenue and employment as well as other businesses providing goods and tourism services that create mobility indirectly. Obtained revenue by labor force is used again directly or indirectly and it creates additional effect inductively. On the other hand, government's tax revenues are increased and new investments are entered into tourism sector by private sector. Economic impacts on tourism industry like any other sectors depend on some factors and conditions that determine their intensity. Some of these factors include economic structure of the country, tourism industry management, performance of supply chain of tourism industry, and seasonality of demand. Thus, if tourism industry can work as an active sector in economic downturn conditions, it has strengths and weaknesses facing with opportunities and threats. In the meantime, Zanjan Province, as tourism hub and having the listed world heritage (Soltaniyeh Dome), several historical, natural, and cultural attractions, is not excluded from this fact. Investigating strengths, weaknesses, opportunities, and threats of tourism industry in Zanjan Province, it can be concluded that despite potential abilities and talents of Zanjan Province to attract tourism, there is a long way to use strengths of tourism industry in this province ideally. Moreover, the results indicate that utilizing advantages of tourism industry requires attention to all related sectors with this industry and it asks necessary coordination between them, integrated management, and labor distribution between tourism industry in governmental and private sectors. Tourism industry in this Province is tended toward tourism strengths and opportunities. Thus, it requires comprehensive planning to use strengths and opportunities and combat with threats

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and weaknesses. Therefore, it should be mentioned that attention to tourism industry in Zanjan Province is one of the essential contexts for endogenous development; a clear horizon can be drawn in the shadow of comprehensive planning based on futurology and attention to factors of this industry. In order to attract tourism and move toward sustainable development that can create integrated and coordinated development, it is necessary to pay attention to strategies and solutions of the industry development. Thus, the results indicate that strategies of tourism development in Zanjan Province can be a good stimulus in development of Zanjan Province economy. The results of input-output analysis table indicate that tourism industry can boom economy of Zanjan Province in terms of supply, demand, and production. Moreover, it is necessary to pay attention to the strategies of spatial system of tourism in Zanjan Province in the form of reviewing in following approaches:

1. Taking advantage of capacity and potential of attracting tourism in private and governmental sectors in order to contextualize multilateral development of necessary facilities in the field of tourism

2. Using governmental lands in order to create necessary services and welfare infrastructures for tourists in different seasons of the year

3. Increasing and improving tourism resources and their qualitative development

4. Identifying potential of tourism development to host society and developing education for employed people in this sector

5. Diversification of appropriate rules and policies to develop tourism

6. Reviewing in integrated management system and choosing an integrated management to develop and advance the purposes of sustainable tourism

7. Organizing spatially-physically to create appropriate mechanism for investment of governmental and private sector in the field of tourism facilities and services in Zanjan Province

However, the matrix of strategic internal and external factors of tourism structure indicates that total score of the table of internal factors matrix is 2.714 that is less than average of 3 and strengths have not been used to combat weaknesses well and weaknesses dominate strengths in tourism structure of Zanjan Province and total weighted score of external factors matrix table is 2.769. The obtained value is less than average and it indicates that threats dominate opportunities. Opportunities have not been used well to combat against threats, but generally, matrix of external factors is in better conditions compared to the matrix of internal factors. However, strategies obtained from QSPM matrix have been proposed as table 12 to exit from status quo in the tourism structure of Zanjan Province, move toward attract tourists, use potentials of the province, and control negative impacts of tourism.

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Table12. Combined strategies in tourism of Zanjan Province

priority	Total score	Combined strategies in tourism of Zanjan Province
1	10.906	ST_1- Preparing tourism projects for tourism hubs of the province considering to abilities and active and potential capabilities of all tourism areas of the province
2	10.149	WT_4-Inviting Iranian and foreign investors and creating particular facilities and scores in the field of constructing hotels, residential, recreational, forest complexes and sport lands
3	10.058	SO_3 - Emphasizing on development of natural and local tourism because of relative advantages for development
4	9.815	WO_3- Revising type of planning and governmental support of tourism areas, logical use of them, regulations, supportive rules to develop and equip infrastructures with different facilities of urban areas in the province
5	9.735	WT_3-Holding seminars and forums on investment development in tourism industry with other organizations and related officials and entrepreneurs
6	9.281	SO_5- Preparing the ground and taking advantage of private sector's support to invest in tourism industry of province via clarification of governmental policies and local plans, how to collect tax, how to pay subsidy, banking facilities etc.
7	8.915	WT_5 - Formulating particular rules and regulations for optimal use of attractions and tourism productions, and preventing destruction, pollution, and loss of these resources in these areas
8	8.413	WO_5- It is necessary to revise how to use public participation of development, preparing and implementing projects, equipping urban areas in terms of tourism facilities and services and take necessary steps to revive and develop these areas by experts and different organizations
9	8.204	ST_2- Building equipped recreational and residential complexes beside tourism places
10	7.878	SO_4 - Using experienced experts to create public cooperation foundations and promoting and educating tourism via different meetings and forums with people
11	7.708	WT_1- Explaining the concept of tourism as an industry that have unique benefits for host societies
12	7.425	ST_4 - Accepting capacity and determining ideal limit of population density in different tourism places in the province to reduce extreme pressure and density to these places and preventing to destroy them
13	7.089	WO_1- Formulating regulations to prevent destruction of natural attractions by nature enemies
14	6.869	ST5 - Developing and equipping tourism paths and creating signs and regulations in these places, and formulating guide books for tourists and educating them
15	6.466	SO_2- Preparing and formulating a comprehensive resource and a database for tourism attractions of the province
16	6.322	WO_4- Revising how to distribute tourism facilities and services and prioritizing re-distribution of these facilities with high and average ability to attract tourism to this province
17	6.158	ST_3- Economic use of tourism resources and attention to the issue of industrial-commercial tourism by constructing related factories and workshops
18	60.016	WO_2- Attention to domestic tourists (inside the province) as an effective factor on revenue distribution and creating a regional balance
19	6.014	SO_1- Using and modeling experiences of successful provinces and countries in attracting domestic and international tourist
20	5.476	WT_2 - Development of human force training in tourism sector activities in order to present efficient services in this sector

Reference: (Researchers' findings)

7- References

Consultant engineers of Sabz Andish Payesh (SAP). (2004). *Comprehensive plan of tourism of Zanjan Province,* Organization of Cultural Heritage, Handicrafts and Tourism of Zanjan Province.

Dallen, J. (2014). *Tourism and economic growth*. Dehli publish.

[Downloaded from mail.iueam.ir on 2026-09-28]

[DOR: 20.1001.1.23452870.1395.4.15.5.0]

Dehghanizadeh, M. (2008). *Studying employment of economic activities of Yazd Province by using input-output table,* A collection of articles of the first national conference on development of economic activities.

Doss Weill, R. (2000). *Tourism management*. translated by Arabi, M., Izadi, D. Tehran: cultural research center.

Fletcher, J., Fyall, A., Gilbert, D., & Wanhill, S. (2013). *Tourism: principles and practice*. Pearson Higher Ed.

Ghorbani, R. (2013). Tourism and dynamism of urban space, *Journal of Faculty of Humanities and Social Sciences of Tabriz University,* vol. 3.

Goldener, C R., Ritchie, J.R.B. (2003). *Tourism and principles, practices philosophies*. (9 th ed), New York, NY: John Wiley and Sons.

Haman, G. (2014). *Tourism and economy development*, New York: Longman.

Hedrick-Wong, Y., & Choog, D. (2013). MasterCard global destination cities index. *MasterCard Worldwide Insights*.

Hekmatniya, H., Mousavi, M.N. (2011). *An application of model in geography emphasizing on urban and regional planning,* Tehran: Elme Novin Publications.

Heydari, R., Hosseinzadeh Dalir, K. (2003). An investigation about evaluation of tourism industry in Iran, *Journal of Faculty of Humanities and Social Sciences of Tabriz University,* 3(9).

Kohn, G. (1998). Tourism industry and sustainable development; symbol of dynamic management, *Journal of ecology,* vol. 21 and 22.

Landberg, G. (2010). *Tourism development in urban region*, New York: Long man.

Management and planning organization of Zanjan Province. (2011). *Statistical yearbook of Zanjan Province.*

Mehrabi Basharabadi, H., Jalayi Esfandabadi, S.A., Shakibayi, A., Javidan, E. (2011). *Studying the role of tourism on the economy of Kerman Province and physical development of its cities,* the first conference on Iran's urban economy.

Movahhed, A., Kahzadi, S. (2010). Analyizng effective factors on tourism development of Kurdistan Province by using SWOT model, *Quarterly journal of urban research and planning,* 1(2).

Noorbakhsh, S.M., Akbarpoor, M. (2010). The role of urban tourism on economic development of metropolises, *Quarterly journal of urban economy, 2nd year,* special issue of tourism.

Organization of Cultural Heritage, Handicrafts and Tourism of Zanjan Province. (2014).

Ranjbar, M., Jarfi, A. (2012). Evaluating consequences of urban tourists on urban economy with statistical method, case study: city of Ahwaz, *Geographical Quarterly Journal of Zagros Perspective,* 4(11).

Saghayi, M. (2006). *Challenges of tourism industry in Iran and strategies for its improvement and development,* collection of articles of the conference on geography and the 21st century, Islamic Azad University publications, Najafabad.

Selby, M. (2004). *Understanding urban tourism: Image, culture and experience.* IB Tauris.

Sharply, R., Telfer, D. (2012). *Planning of tourism development in developing countries.* Translated by Zargham Borujeni, H. Tehran: Mahkameh publications.

Skulmoski, G J., Hartman, F T., Krahn, J. (2007). The Delphi Method for Graduate Research, *Journal of Information Technology Education*, Volume 6.

Weaver, L. (2013). *Introduction to sport and tourism development and impact to urban economy,* Publishing London.

World Tourism Organization. (2012). Golobal tourism forcasts to the year 2020, *The world, Vol 2*.

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[DOR: 20.1001.1.23452870.1395.4.15.5.0]