

## **Leveling 15 Districts of Isfahan in terms of Urban Tourism Infrastructure Using HDI model**

***Iman Chaghajerdi\****

*Graduate student of Geography & Tourism Planning, Islamic Azad University,  
Najaf Bad Branch, Isfahan, Iran*

***Ziba Fotoohi***

*M.A. of Geography & Urban Planning, Dept. of Geography, Islamic Azad  
University, Najaf Bad Branch, Isfahan, Iran*

---

### ***Abstract***

*Today, tourism is the most dynamic economic activities of our time, in terms of mobility and employment creation and overall development in the world's grandstanding And by making strategic opportunity due to economic diversification of local communities, creating job opportunities around the world The stability of societies and the prevention of irregular migration, preserving natural resources and maintaining ecological balance cultural characteristics of cities. Accordingly, it can be said that one of the best ways to save cities from the social and economic problems, urban tourism development. One of the problems of the tourism in Iran, including Isfahan, is the imbalance in spatial organization and lack of hierarchy based on the interaction between tourism areas. Leveling of tourism infrastructure in different areas of a city and a balanced distribution of infrastructure and moderating inequality in different areas are of the important tourism development actions. The aim of this study is to level 15 districts in Isfahan regarding Urban tourism infrastructure, and HDI model is used to analyze it. The research is descriptive-analytic. For data collection, statistics of Isfahan, Related organizations was used The results showed that the two, three, five, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen and fifteen with the level of development of disadvantaged areas one, four and six has a medium level of development orientation.*

***Keywords:*** *urban tourism, urbans infrastructure, leveling, fifteen districts, HDI model*

---

*\*Corresponding author: Ichaghajerdi@gmail.com*

*Received Date: 18 October 2016*

*Accepted Date: 9 January 2017*

***Date of Print: Winter 2017***

### **Introduction**

Today, the tourism industry as a dynamic industry with unique and significant features is allocated to itself an important part of economic and manufacturing activities in developed and developing countries. The biggest organization in the world is the tourism industry. Now, it has created more than 200 million career opportunities in full time, part time and seasonal directly or indirectly (WTO) (World Tourism Organization, 2013). Cities in terms of long history and establishment symbols of ancient, historical and cultural are national values of every country and Landscapes are appealing places for tourists (Rastegar et al., 2012:156). Urban tourism is identified with two original objectives and incentives: 1-economy 2-culture (Law, 1998: 168). The criterion for determining the center of tourist areas and also the needed infrastructure and is adjusted for inequalities between regions. Tourism in the 1990s, very little research about the spread of tourist areas. But in recent decades, researchers in the areas of tourism at the regional scale, have national and international and regional (Shamaei and Mosavand, 1390: 27). (Uysal, 2013:17-27) In an article titled urban tourism development (what difference it makes) a comparative study of the development of urban tourism in Istanbul and Helsinki and concluded that both the city of 3 points (1-location of the East and West (2) tolerance of 3-size city) to attract tourists (Saifuddini et al., 2011:67-87) In a paper to investigate the quality and capacity of urban tourism based on the behavior of tourists and host communities (Case Study: Isfahan) and concluded that due to the volume of tourist arrivals over the host community capacity Kalbdyayn tourism destination negative impact of tourism in different socio-economic aspects of the physical environment have felt (Ebrahimzade, 2013:33-48) The article examines the planning and optimization of secondary mechanisms city facilities and tourism infrastructure using GIS Semnan began and concluded that weakness. Resources, facilities, infrastructure and tourism services and their poor distribution, advertising and a very low public awareness about the potential of

tourism attractions and shows a lack of proper planning and the right to attract tourists to the city of Semnan (movahed et al, 2013:17-36) In an article based on the study of urban tourism marketing Brndyaby with the Analytic Hierarchy Process (AHP) presented a case study Kermanshah Taq-e Bostan and Inscription and finally to the conclusion that the criteria considered suitable locations for marketing have been selected. (Khaksari et al, 2013:126-147.) in an article on how to assess the impact of urban tourism, social and cultural life of the city Bablsar And concluded that the city's tourism potential is high and many tourists, especially in the first half of the visit. (Akhavan Ashrafieh, 2013:1.) At Treatise to the effect of tourism on the development of urban tourism \* Run through the region 22 of Tehran payment and the region concluded that the results indicate that at all levels, particularly in the field of tourism, urban tourism, attractions, climate paramount are the most attractive in the context of climate south of the Lake Persian Gulf region, which is. (shojavand, 2015:1) At Treatise to investigate people's attitudes towards partnership, development of urban tourism region 7 and 10 Tabriz, and came to the conclusion that people in the study area to contribute and tourism development have positive attitudes and the development of tourism welcome. Why that tourism development is to improve economic and social conditions the city has a variety of attractions from historical, cultural and natural tourism hub and one of the tourism hubs of the world, but it is not as good in terms of tourism development. Which can be important because it named the lack of tourism infrastructure this authors mind on it to investigate this issue?

### **Theoretical**

Urban tourism in the second half of the 18th century with the spread of urbanization, promoting the development of means of transportation, especially railroads, social change and rising middle class expanded more social and leisure (Raseq Ghezelbash, 2009: 53) In other words, we can say that the accumulation and pace of innovation and technological mainstream, modern and postmodern under the stress of this technology was the emergence of social change (Kadivar & saghaie, 2006: 68) One of these social changes in the contemporary world appears Leisure as one of the basic needs and requirements of contemporary societies to withstand life is dominated

by technology (Papoli yazdi & Saghaei, 2002: 38) On the other hand, urban areas and isolated areas are complex, with four common characteristic, namely (1) high physical density, structure, people, performance, and (2) the heterogeneity of social, cultural, 3- and 4-core multi-functioning physical economy finds the network (Ranjbar et all, 2012: 84)

#### **- Leveling**

The level of expression of the determination of the necessary layers separated by an organization that quantitative scales, units at similar levels organize such events. Small slopes are selected in such a way that different levels, tasks, operations, express qualitative difference. Classification can be integrated relationships from small to large and are hierarchical order (khezri et all , 2013:44)

#### **-Tourism infrastructure**

One of the most important factors in attracting tourists and equipments. Tourism facilities. These units are intended to provide facilities for catering, accommodation and travel services to travelers or guests regulations in accordance with the regulations of the country are tourist facilities (dindari, 2005:82).

#### **-Territory where research**

Isfahan, longitude 51 degrees 38 minutes 40 seconds east and latitude 32 degrees north and 30 seconds after Tehran and Mashhad is Iran's third largest city 424 km south of Tehran, Isfahan is located. Of mountainous areas in the West and in the East of the mountains continues to Chahar Mahal and Ghahrood caps. Mountain streams and river alluvial plain area from there. (Saeidian, 2000: 138) According to municipal zoning of the summer of 1392 the city has been divided into 15 regions (see Map 1). In urban areas Zayandehrud divided the city into two halves divides northern and southern South .nymh includes three regions 5, 6, 13 and twelve other region in the northern half of the eastern half and western Chahar river And.mhvr artifact is created. (Isfahan Municipality statistics, 2014: 10)

#### **Research method**

The study is based on applied research based on descriptive-analytic nature. In order to recognize the potential of urban tourism in areas of

15 districts in statistics in statistics will be used. The surface areas of 15 districts of the HDI model will be used

### Analysis of data

#### -Leveling areas of 15 districts in Isfahan with HDI model

Model United Nations Development Programme's HDI For the first time in 1990 to rank countries in terms of human development model applied by giving equal importance Level of indicators to be used for United Nations Development Programme in this model of three vital expectancy, literacy and per capita income percentage is used to rank countries (ziari, 2006: 73) Human development indicators of the amount or exclusion of different places (neighborhood, city, region, country) in connection with the development and discussion of sustainable development states (Asayesh, Estelaji, 2012: 18) After data collection through the library and reading documents, raw data matrix each criterion was defined in the study area. The decision matrix of options (column) and criteria (rows) is. We have 15 options the city area and the number of 6 are our criteria Results As shown in Table 1. The raw data indexing per 10,000 for each of the options in Table 2 are

Table 1 The raw data matrix

Criteria	Outdoor sports facilities	cinema hall	Recreation hall	restaurant and coffee shop	Cultural hall	Libraries and study rooms
regions						
Region 1	3	4	0	19	10	8
Region 2	5	0	0	18	2	5
Region 3	1	1	0	14	10	14
Region 4	11	0	3	29	5	6
Region 5	9	2	2	47	3	6
Region 6	9	0	2	18	7	9
Region 7	6	0	1	13	5	4
Region 8	5	0	1	18	5	5
Region 9	6	0	0	9	3	7
Region 10	7	0	1	16	6	10
Region 11	4	0	0	2	5	6
Region 12	11	1	1	6	3	5
Region 13	10	0	1	4	5	6
Region 14	6	0	0	0	0	4
Region 15	1	0	1	2	6	8

Source: <http://www.esfahansport.ir> (<http://www.isfahancht>, <http://www.isfahan.ir>)

The First step, the data matrix (Table 1)

**Table 2: data matrix**

Criteria regions	Outdoor sports facilities	cinema hall	Recreation hall	restaurant and coffee shop	Cultural hall	Libraries and study rooms
Region 1	0.38	0.512	0	2.43	1	1.02
Region 2	0.89	0	0	2.78	0.308	0.772
Region 3	0.09	0.09	0	1.273	0.909	1.273
Region 4	0.87	0	0.23	2.301	0.396	0.476
Region 5	0.3	0.122	0.12	2.879	0.183	0.367
Region 6	0.8	0	0.18	1.602	0.626	0.806
Region 7	0.4	0	0.06	0.874	0.336	0.269
Region 8	0.21	0	0.04	0.785	0.21	0.21
Region 9	0.81	0	0	1.227	0.409	0.955
Region 10	0.33	0	0.05	0.752	0.282	0.47
Region 11	0.67	0	0	0.673	0.845	1.014
Region 12	0.87	0.079	0.07	0.477	0.238	0.397
Region 13	0.84	0	0.08	0.338	0.422	0.507
Region 14	0.35	0	0	0	0	0.238
Region 15	0.08	0	0.09	0.354	0.532	0.709

The Second step calculated by the following equation matrix Scale (Table 3)

$$I_{ij} = \frac{\text{Max } x_{ij} - \text{Actual } x_{ij}}{\text{Max } x_{ij} - \text{Min } x_{ij}}$$

**Table 3: The Scale Matrix**

Criteria regions	Outdoor sports facilities	cinema hall	Recreation hall	restaurant and coffee shop	Cultural hall	Libraries and study rooms
Region 1	0.63	0	1	0.19	0	0.238
Region 2	0	1	1	0.034	0.692	0.471
Region 3	0.99	0.982	1	0.0557	0.091	0
Region 4	0.02	1	0	0.2	0.604	0.752
Region 5	0.73	0.761	0.48	0	0.817	0.852
Region 6	0.11	1	0.22	0.443	0.374	0.439
Region 7	0.6	1	0.73	0.696	0.664	0.944
Region 8	0.84	1	0.82	0.728	0.79	1
Region 9	0.1	1	1	0.573	0.591	0.299
Region 10	0.69	1	0.78	0.738	0.718	0.755
Region 11	0.27	1	1	0.766	0.155	0.243
Region 12	0.02	0.845	0.7	0.834	0.762	0.824
Region 13	0.06	1	0.65	0.882	0.578	0.72
Region 14	0.66	1	1	1	1	0.973
Region 15	1	1	0.6	0.877	0.468	0.53

The third step: Calculate the arithmetic mean of the scaled matrix lines (Table 4)

Table 4 rows of the matrix arithmetic mean of Scale

regions	arithmetic mean
Region 1	0.343
Region 2	0.532
Region 3	0.603
Region 4	0.429
Region 5	0.606
Region 6	0.431
Region 7	0.772
Region 8	0.863
Region 9	0.593
Region 10	0.78
Region 11	0.572
Region 12	0.664
Region 13	0.648
Region 14	0.938
Region 15	0.745

Step Four: Find the human development index for each region by the following equation (Table 4)

$$HDI = 1 - I_j$$

Table 5 calculate the HDI

regions	HDI
Region 1	0.667
Region 2	0.468
Region 3	0.397
Region 4	0.571
Region 5	0.394
Region 6	0.569
Region 7	0.228
Region 8	0.137
Region 9	0.407
Region 10	0.22
Region 11	0.428
Region 12	0.336
Region 13	0.352
Region 14	0.062
Region 15	0.255

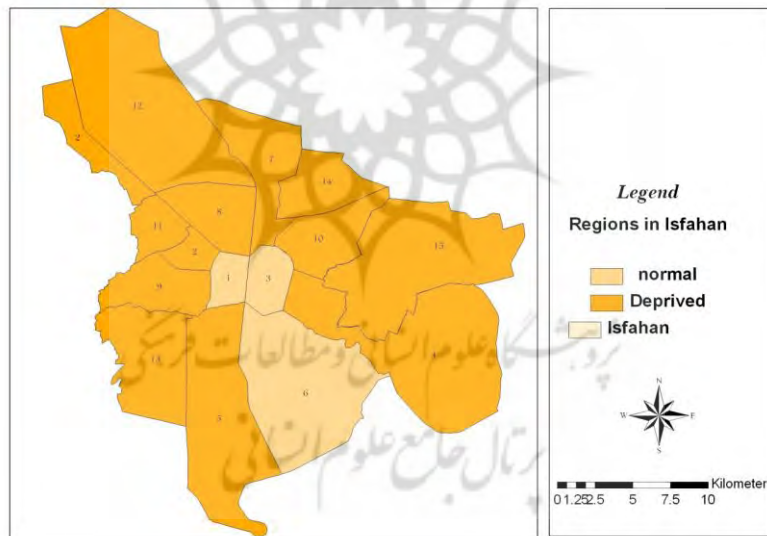
Fifth stage: Leveling areas of 15 districts in Isfahan (Table 5)

Revealing the extent of the human Composite Index each of the regions can be divided into three categories: developed, developing and denied the If  $0.5 \leq HDI < 0.8$  If the area has prevented the development level  $0.8 \leq HDI < 0.5$  medium and if  $1 \leq HDI < 0.8$  of the level of development enjoys high (Hekmatnia, Mousavi, 2006:34)

**Table 6 Leveling regions of 15 districts in Isfahan**

regions	<i>HDI</i>	Level of development
Region 1	0.667	normal
Region 2	0.468	Deprived
Region 3	0.397	Deprived
Region 4	0.571	normal
Region 5	0.394	Deprived
Region 6	0.569	normal
Region 7	0.228	Deprived
Region 8	0.137	Deprived
Region 9	0.407	Deprived
Region 10	0.22	Deprived
Region 11	0.428	Deprived
Region 12	0.336	Deprived
Region 13	0.352	Deprived
Region 14	0.062	Deprived
Region 15	0.255	Deprived

**Leveling regions of 15 districts in Isfahan**



**Fig. 12: regions in Isfahan**

**Conclusion**

Since urban tourism is the economic, political, social and cultural implications in development of areas along the And in recent years not only at national but also at the national, regional and local levels considered Many managers in developed countries for the prosperity



and development of urban tourism to develop more areas under their control And increasing urban tourism infrastructure and improve urban tourism services in order to increase the added value of these activities are In Iran, in terms of capabilities and potentials of tourism are numerous By identifying these capabilities and use the right direction can be effective in attracting domestic and foreign tourists. Isfahan city's historical attractions and beautiful landscapes is a privileged position for promoting tourism The results showed that the two, three, five, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen and fifteen with the level of development of disadvantaged areas one, four and six has a medium level of development orientation. But it seems that due to the importance of urban tourism and necessity of the interests of individual, economic, social, cultural and political proven in various studies So it's time to become a manager and responsible for planning and policy-making in matters of urban tourism more and more attention to this area are And collaboration with organizations, institutions such as municipalities and organizations making relevant impact Cultural Heritage, Handicrafts and Tourism to recognize and promote cultural development and recreational tourism infrastructure And develop the industry with its regional and sectoral management, begin. This requires administrators to learn more about, and understand the importance of attracting urban tourism in the city with the concept of comprehensive development of its regions. In this regard, according to the capabilities and potentials of different historical and cultural tourism for the city. Tourism, urban planners and researchers should take the necessary steps towards the formation and development of the industry and planning appropriate strategies to show.

### **Suggestions**

- Equal distribution of urban tourism infrastructures in the areas of 15 districts of the city and create balance in this field
- Improving the quality of existing infrastructure to increase satisfaction and attract more tourists
- More attention to areas that have lower tourism infrastructures
- The use of brochures and maps, tourist guides and attractive with vivid images

- Touristy setting up offices in the city
- The study is more detailed and more accurate view of tourism planners

### References

- Akhavan Ashrafieh, Payam. (2013). The impact of tourism on tourism development zone 22 of Tehran, Master's thesis, Islamic Azad University Central Tehran Branch
- Asayesh, Hamid, Estelaji, Abas. (2012) "Principles and methods of planning area" Tehran, Islamic Azad University Rey, p. 18
- Ebrahimzadeh, Issa, Hafez, Reza Zadeh, Daraie. (2012). Facilities optimal space planning and urban tourism infrastructures using GIS Case Studies: Semnan (Journal of Geography and Development, pp. 33-48
- Department of Planning, Research and Information Technology, (2014) urban statistics, P 349
- Dindari, Ahmad (2005) of urban tourism in Iran and publishing world Mashhad
- Hekmatnia, Hassan Mousavi, Mir Najaf, (2006) model in geography with an emphasis on urban and regional planning, modern science publications, printed Yazd, P 34
- Kadivar, Ali Aasghar, Saghale, Mehdi. (2006). Organizing tourism in urban promenade surrounding valley Akhlmd, Geographical Research, Issue 83
- Khaksari, Ali, Sama, Koosh, Ebrahimnia, Saide., Damadi, Mohammed Moazez, Vahid. (2013). Social Impact Assessment of urban cultural tourism on the lives of people in the city of Babolsar, planning and development of tourism Issue 7, pp. 126-147
- Khezri, Hossein, Khademol Hosseini, Ahmad, Ghaed Rahmati, Sfar (2013) the city of Fars province based on tourism, Journal of Geography and Environmental Studies, Issue sixth, pp55-42
- Law Christopher, M. (1996). Urban tourism attraction visitors to large cities, Mansell. Publishing, LONDON, 29(18): 1
- Movahed, Ali, Amanpour, Saeide., Naderi, Kaveh. (2012). Bazaryaby urban tourism branding model based on Analytical Hierarchy Process (AHP) Case Study of Kermanshah, Journal of specialized spatial planning, pp17-36
- Papoly Yazdi, Mohammad Hasan, Saghalei, Mehdi. (2002). Grdshgry nature and concepts, Tehran
- Raseq Ghezlbash, Soleyman. (2009) rural .grdshgry; attention to its findings in program development and rural development, housing and rural environment Quarterly, Volume 29, Number 129 pp56-53
- Rastegar, Mousa, Gholami, Mohammad, Zamani, Mina, Moghadam, Masoumeh. (2011). Analysis of factors affecting the development of sustainable tourism using SWOT model Case study Zanjan, Proceedings of the International Conference on Tourism Management and Sustainable Development, pp148-160
- Ranjbar, Mohsen; Jerfy, Ahmad, Mazravy, Emad. (2011) Evaluating impacts of urban tourism in the city's economy (case study: Ahwaz), Proceedings of the

- International Conference on Tourism Management and Sustainable Development, wheat, pp70-88
- Saeidian, Abdolhossain. (2000) .shnakht Iranian cities of Tehran, the first volume, published by the science of life and
- Saifuddini, Frank Shabani, Mohammad, Hosseini, Ali, Rashid, Mostafa. (2010). Assessing the quality and capacity of urban tourism based on the behavior of tourists and the host community, Case Study of Research
- Shojavand, bahman. (2015). Attitudes of people to contribute to the development of urban tourism region 7 and 10 Tabriz Tabriz University Master's thesis
- Uysal, U. (2013). Urban Tourism Promotion: What Makes the Difference? Journal of SocialSciences, Vol 5, No1: 17-27
- World Tourism Organization, Tourism Highlight.(2013)
- Ziari, Keramat Alah (2006) "Regional planning principles and methods" Yazd University Press, Fifth Edition, P 73
- [http:// www.esfahansport.ir](http://www.esfahansport.ir).(2016)
- <http://www.isfahan.ir>.(2016)
- <http://www.isfahancht>.(2016)

