

Role of tourism in rehabilitation of urban old texture
(Case study: Sari)

Sara Derakhshi

M.A. of Geography & Urban Planning, Payame Noor University, Sari, Iran

Nazanin Tabrizi*

*Assistant Professor of Tourism Department, University of Mazandaran,
Babolsar, Iran*

Asadollah Divsalar

*Associate Professor of Geography and Urban Planning,
Payame Noor University, Tehran, Iran*

Abstract

The old textures of cities are going down the path of stagnation and backwardness. On the other hand, urban areas, especially cities with a long historical background, often house many historical attractions that attract tourist into those cities. In this regard, the purpose of this study is to evaluate the role of tourism in restoring the distressed urban texture on the old texture of Sari. In this study, data collection and analysis methods were used through field studies and surveys, texture inhabitant questionnaires (144), statistical tests in form of SPSS software (T-test) and AHP model. And finally, the results of this study are the significant effect of adding applications related to tourism in the texture, beautification within the texture, and converting texture to pedestrian zone.

Keywords: tourism, rehabilitation, old texture, Sari

**Corresponding author:*

Received Date: 30/07/2019

Accepted Date: 08/12/2019

1. Introduction

After oil and automotive manufacturing industries, tourism industry ranks the third in the world in terms of its importance of advancing the socio-cultural purposes of a country on the one hand and developing its economic aspects on the other hand. Due to its role in cultural exchanges, it is beyond doubt that this industry has a major effect on the relationship among human communities. Countries with tourist attractions, such as natural scenery, historical and cultural heritage and artifacts, ancient civilization, religious ceremonies should use their talents and resources in order to attract tourists in a planned and effective way (Azizi & Biglari, 2011). Nowadays, tourism, according to the world statistics, is considered one of the most important industries in the world with the annual income of approximately \$1000 B that can help countries remove poverty by creating jobs and high incomes and expanding justice and culture (Azizi & Biglari, 2011 ; Dritsakis, 2004 ; kundu & Suman, 2012). Moreover, tourism can generate welfare and quality of life for local communities both individually and collectively (Khosravi & Badaruddin, 2013 ; Jusoh, 2013).

Considering that part of the history and memory of a city is related to its historical urban areas without which history may become meaningless and discontinuous, it is believed that they should be viewed as truly representative of the style of that city and the basic elements of its urban landscape (Wang, 2011). In the past, these historical areas had a very important position in terms of historical significance, however, we can use some methods nowadays to restore the years of their importance. One of these methods is revitalization. For example, urban revitalization, in the socio-cultural, economic contexts or in urban areas where one lives and may see the historical areas' breakdown process from physical point of view, refers to eliminate factors affecting urban breakdown or methods to revive the changed areas again (Egercioglu & Yakici, 2015). Due to existing

physical and social ties, special questions may be posed when it comes to the rehabilitation of old towns. In approaching those really complex contexts, the widely recognized supporting role of multi-criteria evaluation of sustainable urban planning becomes more useful than ever (Bellia & Granata, 2014; Cilona & Granata, 2014 ; Cilona & Granata, 2015 ; De Mare & Granata, 2015; Fusco Girard & Cerreta, 2005; Torre & Morano, 2015). Generally speaking, what is particularly difficult to maintain in developing countries is the balance between conservation and redevelopment. Although the conservation of historical towns and cities in western world is regarded as a common endeavor, there has still been widespread debate in these countries over whether they have to repair those old places or to demolish them (Kong & Yeoh, 1994 ; Said & Aksah, 2013 ; Kundu & Kumar, 2012).

The present study aimed at understanding the current status of historical and old places in the city of Sari in Mazandaran province in Iran, examining how to take effective measures to attract tourists to this city, and providing appropriate management techniques to revive its historical areas. Interactive view based on protection of historical elements and contexts in the city and strategies related to development of cultural tourism of the city were reinvented, extracted, and introduced as a guiding document in this study.

2. Review

In 1970s, Thomas L. Saaty initially developed a model called APH that was one of the major theoretical development model and has continuously enriched the field of tourism industry. It has been extensively investigated and refined since then with special focus on group decision making (Saaty & Peniwati, 2008).

The literature review and research background show that the role of tourism has been examined in Indonesia with the aim of rehabilitating Surabaya, especially in Kalimas River zone. Using cultural tourism planning, they have attempted to reduce river utilization and revive the region.

Using comparative models, researchers have also tried to study the role of tourism in the economy of the urban community. The role of tourism in the city's historical district has been carried out in the city of Madan in Malaysia.

Through developing urban tourism, a research into resuscitating (repairing, rebuilding, and rehabilitating) the city's historical district has been conducted in Sicilian hinterland areas (Ginting & Wahid, 2015; Cibinskiene & Snieskiene, 2015; Fiorella & Scavone, 2016; Idajati, 2014).

Vileniske (2014) defined the term revitalization as the demonstration of social, cultural, and economic dimensions which maintains balance of current rapid development in urban regions by conserving urban identity, culture, and traditions. It is worth mentioning that the revitalization is a program through which job opportunity can be created to increase people's income, preserve natural resources, and provide amenities for users. Ntshona (2013:22) stated that encompassing and addressing topics, such as economic restriction, unemployment, social deprivation and exclusion, contaminated lands and environmental pollution were of significant importance. Samadi et al. (2011:71) suggested that one of the most commonly practiced method of most heritage development was conservation. The heritage revitalization is the result of the issues associated with generalization owing to globalization in the early decade of the millennium. Conservation also refers to physical intervention in the basic structures of historical buildings in order to guarantee their continued performance (Baroldin et al., 2013).

3. Material and method

The present research is an applied one in terms of its purpose and it is a descriptive- analytical research in terms of its nature and methodology. Spatiotemporal range of this study comprises the old texture of historical areas in the city of Sari during the period of time between 2015 and 2016. Sari is the major city of Mazandaran province covering 2700 hectares of its land with the population of 417296 people according to general population census in 2011-2012. The population who were participated in this study and questionnaires were two groups: old texture of urban elites and the citizens of the old part of Sari city. The data were collected using secondary research method, field work, and a questionnaire. Actually questionnaire was used in this study to score criteria and define residents' satisfaction of their neighborhood. Analytic hierarchy process of AHP multiple criteria were applied to introduce effective measures to attract tourists

to the old texture of Sari, to select the best area for rehabilitation and tourist attraction, and finally to rank the limits of the old texture of the city. This method can help us to determine what areas have the highest level of sensibility and which criterion has the strongest effect (Wang & Li, 2016; Lee, 2015; Zhou & Maumbe & Deng, 2015; Wang & Jung, 2014).

In 1977, Saaty developed the AHP as a well-established method for the first time. Since then, it has increasingly been used to compare alternative solutions in reference to a criterion, in pair wise mode. The resulting priorities may be deployed to compare and rank alternatives. Experts' opinions as the basis of the comparisons are found to be relevant to the present study. To test the consistency of methodology, consistency index was used in this research. The AHP technique is systematic, simple, practical, dependable, and user-friendly due to the availability of proper software in order to compute priority matrices based on the comparison of matrices (Kumar & Luthra, 2015).

4. Results and discussion

4.1 .Check components in the rehabilitation of old texture of Sari city

4.1.1.The component of land use associated with tourism in the old texture

In addition to the above mentioned issues, the effect of land uses, such as creating traditional market, monumental exhibitions, crafts markets, parking in the neighborhood can be suitable for rehabilitating the old texture. The research findings suggested that citizens with an average of 3.7 and a standard deviation of 0.48 believed that adding land uses to tourism industry within the texture could influence the restoration of the texture much more higher than average. A sample of t-test was used based on the normal variables in the questionnaire. The test results showed that the calculated significance level was found to be significant with $T = 19.66$, significance level = 0.000, and degree of freedom = 149. As a result, the inhabitants of the old texture believed that component of land use associated with tourism was effective in tourist attraction.

Table 1: T-test for the component of land use

Significance level	Degrees of freedom	T-statistics calculated	Standard error	Standard deviation	Average	Number of view
0/000	149	19/66	0/039	0/48	3/7	150

4.1.2. The component of beautification in texture and tourist attraction

Adding to the above, the neighborhood texture regeneration can be studied according to the effect of texture beautification grounded in indicators, such as flooring the streets and sidewalks, the presence of sculptures and statues, the restoration of historical houses, the lighting, etc. The findings showed that citizens with an average of 4.1 and a standard deviation of 0.45 believed that beautification and restoration of texture could have largely impact upon tourist attraction. A sample of t-test was used based on the normal variables in the questionnaire. The test results showed that the calculated significance level was found to be significant with $T= 30.02$, significance level = 0.000, and degrees of freedom = 149, indicating that beautifying component would affect tourist attraction.

Table 2: T-test for the component of beautification

Significance level	Degrees of freedom	T-satistics calculated	Standard error	Standard deviation	Average	Number of view
0/000	149	30/02	0/037	0/50	4/1	150

4.1.3. The component of creating pedestrian zone in old texture and tourist attraction

As associated with the above, the neighborhood texture regeneration can be studied according to the impact of tourism on pedestrianization of the old texture based on such criteria as the effects of creating safe walking zones, paved sidewalks, the quality and beauty of sidewalks in the neighborhood, etc. The findings indicated that citizens with an average of 4 and a standard deviation of 0.49 believed that turning the sidewalk of the texture cold be largely effective in attracting the tourists and reviving the neighborhood. A sample of t-test was used based on the normal variables in the questionnaire. The test results showed that the calculated significance level was found to be significant with $T= 26.13$, significance level = 0.000, and degrees of freedom = 149. Accordingly, it can be concluded that the above components would be effective in tourist attraction.

Table 3: T-test for the Component of creating pedestrian zone

Number of view	Average	Standard deviation	Standard error	T-satistics calculated	Degrees of freedom	Significance level
150	4	0/9	0/40	26/13	149	0/000

4.2. The role of tourism in the rehabilitation of all old texture's zones

The AHP method was used to study the impact of tourism upon the revival of old texture of Sari. Besides, analytic hierarchy process of AHP multiple criteria were deployed to select the best zone for rehabilitation and tourist attraction and to rank the limits of the old

texture. What zone has the highest level of sensibility and which criteria have the highest impact have been determined Using this method.

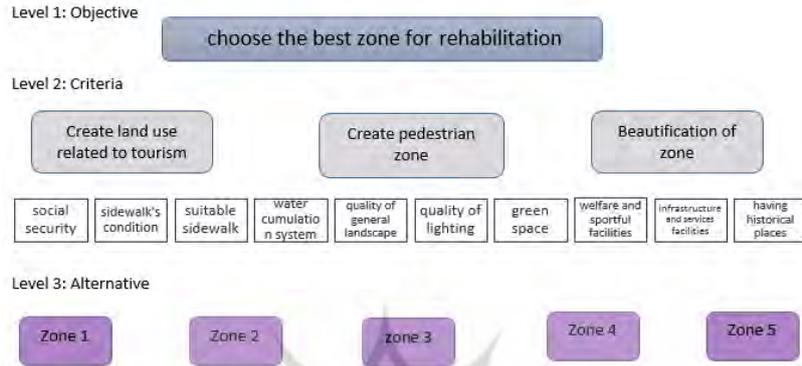


Fig 1: The hierarchical structure and prioritizing the criteria and zones in old texture of Sari

4.3. Hierarchical analysis

After forming the hierarchical structure, the questionnaire was distributed. That is, the criteria compared in the tables were paired by experts. All criteria were compared in pairs in these tables.

Table 4: Paired comparison matrix of pedestrian zone construction from the perspective of experts

Crear pedestrian zone	Social security	Pedestrian zone condition	Suitable pedestrian zone	Surface water collection system
Social security	1	7	5	5
Pedestrian zone condition	1/7	1	1/6	1/5
Suitable pedestrian zone	1/5	6	1	1/5
Surface water collection system	1/5	5	5	1

Table 5: Paired comparison matrix of the land use from the point of view of experts

Crear relevant land use	Having historical places	Welfare and sportive facilities	Infrastructure and services facilities
Having historical places	1/7	3	1
Welfare and sportive facilities	1	1	1/3
Infrastructure and services facilities	1	1	7

Table 6: Paired comparison matrix of beatification from the point of view of experts

beatification	Green space	Quality of lighting	Quality of general landscape
Green space	1/5	6	1
Quality of lighting	5	1	1/6
Quality of general landscape	1	1/5	5

4.3.1. The relative weight of affective criteria in attracting tourists and regeneration of old texture

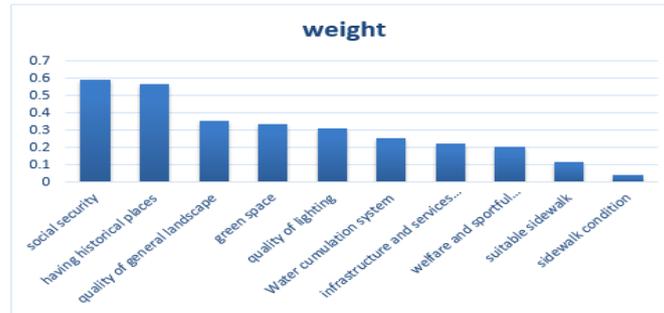


Fig 2: The relative weight of effective criteria
Table 7: The relative weight of effective criteria

Criteria	Weight
Infrastructure and services facilities	0/224
Welfare and sportive facilities	0/206
Having historical places	0/596
Quality of general landscape	0/354
Quality of lighting	0/313
Green space	0/333
Social security	0/589
Pedestrian zone condition	0/042
Suitable pedestrian zone	0/117
Surface water collection system	0/252

The results showed that social security was the best and the most important criterion for tourism development leading to revitalizing the old texture of the city, while historical places established the second priority.

4.3.2. Alternatives' pair wise comparison matrix

In the next step, the options of hierarchical structure or texture zones were compared to each criterion and were weighted by experts. A questionnaire was designed to compare a couple options that were completed by 25 experts.

Table 8. pair wise comparison matrix based on criteria

criteria	Zone	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
historical places	Zone 1	1	7	3	4	5
	Zone 2	1/7	1	1/5	1/5	1/3
	Zone 3	1/3	5	1	1/3	5
	Zone 4	1/4	5	3	1	3
	Zone 5	5	3	1/5	1/3	1
Infrastructure	Zone 1	1	5	2	3	5
	Zone 2	1/5	1	1	3	3
	Zone 3	1/2	1	1	1/4	1/3
	Zone 4	1/3	1/3	4	1	1
	Zone 5	1/5	1/3	3	1	1
Wellfare facilities	Zone1	1	6	1/3	3	5
	Zone 2	1/6	7	1/7	1/4	1/4
	Zone 3	3	1	1	4	6
	Zone 4	1/3	4	1/4	1	3
	Zone 5	4	4	6	1/3	1

Role of tourism in rehabilitation ... 57

lighting	Zone 1	1	3	5	3	3
	Zone 2	1/3	1	1/3	3	5
	Zone 3	1/5	3	1	3	1/3
	Zone 4	1/3	1/3	1/3	1	1
	Zone 5	1/3	1/5	3	1	1
Surface water collection system	Zone 1	1	3	4	3	2
	Zone 2	1/3	1	3	4	3
	Zone 3	1/4	1/3	1	1/3	1/2
	Zone 4	1/3	1/4	3	1	3
	Zone 5	1/4	1/3	2	1/3	1
The quality of general landscape	Zone 1	1	3	1	1/3	1/2
	Zone 2	1/3	1	1/5	1/5	1/5
	Zone 3	1	5	1	1/5	1/3
	Zone 4	5	5	5	1	3
	Zone 5	5	5	3	1/3	1
Social security	Zone 1	1	1/3	5	3	3
	Zone 2	3	1	4	3	1
	Zone 3	1/5	1/4	1	2	2
	Zone 4	1/3	1/3	1/2	1	1/2
	Zone 5	1/3	1	1/2	2	1
Green space	Zone 1	1	3	1/7	1	1/3
	Zone 2	1/3	1	1/5	1	1/3
	Zone 3	7	5	1	5	5
	Zone 4	1	1	1/5	1	5
	Zone 5	1	3	1/5	1/5	1
Pedestrian zone condition	Zone 1	1	3	1	5	7
	Zone 2	1/3	1	3	3	5
	Zone 3	1	1/3	1	4	3
	Zone 4	1/5	1/3	1/4	1	2
	Zone 5	1/3	1/5	1/3	1/2	1
Suitable pedestrian zone	Zone 1	1	5	1	3	1/3
	Zone 2	1/5	1	1/3	1/4	6
	Zone 3	1	3	1	1/3	3
	Zone 4	1/3	4	3	1	4
	Zone 5	4	1/6	1/3	1/4	1

4.3.3. Zones' Weight based on the criteria for the improvements in the old texture due to tourism

Table 9 . zone's weight

	Creat pedestrian zone	Beautification of zone	Creat relevant landuse
Zone 1	0.315	0.218	0.425
Zone 2	0.309	0.112	0.076
Zone 3	0.122	0.261	0.219
Zone 4	0.123	0.232	0.197
Zone 5	0.130	0.177	0.083

4.3.4. Prioritize zones for improvement based on their weight, according to tourism

Table 10. zone's priority

priority	zone	Weight
1	1	0.270
2	3	0.236
3	4	0.212
4	5	0.153
5	2	0.129

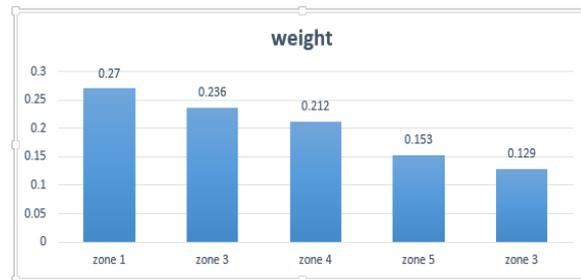


Fig 3. zone's priority

The results suggested that zone 1 was the most suitable place in the old texture for tourism development contributing to achieving the goal of restoring the region.

5. Conclusion

Based on the above discussion, it can be said that the old texture of Sari city related to its old buildings and monuments with great historical and cultural attractions accompanied by natural resources and weather conditions of the city offers great potential for development and tourist attraction. The analysis of the research data revealed that uniformity could not be found in all zones that might affect the growth of tourism to rehabilitate the texture of the city, accordingly, due to cultural and historical conditions; each region would have different levels of rehabilitation. Such organizations as the Cultural Heritage Organization or the Municipality can exploit their potential, the characteristics of each region, and the prioritization criteria and zones to create the conditions necessary for attracting tourists and rehabilitating the region.

Tourism can be injected into the texture as a one way of restoring and rehabilitating the city's texture. Monuments and historical places, especially in old towns, can provide one of the incentives to attract tourists to cities. The presence of applications related to tourism may lead to attracting tourists and eventually rehabilitating the city's texture since there is a direct relationship between the presence of tourism-related applications and tourist attraction to the texture. An increase use of commercial applications, green space, recreational and cultural places can be used to attract tourists to the texture and can contribute to rehabilitating the neighborhood of that region. The beauty of old texture, especially due to the cultural or even religious beauty, may be the cause of attracting tourists as a way of revitalizing

the neighborhood. Restoration and repairing of historical buildings, when their historical elements remain intact, can also be an indicator of attracting tourists. Both reconstruction and beauty of local areas, such as the street furniture or insert symbols and signs of the neighborhood history could have a significant effect on attracting tourists.

Pedestrianization of this old texture can pave the way to attract tourists. Attracting tourists and satisfying their desire to travel and walk in the historical neighborhood can be done through a suitable pedestrian zone and its compatibility with the topography, shape, and appearance of the neighborhood map. Moreover, reduced and interrupted movement of cars within the old texture has a substantial impact on regenerating the texture or slowing the destruction of historical buildings and monuments.

References

- Azizi, H., Biglari, M., Joudi, P. (2011), "Assessment the feasibility of sustainable tourism in urban environments employing the cumulative linear model", *Procedia Engineering*, vol. 21, pp. 24-33
- Dritsakis N.(2004), "Tourism as a long-run Economic Growth Factor, An Empirical Investigation for Greece", *Tourism Economics*, vol. 10(3), pp. 305-316.
- Wang J. (2011), "Problems and solutions in the protection of historical urban areas", *Frontiers of Architectural Research* (2012) 1, pp. 40-43
- Egercioglu Y., Yakici N., Ertan T., (2015), "Urban Decline and Revitalization Project in Izmir-Tire Historical City Center", *Procedia Social and Behavioral Sciences*, vol. 216 (2016), pp. 330-337.
- Kong L., Yeoh B. (1994). "Urban conservation in Singapore: A survey of state policies and popular attitudes". *Urban Studies*, 1(2).
- Said Y SH., Aksah H., Dewiyana Ismail E., (2013), "Heritage Conservation and Regeneration of Historic Areas in Malaysia", *Procedia Social and Behavioral Sciences*, vol. 105 (2013), pp. 418-428.
- Bellia, C., Granata, M. F., & Scavone, V. (2014). Aree dismesse ed orti urbani: un "valore sociale complesso" nelle città - Abandoned areas and urban gardens: a "complex social value" in the cities. *Agribusiness Paesaggio & Ambiente*, 17(2), 61-70.
- Cilona, T., & Granata, M. F. (2014). A Choquet Integral Based Assessment Model of Projects of Urban Neglected Areas: a Case of Study. In B. Murgante et al. (Eds.), *ICCSA 2014, Part III, LNCS 8581*, pp. 90-105
- Cilona, T., & Granata, M. F. (2015 b). Multicriteria Prioritization for Multistage Implementation of Complex Urban Renewal Projects. In O. Gervasi et al. (Eds.), *ICCSA 2015, Part III, LNCS 9157*, pp. 3-19.

- De Mare, G., Granata, M. F., & Nesticò, A. (2015). Weak and Strong Compensation for the Prioritization of Public Investments: Multidimensional Analysis for Pools. *Sustainability*, 7, pp. 16022–16038.
- Fusco Girard, L., Cerreta, M., & De Toro, P. (2005). Integrated planning and integrated evaluation. Theoretical references and methodological approaches. In D. Miller & D. Patassini (Eds), *Beyond Benefit Cost Analysis. Accounting for Non-Market Values in Planning Evaluation*, pp. 175-205.
- Torre, C. M., Morano, P., & Taiani, F. (2015). Social Balance and Economic Effectiveness in Historic Centers Rehabilitation. In O. Gervasi et al. (Eds.), *ICCSA 2015, Part III, LNCS 9157*, pp. 317–329.
- Kundu, Suman, & Kumar. (2012). Economic empowerment through rural tourism: the case of Tarapith-a religious tourism destination in Birbhum District of West Bengal India. *Geografia, Malaysia Journal of Society and Place*, 8(7).
- Boyd, S. (2002). “Cultural and heritage tourism in Canada: opportunities, principle and challenges”. *Tourism and Hospitality Research*, 3(3), pp. 211-233.
- Khosravi, Sharareh., & Badaruddin, Mohamed. (2013). “Community Capacity assessment in the tourism sector”, *TEAM Journal of Hospitality and Tourism*, 10(1), 33-41
- Jusoh, H., et al. (2013). “Impak pelancongan terhadap kualiti hidup bandar: perspektif penduduk Putrajaya”, *Akademika*, 83(1), 45-56
- Wang X., Li X., Zhen F., Zhang J., (2016), “Measuring tourist preferences of smart tourist attractions via a FCEM-AHP and IPA approach”, *Tourism management*, volume 54, 2016, 309-320.
- Kumar s., Iuthra S., Haleem A., Mangla S.K., Garg D., (2015), “Identification and evaluation of critical factors to technology transferring AHP approach”, *International Strategic Management Review* 3, 24-42
- Ginting N., Wahid J., (2015), “Exploring Identity’s Aspect of Continuity of Urban Heritage Tourism”, *Procedia - Social and Behavioral Sciences* 202 (2015) 234 – 241
- Cibinskiene A., Snieskiene G., (2015), “Evaluation of city tourism competitiveness”, *Procedia - Social and Behavioral Sciences* 213 (2015) 105 – 110
- Fiorella M., Scavone V., (2016), “A description model for regeneration through urban tourism in rural towns with underused historic real estate”, *Procedia - Social and Behavioral Sciences* 223 (2016) 349 – 356
- Idajati H., (2014), “Cultural And Tourism Planning As Tool For City Revitalization The Case Study Of Kalimas River, Surabaya-Indonesia”, *Procedia - Social and Behavioral Sciences* 135 (2014) 136 – 141
- Lee J., Lee H., (2015), “Deriving Strategic Priority for Creative Tourism Industry in Korea using AHP”, *Procedia Computer Science*, volume 55, 2015, 479-484
- Zhou Y., Maumbe K., Deng L., Selin S., (2015) “ Resource-based destination competitiveness evaluation using a hybrid analytic hierarchy process (AHP): The case study of west Virginia”, *Tourism management perspectives*, volume 15, 2015, 72-80

Wang Y, Jung K., Yeo G., Chou C., (2014), "Selecting a cruise port of call location using the fuzzy- AHP method: A case study in East Asia", *Tourism Management*, volume 42, 2014, 262-270

