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**Wetland Environmental Potentiality and Attracting Tourist;  
Chaghakhor Wetland, Iran**

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## **Wetland Environmental Potentiality and Attracting Tourist; Chaghakhor Wetland, Iran**

### **Abstract**

Tourism industry is a new phenomenon that may be claimed to complement the human existence, also economic productivity seen as a significant role in the development of this particular industry. To visit the destinations, one of the most important factors for attracting tourists would be the quality of the environment. In this matter, eco-tourism as a major field of tourism industry has been seen as a major point for some developing countries with wealthy nature such as Iran. Iran with the area 1,648,195 km<sup>2</sup> is surrounded in the North by the Caspian Sea, in the South by the Persian Gulf and Oman Sea. Also in the central zone deserts as well as mountains in the North and North-west are common sights. Wetlands as natural attractions are located in different zones of this country, for instance, Chaghakhor wetland which is located on the Chahar-Mahal and Bakhtiari province. This study seeks to review and estimate the influence of the local condition, including the living and economical conditions of the places visited. A quantitative method was applied by distributing the self-administrated questionnaire, to the tourists visiting the study area as well as to the key stakeholders residing to the mentioned region. The respondents answered in terms of the influence of locals' living condition as well as their state of economy e.g. their income, occupation, on the tourists' own decision to visit them between the locals' living condition and tourists' decision making, and it is merely the tourists' attraction that impacts their decision to visit the wetland. Overall, the investigation has decided that an individual's economical and living condition is the significant factors of attracting national and international tourists to visit these areas.

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### **Introduction**

Tourism in all of countries throughout the world, particularly in the third world countries, can create many job opportunities.

On the other hand, conflict between economic and social development in tourism can promote different opportunities which affected the ecosystem formations and natural resources. The exponential of large tourist volumes and natural resources development in different destinations would be tinted as contradictory characters of potentiality of them

into tourism as a nature based activity (Hillery et al., 2001; Lynn and Brown, 2003) which is one the most important field of tourism industry and is called eco-tourism.

Regarding to these statements, different views of eco-tourism were presented as protecting the complex of social, economical as well as environmental profits for local community in each area. According to Weaver (1999) "Interest in eco-tourism, now widespread among tourism planners and marketers, is rationalized by a number of popular assumptions regarding the sector's potential economic, environmental, and socio-cultural benefits" (Weaver, 1999, p.795).

Wetlands are the most producing environments in the entire world and providing more than half of the world's food. The unique characteristics of wetlands have resulted of considering the tourism destination. However, neglecting these locations in a way, can lead to disasters and threaten its existence (Baqerzadeh Karimi and Rankouhi, 2007). The first definition of wetland was defined by Ramsar convention, Iran, in 1971, Wetlands "...areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish, or salt, including areas of marine waters, the depth of which at low tide does not exceed six meters" (Williams, 1991, p.2). Based on their position, vegetation, surface water flow, and their surrounding landscape, ponds are naturally marshy lands as well as types of sea waters that do not have a depth more than 6 meters, making them an attraction for tourism and ecotourism (Majnounian,1998).

Iran is located in Middle East. In south, it has boundary with Persian Gulf and Gulf of Oman, in addition to Turkey and Iraq in the west. In the east Afghanistan and Pakistan, and in the north, the Caspian Sea, Turkmenistan and Azerbaijan are the other boundaries of the country. Total area of this country is 1.65 million square kilometers (Iran, 2008, p.1). One of the most significant provinces in the country is Chahar-Mahal & Bakhtiari which is

located in the south western part of Iran. At the same time, this province has unique natural environment for attracting tourists in this area, which is called Chaghakhor wetland. It is covered as total area of 1360 Hectares by Ramsar Convention; cover not only marshes and lakes, but also peat forests, coral reefs, temporary pools and even underground caves. Based on their position, vegetation, surface water as a major attractive wetland in this province. According to Ramsar Convention Chaghakhor wetland was classified as an important environment of this country and it will be enormous reserves for migration and local birds in this location.

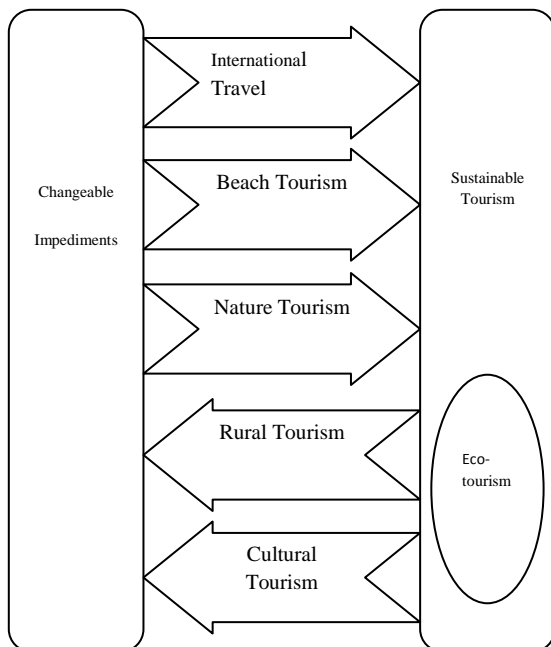
Accordingly, this paper has attempted to study factors which help to develop ecotourism in wetlands, especially Chaghakhor wetland in the province of Chahar- Mahal and Bakhtiari. The aim of this paper is to study the factors attracting domestic and international tourists by estimating two factors which are living conditions and economical conditions of locals in this area. It also concerns, the limitations and opportunities that exist in this wetland in order to develop the industry in near future.

## **Literature Review**

Aforementioned eco-tourism is a significant field of tourism, and in this matter the year 2002 was called eco-tourism year by WTO. Natural tourism or eco-tourism is a relatively new phenomenon that represents only a small portion of tourism industry (EplerWood, 2007). Eco-tourism is one of the subcategories of sustainable tourism. The following diagram demonstrates why and how eco-tourism is mentioned as a sustainable form of nature-tourism and includes sections of cultural and rural tourism as well (EplerWood, 2007, p. 16).

According to the diagram, the definition of eco-tourism by The International Ecotourism Society (TIES) is "responsible travel to natural areas that conserves the environment and improves the well-being of local people" (2005, p.2). Eco-tourism development can make certain economic profits for residents in each area and emerging them in replacing

traditional life styles in different ways (Cooke, 1982 & Wallace, 1996). At the same time, Tourism in natural areas, euphemistically called “eco-tourism,” can be a major source of degradation of local ecological, economical and social systems. The interference of large volumes of foreigners with high-consumption and high-waste habits into natural environments, or into towns with inadequate waste management communications can produce changes to those natural environments at a rate which is far greater than imposed by local residents. See (Figure1).



**Figure-1** Sustainable tourism through eco-tourism. Source: Epler Wood, M. (2007)

Recently, eco-tourism was defined regarding to the different categories such as educating, residents, preservation, and length of stay and also as mentioned above economic opportunities for residents, decreasing the impacts and make sustainable development, and ethnic properties. Many definitions including major factors of eco-tourism were provided for instance, ‘host community participation’, ‘natural areas’, ‘low impact’ and ‘culture’ (Higham, Carr, and Gale, 2001).

**Wetland**

It is crucial that a productive area in the Earth such as wetlands can play an important role in each ecosystem. They can be found in the entire world with numerous range of size from a small number of kilometers to thousands hectares. However these are often located at the length of borders of water resources. In this regards UMEP (2001) refers to approximately 6% of water in the Earth including wetlands which is 8.6 million square kilometer.

**Local Condition**

It is clear to note that local people’s occupation in vicinity of wetlands can be influenced by different opportunities providing in these ecosystems. By using those benefits of wetlands peoples can present better services. Once this happen, it will increase tourists’ number who are looking for and paying for fantastic wetlands attraction. As an example of this situation the Swamp of Caroni in Trinidad area and the Delta of Okavango in Botsavana area are noticeable (Williams, 2006). Reviewing literature shows different case studies of wetlands referred to various effects of this phenomenon, for instance; residents in neighboring Chilawa Lake in Malawi are using different kind of plants which grows around the wetlands. The other example is Malaysia which local people around wetlands can earn USD 80 from plants in a month which are providing medical supplements (Williams, 2006). Experience shows that in related issues of ecotourism, tourists should spend their currency in the local districts to protect economic and motivate local residents. Positive contribution to run and own the accommodation by local residents can make different benefits from eco-tourism in returning the local economy. Moreover, motels, hotels, gas station, restaurant and the other accommodations services which are relating to tourism economic will make various certainties for residents. Consequently, the main common planning for ‘eco-tourism and wetland’ need to consider two groups of locals, which are resident business and personal property-owner. Boo (1991) these reasons are not to benefits governmental human resources (cited in Kusler, 1991, p.57).

### **Economical Condition**

There is not enough study about resident income in tourism industry. Although literature about tourism in natural environment would be increased by ecotourism, (E.g. Stankey et al., 1985; Ziffer, 1989; Whelan, 1991; Boo, 1992), but in the case of the economic component did not give sufficient consideration (Wunder, 2000). The important point, however, is economic, as a major factor for tourism in different countries especially in developing countries. Initially, from 1960's to 1970's, it was the period of growing tourism activities such as employment and making different changes by developing organisms, like World Bank (Goodwin 2000).

In spite of the fact that, some factors can make negative impression on economic in tourism industry, (like price rises, authority by foreigners in different areas and marketing); demanding of tourism can grow rapidly.

In addition the assessment by WTTC was shown demand in tourism with growth about 40%. During the years 1960-2000, it was focused on demand with economic increase in all situations at all levels which would be considerable ambitious to different opportunities such as remote community, which previously were isolated destinations (Ashley, 2000). One of the most significant factors for national economy in the macro attitude or inferior sectors with various communities can be improving the volumes of assertion which can make different development opportunities for industrialist countries and improve identities for the areas. Particularly, this study seeks to explore the statements which are related to wetlands that can 'work' for each society of the world which is preserving the quality of environment, sustainability in occupation, and maintain biodiversity. Socio-economic pressures on wetlands cause negative impacts on the sustainability of the site. These pressures include pushing wetlands for producing more crops or grazing more cattle. Experience of history in wetlands shows that 'over-working' of these destinations, particularly in community and even in society which are depending on this opportunities can make negative impressions for changing the major aspects in these areas ( Williams, 2006).

### **Study Area**

Chaghakhor wetland is located on the Boroojen district in the province of Chahar-Mahal- Bakhtiari. This province is located on the southwest part of Iran which is near Zagros Mountains. This area extended latitude 14°-31' to 47°-32' N and longitude 34°-51' to 49°-49' E (Mansouri, 1994; Ebrahimi and Moshari, 2006). In addition, this wetland is the most popular one in this province with natural extension and different capabilities as written in Ramsar Convention which will explain in following part of this paper. More specifically, this district has seasonal temperature, including July and August (humidity month) and December to February (coldest month). Therefore, the best season for tourists attracting in this area is spring and summer. Although, other wetlands are located in this province attract many tourists in this period of time. At the same time, topography of the inner study area including the junction point of two zones which are parts of Zagros Mountains, located in northwest and southeast of Zagros (Monavari, 2004). Chaghakhor is a large synclinal wetland which is survival with 'tectonic movements' in this area (Karimi, 2000). See (Figure2&3)



**Figure-2** Location of Chaghakhor Wetland

### **Rural Tourism Landscape**

Chaghakhor wetland area and its surrounded areas in short distances, numerous villages exist, each of which have a certain population, and the closest villages to the wetland are Galoogerd and Dastgerd. Tourist townships have been created for accommodating domestic and international tourists that have popular weather and beautiful landscape, and the particular culture, traditions, customs and way of living in this area which are demonstrate the intertwining of human and nature (Field study, July2008).



**Figure-3** Geographical position of wetland  
Source: Author Source: Google earth

**Fishing and Tourist Potentials in Chaghakhor Wetland**

Chaghakhor wetland has many water creatures, in particular fish species in this wetland. Field study was conducted in July 2008; after looking for a large part of the wetland, the finding showed that Chaghakhor wetland was in progression in this circumstances and ecotourism would be threaten in this area.

**Tourism Population in Province**

According to the statistic organization in 1996, the population of the province was 761,168. Approximately 45% of people lived in urban areas, meanwhile, 54.8% lived in rural areas and the other percentage was related to seasonal migration (Static organization, 1998). (Table1). During those years the exact statistic of these issues was shown in 2000 population of this province which was 821,975. On the other hand, average growth in mentioned year was 65-75. Distribution of the population were 414,572 persons living in urban areas, 407,403 persons in rural areas, and household was 11,630 (Iran Statistical Yearbook, 1998).

**Economics of Province**

Chahar-Mahal & Bakhtiari has different lifestyle, which is stated as a tribal district. Lifestyle, traditional style, different customs, and the exact texture of society as a new or old style can make different conditions in this area (Bagheri, 1996). Rural and tribal circumstances and living caused negative impacts on developing industry in this

province. In spite of the fact that, there are different industries which are constructed on this province (such as sugar, flour, milk) in central cities, the province continued to make modern situations and therefore better opportunities especially surrounding the wetland, for attracting tourists and developing tourism which can make income for local people.

**Table-1** Population of province by division of district, 1996

District	Household	Female	Male	Total
<b>Shahr-e-Kord</b>	62810	168059	169867	337926
<b>Boroojen</b>	20662	52080	52405	104485
<b>Farsan</b>	18935	54488	56223	110711
<b>Lordegan</b>	24974	70234	73298	143532
<b>Ardal</b>	11236	32024	32490	64514
<b>Total province</b>	143577	376885	384283	761168

Source: Static organization (1998)

**Methodology**

Chaghakhor wetland was selected as a study area and as mentioned before the area is crowded by local people and tourists. Descriptive analytical method of research was used to carry out the study. The descriptive research was defined by Brown and Rodgers as "A research that describes group characteristics or behaviors in numerical terms" (Brown and Rodgers, 2002, p.117). They maintain that "the descriptive statistics is those statistics used to analyze descriptive research data, usually in terms of central tendency and dispersion" (Brown and Rodgers, 2002, p.117). This helps to find tourist ideas about the wetland condition as well as local condition which attract them to visit the place.

The population of the study consisted of all male and female tourists including domestic and international ones who visited the place. The sample size of the study was (195) tourists (64) males and (120) females as well as (11) missing. Table (2) shows the distribution of the population of the study according to gender.

The researcher used a questionnaire as an instrument of this study, to achieve the aims of the study. Therefore, the researcher depended on different literature to construct the questionnaire: Previous studies in general and theoretical framework. The population of the study covered all domestic and international tourists in the wetland. Additionally, data were collected during the period of June- august 2008. The other method has been used in this research in order to accomplish the aims of the study was field study adding to the descriptive analysis. However, for assessing two hypotheses which are:

- a) It seems that people's economic welfare (with regard to their job and income) is influential in attracting tourists
- b) It seems that people's living conditions are influential in attracting tourists the data was collected from mentioned population.

### **Analysis and Findings**

In order to answer the research question of this study and testing the hypothesis, following analysis were done in this study. The influence of historical monument to attract tourist to visit the place is shown in: Figure 4. The figure indicates that historical monuments to some extent attract tourists. Figure5 shows that the excising facilities don't attract tourist since most of respondents state that, those facilities very little or little influence they decision to visit the place- Figure 6 shows the satisfaction of tourists regarding their trip to Chaghakhor wetland. The figure shows that majority of respondents to some extent were satisfy but still quite number of them indicated that they were little or very little satisfy.

Surprisingly, figure 7 shows that there is probability for majority of respondents to visit the place again in future and group of them are eager to visit a place very much although some of them have little or very little desire for future visit. According to the results obtained from table (3 & 4) the  $X^2$  value is equal to 4.48 and in the safety interval of 0.95 the meaningful level equals 0.04 which is less than 0.05. This signifies that between two variants of natural attraction and attracting tourists there is a consequential relationship.

### **Hypothesis Assessment**

Regarding to related assessment of the assumption, the first hypothesis is confirmed. This result shows that people economic welfare (regarding to job opportunities and income rate) influence tourist attraction in these assumption which are:

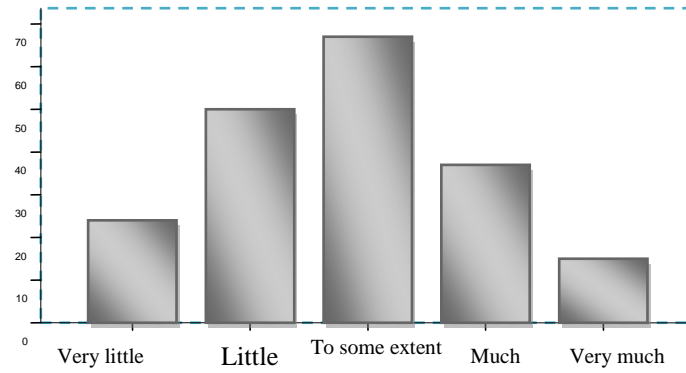
#### **First hypothesis**

**Analysis:** Taking into consideration the results of table 5 shows that the value of  $X^2$  equals 4.2 and in the safety interval of 0.95 the meaningful level equals 0.02 which is less than 0.05. This signifies that between the two variants of people's economic welfare and attracting tourists there is a consequential relationship. Therefore H1 (researcher's hypothesis) is confirmed and considering the existing information, H0 is rendered null.

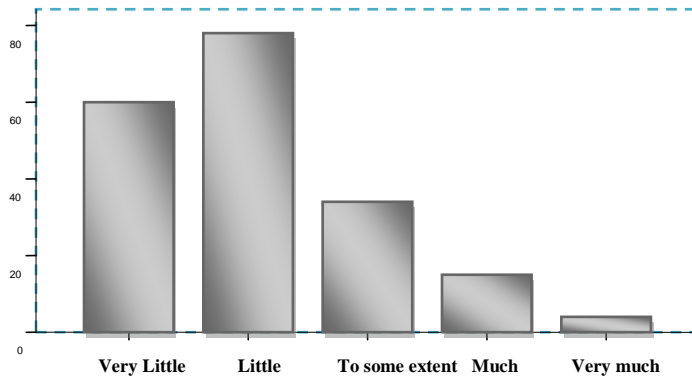
Contrary to earlier research findings, the second assumption which is relating to people's living condition is rejected:

#### **Second hypothesis**

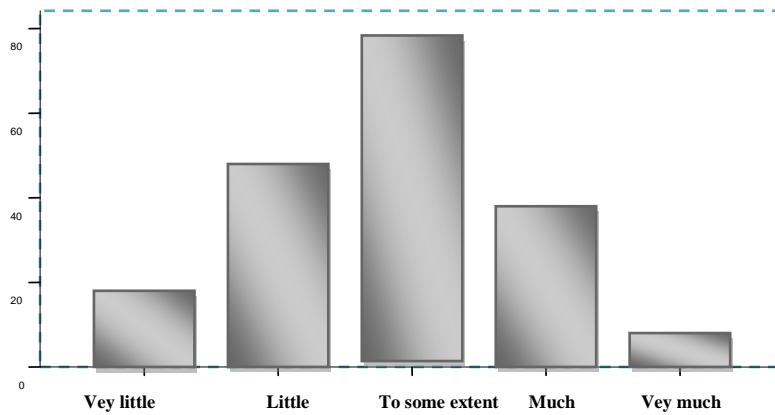
**Analysis:** Considering the results of table 6 the value of  $X^2$  equals 3.41 and in the safety interval of 0.95 the meaningful level equals 0.34 which is more than 0.05. This signifies that between two variants of people's living conditions and attracting tourists there is no consequential relationship. Therefore H1 (researcher's hypothesis) is unacceptable and considering the existing information, H0 is confirmed.



**Figure -4** Historical Monuments to Attract Tourists

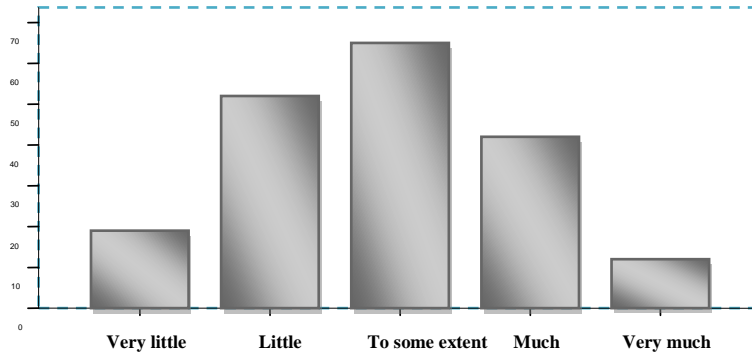


**Figure -5** Integrated Assessment of Existing Tourist Facilities



**Figure -6** Trip Satisfaction





**Figure -7** Future Visit

**Table-2** The Gender Distribution of the Population

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	64	32.8	34.8	34.8
	Male	120	61.5	65.2	100.0
	Total	184	94.4	100.0	
System Missing		11	5.6		

**Table -3** Natural Attractions and Attracting Tourist

Frequency	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
*Attracting tourist	189	97.0%	6	3%	195	100.0%
Natural attraction						

**Table -4** Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.486(a)	4	.04
Likelihood Ratio	4.198	4	.380
Linear-by-Linear Association	2.315	1	.128
N of Valid Cases	195		

$X^2 = 4.4$

Sig = 0.04

df =4

**Table -5** Cultural and Historical Attraction and Attracting Tourist

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
*Attracting tourist Cultural & Historical attraction	186	95.0%	9	5%	50	100.0%

**Table -6** Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.505(a)	4	.02
Likelihood Ratio	8.893	4	.064
Linear-by-Linear Association	3.706	1	.054
N of Valid Cases	195		

$X^2 = 7.5$

Sig = 0.02

df = 4

**First hypothesis**

**Table -7** Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.21(a)	4	.025
Likelihood Ratio	4.170	4	.384
Linear-by-Linear Association	.225	1	.635
N of Valid Cases	195		

$X^2 = 4.2$

Sig =0.025

df = 4

**Second hypothesis**

**Table -8** Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.800(a)	4	.34
Likelihood Ratio	4.362	4	.359
Linear-by-Linear Association	.734	1	.392
N of Valid Cases	195		

$X^2 = 3.$

Sig =0.34

df = 4

## Conclusion

Concluding to this research, environmental potentialities and capacities in wetlands are more profitable for each society especially in this area. It is clear that tourist attraction is related to the environmental ability in each area. Therefore, tourism development in wetland depends on the attractions and the quality of environment. Moreover, attracting more tourists can make different opportunities for residence and conditions of living around wetland. However, as mentioned before Chaghakhor has great potentiality with different fauna and flora as well as other places around wetland for developing ecotourism and attracting tourists. These statements can be leading to make and develop income, job opportunities, and welfare. It is also interesting to note that planning and management in wetlands can be effective for attracting tourists. Meanwhile, ecotourism is an opportunity for different categories such as job, income, and welfare for residence's economic. However, in each society income and welfare by tourism industry will be inevitable. The investigation was determined that individual economic and living conditions are the most important factors for attracting national and international tourists to visit the destination.

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