

# Ecotourism, Expansion, alongside with Dominant Function of Khark (kharg) and Kharko Islands

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**Abstract**—In recent decade's tourism industry is one of main reasons of the social and economical development for many countries; so these countries try to gain more portion of it for themselves. The excessive natural and cultural touristy potentialities in Iran made this country to be one of the most attractive sightseeing areas, although; Iran has got the lowest rate of tourists. Khark Island is about 32 km. It is a beautiful coral reef coast; about 98% of oil export has been done through this place. The ecotourism potentialities of Khark and Kharko Islands (about 3.7km far from Khark) are the reason to consider ecotourism and the main activity in these islands which is exporting oil at the same time. This article refers to way of measuring the geographical coordination of the place, and the potentialities, ecotourism attraction of the islands and introduces some ideas in order to expand tourism in the islands.

**Keywords**—Ecotourism, expansion, tourism, attraction, dominant function, Khark and Kharko Islands

## I. INTRODUCTION

**M**OST of countries in the world are close and immense competitors in order to exploit more of their countries' potentialities; so that they can earn a bigger portion of tourism industry for their own countries and make different job opportunities in the easiest way.

A lot of experts believe that ecotourism and its subdivisions in comparison with cultural tourism have got more benefits and merits. Each of the natural attractions can be a valuable point for the people who love nature.

Ecotourism is the most stable way of sightseeing and the most compatible one; Iran is considered one of the important countries in this matter due to unique attractions, potentialities and its various natures. Moreover the most beautiful natural attractions and its rich cultural attractions have been made Iran among the first ten countries in the world which have been known because of tourism attractions.

Every year Busher province and its islands attract tourists which can have an important role in improving the life in this province.

## II. SURVEY METHOD

Special and strategic position of Khark Island made it to have a specific role in economy of country during the history. The local closed economy has been changed to oil international economy. Oil production and export in Persian Gulf has affected all of the economical activities of these islands[1].

Considering the role of Khark island in exporting 98% of oil in Iran; is affected the island activities. Providing jobs the unemployed youth in the island and Busher, prevention of immigration, making variation in the dominant activity of the island, benefiting from the available touristy attractions and potentialities, increasing the safety of the island via the new activity in the islands which is attraction of foreign tourists, are the main ideas of the present study. The 2 hypothesis introduced in the study are :

Discovering and introducing touristy attractions and potentialities of the island, expanding of ecotourism in Khark and KharKo , activating them can play an important role in increasing the employment, decreasing the immigration ,stability of the island population and increasing the safety of the islands. Considering the ecotourism potentialities of the islands, expanding of ecotourism by emphasizing sea tourism which can be considered an important function besides the oil industry in the island. The method of this research is descriptive analysis and in order to gather the data the attributive and field study have been used Geographical coordination of Khark and Kharko Islands:

Khark island is the center of a section with an identical name in Busher province. This island is one of the most important islands in Persian Gulf, although; the island is not big but it is a very important place because of economy, military, and history. The approximate length of the island is 8km and the with is about 4km; it is located in northern part of Persian Gulf about 57km off the Busher Port; between geographical coordination of 50,15` and 50,20` longitude and 29,12` and 29,17` latitude averagely it is located about 5` latitude and 3` longitude. [2]

Khark Island is about 21km<sup>1</sup> and its altitude is 3m and Kharko island located in the north of it.

All of the area in Khark and Kharko is about 24.5 km<sup>2</sup>; population is about 17000 and about 7147 people are living in the center[3].

The island is located at the end of the simple and broad faults of Zagros mountain.(Province office Busher 1997,120-188) is consisted of calcareous and coral marns which have been appeared from the water about 10 to 14 thousands years ago, smooth and plain surface topography in the northeast the northern coastal strip which its altitude is added gradually toward the south, 25C temperature, the average rainfall is about 266mm, the average humidity is about 62%, the lack of permanent rivers in the island due to the small size of it, the limited number of watershed and basins and also a little raining a week plant cover because of lack of the rain, the limited sedimentary soil ; which are strong, dry and hot climate plants and have got deep roots. Plant cover in most of the pastures about 1/3 of the island and mainly in the northern mountainsides is: banyan, Mexican mesquite, lotus, date, eucalyptus and sea and dry plants, animals such as gazelle, Hindi crow and marine life [4]are the significant natural features of the place[3].

Most of the Islamic historian and geographers in the third century AH in their works mentioned Khark as a populated area , because it has been located near the Arvand and river mouth a good place for diving pearls.

<sup>1</sup>The size of the place has been mentioned differently in various sources In this article the sources are mentioned. A Dutch company was based in Khark Island in 1752; it flourished the island, and changed it to an important port ships came there to buy goods. After the Netherland people left Khark Island and French left Kish Island, English people

replaced them, then after some ups and downs since 1959 different projects have been started and Khark Island has been chosen for exporting crude oil; a lot of changes happened, they were the reason of the island prosperity.

The word Khark has different meanings one of them is: Khark is date from the moment which is edible and is on the tree; another meaning of it is the same meaning as Arabic rock because the island is covered by stones the ancient people call them rocks. On the basis of Security Council votes in Khark (consisting of all of the governmental organizations and the other organizations) legislation was passed in 2007, according to it the island position was not strategic anymore and all of the people can enter or leave without restriction.

*Population in Khark Island is divided to 2 groups*

- i. the residents families either local people or oil company employees
- ii. the working people and oil company employees and contractors

According to statistics the population in 1957 was about 647 and it is increased to 17000 in 2002 [3]

Most of the people religion is Sunnah and Shafei, about  $\frac{1}{3}$  of the people are Sunnah and the rest of them are Shite.

Most of the activities in the island are in terminal companies, continental plateau, Khark petrochemical complex, contractors and other offices, military and police, trading, and other activities such as very limited amount of farming like date, live stock like goats, fishing, and handicrafts related to the sea.

TABLE I

FAMILY DISTRIBUTION AND KHARK POPULATION 1957-2007(KHOSHNOOD, 2007, 86)

Explanat ion	19 37	19 47	19 57	19 77	200 2
Number of families	-	11 36	-	15 62	-
populati on	64 7	54 64	84 53	74 84	170 00
Family dimention	-	41 8	-	71 6	-

*Ecotourism potentialities and attractions of Khark and Kharko islands*

*Geology and Topography*

Khark and Kharko Islands have been made by the inner movement and pressure of the earth coral growth of the islands has been since 14 millennia ago and it is a gentle anticline which has got the average slope of the surface layers is about 10 to 15, calcareous rocks belong to ice age, coral reefs geological changes, seashells and shell marble of small fauna, the other observable interesting feature of the island's stones is the fossil remnants of coral animals and the combination of geological changes which have been the interest of some people in addition its geology, topography, geomorphology attractions for native and international students of related courses ; it can be interesting for others as an ecotourism potentiality[5]. Khark island seashores are made of coral

calcareous stones is like a strip of sand and stones which have been made by sea erosion and weathering The low altitude seashore are in the south and part of the west and also in the northwest of the island and their altitude are about 5m to 500m. Almost all of the parts in the northeast and east seashores have got low altitude which is less than 5m.



Fig. 1 Khark Coastal Reefs



Fig. 2 mKhark Coral Reefs and Geology



Fig. 3 Algae growing on rocks in Khark Island



Fig. 4 Algae growing on rocks in Khark Island

### III. CLIMATE

Climate has been considered the most important factor in improving tourism industry especially ecotourism; in such a

way that travelling in a group depends on the weather condition. During autumn and winter the island has got a mild weather therefore it can be a suitable place for national and international tourists; the lowest temperature in the island is about  $17^{\circ}\text{C}$  and the highest is about  $32.72^{\circ}\text{C}$  the average of the relative humidity is between 51.63% to 56%, and the rainfall is about 4.32mm to 8.12mm in December and January show that the weather is suitable at the end of the year. Streams and seasonal flood channels on the islands are caused by rainfalls because of the soil in these places some of them lead to reedy areas; these are interesting views of the island. Moreover; Mir Mohammad aqueduct as one of the oldest aqueduct has been considered an attraction in the islands; this aqueduct is a natural pond and in summer it dries, is surrounded by reedy area. Khark and Kharko Islands are surrounded by Persian Gulf. Its coral reef coast is considered as a potentiality of natural tourism, and its fine and white sands as a valuable coastal merits provide the development of the coastal marine ecotourism [5].

#### IV. PLANTS AND ANIMAL

One of the most active part of ecotourism industry is going to natural beautiful areas and watching closely different plants' and animals' species especially wild animals in their natural homes. These are attractions for a lot of tourists. Variety of plants' species in Khark and Kharko Islands are the same as south of Iran; therefore strong dry climate plants with deep roots grow there. Although; plants' species in these two islands are limited, but from the middle of November some small parts of the islands are covered in green; which is about  $\frac{1}{3}$  of the islands. This view can be seen mainly in north and west mountainsides and at the same time half of the north mountainside is covered by snow. Herds of gazelles and birds' garden are some examples of the wildlife in the islands; also the marine life on the seashores, floating algae and algae covering the rocks, rocks which are the place of living for different species of fish and mollusk, in these places birds, tortoises and lobsters lay eggs; all of the above mentioned are the ecotourism potentialities of these islands



Figs. 5 and 6 Khark Wild life



Fig. 7 Khark plants life

#### V. CONCLUSION

This island is improving on the basis of oil economy but several factors could have been affective on considering substituting or complementary economical factors in order to vary the economics of the island:

Experts' prediction about finishing the oil sources in future and introducing the substituting Energy sources to the market; it is made clear the need for considering other economical activities such as tourism industry.

Avoiding mono product economy in the island along side with other economical activities.

On the one hand shortcoming of the facilities and recreation for local people and the employee of the oil industry are the cause of travelling to neighboring countries in their free time, on the other hand they cause about thousands of crews and sailors of hundreds ship do not have a chance to get off their ships even for a short time, furthermore; the nonnative employees do not like to settle down in the island with their families.[1]

The local people in Khark Island during the recent decades have few facilities for their free time due to war (between Iran and Iraq) and low active economical situation, lack of facilities and oil industry pollution.

Therefore; it is necessary to pay attention and emphasize on ecotourism; by considering environmental potentialities in cultural tourism and ecotourism not only the problems of the local people will be solved but also it prepares the situation to attract tourists from other provinces in Iran and abroad.



Fig. 8 Sulphurous hill in Khark coasts





Fig. 9 A view of T dock



Fig. 10 Azar Dock



Fig. 11 Advane Cave



Fig. 12 Handi Craft

## VI. SUGGESTION

The new economical opportunities such as ecotourism must be considered as a complementary way of make a living and a variety to the economy of the island along with the continuance of national function of it.

The superiority of local people should be considered in developing tourism and sharing the economical sources and income by active participation of them.

Providing the basic knowledge for tourists in order to know the importance of ecotourism in Khark and Kharko Islands and providing ways to increase staying in Khark and Kharko[7].

Make an effort to decrease the negative effects of ecotourism expansion on the coral reef coasts, the environmental diversity, and the other ecotourism sources, preserve and revive the natural sources and specific emphasis on marine natural life and also improving the living environment for people. Increasing the sources and conferences facilities, seminars, exhibitions, and sport, art, cultural festivals. Developing the culture of the local people, such as marine handicrafts.

Expanding the coastal park in Khark and Kharko Islands, building restaurants and entertainment places on the coastal residence.[8]

Providing and expanding of protected areas for wildlife

Providing recreation and remedial ships among the Islands of the Busher and south of Iran.

Expanding of tourism market in Iran and other countries.

Providing a new face of Khark and Kharko Islands as a destination for tourists in the main touristy markets along with exporting oil.

Khark and Kharko Islands have got a lot of potentialities on the basis of tourism especially ecotourism, for example; coral reef seashore, marine life, natural views, and etc. Each of these potentialities can attract specific group of foreign and Iranian tourists in accordance with their interests; and providing a permanent condition for tourism in these islands.

Factors such as various natural touristy sources, different attractions, hospitality of the local people, the most modern oil industry foundations, marine handicrafts, the oil company can be mentioned for improving Khark Island and also the beautiful empty Kharko Island.

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