



## Issues of empowerment of local people for Ecotourism Development: A Case Study: Shir-Ahmad wildlife refuge-Iran

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### Abstract

*The current study aims to explore the feasibility of ecotourism for development of environment of ShirAhmad wildlife refuge with empowerment of local people. The researcher found that the study region since the last decade have been facing the challenging circumstances such as drought, degradation of farm land, heat wave, pests and etc. and which have adverse impact on degradation of postural production and raise the issue of livelihood of the locals people. This situation forced them to go after illegal hunting of fauna in their wildlife and destruction of pastures. The study has pointed out that Shir Ahmad wildlife refuge has a great potential for ecotourism and can attract a lot of tourist each year who are seeking for the great feeling of being surrounded by the nature, based on its nature and existing animal species. Results of this paper are based on survey method (questionnaire). This research study revealed that the local residents have low level of education of their surrounding area. As a matter of fact studies like this in over the world revealed; ecotourism can bring wealth and different job opportunities for the resident of these regions especially local people. On the other hand it has generate positive effect on the agricultural land, reduction of animal hunting and destruction of green species in the region, while encouraging local people to protect the environment. This study revealed that the needs for more detail investigation on the nature and scope of environmental education in ShirAhmad refuge in relation to ecotourism and its results in economic development and environmental protection.*

**Keywords:** Ecotourism, local economy, conservation of resource, protected area management.

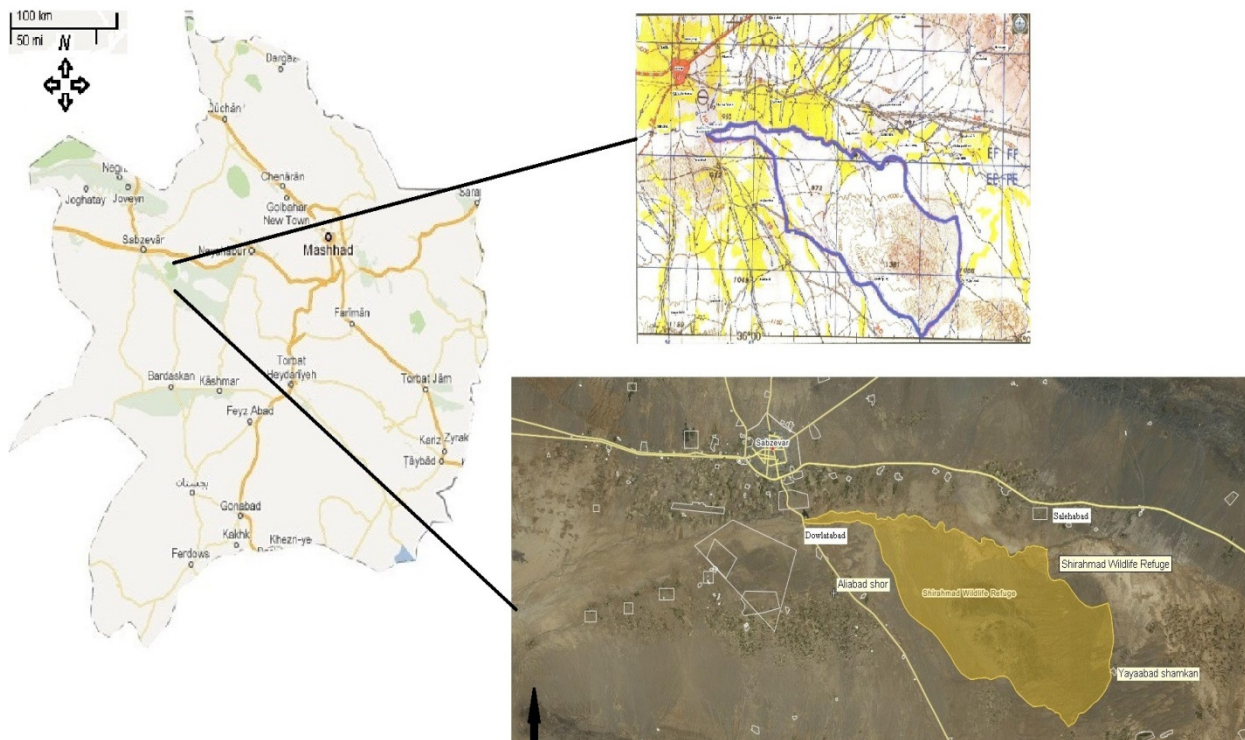
### Introduction

Ecotourism is one of the fastest growing industries in the world<sup>1</sup>. When it comes to compare with mass of tourism, ecotourism is providing found for local people and reduce the poverty by creating different job category and sustainable development<sup>2-3</sup>. Thus, it has been popularly promoted wildlife conservation with economic development, especially among local people in developing countries<sup>4</sup>. The Shir-Ahmad wildlife refuge is one of most important protected area in Iran and situated in North-East of Iran in Razavi- Khorasan province. It is 15 km away from Sabzevar city. The location of the Shir-Ahmad wildlife refuge is such that it offers unique position in the world. Climatology it is situated in the area affected by Mediterranean climate. It is semi-arid zone with high humidity during winter and prevalence of dryness is summer. These conditions are responsible for higher level of biodiversity<sup>5</sup>.

Humans are one part of the ecosystem and mostly by their activities used their surrounding natural resources as contaminate way<sup>6</sup>. Usually in many countries there are existed conflict between local people and livelihood specially near the protected areas, for the areas with high existence of flora has often been managed by top-down approaches, disrupting local people's livelihoods through the control of natural resources<sup>7-8</sup>. Participant of local people in benefits from natural resources are

the technique that some countries used for conservation of environment<sup>9</sup> and there are different methods that are familiar, like the modeling system Multiple Objective Decision Support Tool for Agro ecosystem Management (MODAM). As far as the Shir-Ahmad wildlife refuge is concerned, some research has been done in the past, but only few of them was helpful for local community development and environmental conservation. The aim of this paper is to analyze the ShirAhmad local economy situation in detail and try to find the advisable solutions to these conflicts.

**Study area (Shir-Ahmad wildlife refuge):** The Shir-Ahmad wildlife refuge situated 15 km far away Sabzevar city on north-east of Iran and north-west of Khorasan Razavi province in the range of 57° 42' E to 58° 30' E longitude and 36° 00' N to 37° 11' N latitude. Sabzevar and Neyshabour are the biggest cities about this wildlife refuge. Jolein, Saleh-Abad, Nazl-Abad, Cheshmeh-Avash, Ali-Abad, Saqieh, Yahya-Abad, Hashem-Abad and Dowlat-Abad are representing as most important villages and settlements around this region (figure 1). The main geographical type is plain, desert and foothills. The Government of Iran protected the region as prohibited hunting area from 15 years back when the region was one of the most habitats for deer and Geber and risk of extinction was increased by over hunting and degradation of pasture. By 2001 this area has been upgrade to the wildlife refuge.



**Figure-1**  
**Situation of the Shir-Ahmad wildlife refuge in Razavi-Khorasan**

It is observed that the refuge has rich biodiversity and must be protected. However there is conflict between local people and the wildlife refuge. This must be resolve in the interest of country and also in the interest of global environmental issue. About 95% of local population in the 9 villages is Muslims and the field survey reveals that local mosque play very important role to lead local community, therefore mosque can play significant role to increase local community awareness regarding environmental conservation.

**Table-1**  
**Residential area of the Shir-Ahmad refuge**

Name of village	Position	Distance(km)	Population
Jolein	North	3.5	634
Cheshmeh-Avash	In to the area	50m	235
Haji-Shamsa	North	2	120
Dowlatabad	West	2	1256
Aliabad-Shur	West	2.5	528
Yahya-Abad	East	On boundary line	988

Dependency of local people on this wildlife protection caused reduction and it will definitely lower the treat to natural resources in this wildlife protection.

Ecotourism would be one of the appropriate ways for alternative to direct dependency in this wildlife protection.

The local community that situated near the Shir-Ahmad wildlife protection they have dependency to the area as: i. Entering to the area for collect timber, ii. Some of the farm land situated in the area, iii. The water resources such as Kalshur River, seasonal spring. And wells that situated in this area, iv. Grazing in pastures of the area.

Vegetation of the Shir-Ahmad wildlife refuge, formed a very small part of Iran’s vegetation that to conform to the plants who which growth in dry climate. Fewer amounts of rainfall and very hot weather are one of most specification of this area. The greatest part of flora on this park consists of Halophylous from family of Chenopodiaceae and kind of Plumbagiae, Gramineae and Tmaricaceae. Genus of Seiditzia and Salsola is finding in alkanin soil and kind of Haloxyton and Astragalus could be found in sand form of soil. The most endanger mammal in the area is the Jebeer Gazelle that department of environment try to protect this kind and Determine penalties for hunting that.

Nearest city to Shir Ahmad protected area is Sanbzevar and Neyshabur cities. So it has appropriate position to pay attention to education of local people and increases their knowledge about ecotourism and benefit of that.

### Methodology

Survey of randomly selected stakeholders have been conducted. This kind of method has been used by several scholars as mentioned in the previous literature like Local people and

visitor's survey from July 2011 to August 2011. About 20% of families in each village have been studied in term of age of respondents, education level and their awareness about tourism and environment. Total 9 villages out of 16 villages investigated. The survey questionnaire was distributed between 1303 person in all villages.

## Results and Discussion

Of the 1303 person of the total population 24 and below, between 24 and 36, 36 and 45, 46 and 55, and 56 and above years old counted for: 12, 28, 20, 32 and 17%, represent. However with increasing in number of people there will be more pressure on natural because of the limit economic development. Although the result reveal that most of local people are not educated. Among sample person in school entrance age 55% of them graduated from primary school and about 30% of had opportunity to receive the high school education. Those who received university education are about 1% however there are 20% illiterates.

The research declares that 43% of local community aware about their environment and 57% of them had even minimum information on it. Even 88% of local residents especially who were near this wildlife and they had more interaction with this region believe that conservation of the Shir Ahmad wildlife refuge policy reduced their income due to terminate their traditional knowledge such as hunting, medicinal flora collecting and pasture. About 9% of the respondents think that

the Shir-Ahmad wildlife refuge help them to reduce natural disaster and will absorb tourist to visit their area consequently improve their economic condition.

Among the income of farmers of the ShirAhmad wildlife local people, the traditional crops and livestock account for 44.9% of the total. Cultivation of summer crop counted about 91.1% of the total. Cattle and sheep are most important their livestock has been seen about 68.3%. Diversified planting, selling hand crafts, work in nearest factory are the other economic activities of people in this area. Drought is the most important reason that effect local residence farm land and follow that there is no pasture for their cattle so they have less amount of income, however unemployed young people and financial problem turn them to illegal hunting animal species in the region.

Some of the villages like Dowlat-Abad and Yahya-Abad, because they are near to the Sabzevar City they have better situation for road and transportation. 215 out of 1303 respondents have job related to Governmental or private sector that mostly have better economic condition in compare to other residents in the region.

The Shir-Ahmad wildlife refuge with specific flora and fauna that adapted to living in the semi-desert are have potential to become one of important destination for visitors and tourist as well as it can provide many job opportunities related to ecotourism for local residents in the study area.

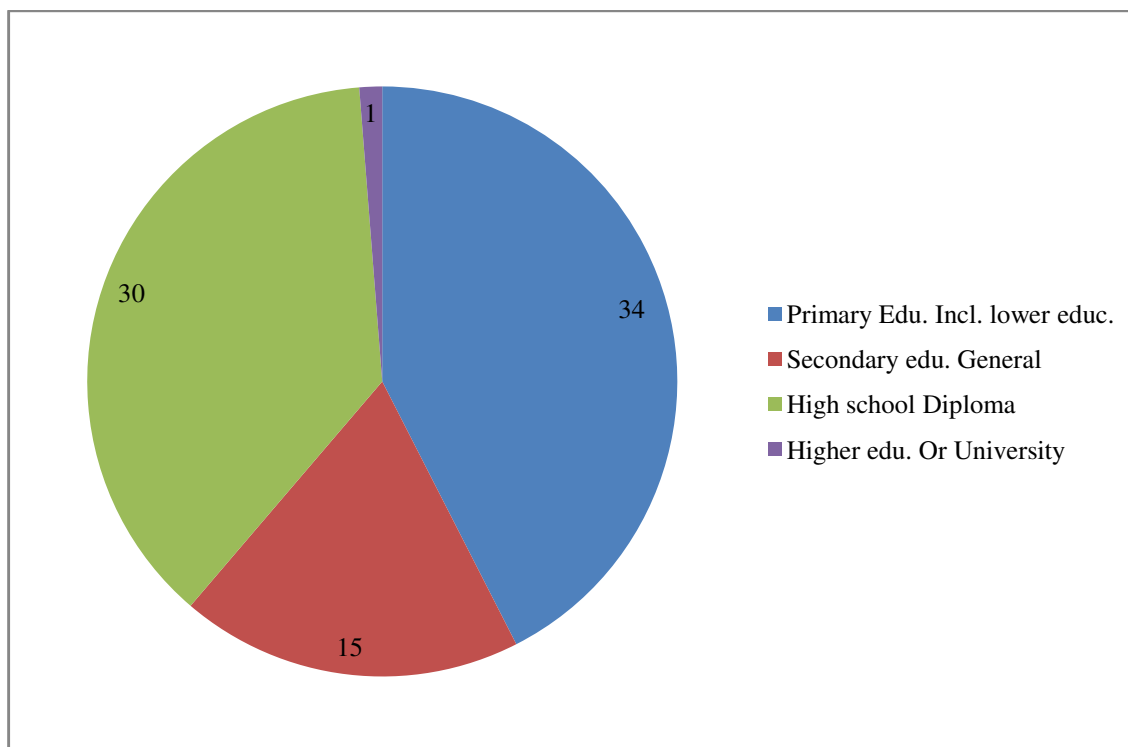


Figure-2  
Education level of local people

## Conclusion

Traditional idea, low education, poverty and weak society mechanism are the main reason for conflict between local people and the wildlife refuge. These factors are not only limited the economy development, also it will be cause of better treatment of natural resources and biodiversity conservation in the region. Participate local people in conservation process is the key for protection of natural resources and helpful to biodiversity conservation process<sup>10,12</sup>.

Mostly local communities are more interested with immediate economic benefits and Iran is no exception to this maxim. To achieve this goal on one hand, some alternatives should be found, on the other hand, to changing the old-fashion the culture of local community should be recognized<sup>13</sup>.

Comparing between education level of respondents and willingness to conservation of environment shows that people higher education level have more attitude towards conservation of this wildlife refuge and they are more supportive in natural resources protection<sup>14-15</sup>. The average of traditional knowledge level of local people in the 9 villages near the Shir-Ahmad wildlife refuge was less than 50% knowledge for conservation of environment. Also education level of local residents has no association with traditional knowledge base. In other words, education has not been able to cultivated environmental awareness. Hence concerned authorities should put efforts to increasing their environmental awareness.

According to the investigation, it's was clearly observed that people there are interested for useful knowledge regarding the natural resources and ecotourism but mostly they are in believed that still hunting of animal species in this wildlife refuge is more profitable than their own business.

**Development of featured economies:** Since The Shir-Ahmad wildlife refuge situated between Tehran (Capital of Iran) and Mashhad one of the biggest religion place in Iran so per year there are large number of visitor past through this area by encourage them to visit Shir-Ahmad, it will helpful for local residents income by creating job opportunities in some related fields such as transportation, cicerone, restaurant, shopping, recreation, etc. and it will be helpful to raising local people environmental awareness regarding protection of their valuable natural environment. However it gives them incentives for a new rationality in traditional resource uses<sup>16</sup>. However, local farmers of the study region get maximum benefit from tourist. The analysis in the previous chapter has shown that the level of awareness of local people regarding to the ecotourism and its benefits is very low and hence it is necessary that the Government and Department of Environment effort to increasing their awareness respect to the ecotourism. It will make negative impacts on biodiversity conservation process. Therefore, incomes from the tourism industry should be used for improving of life being of local people.

Ecotourism plan suggested above may be accepted by local people because they would be benefited if ecotourism has been planned properly. Further, the plan has suggested starting ecotourism practices right from the city of Sabzevar. This may make them more and more responsible traveler so that they will visit the area frequently. It is very likely that Herbal Health Care Centers would provide them recovery if required, rest and leisure in this high quality environment. These points may favor ecotourism practices if designed according to suggested plans.

**Improving the management system of ShirAhmad with the help of local people:** It has been proved beyond doubt that active participation of all the stakeholders in tourism activity is essential for conservation of wildlife refuge. It should not be for the sake of conservation but conservation for development. This kind of strategy can be to achieve sustainability of the present wildlife which has good potential for ecotourism. Thus it may be useful to follow the principle of ecotourism by visitor's shouldering their responsibility and also local people by supporting conservation practices. i. The tourism activity should be such a way that the ecological would be used in non-contamination way. ii. Carbon footprint of the visitors should be kept low as far as possible. iii. Significant part of benefit out of tourism activity should be shared by local population. iv. Encouragement should be given to the local traditional knowledge about food habits, health care and agricultural practices.

**Mechanism building: the fundamental solution:** The study has observed mainly how ecological resource is being eroded. This is well reflected the results of water analysis of the pond and subterranean in the Shir-Ahmad wildlife refuge and also by floral study of the area. Ecological conservation starts from conservation of soils, water and species. This can be possible by changing the attitude and behavior of the stockholders. The study has also observed that there is conflict between local community and wildlife area because of improper interaction with the precious wildlife resource in the form of the Shir-Ahmad wildlife refuge. It can be resolved by promoting ecotourism practices. Thus, it may be concluded that ecotourism practices if properly planned according to the strategy mentioned in the study can be able to conserve the wildlife refuge. According to the proposed strategy it is expected that the present biodiversity resource can be utilized in the better way so that sustainability of the sanctuary of study would be enhanced. It is in this sense, the hypothesis stated in the beginning of the study and proved under basis of present work.

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