

**SUSTAINABLE ECOTOURISM DEVELOPMENT:
PRINCIPLES, POTENTIALS & PRACTICES IN INDIA &
IRAN**

Sayed Ebrahim Mousavi*

Dr. G. M. Pondhe**

Dr. Ravindra G. Jaybhaye***

Abstract:

Tourism or ecotourism is inherent desire of human beings, which developed with the progress of human civilization. Every man on this planet earth is very fond of tourism, hence always attracted towards nature. The mountains, hills, valleys, oceans, rivers, lakes, islands, waterfalls, forests, wild animals, birds butterflies etc. have become important attractions for the Eco tourists. The attraction towards nature is increasing day by day due to ever increasing urbanization, environmental pollution, deforestation, loss of biodiversity and natural sites. This paper focuses on Sustainable Ecotourism Development. It stresses on three shafts of SED including principles, potential and practices involves specifying the objective of sustainable development of ecotourism in Iran (Zayandeh Rud River) and India (Mulshi Lake) and identifying the internal and external impacts that are favorable and unfavorable to achieve that objective. In conclusion, all tourism-related activities should be well planned, located, designed, and managed in an environmentally friendly and culturally sensitive manner so that the environment is not congested, polluted or degraded and there no social tension.

Keywords: Sustainable development, Ecotourism, Benefits

* Department of Environmental Sciences, University of Pune, India

** Department of Environmental sciences, P.V.P College, Ahmadnagar, India

*** Department of Geography, University of Pune, India

Introduction

Tourism is one of the world's fastest growing industries and is a major source of income for many countries. Being a people-oriented industry, tourism also provides many jobs which have helped revitalize local economies. However, like other forms of development, tourism can also cause its share of problems, such as social dislocation, loss of cultural heritage, economic dependence and ecological degradation. Learning about the impacts of tourism has led many people to seek more responsible holidays. These include various forms of alternative or sustainable tourism such as: 'nature-based tourism', 'ecotourism' and 'cultural tourism'. Sustainable tourism is becoming so popular that some say that what we presently call 'alternative' will be the 'mainstream' in a decade. All tourism activities of whatever motivation – holidays, business travel, conferences, adventure travel and ecotourism – need to be sustainable. Sustainable tourism is defined as "tourism that respects both local people and the traveller, cultural heritage and the environment". It seeks to provide people with an exciting and educational holiday that is also of benefit to the people of the host country. This paper explores the characteristics and objectives of sustainable tourism through a series of case studies in India and Iran. It also helps identify ways in sustainable tourism.

Method and Material

The methods which are used in this research are combination of librarians and documental, descriptive and observation methods. The information was gathered through primary and secondary data, doing interviews with tourism related people and authorizes in Iran and India. Site selection was done keeping in mind the importance of research which should be implemented for promoting sustainable development in the rapidly increasing tourism pressure in Mulshi lake of Pune District, Maharashtra and Zayandeh Rud river of Isfahan, Iran which are different in comparisons to other common ecotourism ventures like a National Park. Sites are selected by consultation with Research supervisor and after proper inspection of the areas. These sites were selected on the basis of being diverse ecosystems with predominantly indigenous populations, which are the selling propositions of ecotourism.

Fig (1) Location of study Area (Mulshi Lake)
Area (Zayandeh Rud River)

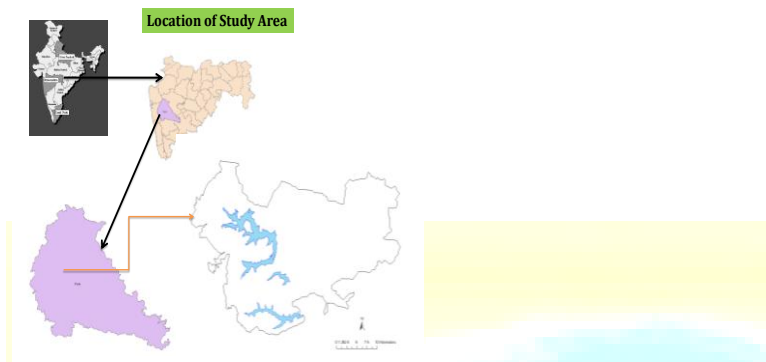
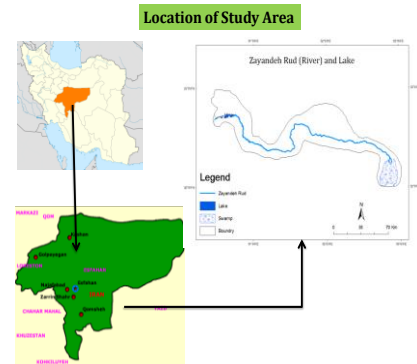


Fig (2) Location of study



The researcher gathers the required data from documentation, archival records, interviews and direct observation. The documentation and archival records were gathered from a variety of sources in Isfahan, Iran and Pune district, India. Fieldwork notes were made during and immediately after each interview and observation session. Observation in this context includes listening as well as looking, everyday face-to-face interaction, and group meetings (with the local community) that depend heavily on both verbal and visual behaviors. In naturalistic observation, observers neither manipulate nor stimulate the behavior of those whom they are observing and this is known as pure or direct and non-participant observation. Observations are made and recorded during fieldwork. The observations are useful in clarifying data especially during visits after interviewing the respondents. It has been the endeavor of the author to make an empirical study, by analyzing and critically examining the relevant statistics, collected from primary as well as secondary sources. Primary data have been collected by using structured questionnaire, personal interviews, discussions and observations. Secondary sources include published and unpublished sources. Published sources are newspapers, reports of WTO, ITDC (Indian Tourism Development Corporation), and official publications of national and international tourism bodies including Central and State Governments. Unpublished sources viz., the records maintained by the Government and private hotels, studies undertaken by research institutions, scholars, executives and economists have served the purpose. The research design and methodology with respect to the sample size, its composition and susceptibility for the selected statistical tools and procedures have been strongly influenced by the inherent characteristics of the respondents in study areas. Different techniques were used for gathering

data from different respondents. The study includes the rural community, local institutions and government officials (Iran and India). The study also consists of both illiterate and literate people. The primary data were from the semi-structured interview and field survey for catch tourist and know the waste generation, floral and faunal biodiversity. Interviews and Questionnaire were two important methods for gathering data in present study. GIS was another essential tool for this research.

Results and Discussion

The data collected through questionnaire and interviews indicated that when interviewed 30% tourists said that they visit Mulshi lake weekly, 30% said monthly and 40% said yearly, While as in case of Zayandeh Rud river, 52% tourists confessed by visiting river on weekly basis, 32% monthly and 16% on yearly basis (Fig.3). Tourists are mostly coming in groups accompanied by friends 48% followed by family members (32%). In Zayandeh Rud river families visiting the river are scoring the highest of about 74% followed by friends 26% (Fig. 4). The number of visitors and their frequency was depending on the holidays, particular auspicious days, temperature, season, rainfall and many other factors. The people from 25-35 age-groups are more coming to Mulshi Lake while as in case of Zayandeh Rud river people from 35-45% were observed in the highest number. Tourists from both the study sites were found educated. The visitors are mostly day time and coming from nearby areas, no foreign tourist was observed during the study. The people visiting both the study sites were mostly found to be appreciating the natural beauty of the areas and when asked to tourists their purpose of visit in both the sites, enjoying natural beauty was the main answer (Fig. 5).

Fig. 3: Frequency of visitors to Mulshi Lake Fig. 4: Frequency of visitors to Zayandeh Rud River

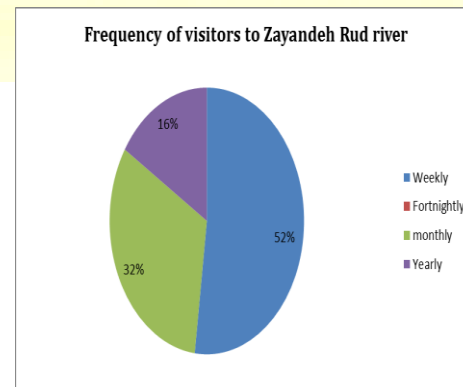
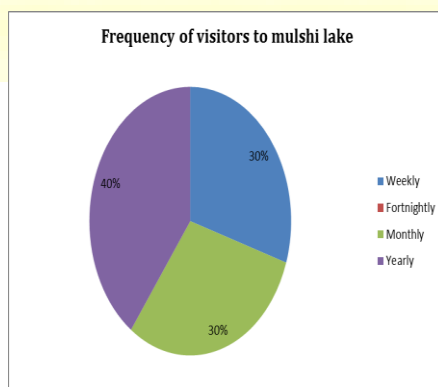
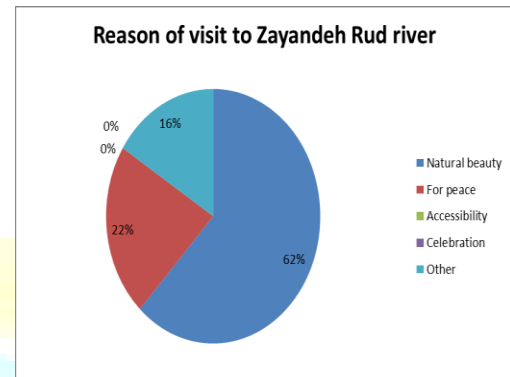
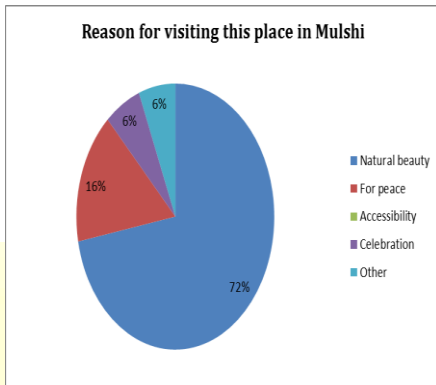


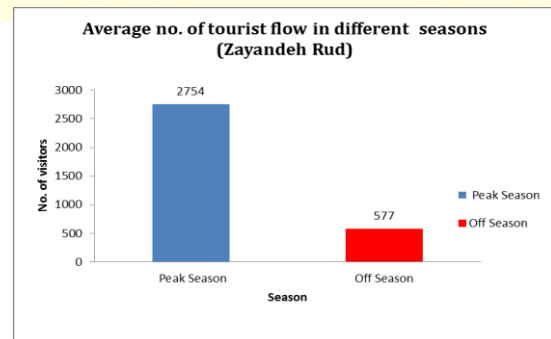
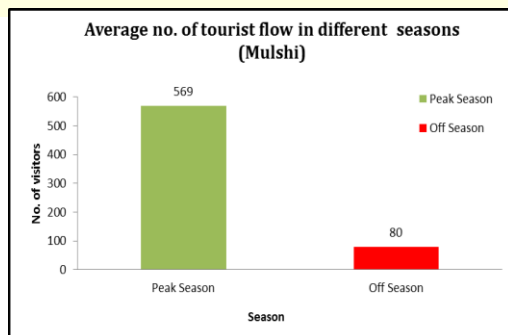
Fig. 5: Persons accompanying the visitors to Mulshi Lake Fig. 6: Reason for visiting this place in Zayandeh Rud River



Seasonal importance of the study sites

The season plays an important role in case of ecotourism as it has been found that majority of the visitors in both the study sites are coming for nature seeing including flora and fauna of the sites. Both the study areas are quite distant from each other in case of seasons, in which Mulshi Lake has three seasons a year which are summer season, monsoon (rainy) season and winter season where tourists prefer to visit in rainy season more and is considered as peak season for tourism. While as Zayandeh Rud has four seasons a year which are spring season, summer season, autumn season and winter season. In Zayandeh Rud river end of spring season and summer season is considered as the peak season for tourists. The data recorded through questionnaire revealed that around 88% tourists prefer to visit Mulshi Lake in peak season and only 12% were observed in off season. In Zayandeh Rud River, approximately 80% tourists were found to visit the ecotourism destinations along river side in peak season while as 17% tourists visited in off season (Fig. 7

Fig. 7: Average number of tourist flow in different seasons in Mulshi Lake Fig.8: Average number of tourist flow in different seasons in Zayandeh Rud River



Facilities available in the study sites

In Mulshi Lake, electricity is available at most of the places by Tata Power, but is limited by economic condition of the family. The available electricity has load shedding problems (9hrs a day). The telephones and mobiles are present in almost every village. At many places coin-box telephones are also available. The LPG is used by some families, mainly educated ones. Some private owners offer lodging facilities to tourists, but these are of low standard (Fig. 9) which is one of the reason tourists are hindered to visit again Mulshi lake and such tourists which are coming from long distances, mostly avoid to come to Mulshi. Along the Zayandeh Rud River all the facilities needed for the tourists are available including 24 hour electricity, phone and internet connections, drinking water, shopping places and worship places at every corner of viewpoint is at ease for all kind of tourists (Fig. 10). In comparison to Mulshi Lake, hotels/restaurants were found of good quality in Zayandeh Rud River (Fig. 11)

Fig.9: Hotel and Restaurants location around Mulshi Lake Fig.11: Hotel and Restaurants around Zayandeh Rud River and Lake

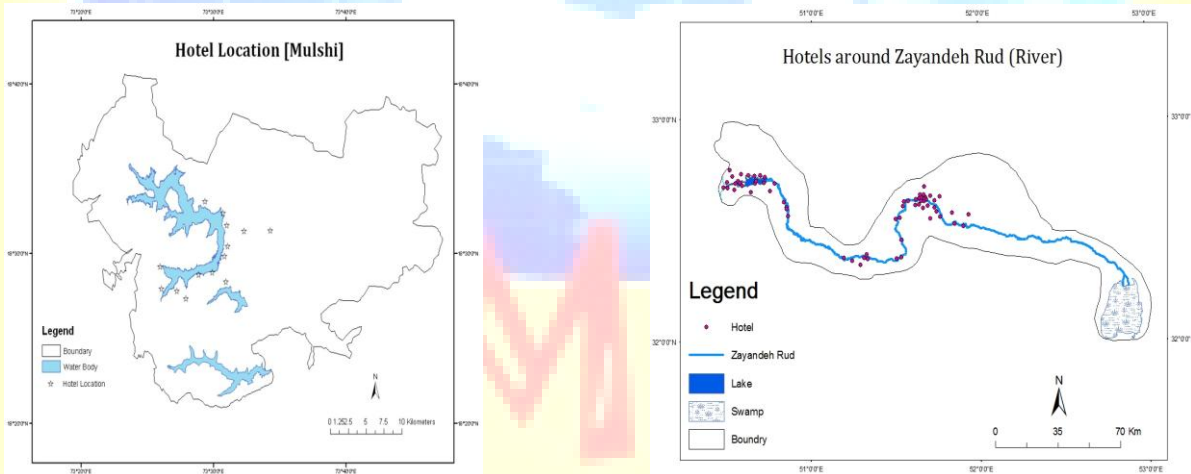
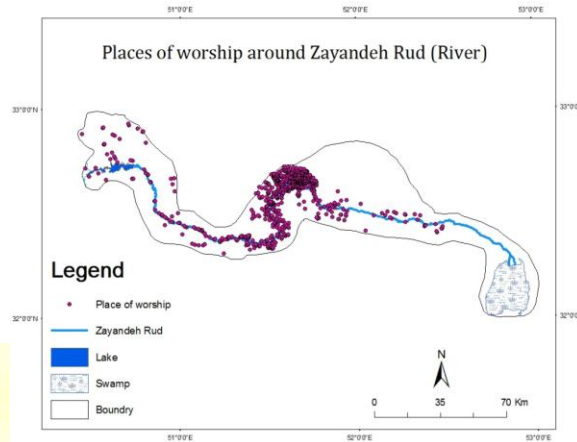


Fig. 10: Places of worship around Zayandeh Rud River



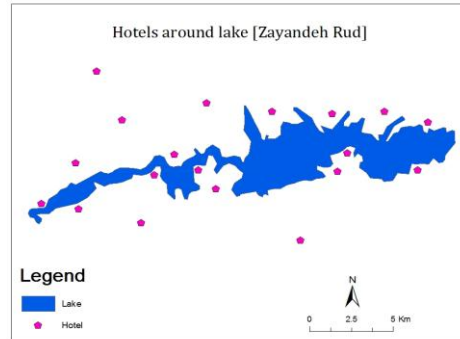
Restaurants of all kinds, also tourists can enjoy local traditional food and other eatables are available everywhere at the tourist destinations along the riverside. Lodging facilities starting from five stars to budget hotels are all time available and also the villagers around tourist destinations are also providing lodging facilities. Zayandeh Rud Lake particularly has of great tourist importance and a good network of hotels, restaurants and other facilities were found around all lake (Fig. 12). But the area around lake is owned as private property and some places in under the control of government, which has prohibited the lake side to those tourists only who are ready to pay. Many tourists were found to be uninterested to pay and enjoy the lake view as private owners have made it more expensive which every type of tourist cannot afford. Below are some of the facilities found along Zayandeh Rud River:

- 1- Chadegan recreational (sport, restaurant, hotel, villa, pool and stores)
- 2- Shaida recreational town (south)
- 3- The village of Tourism Houreh
- 4- Recreational site Houreh
- 5- Recreational complex tourist Houreh
- 6- The village of Tourism Yasechay
- 7-Recreational complex tourist heaven earth-Sadiq Abad village in the sport-restaurant-hotel - Villa-pool-and stores
- 8-Villa complex organization regional water (the game-restaurant-hotel-villa-pool-and stores. . .)
- 9- Villa complex of the Organization of the regional electricity (the game-restaurant-hotel-villa-pool-and stores. . .)

The villages around the dam:

Chadegan city, Abadchy, Mashhad Kaveh, Yancheshmeh, Heydary, Pahna, Azadegan, Ali Abad, Fort(Ghale) Sharogh Topbak, Geshnizjan, Darkan, and Hojjatol Abad. . . .

Fig. 12: Hotels and Restaurants around Zayandeh Rud Lake



Tourist attractions

Several attractive destinations are existing at both the study sites. But in case of Mulshi Lake the viewpoints need further development and improvement. They require prominent directional and informative signs, walking/jogging tracks, vehicle parking facility, pathways and other facilities needed to promote eco-tourism. Because of the specific altitude and geographic location of lake, fog prevails during rainy and winter months of the year. The visitors come to enjoy the fog during night time. But at present there are no adequate streetlights and path lights. Lighting at the viewing spots during night-time is not made available. As a result of this Mulshi lake and surrounding is virtually impossible to visit and use for night walk. The visitors are therefore limited to daytime only.

There are a few other places in Mulshi region which can be counted as good tourist spots such as forts of Dhangad and Koraigad, Valanewadi (lake), Lavmal (Iteau), Taminighats, Mutha, Kolwan, Niwe, Palse (waterfall), Pahuna (dam). Despite its breathtaking natural beauty and proximity to Pune, Mumbai and the thriving tourist town of Lonavala, Mulshi had so far remained hidden from the limelight essentially due to its inaccessibility. The advent of Sahara's Amby Valley City Project has resulted in major road development in the area. Lake Mulshi is now connected to both Pune and Loavala by road, due to which it is one of the most frequented tourist spots around Pune city, especially for day trips.

While as in case of Zayandeh Rud River, Fig. 13 showed that 64% eco-tourists were disinterested to visit again the area because of lack of facilities, 24% tourists were complaining

about lack of proper space to sit and enjoy the nature’s beauty. When asked to local people about their involvement in eco-tourism business, 46% people said due to lack of money we cannot start any business related to tourism and earn through it. While as 22% were found unaware about eco-tourism concept and 20% local want support from the government in promotion of eco-tourism (Fig. 14). For 82% of restaurant owners (Fig. 15), eco-tourism was the only source of income for them and the labors working in their restaurants are wholly dependent on eco-tourism industry.

Fig. 13: Tourists facing problem during stay in Zayandeh Rud River

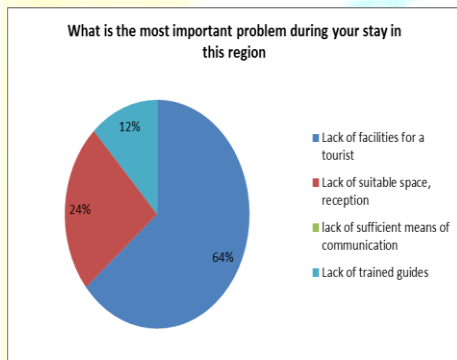


Fig. 14: Local

villagers involved in ecotourism in Zayandeh Rud River

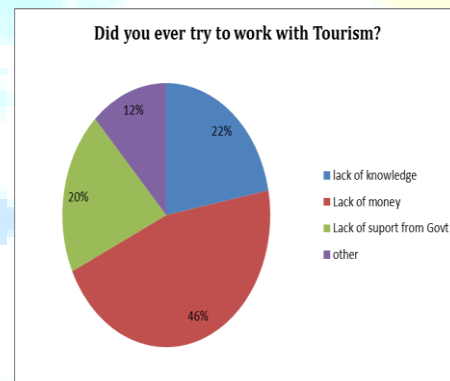
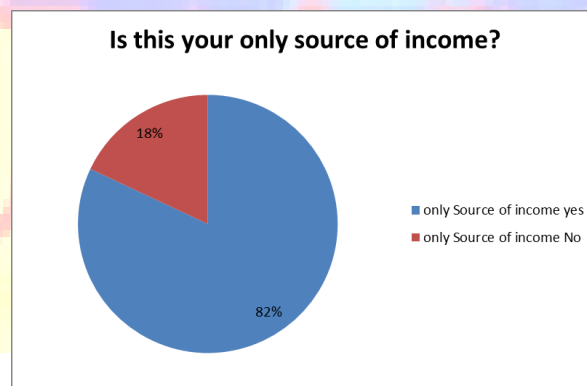


Fig. 15: Source of income of restaurant owners in Zayandeh Rud River



Principles of Ecotourism

The principles of ecotourism developed by the International Ecotourism Society (TIES) are presented hereunder (Shrestha and Walinga, 2003)

- Avoids negative impacts that can damage or destroy the integrity or character of the natural or cultural environments being visited.
- Educates the traveler on the importance of conservation.
- Directs revenues to the conservation of natural areas and the management of protected areas.
- Brings economic benefits to local communities and directs revenues to local people living adjacent to protected areas.
- Emphasizes the need for planning and sustainable growth of the tourism industry, and seeks to ensure that tourism development does not exceed the social and environmental 'carrying capacity'.
- Retains a high percentage of revenues in the host country by stressing the use of locally owned facilities and services.
- Increasingly relies on infrastructure that has been developed sensitively in harmony with the environment - minimizing use of fossil fuels conserving local plants and wildlife, and blending with the natural environment.

Other authors have described ecotourism principles differently but the essence of these principles (Blamey, 2000; Dhakal and Dahal, 2000) is not too different from those mentioned above.

- It should not negatively impact the resource that helps to develop ecotourism in any destination. Rather it should be developed in an environmentally friendly manner.
- It should provide benefits to all parties—local natural resources, people and the tourism industry - with a stake in ecotourism.
- It should extend first-hand information to visitors.
- It should provide educational opportunities for all parties – local communities, government, NGOs, industry and tourists.
- It should encourage all-party recognition of the intrinsic values of the resource.
- It should involve acceptance of the resource on its own terms, and in recognition of its own limits.
- It should promote understanding and partnerships between many players, which could involve government, NGOs, industry, scientists and locals.
- It should promote moral and ethical responsibilities and behavior towards the natural and cultural environment by all players.

Tourism and Eco-tourism potentials in Iran

Iran is a unique country in terms of its tourist attractions and abundant resources. The most important characteristics of the country are its diverse natural and ecotourism attractions, religious, ethical and cultural diversity, its national and Islamic architectural style, diverse climatic conditions and above all its people's hospitality. Iran is not only a nation with reach historical and cultural sites but, it has unique environment and nature in which four season of the year could be observed. There are 17 kinds of climates in the world that 12 kinds of them can be seen in Iran. The numbers of registered historic buildings are 11000 and many historical works and buildings of Iran have been registered in the list of world cultural heritage. According to many foreign, Iran's archeology, cultural heritage, traditions and diversity of nature are the main factors which attract foreigners to Iran. (Rezvani, 1996)

Development of ecotourism practices

Properly understood, the emphasis in ecotourism is on a set of principles and how to put them into practice—on what ecotourism stands for and how these standards are being implemented (Honey, 1999). The establishment of nationally and internationally accepted principles has proceeded at a modest pace, primarily because the process involves stakeholders from many regions, disciplines and backgrounds (Wood, 2002).

Objectives of ecotourism and possible indicators

The main objective in ecotourism development is to ensure having a high quality tourism product is made available in each specific area, with avoiding tourism to have negative impacts on the natural environment or to disturb the plant and animal life. This will entail:

- Identifying suitable areas for tourism development;
- Doing scientific research to determine the carrying capacity of selected sites for tourism activities;
- Implementing monitoring and controlling measures to ensure that the limits of carrying capacities are being considered;
- In the absence of such limits, best-scenario decisions on arbitrary limits should be determined for each site and strictly improved and enforced.

Accommodations for interested tourists in both nature and urban sites are in keeping with the environment and guidelines for the design and construction of tourist accommodation should be developed. Interior construction should be done to the extent possible with natural and indigenous materials. Local laws and their regulation should be developed and improved.

While tourism should completely involve indigenous populations as participants and beneficiaries, their cultural identity must be protected and they should participate in developing policies to achieve the mentioned objectives.

The objectives of Ecotourism consists of studying, admiring and enjoying the scenery and its flora and fauna together with any existing cultural manifestations both in the past and present, found in undisturbed or uncontaminated natural areas (Ecclectica, 2005). Ecotourism again advocates for rehabilitation of damaged lands, restoration of damaged heritage sites and conservation of local biodiversity in order to secure long-term sustainability of tourism. Natural conservation, maintenance against degradation, improvement and protection of biodiversity are some the issues ecotourism strives to achieve for the area in which it operates (Diamantis, 2004).

Conclusion

Ecotourism can clearly create opportunities for spreading the economic, cultural, social and local benefits of tourism to villages, remote areas and national parks, many other high potential ecotourism areas as long as the government policy aims to have more tourism in these areas and the local people have participated in the process. Along these lines, policy-makers should be aware that smaller-scale business operators are more appropriate for activities related to ecotourism and government policies need to support this level of tourism services. Ecotourism directs many opportunities and benefits to local people and some efforts should be made to maximize benefits for the host country, local business and communities specially people living in and adjacent to natural and protected areas. In fact, sustainable development intended to reduce the tension and friction created by the interaction between the various sector of tourism industry, the tourists, the host population, ecotourism and the environment and reach the above mentioned benefits. In conclusion, all tourism-related activities should be well planned, located, designed, and managed in an environmentally friendly and culturally sensitive manner so that the environment is not congested, polluted or degraded and there no social tension. Local communities are involved in tourism and ecotourism planning in the area from the inception of

the project in developing countries and they participate and benefits from tourism and ecotourism. Sustainable tourism development embraces a community involvement and participation.

References:

- Blamey, R. K., (2000), Principles of Ecotourism, Weaver, D. B., (eds), The Encyclopedia of Ecotourism, CABI Publishing, UK
- Ecclectica.2005. Ecotourism and Sustainable Community Development
 - Diamantis. D.2004. Ecotourism: Management and Assessment. Thomson Learning, London
- Honey, M. 1999. Ecotourism and Sustainable Development: Who Owns Paradise? Island Press, Washington DC.
- Rezvani Ali Asghar (1996) Geography and tourism industry, Payame nor University, Tehran
Geography and tourism industry, Payame nor University, Tehran
- Shrestha, S. and Walinga, M., (2003), Ecotourism: Planning and Management (Second Draft), Institute of Forestry, Pokhara.
- Wood, M. E. 2002.Ecotourism: Principles, practices and policies for sustainability. Paris, France: United Nations Environment Programmer
- Bahaire M., & Elliot-White. (1999). The Application of Geographical Information Systems (GIS) in Sustainable Tourism Planning: A Review. Journal of Sustainable Tourism, 7(2), 159-
- Colak, H. and Aydinoglu, A.C. (2006). Determining Regional Tourism Development Strategies of East Black Sea Region of Turkey by GIS.XXIII FIG Congress, Munich, Germany
 - Cooper and Schindler,(2003), Business Research Methods, eight edition, McGraw Hill,Inc.
 - Daniel, L., Samuel, A. and Prah, K. (2009). Management and Promotion of Tourism in Ghana: A GIS Approach.
- Elizabeth Joy Matthews (2002) Ecotourism: Are current practices delivering desired outcomes? Blacksburg, Virginia
- Farsari, Y. and Prastacos, P. (2009). GIS Contribution for the Evaluation and Planning of Tourism: A Sustainable Tourism Perspective.
 - Flick, U. (2002).An introduction to qualitative research (2nded.) London: Sage Publications.

- Gribb, W. (1991). Integrating Visitor Surveys, Environmental factors, and GIS into Recreation Planning: Site Development at Grayrocks Reservoir, Wyoming. GIS/LIS '91 Proceedings, 1, American Congress on Surveying and mapping, US
- Gunn, C.A., and Larsen, Terry R. (1988). Tourism Potential-Aided by Computer Cartography. Aix-en-Provence, France: Centres des Hautes Etudes Touristiques.
- Mansir Aminu. (2007). A Geographic Information System and Multi-Criteria Analysis for Sustainable Tourism Planning. Faculty of Built Environment, University Technologies, Malaysia, Msc. Thesis.
- Moorosi, T. C (2007) Socio-Environmental Impacts of the Lesotho Highlands Water Project, (Unpublished Master's Thesis). University of Fort Hare, Alice
- Rannveig, O. and Micael, C. (2009). A GIS Approach to Evaluating Ecological Sensitivity for Tourism Development in Fragile Environments. A Case Study from SE Iceland. Scandinavian Journal of Hospitality and Tourism, 9: 22–38
- Valentine, G. (2005) Tell me about using Interviews as a Research Methodology. In Methods in Human Geography Guide for Students Doing Research Projects, Harlow, England, Prentice Hall. pp 110-129.