



EFFECT OF FOREST ECOTOURISM ON SOCIOECONMIC CONDITIONS OF LOCAL COMMUNITY

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Abstract

Pakistan is having scarcity of forests, with the total area covered under forest being 5%, while it must be 25%. In spite of the fact that we have to protect and expand our forests, many other alternative land cover and land use practices are going to be more common. Current study is a part of that effort. To have panel discussion and interviews of activists and key persons of the rural areas in the vicinity of major ecotourism spots that is Mall, Bhurban, Patriata 2-3 workshops were arranged in which a semi structured questionnaire was followed to assess the role of ecotourism in the livelihood and socioeconomic conditions of the local community. This study shows that most of the people get 5000-10000 (\$49.30-98.60), rupees increase in the income per month while some earn 11000-20000 (\$108.45-197.19). Even (4%, who have rented houses and restaurants) think that the raise of income is PKR 21000-50000(\$207.5-492.98). The local villager's perceptions about the ecological negative and positive aspects of ecotourism show that the forest based tourism has more positive effects on the lives of people as well as for biodiversity and nature conservation, as it develops the wildlife reserves, promotes the awareness of forests, environment and biodiversity, it also proves a good source of knowledge and motivation of visitors that increases the stewardship, to love and conserve natural resources.

Keywords: Forest, ecotourism, nature conservation

1. INTRODUCTION

Ecotourism is a responsible tourism that generally deals with living parts of the natural environment. Ecotourism focuses on socially responsible travel, personal growth and environmental sustainability. It particularly involves travel to destinations where flora and fauna and cultural heritage are the primary attractions (Sadry, 2009).

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Well managed ecotourism not only supports local biodiversity but it is also believed to be the perfect economic activity to promote the sustainability and development of that forest area and local community. Ecotourism offers tourists an opportunity to interact with nature in such a way as to make it possible to preserve or enhance the special qualities of the site, while allowing local inhabitants and future visitors to enjoy these qualities (David, 1996).

Two conditions must be met during ecotourism, to ensure the successful integration of biodiversity conservation and local economic development: (1) the identification of economic incentives that provide immediate benefits to local people and (2) the identification of economic incentives that are appropriate in space and time to the scale of threats to biodiversity (Dinerstein *et al.*, 2007).

In Pakistan, Murree is a favourite picnic spot for people of almost all parts of the country. It is a popular hill station lying approximately 33° to 34° north latitude and 72° 42' to 73° 30' east longitude, with an elevation of the area ranging from 600 m to 2100 m with a steady rise from south towards north. More than 1000 visitors pay their visit daily in Murree particularly in two peak seasons, hot summer (June-July) and snow fall season (December-January). It is situated about 65 km north of Islamabad. This area is geographically known as "Foot Hills of the Himalayas". It is very important location due to its state forest territory. It comprises of 14032 hectares of conifer forests and 5112 hectares of scrub forests. The vegetation is mostly comprised of Chir pine, Blue pine, and *Sanatha* as under storey. Wildlife comprises of common leopard, rhesus monkeys, and various birds, rodents and mammals. Tourism is a multimillion rupees enterprise in Murree. Most of the local people are associated directly or indirectly to this industry. Hence ecotourism plays a vital role in the improvement of socioeconomic conditions of the local people. Visitors come from all over Pakistan, due to its enchanting beauty associated with its Forests.

On a daily basis, visitors also come to this place to enjoy the serene environment and beautiful landscape. Patriata is also developed as a big tourist resort having many small food huts and small hotels to stay. One of the major attractions is the chairlift and cable car that passes over forests, interspersed with waterfalls and streams, and passes over small mud houses of the villagers living in these areas.

For Pakistan and other such developing countries, there are so many socioeconomic problems, that forest conservation, Park management and provision of recreational spaces for community is not a priority. Supporting Southgate and Whitaker (1994); Khan (2004) has also discussed that states of such countries are already facing a short of financial resources to run their country as welfare state and to protect and conserve their natural resources with sustainable utilization. In such countries the ecotourism can benefit both in conserving natural resources as well as providing economic benefits.

2. REVIEW OF LITERATURE

Although Tourism is called a smoke free industry, it disturbs the life of community and people. People become more conscious about their norms and values. Though forest-ecotourism enhance the economic development of a community living in the vicinity, it also speedup the natural and cultural transformation at a nonstop rate. These changes are mostly undesirable, irreversible and negative environmental impacts; community and societal well-being are inextricably linked to human ecological relationship (Jamal *et al.*, 2006).

The word "Community" is derived from the word "Communion" that means to share common task together. When the people join hands together they can accomplish the big tasks in better way that are sometimes far beyond their potential. The commonly used phrase of community-capitals, that is community and capitals give origin of a new approach that is "commonality". The community can be getting the collective benefits from the forests and forest tourism, the "Collective acquired

assets". This may be a full package of benefits that community can use for itself. Enhancement of community capitals leads to the spatial and temporal transformations of standards of living of local people, this as a result make people look into the problematic areas and rehabilitate the negative impact. If these negative impacts are left unaltered they will lead to the community deterioration (Allen, 2001).

According to Singhe *et al.* 2008, the strict conservation of forest sometimes restrict local people from taking benefits of non-timber forest products and adversely affect their livelihood. Ecotourism and making marketing channels for the sale of NTF and agricultural products will overcome this problem and can enhance their livelihood.

When cosmopolitan people come and share space and time with the locals, attention to their culture, life style and environment, a new paradigm takes place. Amazonians in remote areas gain an inner feeling of social ascension and importance, enhancing both social and human capitals. When the [eco] tourists come to support the locals in their own environment, to listen to their stories, myths, day-to-day challenges and difficulties, and set the locals at center stage during the visit, the tourists have a crucial role in helping these communities overcome social exclusion and feelings of inferiority.

3. METHODOLOGY

For the assessment of socioeconomic changes due to Ecotourism activities, two activist workshops were conducted in which all the key persons in specifically defined areas in the vicinity of tourist resort were invited. The tool used for this study was a semi-structured survey form to be filled by the participants of the workshops and the focused group discussion. The questionnaire (Annexure1) was formulated on the bases of questions related to the data required for socio-economic condition. Prior to the collection of Primary data from the study area, secondary data was collected from the departments of Government sector and non-governmental organizations working in Murree town. This data was collected to be used as base line or a bench mark. By this secondary data socioeconomic condition of the local communities were found out to be taken as a bench mark. This missing link was filled via quarrying by base-line surveys.

Further for the conduction of interactive workshops, small hamlets of the rural areas were selected randomly, that were in the close vicinity of ecotourism spots (Murree, Bhurban and Patriata). The key persons and activists from these selected villages were invited for participation in the workshops where focal group discussions were also organized to determine the above mentioned effects. A semi structured but a comprehensive socio-economic survey questionnaire was given to the key persons to fill in the workshop. The main parts of the questionnaire were containing the questions related to their personal information, i.e. name, age, family type, cast, family size, house structure (mud house or concrete, education etc.). The second part contains the questions related to business related to ecotourism, their existing income and additional income related to ecotourism. The third and most important was the negative and positive impacts of ecotourism on their livelihood, agricultural practices, culture etc.

Local community is not only affected economically but also socially by forest-based ecotourism because a lot of people from different areas and different cultures visit this area. This interference of the visitors affects the area by changing traditions and culture that is sometimes liked by the community and sometimes rejected but it cannot be avoided. All the important aspects of social and economic impacts analysis amassing to forest ecotourism was covered in the questionnaires. That carried the questions about change in agricultural practices, marketing sources, improved varieties of seeds and livestock, soil erosion etc.

The impact of Forest-based ecotourism was finally calculated in monetary terms as well as social terms based on the focused group discussions and questionnaires filled during workshops.

4. RESULTS AND DISCUSSIONS

The results of panel discussions and meetings with Key persons of local community showed that forest ecotourism can support livelihood diversification. The profile (socioeconomic features) of panel discussion participants (Table 1) and the descriptive analysis of 100 questionnaire showed that male respondents comprises of 80% and female 20%. Among them 36% were of the age group 31-45 years while 4% were above 60 and 16% of the age group below 18.

Most of the household are living in joint family system that is 62%. And 46% families have their income in the series of Rs 11000-25000 (\$108.53-246.67), while 30% respondents have income of rupees 26000-50000 (\$256.54-493.34) while 16% respondents have per month income below Rs.10000 (\$98.67).

Table 1, also shows that structure of houses is mixed that is most of the respondents, have concrete houses some have mixed and a few have mud houses. The two tribes (castes) are dominating the area, Abbasi and Rajas. Only 6% respondents were Chaudhary, though this title is not common in this area but with interaction and influence of more visitors coming from interior Punjab the Gujjar tribe is called as Chaudhary. The data about all these factors was taken due to the fact that tourism effect culture and mixing up with other tribes (castes) and changing the way of living of local people.

Table 1: The socio-economic features of the participants

Gender		Family System	
Male	80%	Single family	32%
Female	20%	Joint family	62%
Age (Years)		Other	06%
Below 18	16%	Caste System	
19-30	24%	Raja	28%
31-45	36%	Abbasi	56%
46-60	20%	Chaudhry(Gujjars)	06%
Above 60	04%	Other	10%
Family Income (Rs)		Education Level	
Below 10000	16%	Primary	22%
11000-25000	46%	Secondary	36%
26000-50000	30%	Higher secondary	14%
Above 50000	08%	Graduates	16%
House Condition		Master	08%
Mud	22%	Others	04%
Cemented (Pacca)	52%		
Cemented n Mud Mixed (Kacha-pacca)	20%		
Other	6%		

Table 2 shows that the current scenario of the infrastructure includes the electricity and roads access that is 86% people's response. 14% respondents denied the presence of roads to their villages. It means the people near the tourism spots find most of the facilities while people away from picnic spots are deprived of most of the facilities.

Table 2: Current scenario of Infra-structure

Sr. No.	Infra-Structure	Yes	No
1	Electricity availability	100%	--
2	Roads access	86%	14%
3	Picnic spots awareness	90%	10%
4	Stream/canal systems	--	100%
5	Gas facility	--	100%
6	Drainage system	02%	98%

One of the major objectives of this study was to find out the local villager's perceptions about the ecological negative and positive aspects of tourism on local community. Table 3 shows the responses of the participants against these positive and negative impacts of the tourism activity. The negative impact includes destruction of vegetation, disruption of breeding habits, reduction in wildlife species and the most important factor for the locals was the reduced access for wood and timber.

Table 3: Impact of ecotourism on ecological aspects of the area

Positive Impact	Negative Impact
Creation of wildlife reserve	Reduction in wildlife species
Habitat restoration	Disruption of breeding habitats
Justification for park protection	Change in wildlife migration patterns
Government protection of natural resources	Reduced access for wood and timber
Production of more wild plant species other than pine trees	Diversification of natural resources
Increased stewardship	Changes in land use pattern in the areas
New agricultural technology	Destruction of natural vegetation

Participant's response show that the Forest based tourism has more positive effects on the lives of people as well as for biodiversity and nature conservation. Tourism develops the wildlife reserves. Tourism promotes the awareness Forests, environment and biodiversity so it increases the stewardship. Some visitors also belong to research institutes from different areas that are coming for the research purposes, students from different universities and research organizations spend their leisure time with local community that share their knowledge and suggest different modern agriculture practices, that enhances the knowledge about the agriculture technology, and culture of the area.

The respondent's view about economic aspect is obvious from the table 4 that forest tourism has promoted their businesses, and employment opportunities are increased, so the income is increased. As more than a million populations is increased in every peak season the Government has to increase and improve the social sector services in this area. The most important being the health services, availability of markets, developing main roads to have easy access to tourism spots etc. But more frequent link with the outside world has positive as well as negative impacts. Economically local export and import of the goods and services improve their income while more exposure to a large number of visitors has deteriorated social culture and traditional patterns.

Table 4: Economic impacts of ecotourism on social aspects of community

Sr. No.	Aspects	Yes (%)	No (%)
1	Employment generated	92	08
2	Income increased	96	04
3	Business opportunities increased	94	06
4	Awareness raised	98	02
5	Education and health facilities increased	80	20
6	Skills enhancement opportunities increased	94	06

7	Market become available	96	04
8	New varieties of crops	92	08
9	New pattern of farming increased	22	78
10	More link with outside world	76	24
11	Land slide due to construction	86	14
12	Soil erosion	94	06
13	Deterioration of social culture and traditions	76	24
14	Disappearance of animal or plant species	96	04

While this area is more prominent and an attraction for NGOs and other research organizations, many residential trainings and workshops are organized. Study visits are also arranged in the nearby villages so it affects agriculture pattern and improve crops NGOs have developed guidance and demonstration plots of apple orchards and other fruit varieties due to which human resource of local area is developed.

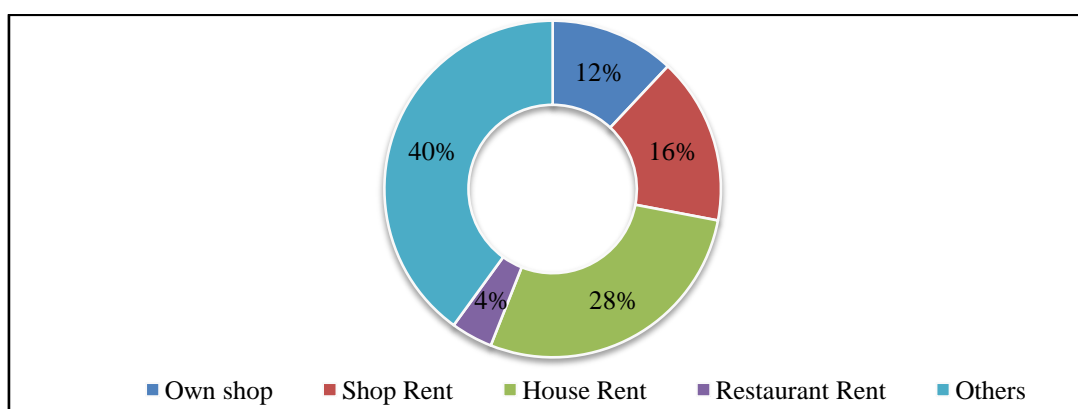


Figure 1: Source of earning through ecotourism opportunities

All the participants were of the view that forest based ecotourism has opened the doors of businesses and vast opportunities for income generation. As described in Figure 1, most of the people (40 %) are involved in one or the other business activity. 12% participants answered that they have their own shops in the market particularly near picnic spots. 28% have houses that are given on rent in peak seasons, 16% have given shops on rent, 4% have given restaurants on rent. Hence the tremendous opportunities of business and income generation activities have increased the income of the local people. (Figure 2).

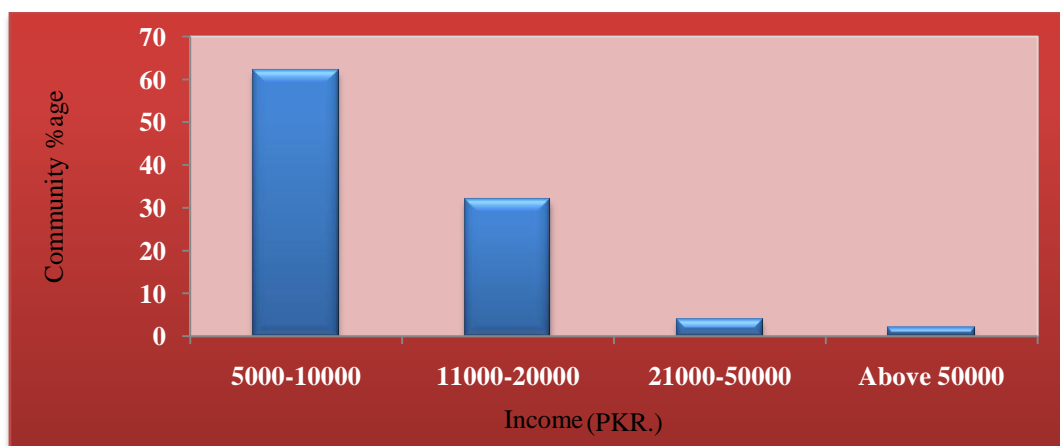


Figure 2: Income generated through ecotourism opportunities

According to 62% participants, 5000-10000 (\$49.30-98.60), rupees increase in the income per month can be attributed to Forest based ecotourism. While according to 32% participants the raise of income due to Forest based ecotourism is 11000-20000 (\$108.45-197.19). Some of the participants (4%) even think that the raise of income is PKR 21000-50000 (\$207.5-492.98). This group belongs to people who have been involved in house rent or Restaurants on rent during the tourist peaks seasons.

The results showed that the 52.78 % visitors preferred Murree Hills resort for the enjoyment of flora and fauna and natural beauty while 32.78% for general environment that also included the security issue. F distribution at 95% interval shows significant relationship between the responses of question about specific objective that was to enhance knowledge (Kausar *et al.*, 2013).

5. CONCLUSIONS AND RECOMMENDATIONS

1. Livelihood of people depends upon forests. So strict conservation that restrict the provision of wood and other non-timber benefits should not be done.
2. Ecotourism development should be done on scientific bases that not only protect natural resources from deterioration but also develop love and importance of natural resources.
3. More facilities should be developed in the tourist's resorts, to attract tourist and other investors to invest in ecotourism activities and develop ecotourism as economic as well as conservation industry.

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Annexure 1-Interview schedule

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S. No. _____ Date _____/_____/2012

Name of Respondent----- Age of respondent -----
 Name of village----- Name of Union council-----Distance from
 Murree-----Km. What is the nearest tourist spot-----What is the distance of your
 village from this tourist spot? -----Km

1. Do you have any business link with that tourist spot?
 1. Your shop-----2.shops given on rent-----3.-restaurant-----4.Restaurant
 given on rent-----5.house given on rent-----6.Any other service rendered for income
 generation in tourist area from you or any other family member. -----
2. How much income is generated through this activity per month?
 1. 5000-10000(\$ 49.33-98.67) 2.11000-20000(\$108.53-197.34)
 3.21000-50000(\$207.2-493.34) 4.more than 50000(\$493.34)

(A) Population and human settlement

Total population of the village-----Male-----Female-----

- Age 1:** Below 18 **2:**19-30 **3:** 31-45 **4:** 46- 60 **5:** Above 60
Gender 1: Male **2:** Female
Family Composition 1: Nuclear **2:** Joint **3:** Extended
Ethnic Group 1: Rajas **2:** Abbasi **3:** Chaudary **4:** Others
Family Income 1: Below 10000(\$ 98.67) **2:**11000- 25000(\$108.53-246.67) **3:** 26000-
 50000(\$256.54-493.34) **4:** Above 50000(\$493.34)
Condition of Houses 1: Kacha **2:** Pakka **3:** Kacha Pakka **4:** How many room.--
Education 1: Illiterate **2:** Primary **3:** Pre Matric **4:** Matric – Graduate **5:** Masters **6:** MS/MPhil
7: Others

(B) Health profile

1. What Facilities are available in Basic Health Units?-----

2. What ailments are being addressed in BHU?-----

3. Where the patients are referred in case of complications. What type of diseases/cases is
 usually referred?
4. Is there any private clinics?

(C) Existing infrastructure

1.	Electricity Present	Yes	No
2.	Concrete Roads	Yes	No
3.	Picnic Importance	Yes	No
4.	Stream	Yes	No
5.	Natural Gas Supply	Yes	No
6.	Drainage	Yes	No

(D) Cultural values

1. Social Stratification
2. Profession of Individuals
3. Ownership of Land
4. Caste System

(E) Flora and fauna

What type of wild animals you observed in your village in your child hood? Name) -----

What type of wild animal you observe now days. Is there any change? -----What type of -----

Name some plants which you usually observed in your child hood in nearby forests-----

What type of plans you observed now a days in your nearby forest-----

Do you think some animal and plant species are vanished or diminished (Decreased) form these forests?

(E) Agricultural pattern

Is farming culture changed with the increase of tourism in the area around your village. Yes-----
---No-----

Is this change: 1. Productive or 2. Non-productive

Level of production is more diversified or not

Milk Production increased or Milk Products increased (Cheese, curd , ghee, etc)

Animal type changed goat or cow replaced with buffalo or any other

Crops and vegetables grown in home garden and fields are same as in your child hood or changed now.(more salads, more cabbage, Broccoli, Strawberry etc or any other new variety is grown) or not /

What are Positive impacts of Ecotourism generally or specifically in your village-----

Employment generated, income increased, business opportunities increased,

What are Negative impacts of Ecotourism generally or specifically in your area.

*(Land slide due to construction, Soil erosion, Deterioration of social culture and traditions
Disappearance of Animal or plant species.)*