

**Case Report**

Ecotourism Potential in Gilgit-Baltistan (A Case Study of Khunjerab National Park)

Syed Naeem Abbas¹, Mujeeb Sardar¹, Mamoona Wali Muhammad¹, Yawar Abbas^{2, *}, Rizwan Karim³, Nawazish Ali⁴, Saeed Abbas⁵, Syed Ali Haider²

¹Forest Education Division Pakistan, Forest Institute, Peshawar, Pakistan

²Department of Earth and Environmental Sciences, Bahria University, Islamabad, Pakistan

³Department of Forestry and Range Management, PMAS-Arid Agriculture University, Rawalpindi, Pakistan

⁴Department of Agriculture and Food Technology, Karakoram International University, Gilgit, Pakistan

⁵World Wide Fund for Nature-Pakistan, GCIC, NLI Colony Gilgit, Pakistan

Email address:

s_abbas313@yahoo.com (S. N. Abbas), mujeebsardar@gmail.com (M. Sardar), mamoonawali@hotmail.com (M. W. Muhammad), yawar_zaid@yahoo.com (Y. Abbas), rizwan555danyore@gmail.com (R. Karim), amjadmailik747@gmail.com (N. Ali), baitham.abbas@gmail.com (S. Abbas), alysob66@gmail.com (S. A. Haider)

To cite this article:

Syed Naeem Abbas, Mujeeb Sardar, Mamoona Wali Muhammad, Yawar Abbas, Rizwan Karim, Nawazish Ali, Saeed Abbas, Syed Ali Haider. Ecotourism Potential in Gilgit-Baltistan (A Case Study of Khunjerab National Park). *American Journal of Agriculture and Forestry*. Vol. 3, No. 6, 2015, pp. 253-259. doi: 10.11648/j.ajaf.20150306.12

Abstract: The Khunjerab National Park (KNP) which is one of the highest Parks in the world existing above 4000 meters. A random sampling technique was applied to select respondents. The total sample drawn was 28. A structured questionnaire was used in face to face interviews to collect data. Basically, interviewees included three different groups of stakeholders: KNP management, village committee members, and tourists. Different tourism- related questions were designed for different types of targeted groups, but they generally revolved around ecotourism planning, management issues, and the impacts of the ecotourism project. The statistical analysis was carried out using SPSS 18. The results showed male respondent were dominated i.e. 86% and female were 14%. The majority of the respondents were having diverse occupation categories as 25% of them were each government/semi government and private sectors followed by 21% each from student and business category, and finally 4% each from house wife and retired persons from government and private. 100% of the respondents were literate. Most respondent were well aware about the eco tourism and minimal impacts on the environment. Majority of the tourist confirmed that they like ecotourism, only 5% were not sure. The ecotourism may be enhanced in KNP by importance were destination and facilities (32% each) popularity (18%), price (11%) and referrals 7% respectively. Ecotourism is greatly affected by its destination and facilities. An average of about Rs 2000 per day is spent to visit KNP. This will provide an opportunity of employment for local people

Keywords: KNP, Ecotourism, Benefits, Environment, Income

1. Introduction

After the Second World War, development became the focus of many newly independent Third World countries (McMichael, 1996). Projects have contributed to the rapid development of some economies and advanced technology, which, consequently, smoothed the way for the emergence of a number of new industries, among which the tourism industry is an important one consistent with this shift of development thinking, a new cautionary platform of tourism has also

emerged and has started to occupy the dominant position in tourism theories. Tourism, especially mass tourism, was broadly criticized as merely a means used by the developed core countries to continue their exploitation and domination of the underdeveloped periphery (Mowforth and Munt, 1998). Nature tourism is supposed to attract foreign investment in the "smokeless" tourist industry; bring national and international tourists to visit natural and cultural sites; provide local employment for rural population; preserve ecosystems and cultures; and generally solve the ecological, social, and

political woes that hinder sustainable rural development. (John, 1999).

The word tourism stands for any activity, which takes place when a tourist travels. This encompasses everything from planning of a trip, travel to the place, stay, return and the reminiscences afterwards. Tourism also includes the activities, which the traveler undertakes as part of the trip, the purchases and interaction, which occurs between the host and the guest. (Nadeem, 2001). The developed countries emphasis environmental protection and socio-cultural aspects of ecotourism, while developing countries are more focused on economic perspectives in developing ecotourism (Lindberg *et al.*, 1997). Several established definitions and conceptualizations of the term 'ecotourism'. In spite of the inherent contestability of the term, several orthodoxies are beginning to emerge (Agha, 2005). Integrated tourism, to be successful, must promote sustainable development by establishing a durable productive base that allows local inhabitants and service providers to enjoy rising standards of living," wrote David Barkin in 1996 (Agha, 2002).

Ecotourism is the travel to enjoy the world's amazing diversity of natural life and human culture without causing damage to either. A vital requirement is that visitors should show respect for both the environment and the people who live in it. Above all, the tourist industry has to remember a central precept: do not kill the goose, which lays the golden eggs. (Crispin, 1994). Ecotourism involves visiting natural areas with the objectives of learning, studying or participating in activities that do not bring negative effects to the environment; whilst protecting and empowering the local community social and economical. (Cristina, 2004). Tourism is the largest industry in the world. In 2004, according to the world tourism

organization, countries made more than six hundred billion dollars from their tourism industries. To get an idea of how big is this amount, remember that Pakistan is trying to get its total exports reach \$17 billion mark this year. Events like 9/11 derailed the growth of tourism for some years but this industry is again growing at the rate of ten percent internationally. Pakistan's earnings are around \$190 million out of an industry of six hundred billion dollars, around hundredth of a percent. Although, it is growing at a healthy rate in the last few years, the overall amount is still very small even compared to countries like Sri Lanka and Maldives (Hussain, 2006).

Tourism activities in the region have been heavily based upon the northern areas outstanding landscape and dramatic mountain scenery; itineraries featuring the region's wildlife or the Gilgit-Baltistan (GB) unique cultural in archaeological heritage have been relatively less common (IUCN, 2003). Ahmed (2003) tourism sector is one of the major contributors to the economy of the NA's, though no official statistics are available but it is estimated that more than 50% of the international tourists arriving in Pakistan visit GB (Ahmed, 2003).

Tourism is developed in an ecologically, environmentally, and culturally friendly manner with optimal economic gains. Empowerment of local community, employment is a hot issue in some study. Well planned and managed ecotourism has proven to be one of the most effective tools for long term, encouraging travelers to behave in an environmentally responsible way, sustainable tourism development requires the informed participation of all relevant stakeholders. Some studies discuss ecotourism activities in the area, conservation of important wildlife habitats and ecosystem, the integrated tourism to be successful which must be promoted.

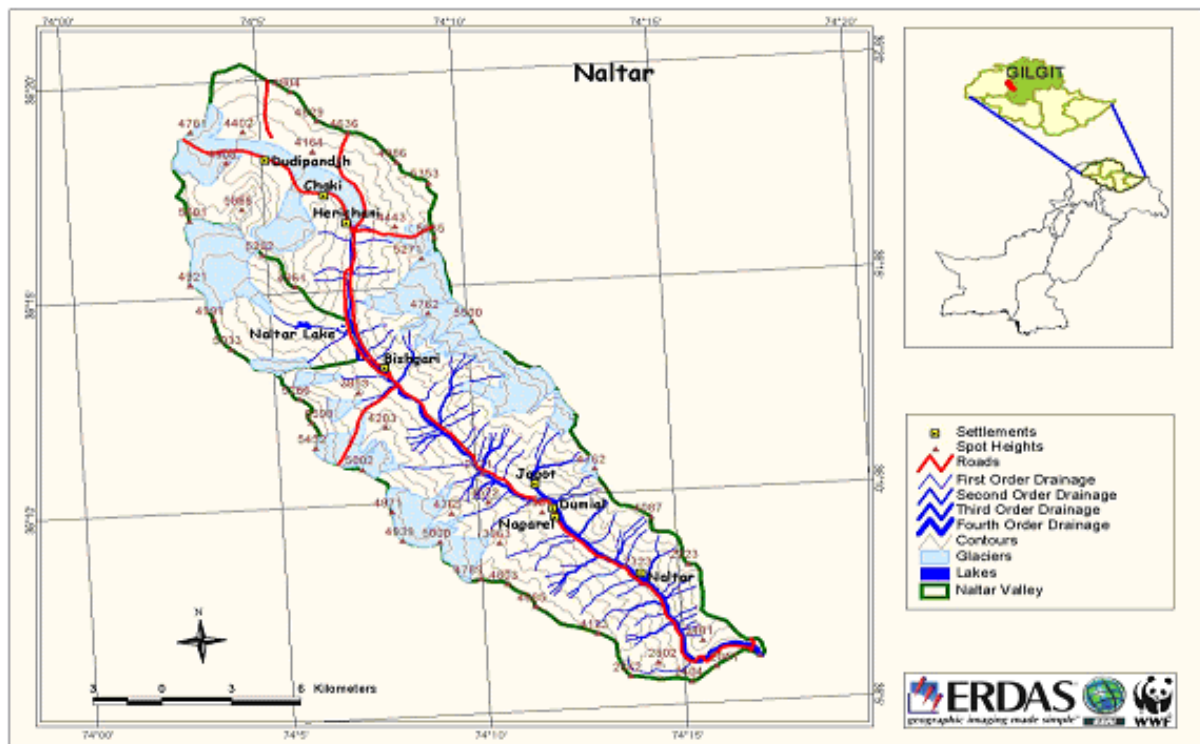


Figure 1. Study Area Map (Source: WWF-Pakistan-GB).

2. Material and Methods

2.1. Study Area

Gilgit-Baltistan are located between 35-37° N and 72-75° E, where it borders Xingiang province of China. Chitral lies to its west; Kalam, Kohistan and Kaghan valleys to the south, the newly independent Republic of Tajikistan is only a handshake away and to the East lies the occupied territories of Ladakh and Kashmir, the place where the three major parts of Asia i.e. Southern Asia, Central Asia, and South east Asia converge. Therefore it is also entitled as the roof of the world. (NADP, 2003). The area experiences climatic extremes with temperatures in the summer exceeding 45°C and winter temperatures fall well below freezing point. The temperature depends on the altitude and geographical position of the area. The minimum rainfall is usually 0.91 mm and maximum 30.75 mm (WWF, 2003). Khunjerab National Park lies between 35°-37° N latitude and 73°-75° E longitude. It is one of the highest Parks in the world existing above 4000 meters elevation. (Map attached Fig. 1). Altitude ranges from 3660 meters at the entrance to the park to over 6000 meters. Khunjerab pass the gate way to China via the Karakorum highway is at 4934 meters. Khunjerab and Shamsal valleys are narrow and bonded by rugged mountain; barren cliffs and steep slopes but open out into plateaus at their heads.

2.2. Material and Methods

Field work Preparation

Research preparation plays a significant role in contributing to smooth and efficient data collection (Bouma, 1996). The preparation work for this research included a comprehensive study of the relevant academic literature; consulting secondary materials that are relevant to the background information about the study area, careful consideration of ethical issues; design of research questions and the establishment of initial contacts with potential participants. This was conducted to guide me to investigate morally, and avoid unnecessary conflicts. According to Scheyvens, Nowak and Scheyvens's (2003), ethical principles are a useful tool to enlighten the whole research process.

In addition to the above preparatory work, all possible participant groups were identified before entering the field. Accordingly, different types of questions and methods were designed for use with the varying groups of interviewees. The research process revealed that local officials who were being interviewed, due to their busy schedules, expected the researcher to be organized and efficient. The initial contacts were made with perceived key participants through emails and telephone calls during the preparation stage, in order to facilitate access to the field site.

2.3. Sampling

Population for the study was Gilgit-Baltistan with sub population KNP. The unit of analysis was sub divided in three

groups namely KNP management, village organization and visitors. The data was collected from the respondents from all these three groups. KNP management was consisting of 68 employees, five respondents were interviewed from KNP management which includes two gazetted officers and three lower staff. One of the other major stakeholders in KNP was village organizations in KNP namely Khunjerab Villagers Organization (KVO), Gulkin Nature Conservation Association (GVO), and Shimsal Nature Trust (SNT). From above three stakeholders, one respondent randomly from each of the village organization was selected and interviewed. The other important stakeholder is definitely tourists, who were visiting KNP, hence the major number of sampled respondents consist of tourist/visitors. The average number of visitors for last five years is calculated and 30% of the number was interviewed.

2.4. Data Collection

A significant element of this research was the collection of primary data for analysis. The process has been discussed in the following subsections.

2.5. Questionnaire

The questionnaire was used for quantitative data collection. Development of questionnaire was based on the information from previous studies and consultation from field officers. The purpose of questionnaire was to generate detailed information about the perceptions, attitude, behavior and awareness of tourist and management towards ecotourism, as well as tourists activities and experiences. It consisted of three sections i.e. information, visitor and management body. Different tourism-related questions were redesigned for differently targeted groups, but they generally revolved around ecotourism planning, management issues, and the impacts of the ecotourism.

The questionnaire was pre-tested and revised. The final questionnaire mainly consisted of close ended questions with multiple choice and dichotomous type of questions.

2.6. Interviewing Respondent

Table 1. Average monthly number of Tourists for last five years.

Year	Number of tourist
2006	47
2007	21
2008	28
2009	17
2010	08
Sampling intensity	30%
Number of Tourist interviewed	20

Source: Secondary data: KNP annual report

All the interviews with the participants started with a short introduction relating to our background, as well as the content of the research, and its purpose. Research also made clear all the rights that participants have before the initiation of each interview, including their rights to withdraw their participation at anytime, to refuse to answer any research

questions, and to receive a copy of the findings of the research as shown in Table 1. The longest interview took approximately one hour, while the shortest one took about 20 minutes, depending on whether the interviewees were available or talkative. The majority of interviewees allowed the team to take notes, and some allowed us to use camera.

The decline in average number of tourist in the year 2010 was observed. It was found because of militancy in Pakistan. More over the formation of Attaabad lake in Hunza valley was also the latest cause as the transportation to KNP via road is blocked.

2.7. Time of Data Collection

The research team stayed in Khunjerab for a period of two weeks from 21 October 2010 to 09 November 2010.

2.8. Secondary Data Sources

In addition to the collection of the above primary data, secondary materials including promotional pamphlets, books, and articles in magazines, local newspaper, VCD and local official documents (e.g. written reports, maps, and layout of the village, etc.) were also employed and consulted, in order to gather information on ecotourism management activities, facilities and attractions, which add valuable insights into ecotourism development issues. In other words, the secondary sources of information supplemented the data collected from the primary qualitative methods.

3. Results and Discussion

3.1. Socio- Demographics of the Respondents

Gender and Nationality of Respondent

Majority 93% respondents were Pakistani coming from different cities of Pakistan namely Abbottabad, Attock, Divalpure, Gilgit, Islamabad, Lahore, Manshera, Multan, Muzaferabad, Okara, Quetta and Swat. As shown in Table 2.

The male respondents were dominated i.e 86% and female were 14%.

Table 2. Distribution of Respondent According to their Gender and Nationality.

Gender	Frequency	Percentage
Male	24	86
Female	4	14
Total	28	100
Nationality		
Pakistani	26	93
Foreigner	2	7
Total	28	100

Source: Survey data 2010

Table 5. Literacy Level of the Sample Respondents.

Sample Respondents	Higher		Graduate		Masters		PhD		Total		
	Frequency	%	frequency	%	frequency	%	Frequency	%	frequency	%	
Tourists	-	-	14	70	4	20	2	-	10	20	100
KNP Mgt	1	20	2	40	2	40	-	-	5	100	100
VCO	-	-	1	33	2	67	-	-	3	100	100
Total	1	3.5	17	60.7	8	28.5	2	7	28	100	100

Source: Survey data 2010

3.2. Profession of the Respondents

The majority of the respondents were having diverse occupation categories as 25% of them were each from government and private. As shown in Table 3.

Table 3. Profession of the respondents.

Profession	Frequency	Percentage
Government/semi government	7	25
Private	7	25
Business	6	21
House wife	1	4
Students	6	21
Retired persons	1	4
Total	28	100

Source: survey data 2010

Private sectors followed by 21% each from student and business category, and finally 4% each from house wife and retired persons.

3.3. Distribution of Respondents According to Age

Age of individual is known to have direct bearing upon his/her attitude towards observing and taking the ideas or the things that happen to come into the sphere of his/her experience. As shown in Table 4.

Table 4. Distribution of respondents according to their age.

	Age Class			Total	Percentage
	Youth (20-35)	Middle age (35-50)	Old Age (50 and Above)		
Visitor	10(50)	10(50)	0(0)	20	71.4
Forest Deptt	2(40)	1(40)	2(20)	5	17.8
VCO	0(0)	2(33)	1(67)	3	10.7
Total	12(43)	13(46)	3(11)	28	100

Source survey data 2010 represent percentage

3.4. Literacy Level of the Sample Respondents

Education plays a vital role in delivering the information and dealing the other person. A literate person can deal in better way as compared to illiterate person, and a literate person is considered to be more enriched in knowledge. Table 5. shows that 100% of the sample respondents were literate. 61% of the sample respondents were Graduate, 29% were Masters', PhD were 7% and 4% were with higher secondary degree.

3.5. Definition and Expectation of Ecotourism

By evaluating the response of respondents the definition of ecotourism can be “minimal impact to the environment” as 53.6% respondent define ecotourism as minimal impact to environment. It was followed by 18% who considered it as travel to natural destination. As shown in Table 6.

Table 6. Definition of Ecotourism.

S.No	Options	Frequency	Percent
01	Travel to natural destination	5	17.9
02	Minimal impact to the environmental	15	53.6
03	Create environmental awareness	4	14.3
04	Provide financial benefits to conservation	1	3.6
05	Provide financial benefit for locals	3	10.7
Total		28	100.0

Source: Survey data 2010

3.6. Tourist Data

Only 39% of the respondents over member of only conservation oriented organization. This shows the lack of importance to the environment conservation issues; however 75% of them have idea of having the national park (Table.7).Majority (95%) of the tourist confirmed that they like eco tourism, only 5% were not sure, probably they were not clear about the concept of ecotourism, on further inquiry how they organized there tour (40%) stated, they organized independently follow by travel agent (25%), independently with organized tour (20%) and nonprofit group organized tour (15%) as shown in Table.7.

Table 7. Respondent and Tourist Data.

Member of conservation oriented organization	Frequency	Percentage
Yes	11	39
No	17	61
Total	28	100
Idea of national park		
Yes	21	75
No	7	25
Total	28	100
Like ecotourism		
Yes	19	95
No	1	5
Total	20	100
Organization of trip		
Independently	8	40
With organize tour	4	20
Nonprofit group organize tour	3	15
Travel agent	5	25
Total	20	100

Source: Survey data 2010

Wildlife is selected as a top priority by the visitor as their expectation in the KNP and ecotourism (Plate 1) followed by environmental programme and then trekking with a ratio of 0.54, 0.28 and 0.35 and percentages are 54%, 28% and 35% respectively as shown in Table 8.

Table 8. Activities that considered to be a part of ecotourism.

S.No	Activities	Grading/rating									
		1	2	3	4	5	6	7	8	9	10
1	Wildlife	15	5	2	2	3	1	-	-	-	-
2	Trekking	-	2	10	2	1	4	4	-	2	-
3	Water falls	-	3	2	2	4	6	8	2	-	1
4	Nature walk	-	2	-	-	-	1	2	14	6	3
5	Environmental program	7	8	1	3	3	1	2	14	6	3
6	Wilderness	2	2	-	3	5	6	1	6	3	-
7	Sports hunting	-	2	4	3	5	6	1	-	2	5
8	Ethnic village	-	-	1	2	1	1	1	3	12	7
9	Mountaineering	1	3	6	6	6	2	3	-	1	1
10	Caves visit	2	1	2	3	-	1	1	2	2	13

Source: Survey data 2010

There is a great diversity found in the opinion of respondent regarding the motivational facilities (Fig.4).



Figure 2. Wildlife watching.



Figure 3. Water falls.



Figure 4. Guest house in Dhee.

57% respondents select wildlife and bird watching activity as the motivational facility and is top priority of most of the respondents. While 28% respondents were of the view that they traveled to KNP for relaxation and sightseeing (While other activities are nearly same in ratios.

3.7. Factors That Influenced Ecotourism in KNP

During the process of interview respondents indicated many factors which influence ecotourism in KNP. Which are given in order of importance i.e destination and facilities (32% each) popularity (18%), price (11%) and referrals 7% respectively.

Many respondents have opinion that if proper publicity and exposure is given to the area it can influence the ecotourism in KNP.

From the views of the respondents it can be concluded that the ecotourism is greatly affected by its destination and facilities provided (32%). The popularity level of area also contribute to a significant level where as price has not much effect.

3.8. Perceived Impacts

While in evaluating perceived impacts of ecotourism, some questions are develop. The perceived impact can be classified in to two categories i.e Tangible and Intangible benefits. Due to establishment of park sport hunting is practiced in the peripheral of park while entry fees is compulsory for every visitor who wishes to visit park. The intangible benefits include construction of infrastructure, environmental condition etc. the condition of intangible benefits are increased to three to four times as it were before according to locals and KNP management body. An average of about 2,000 per day is expenses to visit KNP as record by tourist. This will provide an opportunity of employment and earnings for the local people. Due to this the rotation of capital in market will be faster and inflation in the area can be reduced. Regarding positive impact of the development of eco tourism in protecting environment and creating awareness, the 50% i.e half of the total respondents strongly agreed. As shown in Table. 10.

Table 9. Activities that Motivate an Individual for Visiting KNP.

S.No	Activities	Grading/rating								
		1	2	3	4	5	6	7	8	9
1	Wildlife	16	2	5	2	1	1	-	1	-
2	Trying new food	-	-	1	-	-	1	5	12	9
3	Similar interest	-	-	1	2	2	7	3	5	8
4	Knowledge	2	2	5	7	4	3	3	1	1
5	Historical places	-	6	2	2	8	3	4	2	1
6	Adventure	7	5	4	-	1	3	-	4	4
7	Relaxation	4	8	5	2	5	1	3	-	-
8	Nature based	-	2	4	9	2	3	5	3	-
9	New and different lifestyle	-	1	2	3	2	6	5	2	7

Source: Survey data 2010

Table 10. Factors influence ecotourism in KNP.

S.NO	Options	Frequency	Percentage
01	Destination	09	32
02	Price	03	11
03	Referrals	02	07
04	Popularity	05	18
05	Conservation	-	-
06	Facilities at the spot	09	32

Source: Survey data 2010

Table 11. Ecotourism help in protecting environment by creating awareness.

Option	Frequency	Percentage
Strongly agree	9	32.1
Agree	14	50
Neutral	5	17.9

Source: Survey data 2010

Table 12. Development Potential for GilgitBaltistan.

Option	Frequency	Percentage
Strongly agree	7	25
Agree	19	68
Neutral	2	7

Source: Survey data 2010

The 68% of the respondents agreed that the development of ecotourism in Gilgit Baltistan can fetch foreign exchange, 25% strongly agreed to this statement, where as few as 7% were neutral.

4. Conclusions and Recommendations

4.1. Conclusions

From the analysis, it has been concluded that the study area has the potential of attracting the various tourists and Eco tourists. The area has very high potential of natural resources, which can promote tourism and Ecotourism in the area. Many tourist visit this area every year, which can be increases through further development of the area for Ecotourism and providing basic facilities for the tourists through construction of hotels, roads, transports, electricity, hospitals and awareness among the common people by the government and

NGO's. The government also has to change the western media bias against Pakistan and also provide security for the foreign tourists. Therefore, there is great need to develop the area for Ecotourism, which will not only improve the area economically but also leads to the conservation of natural resources of the area. The government has to provide basic facilities to the common peoples and improve their living standard, which will lead the conservation of natural resources of the area. The local community be involved in the developmental activities and promotion of tourism in the area.

4.2. Recommendations

1. Although and overall policy for development of tourism in Pakistan is formulated and implemented by Ministry of tourism in Pakistan is formulated and implemented by Ministry of tourism, it is imperative that every region with its own distinctive requirements should have its own decentralized tourism policy formulation mechanism inline with the specific requirements of the area with broad frame work of Federal policy.
2. A tourism development cell (TDC) should be established to coordinate tourism related activities in northern areas.
3. Marketing and promotional activities should be undertaken through publications, brochures and developing websites, incentives should be given to the private sector in tourism promotion activities.
4. The state of poor infrastructure should be improved especially the communication, transportation, operation of direct foreign flights to Skardu and Gilgit, and solve power problem.
5. The silk route festival should be made a regular event of the Northern areas. Government should have to arrange some local festivals for the advertisement of the areas culture heritage and handicrafts to the tourists
6. There should be a museum in northern areas to display and promote the artifacts and relics discovered from archaeological sites in Northern areas.
7. A participatory approach should be adopted where the local community should be taken in confidence at every step in the development of Eco tourism as after all it is them who can make a move successful or otherwise.
8. Given the potential role of Northern area in the development of tourism, it is recommended that tourism training institutes should be established. The institute should offer degree, diploma and certificate courses in Ecotourism Management and planning, and hotel Management. Training of local mountaineers and trekkers, and guides should also be given or otherwise PFI can offer these courses.

9. The Government should take strict measures for maintaining law and order in the area to ensure security for tourists.
10. The forest department should make strategy for rotational grazing and improvement of Ranges.
11. Deforestation should be controlled by providing alternatives of fuel wood..
12. Improvement in hotelling and guests houses.

Acknowledgement

Authors wish acknowledge all contributors who give their input during the research period and special thanks to Forest Education Division Pakistan, Forest Institute, Peshawar, Pakistan.

References

- [1] Agha IH. 2002. Ecotourism in Pakistan. A Myth Volume. 22, 110-112.
- [2] Agha IH. 2005. Does Reality Substantiates the Myth of Integrated Tourism. Sustainability Environmental Management and Ecotourism in Pakistan.
- [3] Ahmed B. 2003. Sustainable Tourism and Cultural Heritage; Northern Areas Strategy for Sustainable Development: (background paper).
- [4] Christina A. 1996. Parrot Conservation and Ecotourism in Windward Island Journal Biogeography. 23(3): 5-12.
- [5] Crispin TGC, Flowman T. 1994. Defining the Ecotourism. Diversity of Nature, 2; 31.
- [6] Hussain SA. 2006. The Daily Dawn, (February 20-26 2006) a Report; on "Promoting Tourism" p. 4.
- [7] IUCN. 2003. State of Environment and Development, Tourism Assets in Northern Areas, Hamdard Press Karachi, pp.118-128.
- [8] John N, Shores. 1999. Sustainable Tourism Development Specialist, San Jose, California USA.
- [9] Lindberg BM, Furze, Black R. 1997. Ecotourism in the Asia Pacific Region; Issues and Outlook (bennington, VT; the Ecotourism Society, 1997). pp. 101-105.
- [10] Mc Micheal P. 1996. Development and Social Change. Thousand Oak, CA: Sage.
- [11] Mowforth, Munt.1998. Sustainability indicators for managing community tourism. Science Direct.
- [12] Nadeem I. 2001. Suggestion/Recommendation for Tourism Promotion in Northern Areas of Pakistan. Tourism Report, p.16.
- [13] Smith A, Eadington W. 1994. Tourism Alternatives. Potentials and Problems in the development of tourism. Philadelphia, University of Pennsylvania Press.