

## Resident's Perceptions towards the Economic, Socio-Cultural, and Environmental Impacts of Tourism: A Case Study of Nathiagali, District Abbottabad, Pakistan

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**Abstract:** The tourism industry poses both favorable and unfavorable consequences to the local communities of tourist destinations. This study aims to analyze the economic, social, and environmental impacts of tourism on the host community in Nathiagali. In this study, the data were collected through structured questionnaires from 200 residents of the selected tourist destinations. The study applied factor analysis approach for empirical results. It is found that the local community perceives positive and significant economic and social impacts from tourism in the form of job or business opportunities, raising the standard of living and infrastructural development in the area. On the other hand, tourism brings environmental threats including health hazards from air and noise pollution, environmental degradation, and traffic congestion issues for the local community. Based on the results, it is recommended that appropriate policies are needed at the government and local levels to get maximum benefits from tourism in Nathiagali, Pakistan.

**Keywords:** Local community perceptions, tourism, factor analysis.

### Introduction

Tourism is one of the rapidly expanding sectors in developed as well as developing countries for the past few years. According to WTTC report (2019), travel and tourism contributed 10.4% in global economic activities and it is growing at a rate of 3.9% per annum. Due to positive impacts of tourism, it is considered an engine of growth and development for the economy. The tourism sector also helps to promote employment opportunities in various sectors which are directly or indirectly linked to this sector. Major sources of revenue include income from restaurants, entrance fees of the tourist spots, handicraft shops, and different cultural activities in the tourist areas (Puah, et al., 2018). Bellow et al. (2017) pointed out that residents who are directly linked with the tourism sector obtain more economic benefits from tourism activities in the area.

Previous literature revealed that the tourism industry has intense and wider socio-cultural impacts on local communities (Mbaiwa, 2003; Liu et al., 2012; Mensah, 2012; do Val Simardi et al., 2019). The socio-cultural impacts are summarized as impacts on values, norms, traditions, and impacts on the lifestyle of the community (Tournois and Djeri, 2019). When visitors belonging to different cultures visit the tourist destinations, they get the opportunity to have direct exposure to the culture of the local communities (Mizrahi et al., 2019). According to Besculides (2002) and Zamani-Farahani and Musa (2012) tourism aids to raise the pride and confidence of the local communities and brings integration among various cultures. Simultaneously, there are few negative socio-cultural impacts of tourism as well. One of the major negative socio-cultural impacts of tourism is the increase in the crime rate in tourist destinations (Nazneen et al., 2019). In addition, Golzardi and Sarvaramini (2012) surveyed residents' attitudes

towards tourism development in Niasar, Iran. However, the tourism activities also degrade the environment of the selected area. Boz and Karakas (2017) explained the social economic and cultural impacts of tourism on the host communities of Antalya and Canakkale, Turkey. According to the empirical results, tourism helps to improve the standard of living of the host communities, who learn foreign culture from the tourists.

Tourism is one of the significant factors due to which government and local authorities spend on the infrastructure development of that particular area. Previous studies (Afthanorhan et al., 2017; McCaughey et al., 2018; Zhuang et al., 2019) have mentioned that due to increase in tourism activities government, local bodies focus on the construction of roads, parks, and parking areas to provide better facilities to attract tourists to a particular tourist destination. But at the same time, tourism is also considered a major cause of creating noise, air, and water pollution at tourist spots. An increase in tourism activities imposes pressure on the consumption of natural resources in tourist spots (Mohammadi et al., 2010). It is especially applicable to these areas where natural resources are already scarce, therefore, excessive tourist arrivals may cause more depletion of these natural resources (Stylidis et al., 2014). Meanwhile, massive construction projects, for example, hotels and other sites for the tourists' attraction may cause deforestation and also wipe out natural sceneries from the tourists spots (Brida et al., 2011). Due to tourist arrivals in the peak seasons, these cities suffer from solid waste disposal problems as well. Based on this discussion, the present study assesses the residents' perceptions about the economic, socio-cultural, and environmental impacts of tourism in Nathiagali.

### Materials and Methods

In this study, data were collected from 200 residents of Nathiagali from all union councils through self-administered questionnaires. The data were collected in the peak season (June and July, 2019) to find out about realistic perceptions of the local community. The questionnaire was divided into parts. The main questionnaire collected data about demographic characteristics. In second part, the respondents were asked about their perceptions about tourism impact on economy, socio-cultural life and the environment.

## Study Area

Nathiagali is one of the most beautiful and attractive hilly resorts situated in the middle of the Galiyat range of Khyber Pakhtunkhwa. Nathiagali is famous due to its higher latitude and tall green pine trees which add beauty and charm to the area. The weather is mostly cold around the year and this is the main reason that tourists prefer to visit and spend their summer holidays in Nathiagali. The union council of Nathiagali is divided into nine areas, Donga Gali, Keri Sarafali, Keri Raiki, Malach, Jhansa, Nathiagali, and Pasala Bagan, and Lassan. Due to increasing trend of tourism in the region, the local community has so both positive and negative impacts from the tourism activities in the area.

## Variable Construction

This section discusses the profile of the selected respondents (Table 1), and also describes residents' perceptions about economic, socio-cultural, and environmental impacts of tourism by following the previous studies by Gursoy et al. (2002); Tichaawa and Mhlanga (2015), and Tichaawa et al. (2019).

Table 1. Profile of the respondents

Demographic Factors	
Gender	Gender of the respondent
Age	Age of the respondent
Education	The education level of the respondent
Occupation	Occupation of the respondent
Distance	The distance of the tourist destination

Table 2. Economic, socio-cultural and environmental impacts of tourism.

Impact type	S.No	Statement/question/perception
Economic Impacts of Tourism	1	Employment opportunities
	2	Increase in personal income
	3	Increase in standard of living
	4	Generation of tax revenues
	5	Increase in investment and infrastructure development
	6	Improved quality of local services
	7	Increase in the prices of goods and services
	8	Increase in land prices
	9	Increased influence of foreign companies and investors
	10	Seasonal unemployment
	11	Lower wages due to illiteracy and unskilled workers
Socio-cultural impacts of Tourism	1	Interaction between various communities
	2	Improvement in knowledge and awareness of different cultures
	3	Opportunity to exchange cultural norms and traditions
	4	Variety of recreational and entertainment

Environmental Impacts of Tourism		facilities
	5	Criminal activities
	6	Assimilation in local Language and local traditions
	1	Overcrowding
	2	Degradation of natural resources by over-utilizing them
	3	Deforestation for construction purposes.
	4	Traffic congestion
	5	Littering and solid waste
	6	Air/Noise pollution

Sources: Gursoy et al. (2002); Tichaawa and Mhlanga, (2015), and Tichaawa et al. (2019).

## Descriptive Statistics

Table 3. Descriptive statistics

Variables	Mean	SD
Gender		
Male	0.89	0.45
Female	0.11	0.45
Employment Status		
Tourism sector	0.91	0.39
Non-tourism sector	0.09	0.39
Age Groups		
16-25	0.25	0.22
26-35	0.36	0.24
36-45	0.33	0.37
46-55	0.04	0.19
56-65	0.02	0.12
Education levels		
Illiterate	0.22	0.22
Primary	0.20	0.23
Middle	0.12	0.31
Matric	0.21	0.35
Intermediate	0.17	0.33
BA	0.07	0.27
Masters	0.01	0.12
Distance from the tourist destination in Kilometers		
0-5	0.22	0.23
6-10	0.31	0.21
11-15	0.35	0.25
15+	0.11	0.19

The descriptive statistics show that the majority of the respondents were males. Most of the respondents living in the area are engaged, directly or indirectly, in the tourism sector. Furthermore, 22% of the total respondents are illiterate, 20% respondents have primary, 12% of the total respondents have the middle level of education. Whereas, 21% respondents have matric, 17% intermediate and 7% have Bachelors' degrees. Only 1% of the total respondents had a Master's or high degrees. The descriptive statistics also show that most of the respondents are young and belong to the different age groups between 16 to 35 years. Most of the residents live either 6 to 10 Km or 11 to 15 Km from the tourist spots.

## Results and Discussion

### Economic Impact of Tourism

According to the residents' perception tourism is the important source of the creation of employment opportunities in Nathiagali. The tourism helps to increase personal income. The third factor under the economic impacts of tourism is the improvement in the residents' standard of living. According to majority of residents, the standard of living is moderately affected by tourism-related activities in Nathiagali. The fourth factor is the generation of tax revenues. It is concluded that according to the residents' perceptions the tax generation is highly influenced by tourism sector activities in the area in the form of toll taxes and park entrance fees.

Next, the included variable is infrastructure development in the selected area. According to residents' perceptions, tourism is a significant source of infrastructure development. The government constructs new roads, parks, and tourist resorts. According to the residents' perceptions, tourism has a moderate impact on the quality of local services in the area. The seventh factor is the increase in prices. The local community perspective that tourism activities also contribute to increasing the prices of goods and services in the area.

The eighth factor under the economic impacts of tourism is the influence of foreign companies and investors. The residents feel that when foreign investors invest at tourist destinations in the form of new businesses or infrastructural development projects, they may exert their influence. The ninth factor is seasonal unemployment. The residents of the local community thought that they have to face unemployment in the offseason. The last and tenth factor is about wages. Due to increase in demand for tourism-related services, especially in the peak season, the wages of the local workers are increased.

### Socio-Cultural Impact of Tourism

The first factor under the socio-cultural impact of tourism in Nathiagali is the interaction between various communities. The tourism activities help the residents to interact with various communities. The second advantage is the knowledge about various cultures. The residents are of the view that due to tourists arrivals, they can interact with people from around the world and they can learn about their cultures. The third factor is an opportunity to exchange cultural norms and traditions.

The fourth factor is the variety of recreational and entertainment facilities in the region, which have impose direct impacts on residents in numerous ways, for instance in terms of an increase in their earnings as well as their interaction with people from other parts of the world. The fifth factor is criminal activities. Which increase due to easy accessibility of a tourist spot where the pickpockets and thieves target the visitors

easily. The sixth impact is the changes in local language and local traditions. The residents thought that the local community can learn new words from the tourists and may adapt their language and dialect.

### Environmental Impacts of Tourism

The residents' perceptions indicate that due to tourism activities the residents have to face the problem of overcrowding at restaurants, parks, and shopping malls. The activities involved in the tourism industry are highly dependent on the physical environment of the tourist destination. With the arrival of visitors at tourist destinations, the consumption of natural as well as manmade resources increases, therefore these sites have to face the issue of the overutilization of the natural resources. With the development of infrastructure-related projects, mostly tourists sites are facing the problem of deforestation. According to the residents' perceptions, the issue of deforestation is the major consequence of massive construction projects in the area. The fourth factor is traffic congestion in the area. The fifth factor under the environmental impact of tourism in Nathiagali is solid waste. According to the residents' perceptions as tourism activities are expanding in Nathiagali the problems of solid waste management also increasing in the area.

### Conclusion

The empirical results indicate that on the economic front, tourism is an important source to generate new employment opportunities for the residents of Nathiagali. It helps to raise the standard of living of the local community. Due to tourists arrival, the government and local authorities pay attention to this area and develop infrastructure to facilitate tourists. However, the residents have to bear inflation as well. The residents are of the view that tourism is an important way to exchange cultural norms and traditions. However, the residents are of the view that tourism sector activities cause overcrowding, air and noise pollution, and road congestion.

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