



ECOTOURISM DEVELOPMENT IN A REMOTE DISTRICT OF INDIA: A STUDY OF TAWANG, ARUNACHAL PRADESH

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ABSTRACT

This paper explores the potentials and challenges of ecotourism development in Tawang, a remote district of Arunachal Pradesh, India. It also examines the trend in tourist arrivals, travel choice and expenditure pattern of the tourists based on secondary and field survey data collected from randomly selected 200 Indian tourists. The data were analysed by using statistical tools such as percentage, compound annual growth rate, line graph and pie diagram. The study revealed that Tawang has huge potentials for ecotourism development owing to its location in Eastern Himalayan ranges. Its landscape is extremely fascinating with presence of numerous snow-capped peaks, passes and lakes, historical sites and cultural heritage. However, the tourists inflow in Tawang has been fluctuating and its share in total tourist arrivals in the State has declined over the years. The travel choice of tourists indicated that most of the tourists visited this destination in a group of families mainly to enjoy natural beauty. The expenditure pattern indicated that tourists spent greater proportion on accommodation, transportation and food and beverages. The main challenges of ecotourism development were identified as inaccessibility, inadequate recreational facilities, entry restrictions, climatic constraints and socio-political disturbances. Hence, the policy should focus on improving connectivity, recreational facilities, quality of services and maintain clean and green environment.

KEYWORDS: *Ecotourism, Tawang, Potentials, Challenges, Travel Choice, Expenditure Pattern*

INTRODUCTION

Ecotourism is a form of tourism that involves travelling to natural sites to enjoy and admire natural environment and culture connected with such environment. It is dependent on nature environments (both living and non-living) and any indigenous cultures closely connected to such environments (Tisdell, 2001). Ecotourism is defined as a variety of ways. However, the most widely accepted definition was given by Ceballos-Lascurain in 1987 who defined it as, "tourism that involves traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals as well as any existing cultural manifestations (both past and present) found in these areas" (Boo, 1990, p.20). The Ecotourism Society in 1991 defined ecotourism as, "purposeful travel to natural areas to understand the

culture and natural history of the environment, taking care not to alter the integrity of ecosystem while producing economic opportunities that make the conservation of natural resources beneficial to local people". The society, later, shortened this definition of ecotourism to "responsible travel to natural areas which conserves the environment and improves the welfare of local people" (Western, 1993, p. 8).

These definitions imply that ecotourism is based on natural environment and local culture and it involves non-consumptive and mindful use of surrounding environments for recreation benefit of visitors and economic benefits of local people by generating income and employment opportunities. It is a nature-based tourism that must enhance or maintain natural systems. It involves recreational activities such as bird watching, wildlife watching, nature photography, botanical study, and wildlife treks or



safaris (Whelan, 1991). Environmental education is an important aspect of ecotourism as it can educate both visitors and local people about the importance of environment and thus helps to reduce environmental damage. A distinguishing feature of ecotourism is that it benefits biodiversity conservation (Brandon and Margoluis, 1996). Ecotourism is gaining popularity worldwide because of its potential to combine conservation of environment and economic development. In fact, it is one of the fastest growing segments of the tourism industry (Whelan, 1991). The global spending on ecotourism is increasing by 20 per cent per year, about five times the average rate of growth in tourism industry as a whole (Vijayakumar, 2005). This is because people all over the world are turning to nature for peace, happiness and enjoyment. The participation of local community in resource management and in provisioning of services to the tourists is an important component of ecotourism. It, thus, provides economic benefits to local community and encourage their participation in the conservation efforts. Because of its potential to produce economic benefits to host community and ensure conservation of environment, ecotourism is considered as an effective strategy across the world to promote sustainable development.

Tawang district is a remote district of India. It is situated in the Eastern Himalayas in the north western corner of Arunachal Pradesh, India. Tawang, the headquarter of Tawang district, is situated an altitude of 10,000 ft (3,048 m) above mean sea level. This district is connected to the rest of the world only by the National Highway-13. It is located at a distance of 555 km from Guwahati and 320 km from Tezpur airport, Assam (the nearest airport) and about 300 km from Rangapara, Assam (the nearest railway station). It is strategically located and shares international border with Tibet (China) in the north and Bhutan in the south-west. It is spread over an area of 2172 sq. km. As per the population census 2011, the district has a population of 49,950 persons (54 per cent male and 46 per cent female) with population density of only 23 persons per Sq. km. The literacy rate in the district was 59 per cent as per 2011 census which is lower than the State average of 65.38 per cent and national average of 74.04 per cent. The district is inhabited by *Monpa* tribe who profess Buddhism and are known for hospitable and peace loving nature. The district is lagging behind in socio-economic development because of its inaccessibility, limited arable land owing to its mountainous topography and lack of industrial activities. Majority of the people live in rural area (77 per cent as per population census 2011) and are

engaged in agriculture and rearing of animals like yak and sheep for their livelihood. However, Tawang has tremendous potential for development of ecotourism because of its picturesque landscape, crystal fresh water lakes, cascading waterfalls, peaks and passes, snowfall, places of historical significance and rich local culture. Tawang's potential for tourism came to be known to the rest of the world after the filming of a scene of the Bollywood movie *Koyla* featuring actress Madhuri Dixit at Sangetsar Lake in 1996. Since then, Tawang has been witnessing increasing number of tourist arrivals every year. However, there are numerous challenges to development of ecotourism in the destination.

In this background, this paper explores the potentials for ecotourism in Tawang, trend in tourist inflow and tourists' perception and challenges of ecotourism development.

DATA SOURCE AND METHODOLOGY

The study is based on both primary and secondary data. The secondary data were collected from the Indian Tourism Statistics, Ministry of Tourism, Government of India and Tourism Statistics of Arunachal Pradesh, Directorate of Tourism, Government of Arunachal Pradesh. The primary data were collected by conducting field survey of visitors in the study area. The survey was conducted with the help of structured questionnaire during the peak tourist seasons. The questionnaire was designed to collect information on socio-economic variables (such as age, sex, educational qualification, occupation, income etc.), travel pattern and choice such as duration of tour, duration of stay, purpose of visit, sources of information, mode of transportation and other relevant information. Face-face interview method was used to collect information from the tourists. Tourists who had completed their tour were interviewed in the hotels for collection of necessary information. The random sampling technique was applied to select the samples of visitors. The sample size was 200 Indian tourists. Foreign tourists could not be included in the sample, as the government had imposed restrictions on their entry owing to Covid-19 pandemic. In the sample, only adult visitors who have defined source of income were included because they are considered to be more realistic in making personal valuations.

The data were analysed by using various statistical tools. The Statistical analysis was done using software such as *MS Excel and SPSS*.



ECOTOURISM POTENTIALS OF TAWANG

Tawang has a high potential for ecotourism. It is an ideal destination for ecotourism as it has numerous natural and cultural attractions which lure tourists from different parts of the world as well as the country. Its landscape is quite fascinating owing to undulating topography consisting of snow-capped peaks, passes, waterfalls, lakes and river valleys. Unequivocally, it is one of the most beautiful place on the Earth. The presence of historical monuments, international borders and rich culture of the people are added attractions of Tawang. The ecotourism potentials of Tawang are presented as follows:

Galden Namgyal Lhatse: It is popularly known as Tawang Monastery. It the largest monastery in India and second largest monastery in the world after the Potala Palace in Lhasa, Tibet. It was founded by Merak Lama Lodre Gyatso in 1680-1681 in accordance with the wishes of the 5th dalai Lama, ngawang Lobsang Gyatso (Singh, 2016). The main temple is known as *Dukhang* which means assembly building. It houses a large image of Lord Buddha of 18 feet height which is glided and decorated in a lotus position. Galden Namgyal Lhatse which means 'celestial paradise is a clear night' is the cultural and religious centre of the people of Tawang. The main festivals held in the monastery are; Torgya, Losar, Ajilamu and Choskar. Torgya, an annual festival, is one of the most colourful and important festivals celebrated in Tawang Monastery. It is celebrated in the month of January to drive away evil spirits and to protect the people from natural disasters. The monastery has a library which houses valuable old scriptures. It also has a museum which contains statues of gods and goddesses and antique items. The monastery attracts a large number of Buddhist pilgrimage and tourists.

Sela Pass and Sela Lake: Sela Pass is the second highest motorable Pass in the world after Leh-Manali. It is situated at an altitude of 13,701 ft (4,176 m) above mean sea level and connects Tawang with rest of the world. The landscape of the Pass is mesmerising and breath-taking with presence of snow cover and Sela Lake. Sela Lake, located just adjacent, to the Pass is a crystal fresh water lake. It is really a pristine and a beautiful high altitude lake. The local community considers it to be a sacred lake and believe that sacred ducks swim on the lake which is visible only to few fortune. The fishing and boating activities are strictly prohibited. Tourists can walk around the lake and take photography.

Sangetsar lake: The Sangetsar lake (*Tso*) is popularly known as Madhuri lake. It is located at a distance of about 35 km north of Tawang town and 6.4 km west of *Bumla* Pass (Indo-China border) and is situated about 15,200 ft above sea level. The lake is situated at 27.72⁰ N and 91.82⁰ E and is one of the most pristine lakes in the State. It is considered as a sacred lake by the Buddhist community. It is quite attractive and fascinating as it is surrounded by snow covered mountains and alpine forests. It came to be known to rest of the world after the filming of a scene of Bollywood movie *Koyla* in 1997 featuring actress Madhuri Dixit. Since then it came to be popularly known as Madhuri lake. The tourists visit the lake for recreation and enjoy the beauty of the lake, local people visit it for religious purpose during important days as per Buddhist calendar. Fishing and other activities are strictly prohibited in the lake. There is strong a belief among the local community that any disturbances to the holy lake may bring calamities and disasters.

Nuranang Waterfall: It is one of the most spectacular and beautiful waterfalls in Arunachal Pradesh. It is located near Jang in Tawang district. It is around 100 metre high waterfall. It is formed by Nuranag river which originates from the northern slopes of Sela Pass and it discharge its water in Tawang *Chu* (river). The fall came to the limelight after the filming of a song of the *Koyla* movie featuring actress Madhuri Dixit.

Bum La Pass and Border: Bum La Pass is a border point between India and Tibet (China). It is situated at a distance of 37 km north from Tawang town (India). It is situated at an altitude of (15, 200 ft (4,600 m) above mean sea level. The Pass, which served as a trading point between Tawang and Tibet, was closed for trading after the Sino-India War of 1962. It was re-opened for local traders after 44 years in 2006. It has a historic significance as the People's Liberation Army of China entered Tawang through Bum La (Pass) during the Sino-India War in 1962. One of the fierce battle of the 1962 Sino-India War took place at Bum La (Singh, 2016). The 14th Dalai lama also used this Pass to cross into Tawang (India) on 30th March, 1959. The Pass remains covered with snow for most part of the year. It is one of the most fascinating pass in the world because of its wonderful landscape and history associated with it. The Pass is, now, an important tourist attraction of and is visited by most of the tourists who travel to Tawang.

Zemithang Valley: Zemithang valley is a beautiful place in Tawang district. It is located at distance of about 90 km away from Tawang town. The route to



Zemithang is narrow but quite scenic. The road goes through the thick shadow of pine trees. Zemithang is known for Gorsam Chorten (Stupa) which is second largest stupa in Asia after the Baudha stupa of Kathmandu. Gorsam mela, which is held at the interval of every three years, attracts a large number of devotees. Zemithang is also known for Siberian black-necked Cranes which visit the valley during December to January as their winter habitat. The Cranes are considered to be sacred and are revered by the Monpas as the embodiment of the 6th Dalai Lama (Rina, 2019). Nyamjang *Chu* (river), which originates in Tibet (China), flows through the valley and adds to its natural attractions. Tourists can enjoy viewing migratory bird Siberian black-necked Cranes, visit Gorsam stupa, swim in the Nyamjang *Chu*, visit Pangchen valley community conserved forest for viewing some rare animals like Red Panda, mock deer, trapogan, monal

etc. Visit to tribal villages and agricultural fields of Zemithang to learn their culture and tradition can also be a satisfying experience for tourists.

TREND IN TOURIST ARRIVALS IN TAWANG

Tawang is one of the most attractive tourist spots of the State. A large number of visitors visit Tawang every year for recreation and other purposes. It comes under the Tezpur-Bhalukpong-Bomdila-Tawang tourist circuit which is one of the government identified tourist circuits of the State. In recent years, Tawang has come to emerge as one of the most favoured tourist destinations. It has become a popular destination for spending holidays by both domestic and foreign tourists. The trend in tourist inflow in Tawang has been observed to be fluctuating (Figure 1).

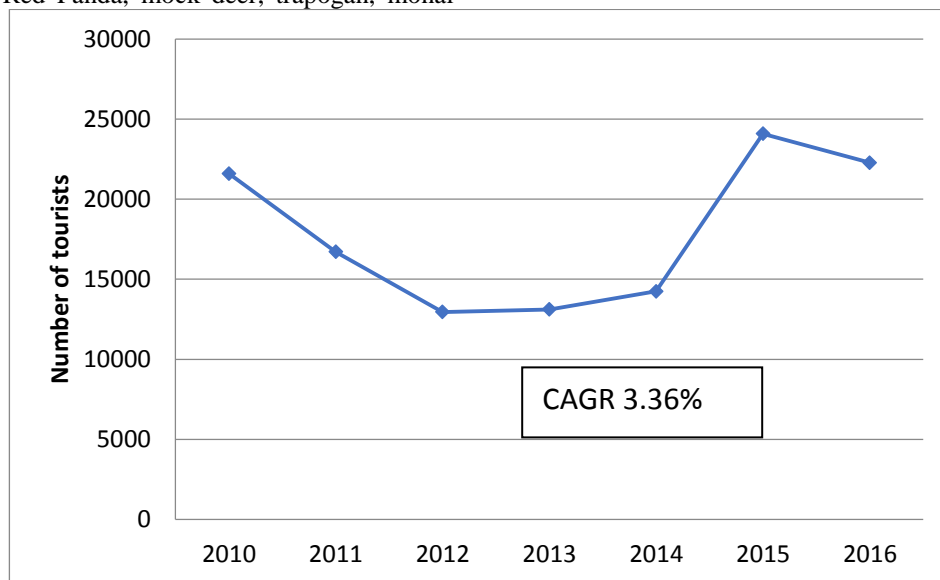


Figure 1 Trend in Tourist Arrivals in Tawang

Table 1: Tourist Arrivals in Tawang

Year	Domestic	Foreign	Total	Growth of total (%)
2010	21325	273	21598	NA
2011	16433	277	16710	-22.63
2012	12686	271	12957	-22.46
2013	12874	235	13109	1.17
2014	13919	319	14238	8.61
2015	23776	305	24081	69.13
2016	22039	234	22273	-7.51

Source: Government of Arunachal Pradesh, 2019.



The Table 1 shows that inflow of tourists in Tawang during the period 2010 to 2016. In 2010, total tourist inflow in the district was 21,598 which accounted for 9.34 per cent of the total tourist arrivals in the State. Tourist inflow to Tawang fell sharply by 22.63 per cent to 16,710 in 2011. It was mainly on account of fall in domestic tourist inflow. It further decline to 12,957 in 2012. The fall can be attributed to socio-political disturbance in the State owing to change in political leadership in the State.

Thereafter, the inflow of tourist in Tawang improved to 14,238 in 2014. It increased sharply to 24,081 in 2015. But in 2016 tourist inflow marginally fell to 22,273 which was 5.68 per cent of the total tourist arrivals in the State. The decline in share of Tawang in total tourist arrivals in the State indicates that it is losing its competitive position. The CAGR of tourist inflow in Tawang during the period 2010 to 2016 was 3.36 per cent. The fluctuations in tourist inflow in Tawang can be attributed to socio-political disturbance related to hydropower development. Hence, there is need to maintain conducive atmosphere to attract tourists. At the same time, roads and other infrastructure should be developed to harness its tourism potential and enhance benefits from tourism.

TOURISTS' SOCIO-ECONOMIC CHARACTERISTICS

The travel decision and demand for tourism are influenced to a great extent by the socio-economic characteristics of tourists and visitors. The study of socio-economic characteristics and demand pattern of

the tourists is important for developing facilities in consonance with tourists' need and demand pattern. The socio-economic characteristics of the visitors include age, gender, education level, occupation, annual household income etc. The demand pattern includes purpose of visit, frequency of visit, duration of stay, type of tour, source of information, expenditure pattern of tourists in the study area and their responses to various facilities enjoyed by them. This information is important to understand in formulating appropriate policy in future for promoting tourism development.

An analysis of gender-wise distribution of the surveyed tourists (respondents) revealed among the surveyed domestic tourists 84.5 per cent were male and only 15.5 were female. It was found that most of the respondent tourists were travelling in a group of one or more families consisting of male, female and children. The average size of group was 6 persons among the surveyed tourists. Since female and children constitute a good proportion of tourists, there is a need to develop sanitary toilet facilities along the side of routes leading to tourist spots and at the spots. There is also a need to develop amusement park for children with all facilities for enhancing tourists' satisfaction and improve destination loyalty. The age profile of tourists showed that 31 per cent of were in the age group of 35-45 years, 29 per cent were in the age group of 45-60 years, and 21.5 per cent were in the age group of 25-35 years, 17 per cent were in the age group of 60 years and above. The mean age of the surveyed domestic tourists was 44.71 years. The details are given in Table 2.

Table 2: Distribution of Surveyed Tourists by Age group

Age Group	Percentage of tourists
Below 25	1.0
25-35	21.5
35-45	31.00
45-60	29.50
60 and above	17.0
Total	100.00

Source: Field Survey 2020

Thus, it was observed that 53.5 per cent of the surveyed domestic tourists belonged to relatively young age group of below 45 years.

The household size is also one of the factors influencing visitation rate. The analysis showed that household size of most of the tourists was small. The details are given in the table 3.

**Table 3: Distribution of Surveyed Tourists by Household Size**

Household Size	Percentage of tourists
1 to 3	42.5
4 to 8	53.0
9 and above	4.50
Total	100.00

Source: Field Survey 2020

The analysis of household size of domestic tourists showed that 53 per cent of domestic tourists had household size of 4 to 8 members. However, a good number of domestic tourists (42.5 per cent) were having small household size and only 4.50 per cent were of them were having large household size. The analysis shows that the demand for recreation comes mainly from small and medium size households. This is expected as per capita income of small and medium sized household tend to relatively be higher than the others.

Demand for tourism is also influenced by the educational level of the people. It is argued that the demand for tourism varies directly with education. This is because the educated people understand the importance of recreational activities in improving both physical and mental health and so they tend to travel for recreation. The analysis of the education level of the surveyed tourists revealed that most of them were sufficiently educated. None of the tourist was found illiterate. The details are given in the Table 4.

Table 4: Distribution of Surveyed Tourists by Education level

Education level	Percentage of tourists
Primary level	0.50
Secondary level	3.5
Higher Secondary	4.5
Graduate	56.5
Post Graduate and above	31.5
Any other	3.5
Total	100.00

Source: Field Survey 2020

It was found that majority of the surveyed tourists were graduates (56.5 per cent) followed by post graduates and above (31.50 per cent). Among the surveyed domestic tourists, 3.50 per cent were educated up to secondary level and 4.5 per cent up to higher secondary. Any other category accounted for 3.5 per cent of tourists which mainly consisted of diploma holders.

Occupation is also important determinants of demand for recreation. People with better occupation are more likely to travel frequently for recreation. The

government service holders in India enjoy the facility of leave travel concession (LTC) for all India travel. This facility has encouraged people to travel to different places for tourism and recreation. Hence, occupation can be an important factor determining the demand for tourism. The analysis of data showed that most of the surveyed tourists were salaried employees followed by professional/consultant and self-employed and business. Any other category included mostly social workers, members of NGOs, pensioners, writers, housewife etc. The details are given in the Table 5.

**Table 5: Distribution of Surveyed Tourists by Occupation**

Occupation	Percentage of tourists
Salaried Employee Govt./Private	55.0
Self-employed	19.0
Professional/Consultant	12.5
Any other	13.5
Total	100.00

Source: Field Survey 2020

The study of the occupational category of the surveyed tourists revealed that most of them were salaried employees (55 per cent) followed by self-employed (19 per cent) and professional/consultant (12.5 per cent).

The income is considered to be one of most important factors that influence the demand for recreation in any site or destination. Demand for recreation is considered to be positively influenced by

income level. People with higher level of income tend to have higher demand for recreation, as recreation is considered to be a luxury goods. The surveyed tourists were classified into various income groups to know the demand for tourism from various categories of tourists. The classification of the surveyed tourists on the basis of annual household income is given in the Table 6.

Table 6: Distribution of Surveyed Tourists by Annual Household Income

Income (in Rs. lakh)	Percentage of tourists
Less than 5	9.0
5-10	42
10-15	26.5
15-20	5.5
20 and above	17.0
Total	100.00

Source: Field Survey 2020

The Table 6 shows that majority of the surveyed tourists (42 per cent) belonged to income group of Rs. 5 lakh to 10 lakh followed by 26.5 per cent in the income group of 10-15 lakh. It was found that 17 per cent of them belonged to income group of 20 lakh and above.

TOURISTS' TRAVEL CHOICE AND EXPENDITURE PATTERN

Travel Choice

The travel choice of tourists is presented as follows:

Sources of origin: The study examined the sources of tourists arrivals in the State. It is important to know the sources of origin of tourists for the purpose of developing services and facilities keeping in view the

region specific food habits and other needs. The source of origin of surveyed domestic tourists was analysed to examine the States from which tourists prefer to visit the destination. From the survey, it was found that the tourists came to visit Arunachal Pradesh from almost all the States of India. However, it was found that majority of them were from West Bengal (53 per cent), followed by Maharashtra (13.5 per cent), Assam (10 per cent). The details are given in the Table 7.

**Table 7: Distribution of Domestic Tourists by State of Origin**

State	Percentage of tourist
West Bengal	53.0
Maharashtra	13.5
Assam	10.0
New Delhi	3.5
Rajasthan	3.5
Others	16.5

Source: Field Survey 2020

It was observed that most of the visitors were basically from plain States. They were visiting in large proportion mainly to enjoy natural beauty, pleasant climate in the hills, experience snowfall and to visit Indo-China border (*Bumla* border).

Purpose of visit: Tourists visit a destination with various purposes. The study of purpose of visit of the tourists can provide information about the purpose of visit of tourists and can help in formulating policies to develop facilities for enhancing their satisfaction level. The main purpose of visit of the surveyed tourists is presented in the Table 8.

Table 8: Distribution of Surveyed Tourists by main Purpose of Visit

Purpose of visit	Percentage of tourists
Recreation/natural beauty	74.7
Know people and their culture	12.9
Adventure tourism	4.7
Educational value	2.9
Religious purpose	1.8
Any other purpose	2.9
Total	100.0

Source: Field Survey 2020

The Table 8 shows that most of the domestic tourists (74.5 per cent) were visiting the State for recreation/enjoy natural beauty. They were mainly interested in enjoying natural beauty and recreation. Only a small proportion of domestic tourists visited for any other purpose which includes mainly official and business visits.

Companion: Tourists, usually, travel to a destination in different types of companion or group. The classification of the surveyed tourists by the type of group in which they were travelling revealed that most of the surveyed tourists (were travelling with their own family members. The details are given in the Table 9.

Table 9: Distribution of Surveyed Tourists by Type of Group

Types of group	Percentage of tourists
Single person	4.0
Couple	0.00
With own family members	51.5
In a group of more than one family	28.0
In a group of friends without family	13.0
Total	100.00

Source: Field Survey, 2020



It was found that most of the domestic tourists (79.5 per cent) were travelling with family members. They were travelling with their own family members (51.5 per cent) or in a group of more than one family (28 per cent). Only a few surveyed domestic tourists (4 per cent) were travelling alone. The analysis shows that most of the tourists prefer to travel to the destination in a group of one of more family. The average size of group of domestic tourist was 6 persons. Hence, there is a need to develop facilities to meet the requirement of family oriented tourists.

Source of Information: Information about a destination is also an important factor which can

influence the potential tourists to visit the destination for recreation. Access to good and reliable information about the destination is very important as it can help the potential tourists to make proper travel plan. The lack of reliable information about the destination may discourage tourists to visit the destination. Hence, an attempt was also made to know the main sources of information about tourist spots in the State. This was considered important given the remote location of the tourist spot under the study and limited source of information. The responses of the surveyed tourists are presented in the Table 10.

Table 10: Distribution of Surveyed Tourists by Sources of Information

Source	Percentage of tourists
Word of mouth	29.0
Internet	21.0
Magazine	16.0
Television	9.5
Newspaper	9.0
Previous visit	7.5
Books	6.0
Any other source	2.0
Total	100.00

Source: Field Survey 2020

The Table 10 shows that most of the surveyed tourists (29 per cent) came to know about the tourist spot from word of mouth followed by internet (21 per cent), magazine (16 per cent), television (9.5 per cent). Those who indicated any other source informed that they came to know about the study area through travel agent and official sources.

The analysis showed that word mouth and internet were the most important sources of information for domestic tourists. Hence, there is a need to make the website more informative and attractive to provide

reliable and relevant information to the tourists. At the same time, tourists should be provided good hospitality and facilities to encourage them to advise their friends and relatives to visit tourist spots in the State.

Type of Tour: Tourists can perform their tour to any destination in two ways. They can either travel on a self-arranged tour or on package tour arranged by tour operators. The study of the type of tour performed by the tourists can indicate the demand for the services of tour operators. The details of type of tour performed by the surveyed tourists are given in the Table 11.

Table 11: Distribution of Surveyed Tourists by Type of Tour

Type of tour	Percentage of tourists
Package	42.0
Self-arranged	58.0
Total	100.00

Source: Field Survey, 2020

The analysis of type of tour performed by surveyed tourists showed that majority of the them visited on a

self- arranged tour. Among the surveyed tourists 58 per cent visited on a self-arranged tour and rest were



visiting on package tour. This indicated growing demand for the services of tour operators. Hence, there is a need to improve the efficiency of the tour operator services to increase their demand and enhance income and employment.

Frequency of visit: The frequency of visit of tourists shows that ability of a destination to attract the visitors. From the survey, it was found that most of the surveyed tourists were visiting for the first time in the tourist spot under the study. This is expected as the spot has a remote location. The details are given in the Table 12.

Table 12: Distribution of Surveyed Tourists by Frequency of Visit

Frequency	Percentage of tourists
First	87.0
More than Once	13.0
Total	100.00

Source: Field Survey 2020

It was found that 87 per cent of the surveyed tourists were visiting for the first time. It found that 13 per cent of the surveyed tourists visited the spot more than once. This is due to that fact that the tourist spot is located in a remote district of the State.

Length of stay: The study also attempted to analyse the length of stay of the surveyed tourists. The length of stay of tourists in a destination can be taken as an

indicator of the demand for tourism. The longer length of stay generally leads to more spending of tourists and greater economic impact of local economy. However, length of stay depends on various factors such as income level, family size, purpose of visit, and availability of recreational facilities in the destination and so on. The length of stay of surveyed tourists in Tawang is given in the Table 13.

Table 13: Length of Stay of Surveyed Tourists

Length of stay (in days)	Percentage of tourists
Less than 5	58.0
5-10	34.0
Above 10	7.5
Total	100.00

Source: Field Survey, 2020

It was found that most of the tourists stayed in the destination for less than 5 days. A high percentage of tourists (58 per cent) stayed in the destination for less than 5 days and 34 per cent of them stayed for 5 to 10 days. Only 7.5 per cent of the tourists stayed for more than 10 days. The average length of stays of the surveyed tourist 4.34

The above analysis and discussion shows that most of the surveyed tourists were visiting the destination for recreation and enjoy natural beauty. They were extremely mesmerised by scenic natural beauty of the Lake. This fact shows that there is a good potential market for ecotourism in the Lake and in Tawang. However, there is a need for formulating proper policies and guidelines so as to avert damages to

natural environment. The analysis showed that most of the domestic tourists were from West Bengal, Maharashtra and Assam. The domestic tourists were visiting for recreation and enjoy natural beauty and to know people and their rich culture. Hence, there is a need develop various facilities recreational activities and also for displaying local culture.

Expenditure Pattern of Tourists

The expenditure pattern of tourists shows their demand for various products and services. This information can be important for policy making purpose. Hence, the study examined the expenditure pattern of the surveyed tourists in the study area. The expenditure pattern of the surveyed tourists is shown in the Figure 2.

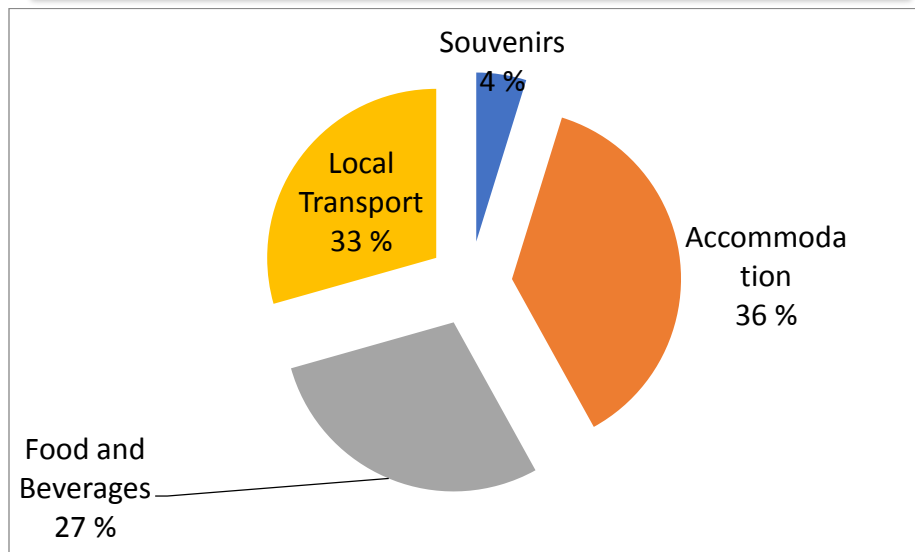


Figure 2: Expenditure pattern of surveyed tourists (in percentage)

It was found that tourists incur expenditure on various services and goods in Tawang. The analysis of the expenditure pattern of the tourists showed that the surveyed tourists incurred the highest expenditure on accommodation (Figure 2). The share of accommodation in total expenditure of tourists was 36 per cent followed by local transport (33 per cent) and food and beverages (27 per cent). It was found that the surveyed tourists spent 4 per cent of total expenditure on purchasing souvenirs (mainly handloom and handicraft products) which is a low share as compared to other hill stations where handicrafts/souvenirs accounts for more than 10 per cent of tourist expenditure. In Sikkim, shopping accounted for 22.7 per cent of tourist spending (GoI, 2012). In Guatemala, handicrafts /souvenirs accounted for 20 per cent of tourist expenditure (Foam and Franco (2008)). The tourists' expenditure pattern indicates that accommodation, transport service providers and food and beverages establishment receive significant benefits from tourism in Tawang. Benefit to the accommodation providers is obvious as almost all tourists stay in hotels and lodges during their trip. The fairly high share of local transport can be attributed to the recent rules made by the local people of the area which require tourists to hire local taxis for sites seeing purpose. Tourists are not allowed to use their own vehicles or vehicles hired from outside to go for site seeing. Relatively low share of food and beverage in total expenditure is mainly because of the fact that most of the Indian tourists travel in a group and they carry their own kitchen along in their vehicles. The low share of souvenirs in total tourist expenditure can be ascribed

to high price due to limited availability of such products. Hence, there is a need to focus on producing varied and attractive local handicraft products to enhance income and employment generation in local area.

CHALLENGES OF ECOTOURISM IN TAWANG

The challenges of ecotourism development in Tawang have been identified as follows:

Transportation Problem: Tawang is a remote district of India and its tourist spots are inaccessibility due to poor road network. It is relatively backward in terms of infrastructural facilities. It is connected to rest of the world only by road (National Highway 13). The road communication remains affected during summer due to heavy monsoon rainfall and during winter heavy snowfall disrupts road network. There is no railway link. However, it is connected by helicopter service from a few selected towns/cities like Guwahati and Itanagar. But the frequency of the service is limited.

Inadequate Infrastructure: Inadequate infrastructure is one of the most important cause of underdevelopment of tourism (Bhatia, 1997). Tourism infrastructure includes, good accommodation facilities, better sanitary facilities and amenities for recreational activities, proper human resources. In Tawang, a good number of hotels and lodges have come up in response to growing tourists demand, but standard of services provided by the tourist lodges are also found to be below the satisfaction level of tourists and room rents are relatively high. Further, there are very few



amenities for recreational activities. There is only one cable car in Tawang which also often remains defunct.

Climatic Constraints: The climatic condition of Tawang is extremely cool during winter, particularly from December to February. During these months, temperature goes below zero degree. Heavy snowfall which occurs during December to February causes disruption in road network and acts as a natural barrier for tourists. During the rainy season, June to August, the entire area receives heavy monsoon rainfall which leads to landslides and road blockades. This serves as a disincentive for potential tourists to visit the spot during these months. Hence, the tourist inflow is confined only during September to November and March to May.

Institutional Constraints: Arunachal Pradesh, due to its strategic location, has been designated as a restricted area. The main institutional constraints are the provision of Inner Line Permit (ILP) and Protected Area Permit (PAP). Domestic tourists are required to obtain ILP and foreign tourists are to obtain PAP to enter the State. PAP is issued by Ministry of Home Affairs, Government of India. PAP is issued only to those foreign tourists who visit in a group of three or more persons for a maximum period of thirty days. Tourists opined that obtaining PAP is difficult and time consuming. This acts as a disincentive for the potential tourists intending to visit Arunachal Pradesh. Further, in Tawang, foreign tourists are not allowed to visit places of interest located near the border.

Socio-political Disturbances: Socio-political disturbances in the State as well as in the neighbouring State also affects tourism development in Tawang. Such disturbances act as a psychological barrier for potential tourists (Mitra and Lama, 2013). Tawang is a peaceful place but it is connected to rest of the world through Assam. The frequent strike (*Bandh call*) by different organizations in Assam restricts the movement of vehicles to the State. At the same time, number of *bandh call* within the State has increased in recent years. For instance, the strike called by some organizations against PRC issue in February, 2020 continued for many days and caused fear psychosis among the public with massive destruction of public properties in the State capital. These disturbances cause psychological impact on potential tourists and lead to diversion of tourists to other hill destinations like Shillong, Gangtok, Darjeeling etc.

CONCLUSION

On the basis of above discussion and findings, it can be concluded that Tawang has huge potentials for development of ecotourism. Its landscape is quite fascinating with presence of numerous snow-capped mountain peaks, passes, lakes, rivers and alpine vegetations. It is also rich in cultural heritage and historical sites. Tawang came to the limelight after the filming of some scenes of Bollywood movie *Koyla* in 1996. Since, then this remote destination has been attracting a growing number of tourists from different parts of the country and the world. However, the inflow of tourists in Tawang has been fluctuating which can be attributed to emergence of other destinations as well as socio-political disturbances. The CAGR of tourist inflow in Tawang during the period 2010 to 2016 was only 3.36 per cent. Tawang's share in total tourist arrivals in the State has declined over the years from 9.34 per cent in 2010 to 5.68 per cent in 2016. This shows that Tawang is losing its competitive position. The study of socio-economic characteristics showed that most of the tourists male. The tourists were travelling in a group of one or more families consisting of male, female and children which implies that there is a need to develop way side sanitary facilities and develop amusement park with all facilities. It was observed that more than per cent of the tourists were below 45 years. Educational level of tourists showed that majority of the surveyed tourists were graduates followed by post graduates and above. The study of the occupational category of the surveyed tourists revealed that most of them were salaried employees, self-employed and professional/consultant.

The analysis of travel choice of the tourists revealed that majority of tourists were from West Bengal, Maharashtra and Assam and most of them were visiting to enjoy natural beauty. In case of source of information, it was found that most of the tourists came to know about the tourist spot from word of mouth, internet, magazine and television. The analysis of type of tour performed by surveyed tourists showed that majority of the them visited on a self- arranged tour. Frequency of visit showed that most of the tourists were visiting the destination for the first time which can be attributed to its remote location. The length of stay of tourists revealed that a high percentage of tourists stayed in the destination for less than 5 days. The expenditure pattern of the tourists showed that accommodation accounted for the highest share in total expenditure. It was observed that tourists spent only 4 per cent of total expenditure on purchasing souvenirs (mainly handloom and handicraft products).



The following policy suggestions can be made for promoting ecotourism development in Tawang; The policy should focus on improving connectivity and recreational facilities at Tawang. There is a need to focus on producing varied and attractive local handicraft products to enhance income and employment generation in local area. The various stakeholders should be sensitized to improve the quality of services to maintain the competitiveness of the destination as word of mouth was the source of information for majority of the tourists. There is a need to invest more in maintaining clean and green environment as tourists were visiting mainly to enjoy natural beauty.

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