

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

Tourism industry has become the largest single earner of foreign exchange in many countries like Nepal. The prevalence of unfavourable balance of trade with low level of export, many low income countries have considered the shortage of foreign exchange revenues as one of the major constraints to economic development. Development of tourism sector has contributed to the increase of foreign exchange earnings, employment opportunity and helped improve the balance of payment of the country.

The promotion of tourism in Nepal in the true sense started more or less only from the beginning of the 1960's. Since the First Five Year Plan and onwards the government of Nepal has adopted an integrated approach of increasing the number of tourist arrivals and length of stay, earning exchanges, creating employment opportunities, sustainable economic growth, alleviation of poverty and reduction of regional imbalances through tourism (Gurung: 2010, 106).

Most of the tourists arriving to Nepal have been found to have been pursuing recreation, trekking and mountaineering. On the tourists visiting Nepal in calendar year 2011, out of total, 53.7 percent visited for tours/travels, 11.77 percent for trekking/ mountaineering, 8.7 percent for pilgrimage, 4.1 percent for recreation, 2.4 percent for trade, 3.3 percent for formal visit, 1.5 percent for meeting/seminar and 13.9 percent for other purposes (MOF, 2069: 148).

This sector has contributed 4.1 percent to GDP in 1993/94 (MOF, 2005: 69), which was decreased to 1.8 percent in 2011 (MOF, 2069: 91).

The total number of tourist arrival was 254885 in 1990 (MOF, 2005: 68), which was increase to 73625 in 2011 (MOF, 2069: 90).

Ministry of Tourism and Civil Aviation, in collaboration with concerned industry entrepreneurs, and Nepal Tourism Board, has issued Nepal Tourism Vision 2020. Under this, vision, target, objectives and strategies have been set to attract 2 million tourists in 2020 (MOF, 2009: 111).

There are different types of tourism in Nepal like Eco-Tourism, Mountain-Tourism, Trekking-Tourism, Wild-Tourism, Rural-Tourism, Agro-Tourism, etc. There are 106 star hotels, 686 non-star hotels, 1936 travel, 1378 trekking, 33 rafting agencies and 2835 tour, 7303 trekking, 44 river and 53 tourist police licensed manpower guide were available in Nepal in 2011 (MOCTCA, 2011: 12).

1.2 Statement of the Problem

The main problem, which is to be dealt in the study, is to identify the growth rate of the tourist arrival in Nepal. This study has been carried out, with the view to examine and analyze the importance of tourism in the country. To summarize, this study has mainly focused on searching the answer to these questions:

- i. What is the structure and trend of tourist arrival in Nepal?
- ii. How to promote the tourism in Nepal?
- iii. To what extent the foreign exchange earnings are contributing to the nation?

1.3 Objectives of the Study

The general objective of the study is to analyze the importance of tourism in Nepal. To obtain this objective, the researcher had set the following specific objectives:

- i. To explore the nature and trend of tourist arrival in Nepal.
- ii. To identify the major tourist problems and make suggestion based on finding.

- iii. To assess the magnitude of foreign exchange earnings from tourism in Nepal.

1.4 Hypothesis of the Study

The hypotheses of this study are mentioned below:

- i. The tourist arrival in Nepal is not significant.
- ii. There is no significant influence of tourist arrival in foreign exchange earnings.
- iii. There is the high possibility of raising the number of tourist arrivals in Nepal.

1.5 Significance of the Study

Nepal has the higher potentialities to develop tourism industry which is suitable for socio-economic prosperity for the country. Various efforts have been made for the development of tourism in Nepal. Tourism is the best way to earn foreign exchange earnings and to increase employment opportunities in the country. In this context, the study of tourism is important and significant for Nepalese economy. This study is mainly concerned with the analysis of tourist arrival and foreign exchange earnings from tourism. In relation to other development indicators such as GDP, reviewing the tourism plan, policies, prospects and problems of the tourism development have been found out. Thus, it is innovation and functional research in the field of tourism in Nepal. It is also supportive for those people who are concerned to get details of information about tourism. It will also help to know the trend of tourist arrival in Nepal. It is expected that the study will be able to provide information and suggestion to the concerned authorities, which can be useful to formulate appropriate policies regarding the development of the tourism sector in Nepal.

1.6 Limitations of the Study

This study is an academic research work. The following are the limitations of the study:

1. This is fully based on descriptive method of analysis. All the given pieces of information have been based on secondary data of the period of twenty-five years. Hence, it may not be applicable for other cases.
2. It has been completed within the boundaries of limited time, budget and other constraints.

1.7 Organization of the Study

This study has been divided into five chapters.

Chapter One is the introductory part of the study. It contains background, statement of the problem, objectives, significance, limitations, organization of the study. Chapter Two is related with review of literature. Chapter Three is related with methodology. It is concerned with research design, sources of data, methods of presentation and analysis of data. Chapter Four is concerned with presentation and analysis of data and major findings. Chapter Five is related with summary, conclusion and suggestions. The bibliography is given in the end of the thesis.

CHAPTER-II

LITERATURE REVIEW

2.1 Literature Review

First, the literature review related to theoretical aspects, i.e. meanings, types, historical development and importance of tourism have been discussed, thereafter, review of applied aspects i.e. reviews of literature related to other countries, Nepal as a whole, and particular areas of Nepal have been discussed.

2.1.1 Review of Theoretical Aspects

Etymologically, the word 'tour' is derived from the latin 'tornare' and the Greek word 'tornos'. The meaning of tornare and tornos is a circle, the movement around a central point. In modern English, the word 'tourism' is made up of two words i.e., tour a prefix and ism a suffix. Tour means a movement and ism means action or progress. While the suffix 'ist' denotes 'One that performs a given action. The act of leaving from and returning to the original starting point, and therefore, one who takes such a journey can be called a tourist. The action of movement is called tourism (Kunwar, 2006: 1).

Tourism planners have given different interpretations of tourism in accordance with their individual needs and orientations. As such, their approach to define tourism will reflect more specific technical attributes. Tourism can be defined in terms of one's reason for traveling whether it is for leisure, family reasons or business. Travel and tourism is a vast complex network of business engaged in the lodging, transportation, feeding and entertainment of travelers. According to British Tourism Authority, a tourist trip is defined as 'a stay of one or more nights away from home for holidays, visits to friends or relatives, for business, conferences or any other purposes, except Boarding education and semi permanent employment. It is recognized that every individual is a different tourist; it can be defined through the impact of each person's experience on

accommodation. The desire for sensual gratification is a major component in the holiday travel industry in which the primary motivation is rest, pleasure, adventure and discovery. As such, another definition of tourism could be "benefits that arise from experiencing new places and new situations that are of a temporary duration whilst free from the constraints of work or normal pattern of daily life at home". Equally, the psychological impacts of tourism may be recognized, for a major component of tourism is holiday travel, and the prime motivations for such travels are the ones of rest, discovery and pleasure. From this point of view of holiday, tourism may be defined as the means by which people seek psychological benefits that arise from experiencing new places and new situations that are of a temporary duration which is free from the constraints of work or normal patterns of daily life at home (Kunwar, 2006, 4-5).

A holistic approach, broadly reaching in its terminology, and assimilating various interpretations into a general definition, was first taken by the tourism steering group to Stratford upon -Avon District council in England in its 1978 report, the group agreed to the following definition. "Day trippers from the cities of the midlands, evening theater goers from London, coach -tour passengers from all over the world hurtling through the country, conference delegates and longer -stay customers of the whole price range of serviced and non-serviced accommodation a visitor to the district for whatever reasons he or she comes for however long he or she may stay and whatever means he or she come." (ibid: 6).

People travel for different purposes. Different factors motivate them to travel from place to place. Hence, different types of tourism have been found. These are as follows (Satyal, 1988: 11-12).

A. Pleasure Tourism

Under pleasure tourism, people go on holidays for enjoyment out of curiosity, to take rest, observe good scenery and something new for delight, in unknown

folklores. This type of tourism depends upon the taste and temperament of individuals.

B. Recreational Tourism.

Recreational tourism is mainly concerned with leisure and rest. It is also related to recover physical and psychic stamina. Recreational tourists usually stay for longer period. The visitors stay by the sea and on the mountain for relaxation. They have preference to go to hill station.

C. Sport Tourism

There are two types of sport tourism namely, (i) like the Olympic Games, World Cup events, Football Boxing etc. which attract not only sportsmen to the host country but also a large number of sport fans, and (ii) visiting well-organized sporting events in countries that have specialized facilities such as winter sports, nautical sports, mountain climbing, hunting, fishing, etc.

D. Cultural Tourism

This type of tourism is motivated by the eagerness to learn different cultures of various countries. Mostly, these tourists of this types visit to learn different habits, languages and customs of people in alien lands, and visit places rich in monuments in the centers of ancient civilizations. It is also concerned with visiting the places of great modern achievements where they visit art galleries, religious centers, or participate in art, music, theatre, dance and folklore festivals.

E. Business or Technical or Tourism

Tourists who came for business purposes are called business tourists. The visit to fairs and exhibitions and places of technical achievements are included under this category.

F. Conference Tourism

International conference is organized in different countries where such convention facilities are available. A large number of people participate in conferences from different countries. These conferences are usually organized in large hotels in low season. There is a rapid growth of conference tourism in the modern world.

G. Pilgrimage/Religious Tourism

Tourists who come for pilgrimage are called pilgrimage tourists. Muslims visit Macca Madina in large volume for worshipping. Likewise, Buddhists and Hindus go to Gumba and Temples respectively. Nepal is the birthplace of Lord Buddha and Sita, Pashupati Nath temple and many other holy places attract many religious tourists.

H. Eco-Tourism

It is also known as ecological tourism. It is a form of tourism, which makes an individual ecologically and socially conscious. It typically involves travel to the destinations where flora, fauna, and cultural heritage are the primary attractions. A program included in ecotourism is the minimization of negative aspects of conventional tourism on environment and enhancement of cultural integrity of local people. Water conservation, people-participation, creation of economic opportunities for the local people, etc, are the integral part of ecotourism. Chitwan National Park, Bardiya and Shye Phoksindo are the good examples of ecotourism spots in Nepal.

Historical Development

The history of tourism is as old as the history of mankind. Nevertheless, it's rapid development began after the Second World war. The cause of underdevelopment of tourism before the Second World War might be due to the restriction of both foreign exchange and travel. Post war period was engaged to the development of heavy industries. Tourism then was neglected.

The years of 1950s provided the opportunity for the development international tourism. Since then, international tourism has grown rapidly; practically. After the liberalization of foreign exchange and travel restriction tourism was limited to neighboring countries only. However, from the early 1960s, it has been spreading widely. Developing countries received more benefits from the growth of international tourism activity. It increased more rapidly from 1980 to 1992 period in the developing countries than in the industrialized, developed world. The combined share of developing nation in the global tourism market, however, is still less than half of developed countries in respect of arrival and only just in excess of 1/3 tourism receipts. However where as the share of arrival grow over the 1980s and 1990s, developing countries listed ground in tourism receipts from 80.4 percent in 1985 to 25.2 percent in 1992 (WTO, 1995: 11).

The economists that make forecasts concerning the nature of human society in the future seem to indicate that all developed countries are progressing quite rapidly in factors such as increased real personal income, technological improvement etc. which favor the growth and development of tourism. The derived tourism, therefore, comprises institutions of traveling, lodging, boarding and shopping.

Importance of Tourism

Tourism industry generates substantial benefits for both host countries and tourists' own home countries. Tourism develops positive attitude towards each other's nations. It helps to learn about each other's cultures and customs, helps reduce negative perceptions and stereotype and develops friendship. It is the main source of foreign exchange earnings and important factor in the development of industries and international trade. Tourism has made a significant contribution to generate income. It serves as an important means to increase economic growth, raise the quality of life and create employment. It improves the overall balance of payment by helping to offset deficits in other sectors. Tourism plays an important role in the economic and technological

development of nations. It also serves to stimulate the development of basic infrastructure and contributes to the growth of domestic industries. It attracts foreign investment and facilitates the transfer of technology and information. People are always eager to see and know something new in their life because of their eagerness, they start their Journey and travels from place to place, such travelers are tourists. Etymologically, the word tour is derived from the Latin word 'tornare' and Greek word 'tomos', meaning lather circle, the movement around the central point of axis. Most widely accepted but technical definition of the tourist was proposed by IUOTO (International Union of Tourism Organization) in 1943 and approved by WTO (World Trade Organization) states that tourists are temporary visitors staying at least 24 hours in a country. Their visit and the purpose of visit is classified under one of the following Leading: one leisure (recreation, holiday, health care, study, religion and sports) and other business (family mission, meeting) (Kunwar, 2002: 15).

Tourism is a human activity which has been proved important for all nations since it fosters international brotherhood and understanding with the passage of time and increasing influence Tourism is being an important activities becoming more popular as well as important day by day throughout the world. Tourism being an important activity, plays not only an important role in alleviation poverty but also improves socio-economic status of a community. It helps to earn foreign currency and provides a sustainable way of conserving environment and culture through integrated local participation. It, by all means, is people's industry it is run by people for the people at the core be they guests or hosts, and it is their well being and enrichment which should be the primary goal of tourism development (Kunwar, 1997: 25).

If the local people understand the contribution of tourism at local and national level, they automatically initiate promotional programmes in rural areas. It can be long-term benefit to the economic development of the country.

South Asia has a great potential for the tourism development. Our rich socio-cultural mosaic adds up to an unparalleled natural beauty to make our region an

attractive destination for tourists from both within the region and abroad. In the last decades, Asia tourism has been extremely successful showing the highest growth rates of all world regions. Together the 12- south East, South Asia and East Africa countries affected by tsunami received some 31 million international tourist arrivals in 2003 and earned receipts of US\$ 23 billion (NTTR, 2005: 35).

Tourism is a forefront industry in context of globalization. Globalization helps us to put forward our unique products to international market that can generate income and employment (Upadhyay, 2005: 13).

As welcoming ceremony is an important gesture of guest relation in tourism. Nepalese believes that guests are toros of gods so the famous saying goes "Atithi Dewo Bhawa" rooted in its culture and religious traits, Tourists arrival number alone should not be judged as an indicator to gauge the success of tourism industry in any country. It needs to be evaluate along with lots of local products and service, generated employment opportunities tourism revenue to the nation (Dhakal, 2006: 132).

Air transport and tourism are the fastest growing industries around the world and the same is frure in Nepal (Shrestha; 2000, 56)

2.1.2 Review of Applied Aspects

Review of Study Related to Other Countries

The tourism report of the year 2000 on qualitative aspects affecting global growth shows that the impacts of tourism on any receiving area (i.e. country region or resort) are of three broad types i.e. economic, socio-cultural and environmental. The extent of these impacts increased during the 1990s because even at the low range forecast, there were 188 million more international tourist arrivals in 2000 that is 1089 million, a rise of over 46%. Furthermore, the developing countries where these impacts (particularly economic and socio-cultural) are marked most will increase their share of international tourism in

the coming decade i.e. from close to 22% of arrivals in 1989 to around 30% by the end of the century. International tourism will become a more important part of the world economy as tourism grows more rapidly than other area of the economy. This will result in creation of a larger portion of jobs and income deriving directly from international tourism and more local economy will be heavily supported by international tourism (WTO, 2000: 27).

William A. Washington has studied on upland resort and tourism in Indonesia. In his studies, he has attempted to analyze the factor affecting the development of tourist center, He has found that natural beauty and pleasant climate of upland were the dominant factors for the development of tourism in Indonesia. Anthony V. William and Wilber Zelinsky have studied the flow of tourists in European and Neo-European countries. They have found an increase of 39.2% in tourist flow between 1958 to 1966 (Kunwar, 2006: 6).

B. Fayissa has studied the impact of tourism on economic growth and development in Africa. He found that over the decade of the 1990s Africa has experienced a rise in tourist arrivals from 8.4 million to 10.6 million and receives growth from \$2.3 billion to \$3.7 billion respectively. The tourism industry in Sub-Saharan Africa enjoyed a robust annual market share growth rate of 10% in 2006. In spite of this, there are only few empirical studies that investigate the contributions of tourism in economic growth and development for African economies. Using a panel data of 42 African countries for the years that span from 1995 to 2004, this study explores the potential contribution of tourism in the economic growth and development within the conventional neoclassical framework. The results show that receipts from the tourism industry significantly contributes both to the current level of gross domestic product and economic growth of Sub-Saharan African countries. It helps to increase the investments in physical and human capital. Their finding implies that African economies could enhance their short recent economic growth by strategically strengthening their tourism industries (Fayissa & Tadasse, 2007: 1-21).

Nicolas Crespo and Santos Negron Diaz have studied Cuban Tourism. The economic impact of tourism is a key component of the study. In order to arrive at a conclusion, they analyzed the income and employment generating capacity of the industry and fiscal resources. The conclusion arrived at in the study is the operation of tourism, hotels, motels and others related assets. It represents a growing major contribution to foreign currency, income generation and employment in Cuba. It will play a major role in the coming years based on the number of hotels rooms under development, the investment required and the potential impact on the economy during construction and operation. Cuba's tourism industry is faced with challenges arising from new competitors and from a rapidly changing global tourism industry. This report suggests that Cuba could get into the position itself to these challenges successfully and generate major economic benefits for its economy through coherent demand and supply side policies. However, Cuba's tourism industry is not demand derived.

The Cuban authorities determine what and when new supply will be developed, sometimes with unorthodox criteria. Demand for these products is expected to be created by the foreign operators and wholesalers. Using the available official figures as the base for the tourism strategy, they attempt in this report to estimate the economic impact of the islands tourism industry ten years from today, in 2007. According to two scenarios, the first scenario assumes continuation of the current political and economic situation, perhaps with minor changes. The second scenario contemplates the transfer through complete elimination of political and economic barriers into a free capitalistic economy where American citizens and residents as well as Cuban citizen will be able to invest, operate visit and enjoy any of Cuba's tourism facilities. The report suggests that there is an abyss between the two scenarios. However, it also indicates the tremendous opportunity that Cuba has to benefit all players including the Cuban people by improving its current political economic and labor policies and allowing free enterprise and demand to lead the growth and success of its tourism industry (Crespo & Diaz, 2007: 150 -151).

Review of Works Related to Nepal as a Whole

Achyut Panta has analyzed the impact of tourism in the economic development of Nepal. In his study, he concluded that the tourism is one of the major sources of foreign currency. In the fiscal year, 1995/1996 the tourism sector has contributed 3.8 percent of the total GDP, 18% of the total foreign currency earning and 47.9% of the total merchandise export. He has analyzed tourism industry as an important component in the Nepalese economy because of its comparative advantage. Tourism has contributed to increase the balance of payments (Panta, 2002: 14).

Gangadhar Dahal has analyzed the role of tourism in the economic development of Nepal. In his study, he reminds generally that there is positive impact of tourism arrivals in Nepal in the different fields like employment opportunities, foreign exchange earnings as well as balance of payment situation in the country. The gross foreign exchange earning in convertible currency in 2000 is US \$38.2 per day. However, in 1998 it was maximum which US \$44.2 per visitor per day was. It created favorable balance of payment (Dahal, 2002: 63).

Om Sharma conducted a study related to package tourism in Nepal. The application of log-linear model finds the result that the elasticity coefficient of the total expenditure by tourists on local transportation has remained more elastic ($e > 1$) the expenditure on food items is closer to unity ($e = 1$) and the expenditure on accommodation wages rating and trekking are lying less elastic ($e < 1$), Therefore, he has concluded that trekking and mountaineering aspect should be well facilitated and properly managed (Sharma, 2003: 16-20).

Gopal Krishna Pradhan has analyzed tourism in Nepal. He has shown the importance of tourism industry in our economic development through foreign exchange. Tourism helps solve unemployment problems in some proportion. The development of tourism industry depends upon the development of hotels travel agencies etc. The proportional resources of tourism must be fully utilized

to develop the national economy through tourism industry. Hence, tourism industry is a milestone in the national economy of Nepal (Pradhan, 1978: 85).

Review of Literature Related to Particular Areas of Nepal

ICIMOD study on tourism for mountain community development, case study report on the Annapurna and Gorkha region of Nepal found that ninety five percent of the lodges in Ghorepani and Ghandruk are owned by people from these villages, and only about five percent are owned by people who migrated to them. The average number of rooms in the lodge in Ghorepani is 8.12 and in Ghandruk, it is 7.27. Likewise, the number of beds per lodge in Ghandruk is 15.94 and it is 17.27 in Ghorepani. The average lodge in both areas provides employment to 7.5 people. Females comprise about 55 percent of the employees in lodge. The bulk of lodge employment (75%) is taken up by family members, and local labor is hired (25%) to fill the gap. The average length of stay in a lodge is about one night per visitor. The majority of trekkers visiting the area were European (80%), followed by Asian (10%). The majority of the group trekkers (56%) planned to spend around two weeks trekking. The average expenditure of a visitor was about NRS 2446. More than ninety- four percent of all visitors expressed an affirmative pinion with five percent visitors answered that the trekking was enjoyable but not much as expected (ICIMOD, 1995: 71-73).

Pradeep Acharya in his study has concluded the socio-economic impacts of tourism in Lumbini, Nepal. Its impacts rest on the host society whose ways of life are affected and also on the tourists who take it as a very important part of their lifetime. It can be straight on/hardly confirmed that the tourism industry in Lumbini has become a job generator: both service oriented and product oriented. Increased income by job generation helps to raise the standard of living. In addition, the diversification of various new economic activities can be employed. People of this area welcome tourists as they have realized its importance, particularly from the economic aspect. It is a matter of fact that a poor country like Nepal should put economic concern at top. Of course, the

economical aspects only should not be overemphasized. Everyday acquaintances with the foreigners and outsiders have made it easier to be familiar with the life style of the others. They are able to comprehend the similarities and differences among the people representing various nations around their courtyard. Lumbini needs to develop tourism in ways to be compatible with maintaining and enhancing the life style and sense of community that presently exists, and in ways that conserve the natural and cultural resources. For such a many objectives to be fulfilled, government has been carrying out the tourism for rural poverty alleviation program in Lumbini (Acharya, 2005: 193- 195).

Shreedhar Tripathee in his study “Prospect of Tourism Development in Lekhnath Municipality” concluded that the inflow of tourist visiting Nepal is found increasing since the year 1962 to 2000 besides few years. At the same period, the numbers of tourists visiting Pokhara had also grown in similar way. Due to the lack of annual data of visitors in Lekhnath Municipality, the total number of tourists arriving Pokhara is converted into 40% to determine the tourist visiting Lekhnath Municipality. The number of tourist arrival varies according to the seasons. Autumn is the peak season followed by spring. Tourist arrival is limited in winter and summer. Domestic tourists also come to Lekhnath area from various places. Field survey shows that majority of domestic visitors are from Kaski, Kathmandu and Chitwan respectively. The number of tourists visiting from India is the highest among all foreigners. They arrive directly in Begnas lake area by tourist bus from Pokhara with their guide. They spend few hours and return to Pokhara (Tripathee, 2004: 69).

Thus, the above studies give in depth knowledge about tourism theoretically and empirically. However, the various studies conducted so far are generally not directly related to the proposed study of the researcher. Therefore, this study differs from above studies. It tries to give new dimension in the development of tourism in Lekhnath Municipality and Nepal as a whole.

In this modern world, tourism industry has been growing at an outstanding rate and it has appeared as the world's largest and greatest exports industry. Following the advanced development of science, information and technology, the world is being global. The basic information of the particular places through internet and electronic media such as television, radio, easy access of speeding transportation, the human desire of travelling across has been increased. Therefore, the tourism is being the fastest growing industry in the world.

Different people, inside and outside the country have conducted many studies in this field. More and more studies about tourism is not a new concept. These studies are made on different ways of facts on tourism in Nepal in addition to this, the various tourism related magazine, booklet, newspaper, published and unpublished reports and publication are also reviewed.

2.2 Major Tourist Attractions in Nepal

The Himalayan kingdom has the highest and most diverse culture and landscapes. Nepal is the holy land of lord Pashupati, Gautam Buddha and Janak Nandani, Sita, where the Hindu and Buddhist have lived together in harmony for centuries. Major tourist attractions of Nepal are cultural Heritage, Natural Heritage, Adventures and Pleasure attractions. Due to various tourism productions and services available in the country, there is a great scope in developing tourism in the country. The prime tourist attractions are nature, Culture and adventure resources. Nepal is endowed with unique cultural landscapes famous for its natural beauty and natural based adventure's resources. Mountaineering, trekking, rafting and wildlife sanctuaries are the special verities of attraction for adventure tourism.

Role of tourism in Nepal can be analyzed in several perspectives. Employment is generated in Nepal due to tourism. Employee works in various fields like hotel and organizations such as rafting, trekking, mountaineering, travel agency etc. The positive impacts of tourism can be seen on the growth of social norms

and values. People copy attractive behaviours of tourists. Tourism also helps to conserve various cultural and natural heritages. Two natural and eight cultural heritages were listed by United Nations as world heritage sites. Many other wonderful cultures and natural products of Nepal are famous all over the world. Role of tourism, richness in ethnic culture of Nepal is getting its value and people have been aware of preserving it. Nepali people are living in peace and harmony in various major religious faiths. This is why; tourism in Nepal plays a very significant role. Tourism has great contributions in national economy and awakened living standard of people in Nepal.

The tourism for Rural Poverty Alleviation programme (TRPAP) has been implemented since September 2001 in six districts of the country namely Taplejung, Solukhumbu, Rasuwa, Chitwan, Rupendihi and Dolpa. The programme aims to set off example of Nepal government's thought to institutionalize the development process of rural tourism implemented by the Ministry of Culture.

CHAPTER-III

RESEARCH METHODOLOGY

The major emphasis of this study is to analyze the causal factor for the tourism development in Nepal. It had set the objectives to analyze the trend of tourist arrival in Nepal from 1987 to 2011. This study tries to explore the problem related to tourism development in Nepal. The present study is based on the analytical and descriptive research method from the collected data. The importance of tourism is considered as the main mode of analysis of the study. It analyses the arrival by air and land transport and their main purpose to be here in Nepal. Impact of total foreign exchange earnings and arrival of tourist have also been analyzed.

3.1 Research Design

The present study is based on secondary data of tourist arrival in Nepal from 1987 to 2011. It is a descriptive and inferential analysis of data. Nepal Tourism Statistics 2011 and different issues of Economic Survey of Nepal are the sources of secondary data.

3.2 Sources of Data

The present study is purely based on the secondary data, collected from the different sources to meet the set objectives. The secondary data and pieces of the information were extracted from the different published sources such as Journals, Books and Different Statistical Reports as per the requirement.

3.3 Data Collection Technique

On the basis of the research objectives, questions and type of data required for the study, the secondary data and informations of the total tourist arrival Nepal, purpose of visits, average stay, total arrival by nationalities and total foreign exchange earnings from tourism have been required from the Nepal Tourism

Statistics, published by MOCTCA and Economic Survey published by MOF, Nepal.

Nepal statistical year Book published by the Central Bureau of Statistics (CBS), Annual Report of Nepal Rastra Bank and Economic Survey of Ministry of Finance were cited to acquire the reliable valid data for the study.

3.4 Technique and Analysis of Data

The collected data have been analyzed qualitatively and quantitatively. The data have been analyzed through ratio and percent. The tables, charts, and diagrams have been prepared to analyze and present the data. The trend analysis of the total tourist arrival in Nepal and total foreign exchange earnings from tourism have been calculated by using the simple linear function by least square method. The established equation is given below.

$$Y = a + bX$$

Where, Y = number of tourist arrival

X = time variable in year

a = regression constant

b = slope of regression line

The t-test has been used to test the significant of regression parameters a and b, under null hypothesis which are given below:

$$t(a) = \frac{a}{Se(a)} \quad \text{and} \quad t(b) = \frac{b}{Se(b)}$$

Where, Se (a) = Standard error of 'a'

Se (b) = Standard error of 'b'

$$Se(a) = \sqrt{\frac{\sum e^2}{n-k} \left(\frac{1}{n} + \frac{\bar{X}^2}{\sum x^2} \right)}$$

$$Se(\hat{b}) = \sqrt{\frac{\sum e^2}{n-2} \left(\frac{1}{\sum x^2} \right)}$$

Where,

n = no. of year

k = number of parameters

$$\sum x^2 = \sum (X - \bar{X})^2$$

Hypothesis for 'a'

Null hypothesis H₀; a = 0, i.e. the value of regression constant is not significant.

Alternative hypothesis H₁; a > 0 i.e. the value of regression constant is positive and significant.

Hypothesis for 'b'

Null hypothesis H₀: b = 0, i.e. the value of regression coefficient (annual growth rate) is not significant.

Alternative hypothesis H₁: b ≠ 0 i.e. the annual growth of tourist arrival is significant. The value of f-test is used to test the overall significance of the estimated equation by using following formula under null hypothesis.

$$F\text{-test} = (t\text{-test})^2$$

Null hypothesis is H₀: The estimated equation is not valid. Alternative hypothesis H₁: The estimated equation is valid.

Autocorrelation: The correlation among error terms is called autocorrelation. The auto correlation has been estimated by using following formula:

$$\rho = \frac{Cov.(e_t e_{t-1})}{Var.(e_t)} = \frac{\sum_{i=2}^t e_t e_{t-1}}{\sum_{i=1}^t e_t^2}$$

Durbin-Watson Statistic

The test developed by J. Durbin and G.S. Watson for small samples in 1950 is called D-W statistic, which can detect the presence of auto correlation. They had tested the null hypothesis of non-autocorrelation i.e. $H_0: \rho = 0$ against the alternative hypothesis of positive auto-correlation of first order i.e., $H_1: \rho \geq 0$. They gave formula for the calculation of Durbin-Watson statistics named as 'd' and defined as follows (Sutihar, 2010: 578).

$$d = \frac{\sum_{i=2}^t (e_t - e_{t-1})^2}{\sum_{i=1}^t e_t^2}$$

where, e_t =residuals at the time period t.

$\sum_{i=2}^t (e_t - e_{t-1})^2$ = the square of difference in two successive errors summed from second observation.

$\sum_{i=1}^t e_t^2$ = the sum of square of residuals.

This statistic measures the correlation between each residual and the residual for the time period immediately preceding one.

For Positive Autocorrelation

- i. If $d < d_L$, d is significant and null hypothesis is rejected which shows that there is positive autocorrelation.
- ii. If $d_L < d < d_U$, the test is inconclusive, i.e. the result does not have a universal application.
- iii. If $d > d_U$ and closer to 2 but less than $4 - d_U$ i.e. $d_U < d < 4 - d_U$, then test is not significant and accept null hypothesis i.e. there is no positive autocorrelation and error terms are independent.

For Negative Autocorrelation

- i. If $d > 4 - d_L$, d is significant and null hypothesis is rejected which shows that there is negative autocorrelation.
- ii. If $4 - d_U < d < 4 - d_L$, the test is inconclusive, i.e. the result does not have a universal application.
- iii. If $d_U < d < 4 - d_U$, then d is not significant and accept null hypothesis i.e. there is no negative autocorrelation and error terms are independent.

Chi-Square Test:

The Chi-square test has been used to test that the sex and age of tourist arrival are independent under null hypothesis by using the formula given by Brandt and Snedecor formula (Sutihar, 2010: 567).

$$\chi^2 = \frac{N^2}{n_1 \times n_2} \left[\frac{a_1^2}{m_1} + \frac{a_2^2}{m_2} + \frac{a_3^2}{m_3} + \dots + \frac{a_k^2}{m_k} - \frac{n_1^2}{N} \right]$$

Null hypothesis H_0 : The sex and age of tourist arrival are independent.

Alternative hypothesis H_1 : The sex and age are not independent.

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Tourism in Nepal after 1951 up to 1957

After the advent of democracy the gate for Nepal was made open to all the outsiders. Nepal took the membership of United Nation in 1955 and made itself on international reorganization. Similarly, Nepal also had taken the membership of different organizations as FOA, UNICEF, WHO, UNESCO etc. In 1957, Tourism Development Board (TDB) was formulated under the chairmanship of the Ministry of Trade and Industry. In 1958, this board was transferred to the Ministry of Public work, transport and communication. In 1959, tourism sector was attached with department of construction and communication and the directorate of tourism was formed. Afterwards Nepal became the member of various world tourism organizations, such as International Union of Official Travel Organization,(IUOTO), South Asian Travel Commission,(SATC) Pacific Area Travel Agent (PATA), etc. The importance of tourism had increased day-by-day after being a member of different world organizations. The number of tourists visited Nepal in 1952 was 562 and in 1966 it was 12,567. In 1967, Department of Tourism was transferred to the Ministry of Commerce and Industry from Previous Ministry and tourism was recognized as an industry. During the period 1966 to 1968, the government policy was so made that accommodation facilities were increased leading to an increase in the various grade hotels providing modern facilities and accommodation (Upadhyay, 2005: 18).

The concept of tourism was recently understood before the unification of Nepal. The number of tourist visiting this country at that period was also very small in number. Most of the people who visited were also with the inception of Buddhist religion on the holy pilgrim. In its early stage of 5th century B.S. Gautam, the Buddha had visited the Kathmandu valley and at that time the

kingdom was ruled by the king of Kirantis Dynasty. In 406 B.S., The noted Buddhist monks and Chinese traveller Fa-Hsien came to Nepal on a Pilgrimage to the places where Sakyamani Buddha was born. During the regime Anshuvarma, Buddhist was introduced in Tibet by the Nepalese princess Bhrikuti. In 2049 B.S., Emperor Ashoka of India had visited the Kathmadu valley on his pilgrimage tour to the holy shrine of Gautam Buddha. His visit was associated with the foundation of one neighbouring hamlet of Kathmandu city called Chabil. He had married beautiful girl Charumati to Kshatriya King Devpali of Devpatan and they had founded a Bihar called Charumati Bihar which still remains and is visited by many pilgrims. Emperor Ashoka had erected Buddhist Stapas at four corners of Lalitpur. In the 7th Century Shankaracharya visited this place after Lord Buddha. Our religious epics for example the Ramayana and the Mahabharata also hint that there might be the several visitors in Nepal during the period. It is noted that Nepal is a holy place where goddess Sita and lord Gautam Buddha were born. Arniko the Nepali famous artist went to China and developed there the Pagoda architecture with a group of Nepali artesian in the invitation of emperor of Mongol in 13th Century (Kumar, 2006: 17)

Nepal remains a long time in isolation and obscurity like a silkworm in its cocoon in tourism during the bureaucratic ruling by the Ranas for 104 years who never tried to get in touch with outside world rather than afraid that their public will know something more so that they may be over thrown. Their policy did not encourage the tourism in Nepal. They were afraid that the tourism might bring the consciousness among the people of Nepal. Thus the Nepalese art and culture were almost hidden at the period of Ranas. Only for the three days the Indians were allowed during the Shivaratri. European especially the British were allowed but have to wait for the invitation of the rulers (Adhikari, 2004: 12).

4.2 Tourism Development in National Plans

Role of tourism in the national economy of the country has been well recognized in all the plans of Nepal. The plans and policies adopted by the government of Nepal had helped a lot in the development of tourism industry in Nepal.

First Five Year Plan (1956-1961): During this plan period Tourism Development Board was established and the feasibility study was carried on hotels and touristic spots. Different posters and pamphlets about Nepal were distributed in various international organizations. A measure of recording statistics about tourism was introduced and other measures were also taken in connection with guide training (NPC, 1957).

Second Three Year Plan (1962-1965): The Second Plan aimed to spend Rs. 20 Lakhs for the development of tourism. In this plan, emphasis was given on the hotel accommodation and transportation. But the actual outlay was approximately Rs. 8.03 lakhs. On this plan period relationship between various international organizations was established and a repartee department of tourism was also established in Kathmandu (NPC, 1962).

Third Five Year Plan (1965-1970): During this plan period the expenditure estimated for the tourism was Rs. 50 lakhs and the priority was given to the development of accommodation and transportation facilities. In this plan period, hotels were opened at Biratnagar and Janakpur. For the advertisement in the international field various tourist films were produced. For the sightseeing in Kathmandu, Rhino tour had began from the year 2023 B.S. Similarly, in this plan period, presentation of temples, historical places, establishment of Mahendra Sangrahalaya, Nepal Museum and archeological garden in Lalitpur and a master plan for the development of Lumbini was formulated. This in comparison to first and second plans, the third plan seems more ambitious for the development of tourism (NPC, 1966).

Fourth Five Year Plan (1970-1975): This plan aimed to spend Rs. 50 lakhs on tourism development and to make a separate tourism plan. The emphasis was given in the advertisement and establishing a photo laboratory. The plan also aimed to establish tourism information centre in Pokhara and Birjung and also aimed to produce 150 guides. Various facilities were provided by the government to encourage private sector. In order to obtain the desirable growth rate in tourism, the private sector was encouraged by providing loan facilities to hotels through Nepal Industrial Development Corporation (NIDC) (NPC, 1972).

Fifth Five Year Plan (1975-1980): During the fifth plan, second phase of the master plan was carried out. The expenditure was established Rs 100 lakhs in the tourism activities. The fifth five year plan had the following objectives in terms of tourism development.

- To earn more foreign currency.
- To provide more employment opportunity.
- To establish tourism centers in all growth centre for reducing the existing regional disparity.
- To encourage tourism both at home and abroad.
- To meet the above objectives his majesty's government of Nepal had allocated Rs. 2 cores to spend on the broad heading international probability, hotel management and tourism training centre and establishment of tourism information centre (NPC, 1975)

Sixth Five Year Plan (1980-1985): Sixth plan included the preparation of second phase tourism master plan (NPC; 1985: 342-344). It was made with the help of an expert team from European Economic Community (EEC) in consultation with concerned Nepalese authorities. The experts from EEC also reviewed first phase tourism master plan. During this plan, Himalayan Region Mountaineering Development Project (HRMDP), Remote Area Tourism Development Project (RATDP) and Tourism Development Program (TDP)

were launched. Many research and studies related to tourism development were also conducted.

Achievements

- Of the 1,310 peaks higher than 6,000m, Nepal opened 115 peaks to mountaineering expeditions. During this plan period, Nepal earned a total income of NRS 9, 15, 29,349 equivalent of foreign exchange.
- Under the Himalayan Region Mountaineering Development Project, pictures of 87 snow peaks and Trekking routes were developed. Two hundred brochures were distributed.

The following research and study were exercised for implementation:

- Canoeing
- increase in earning and employment opportunities through tourism
- Development of manpower in tourism sector
- Effects of mountaineering on ecology
- Tourism development in and around Tatopani
- Feasibility of ballooning, and
- Feasibility of Skiing

In the area of developing tourist activities in different places in the country, survey of Antodanda and Mai-Pokhari in Ilam, Saungradanda of Dhaulagiri, Tyamke Danda of Bhojpur, Halesi Mahadev Mandir of Khotang, Trekking routes to Lukla- Tumling, Langtang - Gosaikunda- Helambu, Timalnarayan in Kavre, Gupteshwore cave and Panchaselake in Parbat, Trekking route to Pokhara-Dhorpatan, Dumre - Manang, Pokhara- Mustang, Muktinath, Lumbini, Tilaurakot, Khaptad, Dadeldhura, Dharchula and Shukltaphat have been completed.

Tourist office in Pokhara and tourist information center in Janakpur, Kakarbhatta, Tribhuvan international, Basantpur, Birgunj and Bhairahawa were improved.

- Under the tourism materials production, distribution and promotion program, millions of brochures, posters, stickers, and badges were distributed. Production of two documentary films, reprinting hundred copies of films and advertising these in international media were done.
- Under Tourism Development Program in Pokhara, trees were planted in Pokhara valley. The sheep farm in Ghandruk was converted to tourist guesthouse. Mahendra cave was electrified.
- At the end of this plan in 1983, 179, 405 tourists have visited Nepal. The foreign exchange earned in 1984 was NRs 5, 86,000 thousand.

Seventh Five Year Plan (1985-1990): The seventh plan has identified and developed the following objectives, policies and programs for the tourism sector (NPC, 1985: 344-348).

Objectives

- To improve the balance of payments situation through increased foreign exchange earnings by attracting the upper class tourists.
- To generate new opportunities of employment by enhancing tourist related business and by stressing their capacity utilization.
- To increase the duration of stay of tourists and ensure a wider distribution of tourists generated income by expanding the tourism related activities and business to those areas, which have the necessary infrastructure.
- To produce to the maximum possible extent, goods consumed and utilized by the tourism sector domestically to reduce imports and to encourage domestic industries.

Policies

- Tourism promotion activities would be further intensified in places of tourist interests.

- As compared to other countries of the region, it has become essential to increase the number of tourists visiting Nepal. Hence, to increase the flow of tourists, different taxes, levies, and other rules and regulation presently in practice and related to tourists, would be simplified in time after thorough review.
- Investments from both public and the private sectors would be encouraged to develop and extend tourist related facilities in such areas where infrastructure have been developed and which hope promise for tourists attraction.
- Mountaineering tourism development would be further developed with concentration of efforts on mountaineering and trekking.
- In addition to the traditional sources (Europe and western countries), efforts would be intensified to attract tourists from Asian countries and, to this end, different measures would be implemented including those related to pilgrimage.
- All services such as airport, hotels and internal flight services related to tourism promotion would be further strengthened and improved.
- The atmosphere and surrounding of cultural, religious as well as historical heritage and of the tourist centers would be conserved and protected.

The following projects have been included for implementation in the seventh plan.

Himali Region Mountain Tourism Development, Tourism Survey and research, Resort Area Development, Pokhara Tourism Development, Taragaun Development Committee, Mobile Tourist Police, etc.

Achievement

The major achievements during this period are as follows (NPC, 1992: 341-343).

- The tourist inflow in Nepal had increased by 11.05% on an average during the first four years of the seventh plan, which were 8,51,989. The foreign exchange inflow reached up to US \$68,343 towards the final year of the plan.
- Development of tourism in the Himalayan Region was done. Tourism survey and research was done. Under it, 26 feasible tourist spots were surveyed. A program has been initiated to develop Annapurna Conservation Area.
- Tourism and hotel management training was conducted. 3,241-trained personnel have been produced in this sector.
- Previously restricted areas with high tourist potential area like Mustang and Manaslu have been opened for trekking.
- Agreement has been made for implementation of tourism development project presented by the appraisal mission of Asian Development Bank for the first time. The Bank agreed to provide 450 million rupees as loan.
- An attempt was made to upgrade air services in Nepal. In order to improve international air transport system, bilateral aviation agreements have been made with twelve countries.

Eighth Five Year Plan (1992-1997): The government having followed a liberal economic policy and having taken a coordinating and supportive role in the form of a catalytic agent to mobilize the private sector in its development. Tourism industry was thought to play the role of a major sector in economic development in this plan (NPC, 1992).

Objectives

- To earn larger amount of foreign currency by the development of tourism sector.
- To keep on expanding the tourism activities to other places of the country in order to ease the tourist pressure in a few limited areas.

- To improve the living standard of the people and to reduce the level of poverty by increasing the employment opportunities through the expansion of tourism industry.
- To improve the quality of services and facilities relating to tourism together with the promotion of environmental, historical, and cultural properties.
- To develop necessary infrastructures required for the operation of efficient, safe and well facilitated and standardized air services.
- To forge a close coordinating link between tourism sector and other sectors of the country.
- To augment the use of local materials and services in the tourism industry.

Policies

It was aimed to develop Nepal as a final destination for tourists and to operate the tourism industry as a main source of employment generator by implementing the following policy wise activities.

- Tourism Promotion and Publicity

This program would be launched in order to increase the inflow of the tourists with greater spending capacity from Australia, Western Europe, America and in the newly developed tourists market. It has attempted to further increase the number of Indian tourists. In order to provide facilities to the tourists coming to Nepal, scheduled and chartered services of foreign airlines would be encouraged and the visa process would be simplified.

- Encouragement would be given to produce materials and services within the country to be used by tourists.
- Adventure Tourism Development

Respective infrastructure would be developed at new trekking areas as a part of phase- wise opening of new trekking routes. The right to conserve and

safeguard those routes would be given to local community so that, the environmental and cultural aspects could be presented. Adventure activities like rafting, paragliding, fishing, hot air ballooning etc would be operated.

- Private Sector Mobilization and Facilities

Private sector would be mobilized effectively. Interested local or foreign investor would be welcomed to invest in the tourism sector. Loan would be provided to them easily. Various financial facilities would be provided as required.

- New Infrastructure Development

Physical infrastructures like road, communication, air transport network are the pillars for tourism development. For this, the government would invest in this sector heavily. It would encourage private sector, NGO and INGO to invest.

- Administrative Consolidation

Mobile tourist police system would also be made available outside the Kathmandu Valley, Tourism law and acts would be updated with scientific changes and amendments. Administrative procedure would be simplified and appropriate environment would be created with attractive facilities for the promotion of local, foreign, or joint investment in tourism and current administrative procedure relating to hotel, travel, trekking and rafting enterprises would be simplified.

- Air Services

NAC would play important role to develop tourism in Nepal. It would extend its international services to Japan, France, South Korea and other countries in order to provide air services to the tourist originating places. Towards domestic air services within country, it would be connected by trunk services to Kathmandu. Tribhuvan Airport would be developed as a focal point. Liberal

sky policy would be adopted to attract private sector. Middle level manpower would be produced for standard civil aviation services.

- NRS 3719 million had been allocated in the eighth plan for programmes related to tourism sector including civil aviation. The programmes included:
- Promotion of Mountain Tourism
- International Contact and Market Management
- Tourism Research and Survey
- Production and Distribution of Publicity Materials
- Tourism Promotion
- Promotion of cultural and Religious Tourism
- Extension of tourism services and facilities
- Consolidation of Tourist Services
- Tourism Promotion Development Project
- Tourism Manpower Development
- Taragaun Development Committee

Achievement

The major achievements during this period have been described here (NPC, 1997: 454-455). The eighth plan incorporated the policies of maximizing the foreign currency earning from tourism, diversifying tourism to other parts of the kingdom and using tourism for poverty alleviation. It has emphasized launching various promotional campaigns for tourism promotion, encouraging international airlines to fly into Nepal and raising the quality of tourism, among to others.

Nepal took part in various tourism fairs and promotional events in different parts of the world. Destination promotion was done through various media like broadcasting tourism programs on radio, information on internet and publication and distribution of various brochures. Advertisements were given

in papers, on TV particularly on Star TV. Preparatory works for visit Nepal'98, which aims at qualitative development of the tourism industry were ongoing.

Under the policy of developing tourism products, a study of the Indian market was carried out. Improvement of tourist sites at Sunsari and Myagdi were carried out. Nepal's adventure tourism added two new products in the form of hot air ballooning in Kathmandu and a power gliding in Pokhara. Under the tourism infrastructure Development Project, Pokhara airport was upgraded and the Gorkha palace area was improved environmentally. Activities pertaining to Himalayan Rescue Association⁹ (HRA), Sagarmatha Pollution Control Project (SPCC) and Annapurna Conservation Area Project (ACAP) were carried out under this program. Work to build an international mountain museum was started in Pokhara. A

With a view to specifying the respective roles of government and the private sector, tourism policy 1995 was executed by the government.

The eighth plan sought to encourage the private sector in the tourism industry. Accordingly, the private sector was encouraged to operate air services in the domestic routes. An open and liberal sky policy was adopted in the international civil aviation. Under the new policy initiatives, 14 air operators including sports and ballooning were permitted to fly in the domestic sector.

Many of them have already started their operations. Helicopter services have been offering their services in remote areas. In the eighth plan period under the institutional improvement schemes, statutes pertaining to Tourism Development Board, 1996, took effect during the plan period. Necessary amendments in the National Civil Aviation Policy (NCAP) 2050 have been made, giving due consideration to issues like competitive development and the safety of domestic airlines.

The RNAC has been operating to 11 places of 9 countries under its services expansion policy. Among the international airlines, those of Singapore,

Thailand, Qatar, Pakistan, India, Bangladesh, China, Bhutan, Russian Federation etc. have been operating their services in Nepal.

TIA has been upgraded as a focal point of National aviation in accordance with the plan objectives. A green channel has been established at the TIA to facilitate the smooth check-in and check-out of tourists, Preparatory work for opening the airport round the clock was being implemented. Altogether, 601, technical manpower was produced for fire control, aviation security and so on.

A policy has been adopted to ensure emergency airlift of people including tourists during the times of Natural calamity and other emergencies. Compared to the estimated, number of 19,07,745 tourists, a total of 17,64,739 tourists visited Nepal during the eighth plan, which was 92.5% of the target set for the plan period, Similarly, US \$ 374.6 million was raised in terms of tourism receipts as against the set target of US \$ 375.4 million.

New Tourism Policy 1995: Government of Nepal, ministry of tourism and civil aviation has introduced a new policy in 1995 (Paudel, 2008: 37-38). The tourism council in its third meeting on 14 June 1995 passed this policy. The cabinet approved it on 22 June 1995.

The new policy has five objectives. They are:

- To develop tourism as an important sector of the national economy by developing linkage between tourism and other sector.
- To diversify tourism down to rural areas so as to improve employment opportunities, foreign currency earning, growth of national income and regional imbalance.
- To improve national culture and human environment of nation in order to develop and expand the tourism industry.
- To maintain a good image of the nation in the international community by providing quality service and sense of security.
- To develop and promote Nepal as an attractive tourism destination.

The new policy has given great importance to the role of private sector in Nepal's tourism development. According to different policies introduced by new tourism policy, the private sector would be encouraged to participate in the task of tourism diversification. This policy also covered local people's participation in environmental conservation, upgrading of existing tourism infrastructure facilities, development of new tourism destination, especially, in rural areas and, improvement and provision of religious sites. The policy also extended to develop Nepal as a center for adventure tourism.

Ninth Five Year Plan (1997-2002): Tourism industry could be developed as an important sector of the national economy on account of its comparative advantage engendered by existing attraction features and special geographic location of the nation. Tourism activities based on social, natural, religious and cultural environment of the nation would be developed and diversified during the ninth plan (NPC, 1997: 459-464).

Objectives

- To establish backward and forward linkages of the tourism sector with the national economy so as to develop it as an important sector for the overall economic development.
- To establish Nepal as a premium destination in the world tourism market through effective publicity and promotion
- To enhance employment opportunities, income generation and foreign currency earnings from the tourism sector and extension of these benefits down to the village level.

Target

Tourist arrival was expected to increase by an annual rate of 10 % and the tourism receipt by 20% during the ninth plan period. In the first year of the ninth plan an estimated 4,20,000 tourists were expected to visit the country. The number was expected to reach 6,76,414 by the final year of the plan

period. Similarly, an estimated US \$ 213 million was expected in terms of receipts in the first year and US \$ 52706 million in the final year.

Policies and Programs

- Additional destinations would be developed and diversified on the basis of feasibility study.
- Historical, religious and cultures sites scattered throughout the country would be registered in form of national heritage sites; they will be conserved and used for tourism purpose.
- Local people in tourist area would be encouraged to develop infrastructure facilities to the best of their abilities.
- Modernized communication, air conditioned transport services would be encouraged in the tourist area.
- Emphasis would be given to produce local goods and handicrafts for tourist consumption.
- A number of feasible activities such as hot air ballooning, hot spring, honey hunting butterfly/ bird watching, anthropological tours and many more would be encouraged.
- Ecotourism, medical tourism, conference and convention tourism, cultural tourism, festival tourism, scientific tourism, village tourism, adventure tourism, holiday tourism and other value based tourism activities would be promoted.
- The local people would be mobilized for the development of tourism as far as possible.
- The airline services would be extended and made available in reliable manner. Tribhuvan international Airport would be equipped with modern technology.
- The environmental pollution in tourist areas would be minimized as far possible.
- A well planned record of lakes, ponds, caves, etc, would be established.

- The private sector would be encouraged to play a leading role in market promotion. In this context, visit Nepal'98 campaign was going to be launched with a view to enhancing quality in the tourism industry and maximizing tourism receipts.
- Marketing and promotion of tourism would be the role of Nepal Tourism Board and the Private sector. Many programs like Tourism Site Development, Tourism infrastructure Development, Model Tourist Village, Mountain Tourism Development, Tourism Promotion Program, Tourism Human Resources Development, etc, were set to develop newer destination along with provision of infrastructure to relieve the pressure of traditional destinations. Tourism that promotes rural economy would be encouraged.

Achievements

The major achievements during this period have been given here (NPC, 2002: 224-227). To establish tourism and culture sector as one of the important sectors of the national economy, the ninth plan had targeted the development of forward and backward linkages and conservation of existing and proposed World Heritage Sites and their promotion as tourist destinations. Similarly, it had targeted to tie up conservation of the national heritages to income earning opportunities and their institutionalization through community management. Effective marketing of Nepal in the international areas to establish it into a major tourist destination, development of traditional arts into an industry to create new employment opportunities, increase in income and foreign currency earning and to channel the benefits accrued from the tourism sector to the rural areas were the major targets of the ninth plan.

"Visit Nepal'98" was launched as a national campaign for the first time for the development of the tourism sector. It played a crucial role in generating awareness on tourism, drawing attention and local investment on tourism related areas, bringing new tourism destinations to the forefront, promoting tourism contacts worldwide and re-establishing Nepal's tourism image in the

world. New aviation agreements were reached with the friendly countries and existing ones were renewed adding a number of air seats and air routes.

During the plan period with the help of international donor agencies, infrastructures were added in the hilly and the busiest local airports. Similarly improvements in runway, addition of more equipment, improvements of the standard of Tribhuvan international Airport, expansion of parking area and terminal buildings, strengthening of the fire extinguishing services among others were achieved during the plan period. Despite a sharp decline in the arrivals of the south Asian tourists towards the middle of the ninth plan period, overall number of the tourists visiting Nepal grew due to the addition of four international airlines that were given permission to start their services abroad. In the area of institutional development, Nepal Civil Aviation Authority was set up and Tourism Department was dissolved to establish Nepal Tourism Board with the participation of the private sector. Cultural issue was brought under the tourism sector and the ministry was renamed as the Ministry for Culture, Civil Aviation and Tourism.

The Buddhist Conference was convened in Lumbini. Significant construction works and reconstruction of Mayadevi Temple started in the area. Lumbini area has also been enlisted in the World Heritage list.

Against the target of 10% growth in tourist arrivals and 20% growth in foreign currency earnings during the plan period, the achievement had been as follows:

The targeted number of tourist during that plan period was 25,64,142. However, only 22,01,928 tourists visited. The average length of stay in Nepal was targeted 13 days. However, in the first three years of the plan period the figure was 10.49, 10.76 and 12.28 days respectively and in the fourth and fifth year, the average stay day declined to 11.88 and 11.93 days respectively. Per stay. Income from a tourist was expected to be US \$60 however in 2001 the figure was only US \$ 39.6. The ninth plan targeted to provide direct employment to 1,11,329. The achievement at the end of 2001, however, was

only 80,000 employments. Contribution of this sector in the total foreign currency earnings and GDP was 12% and 3.1% respectively.

Main Problems in Ninth Plan: In ninth plan period, the tourism sector has been affected by the following major incidents:

- The suspension of Indian Airlines Flight following the hijacking of one of its flights that took off from Kathmandu.
- Different circumstances like Conflict, insecurity and the tragic incidence in Royal Palace in 2001.
- The 11 September 2001 terrorist attack in America, and the Afghanistan war.
- The frequent Banda and strikes announced by political parties and the nationwide imposition of emergency.

Tenth Five Year Plan (2002-2007): The effective and prioritized implementation of the programme in the tourism sector has already emerged as an important organ of the national economy of Nepal. It has not only contributed to national economy but also provided benefits to foreign tourists. It has increased the income generation and employment opportunities. In view of this, following objectives have been set forth in the tenth plan (NPC, 2002: 228-236).

- Sustainable development and qualitative promotion of the tourism sector.
- Conservation and preservation of historical, cultural, religious and archeological heritages and enhancing their practical utilization.
- To render air transportation services easily accessible, secure standard and reliable.

Emphasizing to recover the opportunities of the ninth plan period, the following annual quantitative targets have been fixed for the tenth plan period (Table 4.1).

Table 4.1: Quantitative Targets of Tenth Plan

S.N.	Particulars	Target of this plan
1.	Tourist Arrival(in thousands)	516
2.	Tourist stay period (in Day)	13
3.	Foreign currency earnings (in million US\$)	205
4.	Earning per tourist per day (in US \$)	60
5.	Contribution of tourism to GDP	3.0
6.	Employment: Direct (in thousands)	100
	Indirect (in thousands)	125
7.	Regular international flight number per day	17

Source: NPC, 2002: 228.

Strategy

Development of the tourism sector assists the overall development of the national economy and generates foreign currency; it also helps in the economic development of the hilly region that has low agricultural productivity and creates employment in the region.

- Besides the established tourism markets, less risky tourist destinations would be promoted.
- By increasing the use of locally produced goods and services, local retention of the money spent by the tourist would be encouraged.
- Eco tourism would be promoted.
- Study, conservation and preservation of literature, art, culture and natural areas would be done with the help of government and non-government organization.
- Mountaineering, trekking and other adventure tourism in new areas through participation of local community and non-governmental organization would be focused.

- Domestic tourism would be established as an economic alternative and a strong and reliable security would be implemented for the safety of domestic and international tourists.
- It would be emphasized the participation of the private sector in construction, operation and management of long distance as well as short distance air services.
- Nepal Tourism Board would, in coordination with local community, private sector NGO and educational institute, conduct programs at local level to enhance public awareness, publicity towards tourism.
- NTB would be set up as Tourism Center (hub) and the set programs would be integrated.
- Private sector would be involved in the management of pollution and garbage problems in the urban areas. To make the tourists area safe and well managed, various governments recognized agencies would be encouraged to coordinate.
- Necessary amendments would be made in existing policies, laws and implementation process to make the arrival and departure of international airlines easy, transparent and attractive.
- During the plan period, 13 programs on tourism, 12 on culture and 9 on civil aviation with total of 34 would be implemented.
- Focusing on potential markets such as India and China, Tourism promotion activities have been carried out.
- The destination Nepal Campaign (2002-2003) has been concluded in order to place as a remarkable destination in the international tourism map through the slogan "Naturally Nepal: Once is not enough".
- In order to make a significant contribution towards the national goal of poverty alleviation, and to achieve a sustainable development in tourism. Tourism for Rural Poverty Alleviation Program (TRPAP) would be started.

- With the objective of producing human resources of international standard, courses in Bachelor in Hotel Management and Bachelor in Tourism Management were being offered by NATHM and different colleges under affiliated with different universities of Nepal.
- Golden jubilee celebration of the first conquest of Mt. Everest and other mountains more than 8000m height have been concluded, As per the policy of developing and expanding the tourism industry, there has been a considerable increase in the number of hotel serving tourists, travel agencies, trekking agencies and star hotels.
- During the tenth plan period the target was to increase tourist arrival at an annual rate of 7.25 with the total target of 516, 000 tourists. The plan had set target to increase foreign currency earnings by 8%. However, the number of tourists continued to decrease during the plan period of 2000 to 2002. Although there was some improvement in 2003, and the number of tourists rate could not be sustained in 2005 and the number of tourists dropped by 2.2% to 375,000 A slight progress was made an increase of 2.3% in the tourist arrival during the plan period.
- For operating domestic and international flight services, Air operator certificates have been granted to 42 airline companies, out of which 17 companies are now in operation.
- In order to implement satellite-based communication, Navigation, Surveillance and Air Traffic Management system in Nepal, a ten-year plan (2005-2015) has been prepared and was in the process of being implemented.

Three Years Interim Plan (2007-2010): Nepal will be established as a major tourist destination in the international level by preserving and conserving the existing natural inherent heritages, tangible and intangible intellectual and cultural heritages and by developing accessible and safe air services. It is necessary to enable the tourism sector so develop as an important segment of the national economy. It could contribute significantly in economic growth,

employment generation and poverty alleviation. Recent political development in Nepal has led to a peaceful settlement of the decade long conflict. As a result, the image of the country is improving at global level, and possibility of growth in the tourism sector is getting stronger (NPC, 2007: 210-216).

Objectives

The objective of the three-year interim plan related to culture tourism and civil aviation are as follows:

- To preserve, conserve and promote intellectual, cultural and archeological heritages.
- To develop the tourism sector as major segment of national economy by developing Nepal a major destinations of tourism related infrastructure as well as promotion, diversification and expansion of tourism in order to create employment an improvement in the living standard of the people.
- To develop healthy and competitive air services through the expansion of the domestic and international air services by involving the private sector in construction, development, expansion and operation of infrastructure related to the air transport sector to contribute tourism and economic development and to make regulation of civil aviation effective for safe, organized, reliable and quality air service. The quantitative target is also set in this plan period (Table 4.2).

Table 4.2: Quantitative Targets of Three Year Plan

S.N.	Particulars	Situation as FY 2006	Target in 2009/10
1.	Tourist arrival (in thousands)	375	700
2.	Tourist staying periods (in days)	9.1	13
3.	Convertible foreign currency revenue (in million US \$)	148	300
4.	Expense per tourist per day (in US \$)	58.5	63
5.	Proportional percentage of tourism in GDP	2	3
6.	Direct employment (in thousands)	83	100
7.	Regular international flight number per day	17	25
8.	Tourist arrival via international flights	13,83,000	15,00000

Source: NPC, 2007: 211.

Strategy

In order to achieve the above mentioned objectives, the following strategies will be adopted.

- Local bodies will be involved in the preservation, conservation and promotion of tangible and intangible cultural heritages and they will be involved in tourism promotion also.
- Efforts will be made to add more possible places in the list of world Heritage site.
- By giving high priority, the tourism sector will be developed as the foundation of the economy.
- More trained manpower will be produced for tourism as well as civil aviation sector.
- By considering regional balance as well, diversification and expansion of the tourism sector will be carried out.
- The civil Aviation Authority of Nepal will be strengthened to increase the institutional capability. Private airline companies will be encouraged

to contribute an economic development through the expansion of domestic and international air services.

- Safety management system will be implemented to ensure flight safely and the emphasis will be given for infrastructure development of second international airport in Nijgadh, Bara.
- Using modern information technology and equipments, tourist service will be further enhanced.
- In order to reflect direct and indirect revenue from the tourism sector and their effects on different groups and communities in the national account, satellite accounting system will be brought into implementation.
- In order to preserve, conserve and professionalize intellectual creations by Dalits, Adibasi, Janajatis , Madeshis , Muslims and women, traditional knowledge and skills and special programs will be launched.
- The tourism sector will be diversified by developing education tourism, health tourism, wildlife tourism and agro-ecotourism, sports, mountaineering and trekking tourism, adventure and entertainment tourism, cultural tourism, seminar tourism and so on.
- Necessary initiatives will be taken to involve Nepal Tourism Board, Development committees and various organizations, in the development of tourism infrastructure and in addition to publicity works.
- According to the commitment expressed in the context of joining the World Trade Organization, Nepal as supporter of the international system of copyrights protection, will approve requisite international treaty and convention.

The three years interim plan has aimed to get maximum number of tourists. However, it is challengeable due to recent global financial crisis. The political situation of Nepal is also not stable. Hopefully, the financial crisis will disappear soon. The government should provide short-term tourist stay package

so that we can attract more tourists. The government should establish peace and security.

Tourism Policy 2065: Ministry of Tourism and Civil Aviation (MOCTCA) has brought the Tourism Policy 2065 after some amendments (MOCTCA, 2009: 1-15). The government will provide Rs 10 subsidy on diesel. The government has withdrawn electricity demand charge for hotels, just like for manufacturing industries. The ministry of tourism is planning a curriculum regarding tourism and the development of a separate Tourism University. European arrivals are declining due to the global financial crisis as they are investing in short distance tourist destinations. Therefore, the policy focused in Nepal will now be on boosting regional tourism. The new policy will also promote rural, agro, adventure, health and educational tourism. The ministry is planning to include tourism industry in Special Economic Zones (SEZ). The ministry has also worked on ways to avoid congestion. Korean company LMW has shown interest in the construction of a second international airport and submitted a proposal that is under consideration. The government is planning to construct a second international airport in Nijgadh of Bara district, In this policy, the government will provide air services to people in rural areas. Single-engine aircraft, cargo and air taxis will soon become operational and that will reduce airfare by 25 per cent in the Karnali and western regions. The ministry is also reviewing the Air Service Agreements with India and Qatar. Air services agreements with Bahrain and Sri Lanka were reviewed recently. To make Nepal Tourism Year 2011 a grand success, the government has formed 14 different sub-committees along with regional committees. To develop the tourism industry, Nepal Tourism Board (NTB), Nepal Airlines Corporation, (NAC) and Hotel Association of Nepal (HAN) are jointly working on special packages. There are also some modifications in the civil aviation sector aiming at reducing air congestion. The ministry is planning separate parking places for helicopters and Twin Otters. Recently, the government has announced the new tourism vision 2020. The government aimed to attract 20 lakh tourists in 2020.

Problems, Challenges & Opportunities of Tourism Development in Nepal

Studying the plans and policies of government of Nepal, We can find many problems and challenges as well. There are many constraints to implement the policy in required manner. The main problem is the political instability. The government fails to work completely for its full tenure. Tourism is highly affected by international environment. International problems like economic recession, terrorism, epidemics etc. are the main hindrances in tourism trade. However, the potential of tourism in Nepal is high. There is greater opportunity to get maximum benefit from tourism in our country because of our geographical diversity. Here some problems and challenges have been discussed.

- Limited capacity of international, which is a crucial link between Nepal and the outside world.
- Inadequate provision of physical facilities, modern communication, and navigational aids equipments at the domestic airports to make domestic civil aviation safe and qualitative.
- There is shortage of infrastructure necessary for proper development of existing as well as feasible tourists' spots.
- No attention has been focused on the promotion of environmental, cultural and religious properties while planning for the development of tourism.
- There is a lack of appropriate programs that would inspire tourists to stay longer in Nepal incurring higher expenditure.
- No effective implementation of the promotional works has been made for the development of tourism.
- The effect of seasonality has not been minimized with a view to expanding year round attractions.
- Nepal has not been publicized in the international market in competitive basis.
- Inadequate tourism activities to extend the duration of stay.

- Tourism infrastructure is limited only to a few geographical areas.
- Inadequate retention of tourism receipts.
- Per day tourist expenditure is very low as compared to other destinations.
- The services and capacity of international airlines that have a direct linkage with Nepal are insufficient.
- Internal air services are limited and the services are not up to the required standard. In this way, adequate infrastructural are yet to be completed for the development of air transport.
- Until now, it has not been possible to increase the tourist inflow all round the year. Consequently, the impact of seasonality on tourism is prevalent.
- Tourism sector has not been able to maintain close linkage with other economic sectors.
- Lack of development of new tourist spots and inability to orient tourist services towards rural areas.
- There is an absence of analysis and estimation of the portion of the revenue generated by the tourism sector that stays inside the country, status of the development of cost based quality tourism, direct and indirect employment, use of established infrastructure and necessity of investment.
- Inadequate and poorly developed institutional mechanism in the government and the private sector for qualitative improvement of tourism.
- Political unrest
- If we solve these problems, we can definitely maximize the benefit from tourism.

4.3 Presentation and Analysis of Data

This chapter deals with the available data related to tourist arrival and means of foreign currency earning. This chapter concentrated on tourist arrival, trend of

arrival, average length of their stay, tourist generating market, purpose of their visit and major destination in Nepal and tourist arrival by nationality were included in the following chapter. As per the requirement of study, the researcher of the study has been analyzed the trend of tourist arrival in Nepal from 1987. Another fact for it is lack of data about the earlier record and problem of showing the trend of moving average.

4.3.1 Tourist Arrival in Nepal

The statistic of tourist arrivals have been maintained at official level since 1962 A.D. in Nepal which was 6179 (Shrestha: 2010, 32). But due some constraints, the tourist arrival in Nepal from 1987 to 2011 has been presented below. This will provide the necessary information regarding the annual tourist arrivals and average length of stay in Nepal.

Higher number of tourist arrival in Nepal was in 2011 which makes the total of 726,215 because it could be positive of Nepal Tourism Year 2011." Similarly, this number was 491,504 in 1999, due to positive impact "Visit Nepal 1998." Likewise, from 2000, it started to decrease by -5.7 percent. Similarly, it gone down by -22.9 percent in 2001 and -23.7 percent in the year 2002. The rate of decrease in the trend of tourist arrival may be the extreme political instability in the country. Other factors may be Indian arrivals being high jacked in Kathmandu. The attacked on Twin Tower of USA on 11th September 2001 and wars in Middle East states.

The collected data demonstrates that among the tourist arrival in Nepal had adopted different mode of transport to come to Nepal. It constitutes of 82.9 percent of the total tourists arrival by air in Nepal and 21 percent by land transport in 1987, which was 74.1 percent by air and 25.9 percent by land transport in 2011. This shows that development of the airlines could have positive impact for the arrival of tourist in Nepal (Table: 4.3).

It can be seen that growth trend of the tourist arrival in Nepal was not uniform and fluctuating prior 1987. Annual growth rate was highest in 37.2 percent in

2007 computed to 2006, while this growth was declined to 23.7 percent in 2002. It is due to political instability. The data shows that the average (length of stay is fluctuating from 7.92 days in 2002 to 13.51 days in 2004). In 1991, it was 9.25 days. It reached to 13.50 days in 1996 and 13.51 days in 2004 and 13.11 in 2011(Table: 4.3).

Table: 4.3 Tourist Arrivals and Average Length of Stay (1987-2011)

Year	By air		By land		Total		Average length of stay (in days)
	Number	Percent	Number	Percent	Number	Annual growth rate (%)	
1987	205,611	82.9	42,469	17.1	248,080	11.1	11.98
1988	234,945	88.3	30,998	1.7	265,943	7.2	12.00
1989	207,907	86.6	32,038	13.4	239,945	-9.8	12.00
1990	226,421	88.8	28,464	11.2	254,885	6.2	12.00
1991	267,932	91.4	25,063	8.6	292,995	15.0	9.25
1992	300,496	89.9	33,857	10.1	334,353	14.1	10.14
1993	254,140	86.6	39,427	13.4	293,567	-12.2	10.94
1994	289,381	88.6	37,150	11.4	326,531	11.2	10.00
1995	325,035	89.4	38,360	10.6	363,395	11.3	11.27
1996	343,246	87.2	50,367	12.8	393,613	8.3	13.50
1997	371,145	88.0	50,712	12.0	421,857	7.2	10.49
1998	398,008	85.8	65,676	14.2	463,684	9.9	10.76
1999	421,243	85.7	70,261	14.3	491,504	6.0	12.28
2000	376,914	81.3	86,732	18.7	463,646	-5.7	11.88
2001	299,514	82.9	61,723	17.1	361,237	-22.1	11.93
2002	218,660	79.4	56,808	20.6	275,468	-23.7	7.92
2003	275,438	81.5	62,694	18.5	338,132	22.7	9.60
2004	297,335	77.2	87,962	22.8	385,297	13.9	13.51
2005	277,346	73.9	98,052	26.1	375,398	-2.6	9.09
2006	283,819	73.9	100,107	16.1	383,926	2.3	10.20
2007	360,713	68.5	165,992	31.5	526,705	37.2	11.96
2008	374,661	74.9	125,616	25.1	500,277	-5.0	11.78
2009	379,322	74.4	130,634	25.6	509,956	1.9	11.32
2010	448,800	74.4	154,067	25.6	602,867	18.2	12.67
2011	545,221	74.1	190,994	25.9	726,215	22.1	13.12

Source: MOCTCA, Nepal Tourism Statistics 2011: Table 1, 6.

The equation of straight line trend established was $y = 393.4 + 12.874x$. This shows that annual average of tourist arrival was estimated 393.4 thousand. Similarly, the equation's slope shows annual growth rate was estimated as 12.874 thousand per year. The estimated equation is given below.

$$Y = 393.4 + 12.874X$$

$$\text{se (14.906) (2.067)}$$

$$\text{t-value 26.391* 6.228*}$$

$$F = 38.788*$$

* 5% level of significance

Since calculated value of t of the parameter 'a' is greater than the critical value of t (2.069 at 5%) level of significance with 23 degree of freedom. Hence, null hypothesis is rejected and alternative hypothesis is accepted and it is concluded that annual average of tourist arrival is significant. Similarly, the calculated value of t of the parameter 'b' is also greater than the critical value of t(2.069 two tailed test) at 5% level of significance with 23 degrees of freedom. Hence null hypothesis is rejected and alternative hypothesis is accepted. It is concluded that annual growth rate of tourist arrival is significant during study period 1987-2011 (Table 4.4, Figure 4.1).

**Table 4.4: Calculation of Trend Line of Total Tourist Arrival in Nepal
(1987-2011)**

(in '000)

Year	Total Tourist Arrival (Y)	Trend Value of Total Tourist Arrival (\hat{Y})	Error (e_t)
1987	248	238.9	9.1
1988	266	251.8	14.2
1989	240	264.7	-24.7
1990	255	277.5	-22.5
1991	293	290.4	2.6
1992	334	303.3	30.7
1993	294	316.2	-22.2
1994	327	329.1	-3.1
1995	363	342.0	21.0
1996	394	354.8	39.2
1997	422	367.6	54.4
1998	464	380.5	83.5
1999	492	393.4	98.6
2000	464	406.3	57.7
2001	361	419.1	-58.1
2002	275	432.0	-157.0
2003	338	444.9	-106.9
2004	385	457.7	-72.2
2005	375	470.6	-95.6
2006	384	483.46	-100.5
2007	527	496.3	29.7
2008	500	509.2	-9.2
2009	510	522.1	-13.1
2010	603	534.9	67.1
2011	736	547.8	178.2

Source: Adapted and calculated from Table 4.3.

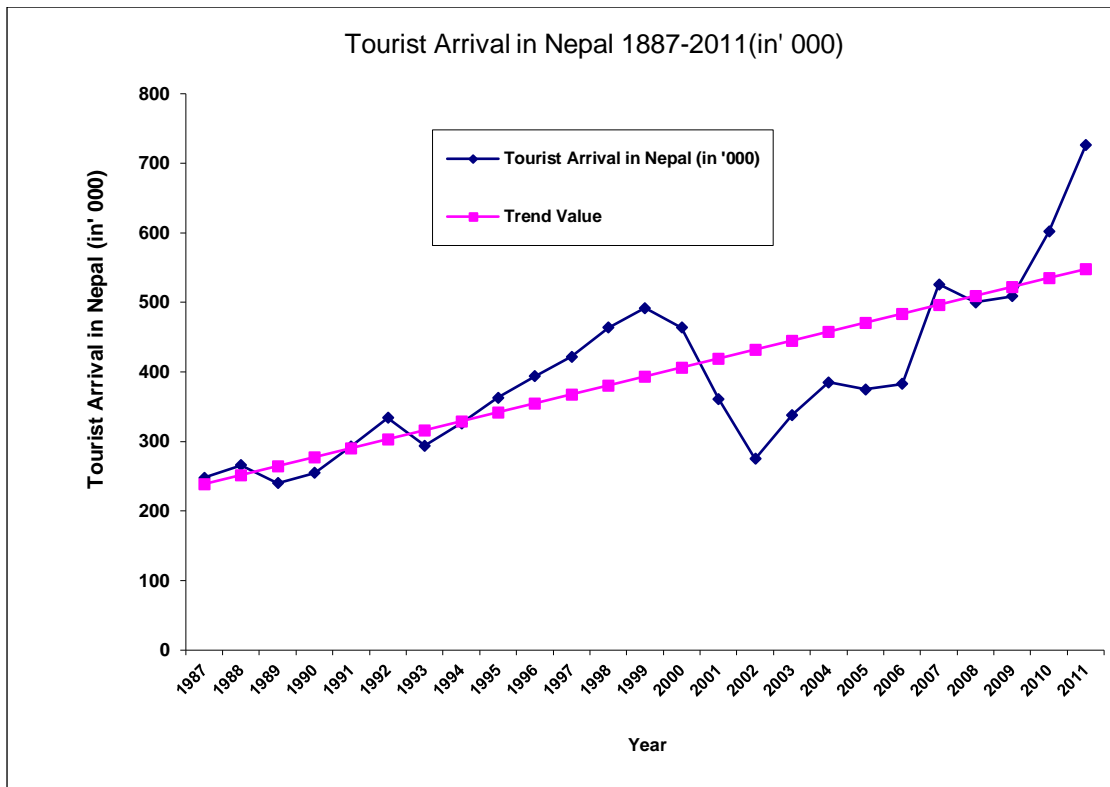


Figure: 4.1 Trend of Tourist Arrival in Nepal (1987-2011)

Since calculated value of F-test is 38.788 which is greater than critical value of F at 5% level of significance with degrees of freedom 1 for numerator and 23 for denominator. Hence, null hypothesis is rejected and alternative hypothesis is accepted. It is concluded that the estimated equation is well fitted.

This study has also tried to calculate the autocorrelation among error terms during study period. Similarly, it has also estimated the value of D-W test to test the existence of autocorrelation among error terms is significant or not. The value of first order autocorrelation is 0.6335. The calculated value D-W test is 0.5791 which is less than the $d_L = 1.288$ at 5% level of significance with $n = 25$ and $k' = 1$. This shows there is the existence of positive autocorrelation among error terms.

The five yearly moving average shows the trend of tourist arrival from 1987 to 2011. It exhibits that the trend of tourist arrival was increasing from 1989 to 1999 and decreased in 2004 which again increased in 2009. (Table: 4.5, Figure: 4.2).

**Table 4.5: Five Yearly Moving Average of Tourist Arrival in Nepal
(1987-2011)**

(in '000)

Year	Total Tourist Arrival	Five Yearly	Five Yearly Average
1987	248		
1988	266		
1989	240	1302	260.4
1990	255		
1991	293		
1992	334		
1993	294		
1994	327	1711	342.2
1995	363		
1996	394		
1997	422		
1998	464		
1999	492	2203	440.6
2000	464		
2001	361		
2002	275		
2003	338		
2004	385	1756	351.2
2005	375		
2006	384		
2007	527		
2008	500		
2009	510	2863	572.6
2010	603		
2011	736		

Source: Adapted and calculated from Table 4.4.

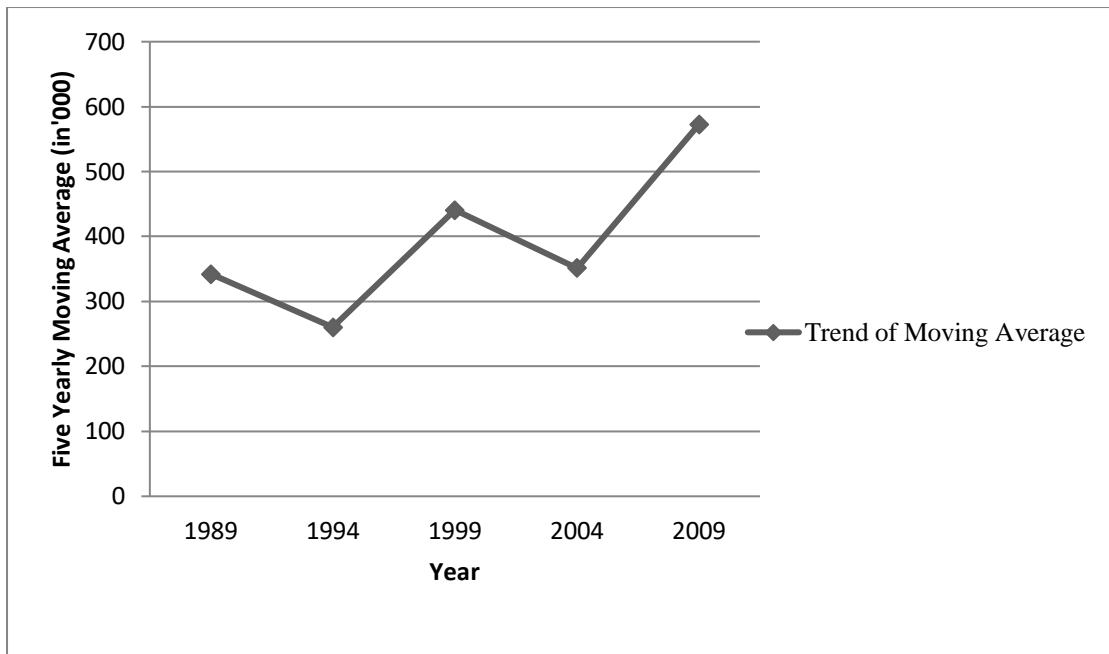


Figure 4.2 Trend of 5-yearly Moving Average of Tourist Arrival in Nepal (1987-2011)

4.3.2 Tourist arrival by Month (1991-2011)

The month-wise tourist arrival in Nepal shows 13% in October the highest 13.2% and 5.7% in January the least. The other months lie in between these two extreme points (Table: 4.6, Figure 4.3).

Table 4.6: Tourist Arrival by Month 2011

S. N.	Month	Number	Percentage
1.	January	42622	5.7
2.	February	56339	7.6
3.	March	67565	9.2
4.	April	59,751	8.1
5.	May	46202	6.3
6.	June	46115	6.3
7.	July	42661	5.8
8.	August	71398	9.7
9.	September	63033	8.6
10.	October	96996	13.2
11.	November	83460	11.3
12.	December	60073	8.2
Total		736215	100

Source: MOCTCA, Nepal Tourism Statistics 2011: Table 2, 9.

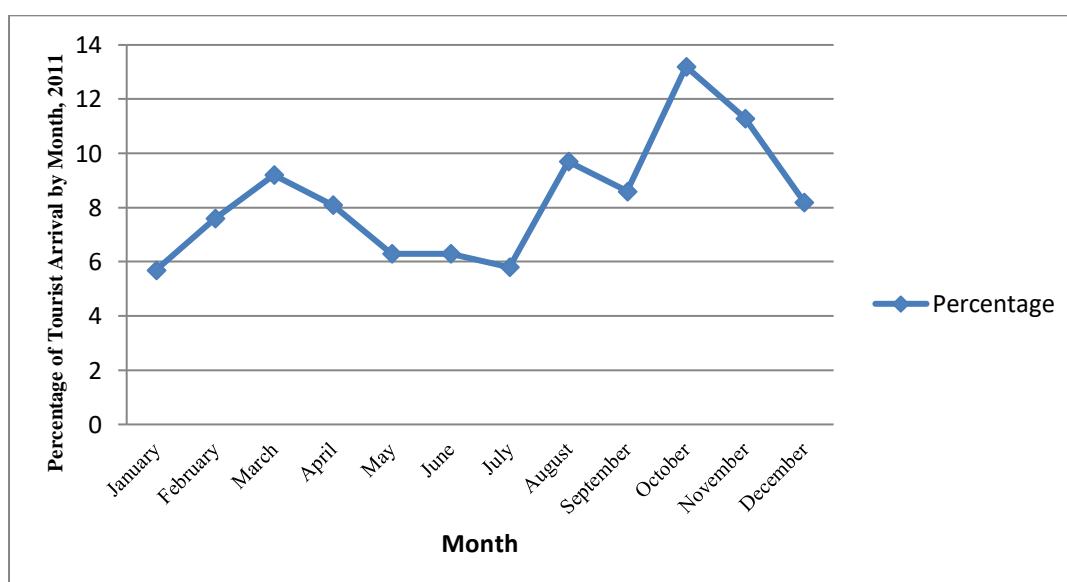


Figure 4.3: Percentages of Tourist Arrivals by Month 2011

4.3.3 Tourist Arrival by Sex and Age Groups (1991-2011)

Age and sex composition is one of the very important variables to know the people's attitude towards any sector. In the case of tourism, it plays very important role to know the interest of the people and age groups towards any destination. The data shows that number of male is greater than that of female visiting Nepal in the period 1991-2011. The data show that the share of male was maximum in 2005 and minimum in 2011 while the share of female was maximum in 2011 and minimum in 2005. It shows that the trend of female visitors is increasing in Nepal (Table 4.7, Figure 4.4).

Table 4.7 Tourist Arrival by Sex & Age Groups (1991-2011)

Year	Sex		Total	Age Groups					
	Male	Female		0-15	16-30	31-45	46-60	61 & over	Not Specified
1991	177,574 (60.6)	115,421 (39.4)	292,995 (100)	17,174 (5.9)	96,634 (33.0)	94,534 (32.3)	54,320 (18.5)	30,328 (10.4)	-
1992	197,051 (58.9)	137,302 (41.1)	334,353 (100)	18,624 (5.6)	105,123 (31.4)	111,096 (33.2)	65,651 (19.6)	33,859 (10.1)	-
1993	179,178 (61.0)	114,389 (39.0)	293,567 (100)	15,289 (5.2)	91,947 (31.3)	96,665 (32.9)	59,768 (20.4)	29,898 (10.2)	-
1994	205,389 (62.6)	121,142 (37.1)	326,531 (100)	20,097 (6.2)	96,016 (29.4)	106,260 (32.5)	66,174 (20.3)	37,984 (11.6)	-
1995	2,22,47,69 (61.9)	138,626 (38.1)	363,395 (100)	22,878 (6.3)	106,603 (29.3)	120,212 (33.1)	76,647 (21.1)	37,055 (10.2)	-
1996	233,055 (59.2)	160,558 (40.8)	393,613 (100)	22,185 (5.6)	94,924 (24.1)	116,307 (29.5)	89,751 (22.8)	70,446 (17.9)	-
1997	251,358 (59.6)	170,499 (40.4)	421,857 (100)	23,840 (5.7)	121,286 (28.8)	126,828 (30.1)	107,111 (25.4)	42,792 (10.1)	-
1998	267,871 (57.8)	195,813 (42.2)	463,684 (100)	26,763 (5.8)	122,103 (26.3)	151,846 (32.7)	121,190 (26.1)	41,782 (9.0)	-
1999	286,161 (58.2)	205,343 (41.8)	491,504 (100)	30,967 (5.3)	150,307 (30.6)	155,985 (31.7)	113,314 (23.1)	40,913 (8.3)	-
2000	266,937 (57.6)	196,709 (42.4)	463,646 (100)	19,136 (4.1)	119,816 (25.8)	148,063 (31.9)	125,140 (27.0)	51,491 (11.1)	-
2001	213,465 (59.1)	147,772 (40.9)	361,237 (100)	14,608 (4.0)	95,801 (26.5)	115,678 (32.0)	93,621 (25.9)	41,529 (11.5)	-
2002	174,710 (63.4)	100,758 (36.6)	275,468 (100)	12,425 (4.5)	67,774 (24.6)	99,622 (36.2)	67,017 (24.3)	28,630 (10.4)	-
2003	204,832 (60.4)	133,400 (39.5)	338,132 (100)	16,056 (4.7)	78,357 (23.2)	99,744 (29.5)	5,753 (25.4)	58,226 (17.2)	-
2004	255,303 (66.3)	129,994 (33.7)	385,297 (100)	38,734 (10.1)	84,125 (21.8)	128,267 (33.3)	96,920 (25.2)	37,251 (9.7)	-
2005	257,972 (68.7)	117,426 (31.3)	375,398 (100)	30,429 (8.1)	57,115 (15.2)	114,103 (30.4)	106,077 (28.3)	67,674 (18.0)	-
2006	218,818 (57.0)	165,108 (43.0)	383,926 (100)	37,433 (9.8)	75,626 (19.7)	123,541 (32.2)	95,260 (24.8)	52,066 (13.6)	-
2007	290,688 (55.2)	236,017 (44.8)	526,705 (100)	38,870 (4.7)	112,879 (21.4)	164,488 (31.2)	130,756 (24.8)	69,927 (13.3)	9,785 (1.9)
2008	286,983 (57.4)	213,294 (42.6)	500,227 (100)	42,581 (8.5)	106,596 (21.3)	150,171 (30.0)	121,387 (24.3)	60,531 (12.1)	19,011 (3.8)
2009	288,155 (56.5)	221,801 (43.5)	509,956 (100)	84,891 (16.6)	140,805 (27.6)	41,955 (27.8)	99,197 (19.5)	39,638 (7.8)	3,470 (0.7)
2010	361,611 (60.0)	241,256 (40.0)	602,867 (100)	41,156 (6.8)	120,395 (20.0)	189,852 (31.5)	172,800 (28.7)	64,593 (10.7)	14,071 (2.3)
2011	252,059 (47.8)	384,156 (52.2)	736,215 (100)	32,795 (4.5)	171,061 (23.2)	212,176 (28.8)	177,983 (24.2)	82,726 (11.2)	59,454 (8.1)

Source: MOCTCA, Nepal Tourism Statistics 2011: Table 6, 15.

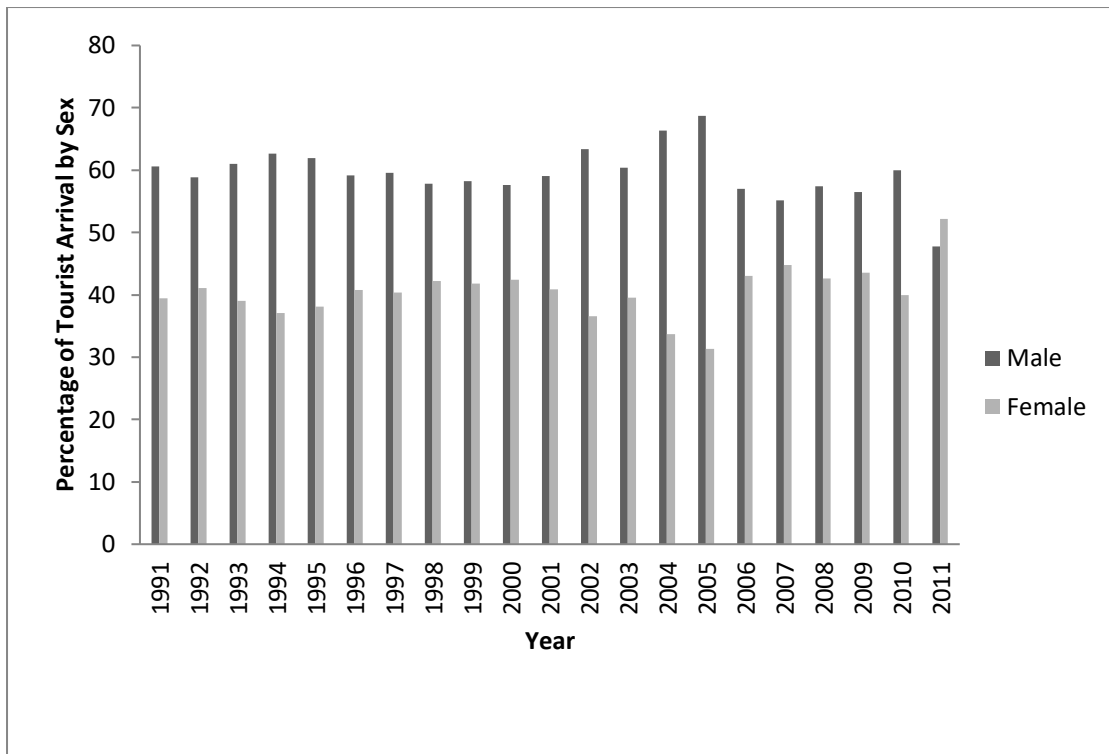


Figure 4.4: Tourist Arrivals by Sex (1991-2011)

The tourist arrival in Nepal varies by age groups. It reveals that 31-45 age groups of tourist have great interest to make the tour to Nepal in 2011, than all the age groups of tourist. They love to be in Nepal. The second group that was found to be interested to make visit Nepal are 46-60 age group. Similarly, 16-30 years age group stands at the third position in regard to visit Nepal. In the same way 61 and over of ages hold the fourth position in regard to visit Nepal.

Likewise, the fifth groups that visit Nepal were from 0-15 age groups. The data are collected from the Nepal Tourism statistics 2011, although the rate of the visitor in Nepal greatly varies according to the situation, time and place. The data demonstrated in Nepal by different age group from 1987 to 2011 (Table 4.8, Figure 4.5).

Table 4.8 Tourist Arrival by Sex and Age Groups 2011

Sex	Age Groups (Years)						Total
	0-15	16-30	31-45	46-60	60 & over	Not specified	
Male	15,486	76,866	112,280	82185	40871	24,271	353059
Female	17309	94215	99796	95798	41855	35183	384156
Total	32795	171081	42176	177983	82726	59454	736215
(%)	(4.5)	(23.2)	(28.8)	(24.2)	(11.2)	(8.1)	(100)

Source: MOCTCA, Nepal Tourism Statistics 2011: Table 7.18.

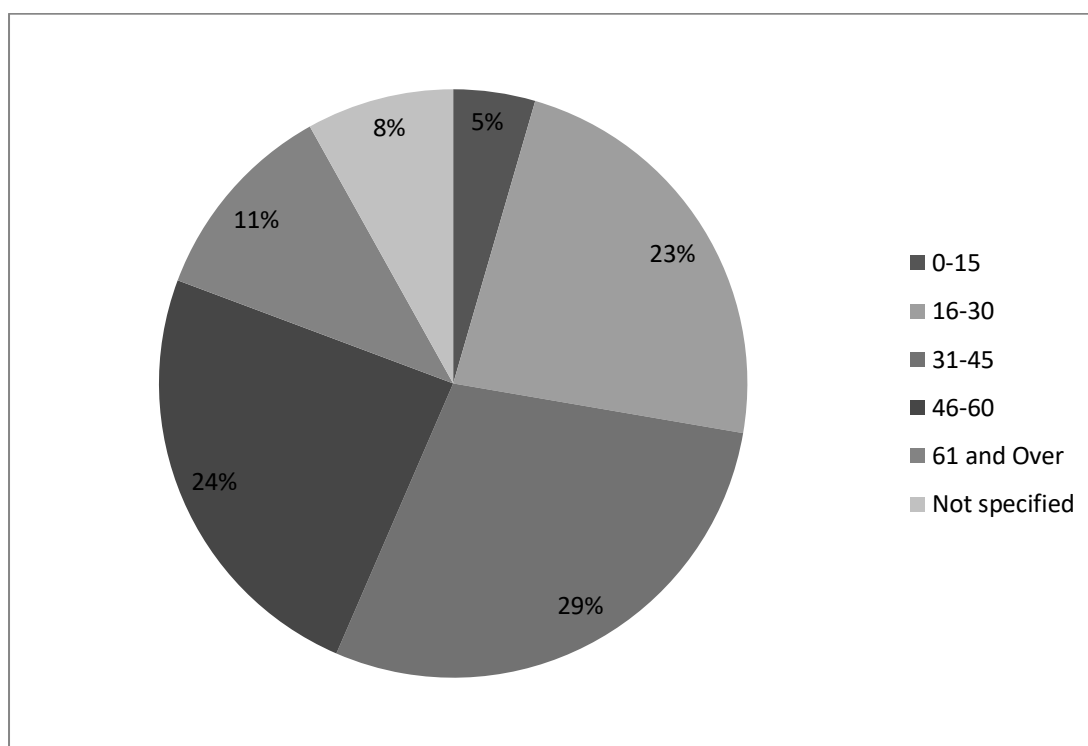


Figure 4.5 Tourist Arrivals by Age Groups 2011

The χ^2 -test is calculated by using Brandt and Snedecor formula for $2 \times K$ contingency table. The computed value of χ^2 is 3847.0856 which is greater than the critical value of χ^2 at 5 percent level of significance with 5 degrees of freedom (11.070). Hence, null hypothesis is rejected alternative hypothesis is

accepted which shows the test statistic is significant. Therefore, it can be concluded that sex and age groups of the tourist arrival in Nepal are dependent (Table 4.8).

4.3.4 Tourist Arrival by Purpose of Their Visit (1997-2011)

Purpose of visit of international tourist varies according to the attraction and attitude of the destination. Foreign tourists visit Nepal, specially, for the holiday and pleasure purpose. Regarding this, Nepal can be the best holiday spot for the tourist, if it can develop the entire infrastructure needed for its proper attention in this regard.

The tourist arrivals by the purpose of their visit to Nepal from 1991 to 2011 have been elaborated below. Tourists have arrived in Nepal for holiday pleasure trekking mountaineering business, pilgrimage, official, convention and conference. The statistics show that the highest number of tourist came for trekking and mountaineering. In 2011, the number of tourist visited Nepal for the holiday and pleasure purpose fluctuates from 4.1 percent from the year 2011 to 71.7 percent in 1992. The number of it for trekking and mountaineering varies from 10.5 percent in 1992 to 27.9 percent in 2001. Similarly, this number for business varies from 2.4 percent in 2011 to 9.5 percent in 1992. Likewise, this number for official fluctuates from 3.3 percent in 2011 to 8.6 percent in 2008. This number for pilgrimage varies from 1.0 percent in 1997 to 16.8 percent in 2010 (Table: 4.9).

Most of the tourists come to in Nepal for holiday/pleasure (47.3 percent) and second for trekking and mountaineering (11.7 percent) (Figure 4.6).

Table 4.9 Tourist Arrival by Purpose of Visit (1991-2011)

Year	Holiday Pleasure	Trekking & Mountaineering	Business	Pilgrimage	Official	Conv./ Conf.	Rafting	Others	Not Specified	Total
1991	177,370 (60.5)	42,308 (14.4)	14,601 (5.0)	9,103 (3.1)	37,274 (12.5)	5,441 (1.9)	-	6,898 (2.4)	-	292,995 (100)
1992	237,711 (58.9)	35,166 (10.5)	31,765 (9.5)	7,219 (2.2)	20,967 (6.3)	815 (0.2)	-	710 (0.2)	-	334,353 (100)
1993	170,279 (58.0)	69,619 (23.7)	19,495 (6.6)	10,429 (3.6)	15,812 (5.4)	5,367 (1.8)	-	2,566 (0.9)	-	293,567 (100)
1994	168,155 (51.5)	76,865 (23.5)	23,522 (7.2)	5,475 (1.7)	0,431 (6.3)	5,361 (1.6)	-	26,722 (8.2)	-	326,531 (100)
1995	183,207 (50.4)	84,787 (23.3)	21,829 (6.0)	5,257 (1.4)	20,090 (5.5)	5,272 (1.5)	-	42,953 (10.2)	-	363,395 (100)
1996	209,377 (53.2)	88,945 (22.6)	25,079 (6.4)	4,802 (1.2)	20,191 (5.1)	6,054 (1.5)	-	39,165 (10.0)	-	393,613 (100)
1997	249,360 (59.1)	91,525 (21.7)	27,409 (6.5)	4,068 (1.0)	24,106 (5.7)	5,824 (1.4)	-	19,565 (4.6)	-	421,857 (100)
1998	261,347 (56.4)	112,644 (24.3)	24,954 (5.4)	16,164 (3.5)	22,123 (4.8)	5,181 (1.1)	-	21,271 (4.6)	-	463,684 (100)
1999	290,862 (59.2)	107,960 (22.0)	23,813 (4.8)	19,198 (3.9)	24,123 (4.9)	5,965 (1.2)	-	19,574 (4.0)	-	491,504 (100)
2000	255,889 (55.2)	118,780 (25.6)	29,454 (6.4)	15,801 (3.4)	20,832 (4.5)	5,599 (1.2)	-	17,291 (3.7)	-	463,646 (100)
2001	187,022 (51.8)	100,828 (27.9)	18,528 (100)	13,816 (3.8)	18,727 (5.2)	0 (0.0)	-	22,316 (6.2)	-	361,237 (100)
2002	110,143 (40.0)	59,279 (21.5)	16,990 (6.2)	12,366 (4.5)	17,783 (6.5)	0 (0.0)	-	58,907 (21.4)	-	275,468 (100)
2003	97,904 (29.0)	65,721 (19.4)	19,387 (5.7)	21,395 (6.3)	21,967 (6.5)	0 (0.0)	-	111,758 (33.1)	-	338,132 (100)
2004	167,262 (43.4)	69,442 (18.0)	13,948 (3.6)	45,664 (11.9)	17,088 (4.4)	0 (0.0)	-	71,893 (18.7)	-	385,297 (100)
2005	160,259 (42.7)	61,488 (16.4)	21,992 (5.9)	47,621 (12.7)	16,859 (4.5)	0 (0.0)	-	67,179 (17.9)	-	375,398 (100)
2006	145,802 (27.7)	66,931 (12.7)	21,066 (4.0)	59,298 (11.3)	18,063 (3.4)	0 (0.0)	-	72,766 (13.8)	-	383,926 (100)
2007	217,815 (41.1)	101,320 (19.2)	24,487 (4.6)	52,594 (10.0)	21,670 (4.1)	8,019 (1.5)	65 (0.0)	78,579 (14.9)	-	526,705 (100)
2008	148,180 (29.6)	104,822 (21.0)	23,093 (4.6)	45,091 (9.0)	43,044 (8.6)	6,938 (1.4)	243 (0.0)	99,391 (19.9)	29,592 (5.9)	500,227 (100)
2009	40,992 (8.0)	132,929 (26.1)	22,758 (4.5)	51,542 (10.1)	24,518 (4.8)	9,985 (2.0)	285 (0.1)	186,849 (36.6)	40,098 (7.9)	509,956 (100)
2010	63,082 (10.5)	70,218 (11.6)	21,377 (3.5)	101,335 (16.8)	26,374 (4.4)	9,627 (1.6)	730 (0.1)	252,473 (41.9)	57,651 (9.6)	602,867 (100)
2011	30,210 (4.1)	86,260 (11.7)	17,859 (2.4)	63,783 (8.7)	24,054 (3.3)	10,836 (1.5)	2,181 (0.3)	430,641 (58.5)	70,391 (9.6)	736,215 (100)

Source: MOCTCA, Nepal Tourism Statistics 2011: Table 6, 15.

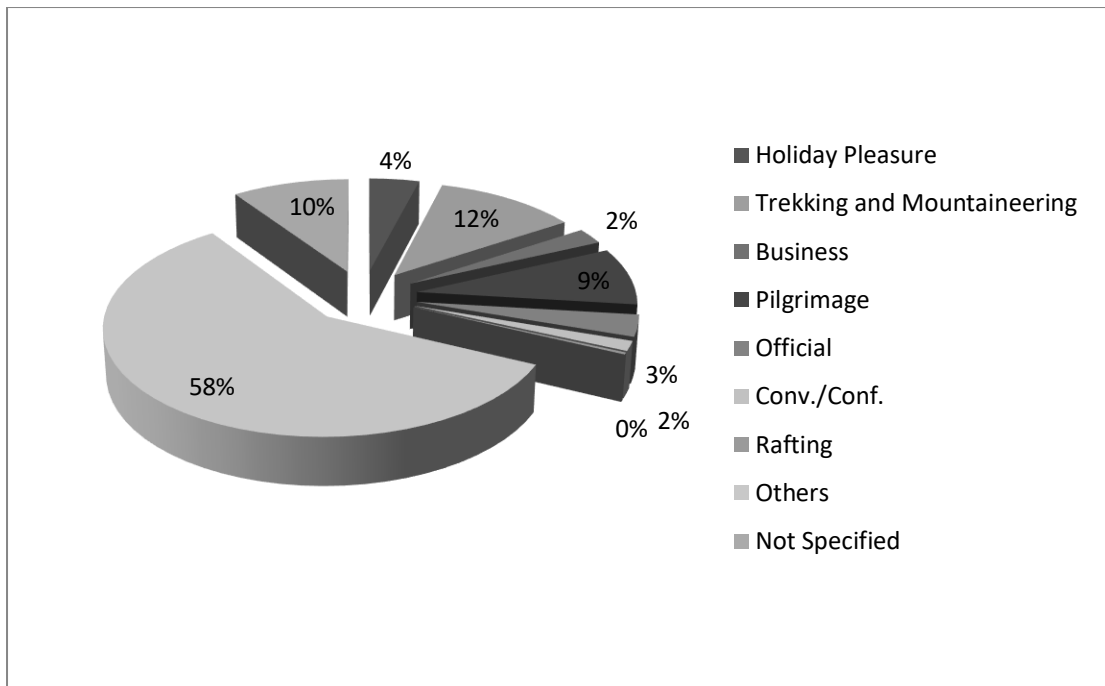


Figure 4.6: Tourists Arrival by Purpose of Visit 2011

While analyzing the tourists generating market for Nepal, it is necessary to glance at the arrival from the different nations. Major countries from where tourists come to Nepal are Australia, Austria, Canada, China, Denmark, France, Germany, India, Italy, Japan, Netherlands, Spain, Switzerland, Srilanka, U.S.A., U.K., etc. whose ratio are 2.7 percent, 05 percent, 1.5 percent, 8.4 percent, 0.8 percent, 3.6 percent, 3.7 percent, 20.3 percent, 1.7 percent, 3.6 percent, 2.3 percent, 2.2 percent, 1.5 percent, 8.1 percent, 5.8 percent, 5.3 percent respectively and remaining of others and not specified counties in 2011 (Table 4.5). All together more than 72 countries are the tourists generating markets for Nepal. The major tourist originating countries are India, China, Srilanka, U.S.A., U.K., Germany, France, Japan etc. (Table 4.10).

Table 4.10 Tourist Arrival by Major Nationalities (2001-2011)

Nationality	2001	2006	2011
Australia	10,455	8,231	19,824
%	2.9	2.1	2.7
Austria	4,164	3,474	3,998
%	1.2	0.9	0.5
Canada	7,068	4,733	11,404
%	2.0	1.2	1.5
Denmark	3,854	1,956	6,138
%	1.1	0.5	0.8
France	21,187	14,835	26,720
%	5.9	3.9	3.6
Germany	21,577	14,361	27,472
%	6.0	3.7	3.7
India	64,320	93,722	149,504
%	17.8	24.4	20.3
Italy	8,745	7,736	12,621
%	2.4	2.0	1.7
Japan	28,830	22,242	26,283
%	8.0	5.8	3.6
Netherlands	13,662	7,207	16,836
%	3.8	1.9	2.3
Spain	5,897	10,377	16,037
%	1.6	2.7	2.2
Switzerland	5,649	3,559	11,020
%	1.6	0.9	1.5
Sri Lanka	9,844	27,413	59,889
%	2.7	7.1	8.1
U.S.A	32,052	19,833	42,875
%	8.9	5.2	5.8
U.K	33,533	22,708	39,091
%	9.3	5.9	5.3
Others	81,662	99,996	179,158
%	22.6	26.0	24.3
Not Specified	-	4,005	25,433
%	-	1.0	3.5
Total	361,237	383,926	736,215
%	100.0	100.0	100.0

Source: MOCTCA, Nepal Tourism Statistics 2011: Table 11, 25.

4.3.5 Tourist Arrival and Average Length of Stay (1987-2011)

There is close relationship between the average length of stay of tourists and economic benefits to the country. The amount of foreign exchange earnings also depends on how long the tourists stay in Nepal. The length of stay depends upon the attraction of our diversified cultural and natural heritages facilities provided to them during their stay. To do this, they should be provided to them during their stay. To do this, they should be provided good facilities such as: transportation, accommodation are diversified tourist packages. Infrastructures in various fields should be developed. Historical, cultural, religions, archaeological and scenic places of remote areas should be highlighted. To promote tourism, introduction of new destinations and, electricity and water supply sector should be improved. So it is suggested to keep peace within the country and political stability for the sustainable development of tourism.

4.3.6 Average Length of Stay by Major Nationalities 2011

The earning of foreign currency is essential for favorable balance of payment. There are various nationalities that come to visit Nepal. Their expenditure depends on the average length of stay. According to major nationalities, the average length of stay varies from 7.99 to 24.50 days and all other nationals stayed in between these two extreme points. The mean of average length of stay was 13.12 day (Table: 4.11).

Table 4.11: Average Length of Stay by Major Nationalities 2011

Nationality	No. of Tourist's Days	Average Length of Stay
Australia	445939	21.83
Austria	78150	17.76
Belgium	121249	20.03
Canada	241316	19.90
China	571007	10.14
Denmark	102682	18.59
Finland	73966	24.50
France	492155	16.23
Germany	510819	18.36
Greece	18353	10.62
India	1307031	7.99
Israel	143070	19.51
Italy	149217	11.15
Japan	343961	12.32
Korea	4417	16.48
Malaysia	86457	11.08
Netherlands	259777	17.82
Norway	68553	21.98
Russia	111183	14.78
Singapore	102760	12.86
Spain	186760	11.48
Sri Lanka	600636	10.08
Swiss	157450	20.68
Chinese Taipei	92802	11.58
U.K	814380	19.31
U.S.A	1008783	22.07
Others	1943767	11.51
Not Specified	169488	17.00
Total		13.12

Source: MOCTCA, Nepal Tourism Statistics 2011: Table 19, 53.

4.3.7 Foreign Exchange Earning from Tourism (1986/87-2010/11)

Foreign exchange earnings from tourism are an important source of economic development in Nepal. It is a matter of fact that tourism sector in Nepal is playing a vital role in receiving the foreign currency. Total foreign exchange

earnings from tourism are fluctuated from Rs. 1675.7 million in 1987/88 to Rs. 28,139.0 Million in 2009/10. The average earnings from tourism was found to be Rs. 11082.9 million during 25 years. The percentage of total value of merchandise exports varies from 14.9% to 65.0%. The average of the total value of merchandise exports was 36.2% during 25 years. The percentage of total value of exports of goods and non-factor services varies from 10.8% to 28.5% during 25 years. The average percentage of total value of exports of goods and non factor services was found to be 19.1 in the same period. Likewise, percentage of total foreign exchange earnings from tourism varies 3.1% in 2009/10 to 26.6% in 1986/87 (Table 4.12, Figure 4.7 a).

It is decaling up to 2006/07 due to political instability in Nepal. The ratio of total foreign exchange earnings from tourism to GDP varies in different year during 1986/87 to 2010/11. This was maximum (4.1%) in 1993/94 and 1994/95, while minimum (1.4%) in 2006/07 due to same reason explained above. The average percent of total foreign exchange from tourism to GDP was found to be 2.87% during 25 years study period (Table 4.12, Figure 4.7 b).

Table 4.12 Foreign Exchange Earning from Tourism (1986/87-2010/11)

(Rs. in Millions)

Year	Total foreign exchange earnings from tourism	As % of total value of merchandise exports	As % of total value of exports of goods and non factor services	As % of total foreign exchange earnings	As % of GDP
1986/87	1740.5	58.0	22.7	26.6	2.9
1987/88	1675.7	40.6	18.8	18.2	2.3
1988/89	2735.3	65.0	28.2	24.5	3.3
1989/90	3121.2	59.5	28.5	23.3	3.2
1990/91	3587.6	47.1	23.5	21.8	3.2
1991/92	5016.9	35.9	19.5	20.0	3.6
1992/93	5966.0	34.5	26.7	17.6	3.7
1993/94	8251.7	42.7	22.2	18.9	4.1
1994/95	8973.2	50.8	21.8	17.3	4.1
1995/96	9521.2	47.9	23.3	21.4	3.8
1996/97	8523.0	37.6	13.7	17.6	3.0
1997/98	9881.6	35.9	17.4	15.2	3.3
1998/99	12167.8	34.1	18.5	15.9	3.6
1999/00	12073.9	24.2	13.0	8.8	3.2
2000/01	11717.0	21.0	12.0	7.4	2.7
2001/02	8654.3	14.9	10.6	6.3	1.9
2002/03	11747.7	23.1	15.2	8.2	2.4
2003/04	18147.4	32.9	20.3	11.4	3.4
2004/05	10464.0	17.5	12.2	6.1	1.8
2005/06	9556.0	15.5	10.9	4.6	1.5
2006/07	10125.0	16.1	10.7	4.5	1.4
2007/08	18653.0	30.1	17.9	6.7	2.3
2008/09	27960.0	40.0	22.8	6.5	2.9
2009/10	28139.0	44.5	24.6	3.1	2.4
2010/11	28673.0	36.3	22.5	7.5	1.8
Total	277072	905.7	477.5	339.4	71.8
Average	11082.9	36.2	19.1	13.6	2.87

Source: Various issues of Economic Survey.

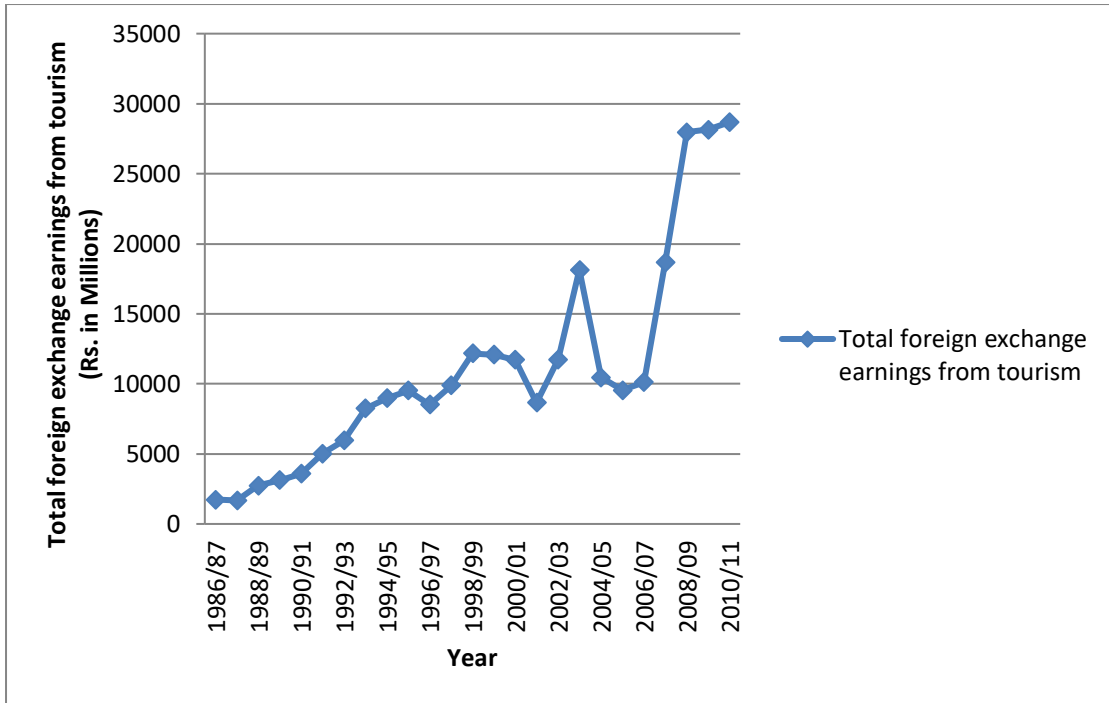


Figure 4.7 a: Total Foreign Exchange Earnings from Tourism

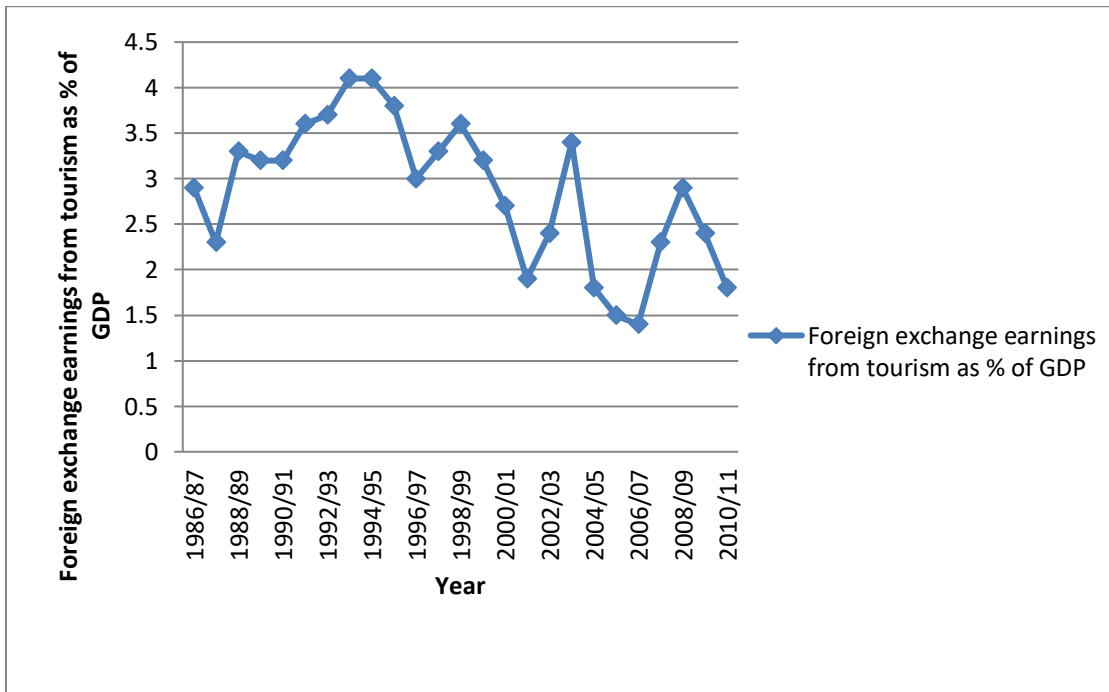


Figure 4.7 b: Foreign Exchange Earnings from Tourism as % of GDP

4.4 Tourism Business

Economic prosperity of a country depends upon rapid and sustained growth. Stability in many aspects plays an important role in the development of

agriculture or any other primary sector. Furthermore, manufacturing industry represents value added processes which directly creates new employment opportunity and provide a fabric for the national economic integration. Accordingly, policies to encourage and sustain growth of manufacturing and industry sector including cottage industries had been given high priority in the Eighth plan. Similarly, tourism sector has been playing an important role in generating foreign exchange, employment and income. This is one sector where Nepal enjoys natural endowment and comparative advantages. However, supply bottleneck and inadequate and inconsistent incentives mechanisms have hindered the potential growth of this sector, resulting in modest growth of this sector; the plan has given full priority to all its overall development. The government infrastructural investment should be supported to private sector investment in industry and tourism. The private sector, both foreign and domestic will be encouraged by the policy conducive to investor and competition returns on their investments.

4.4.1 Tourism and Hotel Business

Tourism and Hotel Business are inter-related with each other without establishing hotel business in a smooth way tourism cannot develop properly. Hotel business is one of the major sources of earnings the foreign currencies, providing employment opportunity to Nepalese people. Thus, the tourism contributes to the economy for increasing number of hotels.

Nepal is in a developing stage of all countries in the world, the employment and under employment problem is rampant. Thus, tourism could be a major source of employment generation in the country. Tourism known as a labour intensive service industry, it provides direct and indirect jobs to large segment of the population in the country. Tourism sector has generated both direct and indirect employment opportunities through establishment of backward and forward linkage with other sector such as agriculture, industry as well as other service sectors of the country. Direct jobs are generated in hotels, motels, resorts and tour business, gift shop, airlines and transports. They are purely

based for the tourist and their basic requirement. There were 104 hotels and 7052 beds consisting of both star and non-star categories in which 43 were star hotels with 2671 beds in 1987. It is continuously in increasing trend. There were 827 hotels and 30780 beds including 106 star with 9323 beds and 721 non-star hotels with 21457 beds in 2011. Due to the political instability in the country it also had badly affected after 2005 in Nepal. It lacks security and lack of sufficient opportunities to invest in tourism industries in Nepal. The decrease rate of hotels is given in table which state clearly shows the reduction in hotels affects the employment opportunities (Table: 4.13).

Table 4.13: Hotel and Hotel Beds

Year	Star		Non-star		Total	
	Hotels	Beds	Hotel	Beds	Hotel	Beds
1987	43	4381	61	2671	104	7052
1988	43	4412	77	3599	120	8011
1989	54	4880	105	4528	159	9408
1990	57	5502	111	4742	168	10244
1991	61	5809	131	5348	192	11207
1992	64	5969	139	5803	203	11772
1993	64	5969	150	6578	214	12547
1994	72	5964	322	11228	394	17730
1995	72	6502	448	15305	520	21807
1996	79	7050	553	18588	632	25638
1997	86	7779	620	19833	706	27612
1998	89	7842	650	21036	739	28878
1999	87	8656	698	23558	785	32214
2000	94	9320	754	25638	848	34958
2001	47	9430	792	26733	888	36613
2002	104	10289	839	27327	943	37616
2003	108	10535	858	27735	966	38270
2004	110	10715	886	28392	996	39107
2005	110	10715	896	28669	1006	39384
2006	105	9763	502	14497	607	24260
2007	105	9763	512	14897	617	24660
2008	96	9320	573	16543	669	26063
2009	97	9369	647	19124	744	28493
2010	103	9125	686	20217	789	29342
2011	106	9323	721	21457	827	30780

Source: Various issues of Economic Survey.

4.1.2 Travel, Trekking, Reporting Agency and Licensed Manpower Guide (2000–2011)

Tourism industry provides different types of job opportunities to the people, which help generate income and increase the living standard of the people in the country. There were 637,537 and 87 travels, trekking and rafting agencies in Nepal during 2000 respectively. The following number had been increased by 1936 and 1378 travels and trekking while decreased by 33 in rafting respectively in the year 2011 (Table 4.14, Figure 4.8 a).

This shows the rate of employment generated by tourism sector. The similar trend is found in the licensed manpowered group in the tourism sector. The number tourist guide and trekking guide were 1854 and 2155 respectively in 2000 which were increased to 2835 and 7303 respectively in 2011. But the given guide decreased from 174 in 2000 to 44 in 2011. With 52 which was increased to 54 in 2011 (Table: 4.14, Figure: 4.8 b)

Table 4.14: Travel, Trekking, Rafting, Agencies and licensed Manpower Guide (2000–2011)

Year	Agencies			Licensed Manpower guide			
	Travel	Trekking	Rafting	Tour	Trekking	River	Tourist police
2000	637	537	87	1854	2155	174	-
2001	691	580	87	1900	2745	174	-
2002	738	611	87	2001	3024	174	-
2003	788	645	20	2071	3457	180	-
2004	877	705	91	2149	3930	182	-
2005	948	740	92	2149	4395	182	-
2006	1026	793	92	2271	4663	182	-
2007	1167	872	94	2343	5098	182	-
2008	1320	977	-	2458	5987	-	52
2009	1496	1096	-	2548	5987	-	52
2010	1739	1240	10	2661	6747	24	50
2011	1936	1378	33	2835	7303	44	53
(%)	(58)	(41)	(1)	(28)	(71)	(0)	(1)

Source: Various issues of Nepal Tourism Statistics.

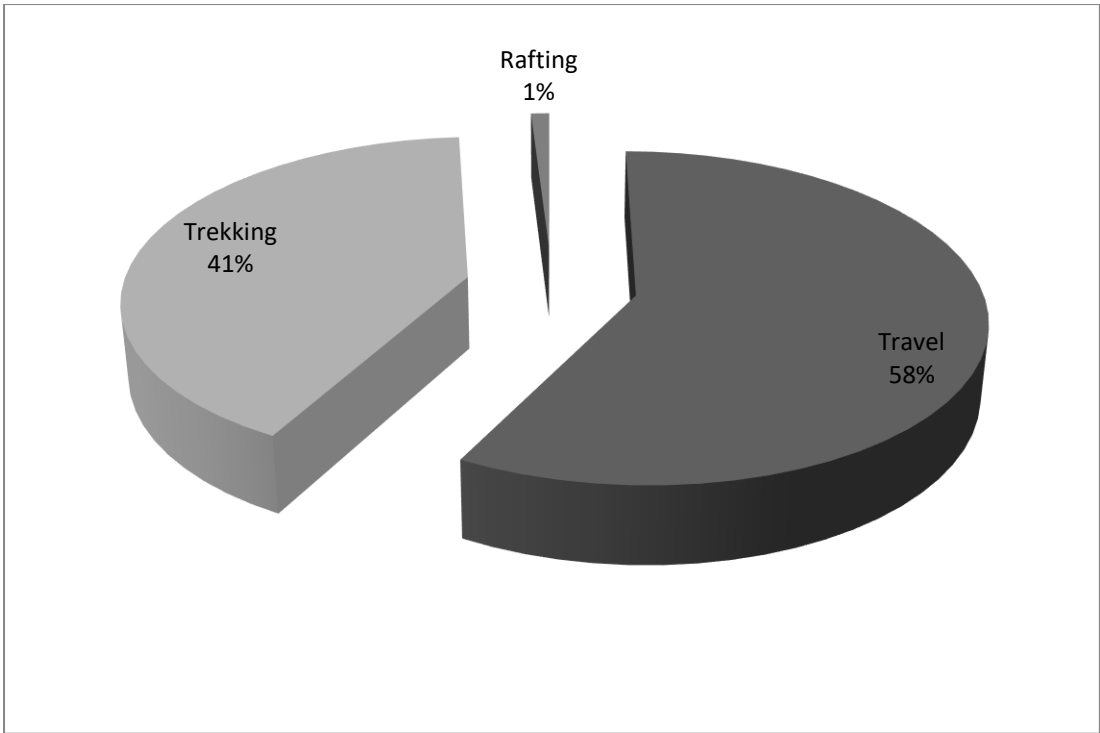


Figure 4.8 a : Travel, Trekking and Rafting Agencies 2011

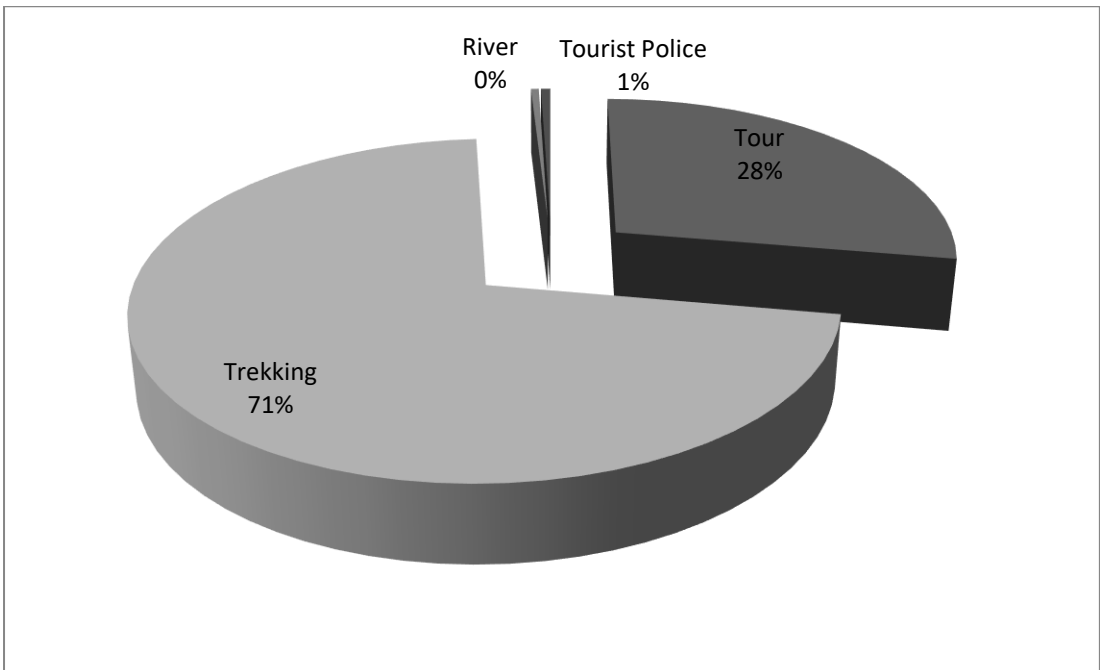


Figure 4.8 b : Licensed Manpower Guide for Tour, Trekking, River and Tourist Police 2011

4.5 Major Findings

The major findings of analysis of the data have been given below.

- i. It is obvious that the number of tourist arrival has been found increasing. It is found that 82.9% of the tourists arrived by air and 17.1% by land transport in 1997, which was 74.1% by air and 25.9% by land in 2011.
- ii. The time series data of 25 years shows that average of annual tourist arrival was 394.4 tourists and annual growth rate was estimated as 12.874 thousand.
- iii. The t-test of the coefficient of the trend line of tourist arrival in Nepal was found to be significant. It shows that the time variable has significant impact on the tourist arrival in Nepal.
- iv. The F-test of the regression equation is found to be significant which exhibit that the estimates equation of straight line is good fitted.
- v. The data of tourist arrival by month shows that arrival is the favourable month of tourist arrival in Nepal. However, January is the least favourable for it.
- vi. The sex-age analyses of the data shows that average number of male tourist arrival is greater than that of female in the period 1987 to 2011. The share of male was maximum in 2005 and minimum in 2011, while the share of female was maximum in 2011 and minimum in 2005.
- vii. The age-wise analysis of the data shows that 31-45 years age-group of the tourists have great interest to make tour in Nepal and second age group is 46-60 years age-group in 2011.
- viii. The χ^2 -test shows that sex and age groups of tourist arrival in Nepal are dependent.
- ix. The tourist arrival in Nepal for the purpose of holiday pleasure, trekking and mountaineering, business, pilgrimage, official, study /research/employment, conference/convention etc. Most of the tourist arrived in Nepal for holiday and pleasure and then for trekking and mountaineering.

- x. The major 26 countries are the market for tourist arrival in Nepal. The major tourist generating countries are India, China, Srilanka, U.S.A, U.K., Germany, France, Japan etc. in descending order.
- xi. The average length of stay of the tourist fluctuating from 7.2 days in 2002 to 13.51 days in 2004.
- xii. The average length of stay of the tourist varies from country to country. The mean of the average length of stay is 13.12 days. The minimum average length of stay of Indian is 7.99 days while the maximum is 24.50 days of Finland in 2011.
- xiii. The data related to foreign exchange earning of the period 1990/91 to 2011 shows that it fluctuated to from Rs. 3, 587.6 million in 1990/91 to Rs. 28,139.0 million in 2009/10. The average of this value of 25 years was found to be Rs. 11082.9 million. Likewise, the ratio of foreign exchange earnings from tourism to GDP was minimum in 2006/07 (1.4%) and maximum in both 1993/94 and 1994/95 (4.1%). The average of the ratio of the foreign exchange earnings from tourism to GDP was 2.87% during 25 years from 1987 to 2011.
- xiv. The trend of hotels and beds are found to be increasing from 1987 to 2011. There were 43 star hotels with 4381 beds and 61 non-star hotels with 2671 beds in 1987. It was increased to 106 star hotels with 9323 beds and 721 non-star hotels with 21457 beds in 2011. All together 827 hotel with 30780 beds are providing the services to the tourist in Nepal in 2011.
- xv. While analyzing the data from 2000 to 2011, there was 1936 travel, 1378 trekking and 33 rafting agencies working in 2011. Similarly, 2855 tour, 7303 trekking, 44 river and 53 tourist police licensed manpower guides were working for tourism industry.
- xvi. The D-W statistic is estimated as 0.5856 which is less than lower limit of table value of d statistics (d_L), which shows that there is existence of positive autocorrelation among error terms.

CHAPTER-V

SUMMARY, CONCLUSION AND SUGGESTIONS

5.1 Summary

The whole study has been divided into five chapters. The first chapter deals with background, statement of the problem, hypothesis, significance and limitations of the study. The second chapter is concerned with review of the literature. The third chapter is concerned with the methodology which includes research design, data collection procedure, method of data analysis, different statistical tools like equation of trend line, t-test, F-test, autocorrelation, D-W statistic, chi-square test. The fourth chapter is concerned with tourism development and tourist arrival in Nepal. It deals with the development of tourism in different plan periods and structure and trend of tourist arrival in Nepal. It also deals with ratio of foreign exchange earnings to GDP and tourism business in Nepal. The fifth chapter deals with summary, conclusion and suggestions.

5.2 Conclusion

The main objective of this study is to analyze the trend of tourist arrival, annual growth rate of tourist arrival, mode of tourist arrival, month wise, sex wise, age-wise, purpose wise, country. Tourist arrival length of stay, foreign exchange earnings from tourism, hotels, travel, trekking and rafting agencies as well as licensed manpower guide to tour, trekking, river and tourist police for the tourist services have been dealt with, the consequence of which has been derived in the Thesis.

The analysis of the previous chapter reveals that Nepal has many potentialities resources to develop tourism. Various sources such as natural attractions, archaeological beauties and cultural values are the main sources to the prospects of tourism in Nepal.

This sector has an important role in the economic development of Nepal. This sector helps increase foreign exchange earnings, export of handicrafts and other domestic goods, import of foreign technology and foreigners view for foreign technology and foreigners view for foreign investment that helps to put favourable balance of payment of Nepal have been found in a favourable condition. It also helps correct trade deficit of the country.

Nepal has sufficient tourism potentialities but it is still not able to mobilize and utilize these immense potentialities correctly. There are also different obstacles internal and external which distorts it. Lack of long term vision, comprehensive policies and programmes, inadequate physical infrastructure building along with deficiency of other supportive things are the main important factors due to which tourism in Nepal has not progressed and promoted as anticipated. Therefore, the concerned authorities should pay proper attention along with appropriate initiation, formulation, execution and monitoring of strong plans and policies to address tourism, which is very significant sector of the development of economy of the nation.

Tourist arrival in Nepal seems to be fluctuating year by year. In the year 2011, it was 736,215 international tourists who had visited Nepal, this number of tourist arrival in Nepal during the year increased by 22.1 % in comparison to previous year 2010. Likewise, the lowest number of tourist arrival during 1996 to 2002 due to extreme political instability, Indian airlines being high jacked in Kathmandu, Twin tower of U.S.A. attacked on 11th September 2001 and wars in Middle East states. However, the trend of tourist arrival in Nepal is seems to be increasing. The trend line shows that growth rate of the tourist arrival was 12874 per year, which is significant.

It is found that October is the favourable month for tourist arrival in Nepal and most of the tourists who visited Nepal were of the age group 31-45. The χ^2 -test has been shown that the sex and age group of tourist arrival were dependent.

Most of the tourists arrived in Nepal for holiday and trekking/mountaineering. More than 72 nationals came to Nepal and mean average length of stay was 13.12 days during 1987 to 2011. The ratio of foreign exchange earnings from tourism to GDP was fluctuated from 1.4 percent to 4.1 percent during the study period. It was found that altogether 827 hotels with 30780 beds are providing the services for the tourists in 2011. Similarly, 1936 travel agencies, 1378 trekking agencies and 33 rafting agencies are working to serve the tourists. Like-wise 2855 tour guide 7303 trekking guide, 44 river guide and 53 tourist police licensed manpower guide were working for tourism industry in Nepal in 2011.

It is also concluded that there is existence of positive autocorrelation among error terms in the present study.

5.3 Suggestions

On the basis of the major findings of the study, following suggestions have been made. That will help reduce the problems and challenges of tourism development in Nepal.

- Marketing and promotional strategies of tourism development in Nepal have not remained so effective and stimulating. Still now, promotional marketing strategies like advertisement and publicity seem less effective in terms of innovation, co-ordination and suitable promotional materials. Due to lack of these promotional at strategies, Nepal has not got optimum benefit from tourism. In order to promote tourism in Nepal, more attractive, effective and clear promotional materials should be produced and distributed to the major tourist generating mount areas.
- The concerned authorities have to try their best to establish political stability and help maintain the peaceful environment and provide security in the country which was violated in the period of political instability. The government should provide the security at reliable level

by increasing the security forces in the tourist region as well as useable trekking routes.

- It is costly and impossible to construct the road transport in the remote areas. Therefore, emphasis must be given to develop road transport and to join these remote areas with the network of highways. The regular and reliable air services must be operated to remote tourism in Nepal.
- Realizing the importance of road for transport the concerned authority should pay special attention for the maintenance of the highways regularly which is very important issue for the development of tourism industry.
- Realizing the great significance of performance of air transport and becoming the inadequate seat capacity in flight and lack of direct link with the major tourist generating markets in the world, the number of flights and destinations should be increased by developing the national carrier as well as giving permission to other foreign operation airlines in Nepal. Efforts should be made to participate in investment of both public and private sector to increase and concept direct air link in the major tourist generating countries. Such efforts help increase tourist inflow in Nepal.
- Due to lack of modern communication facilities neither the international tourist nor domestic tourist can send their urgent message or news to their home or friends in time. Therefore, the government has to pay serious attention in order to install and increase the modern facilities in the remote tourist spots in the country.
- It is observed that the hotel services are inadequate in the tourist arrival seasons. So it is recommended their increasing the hotel service is required so that tourists can have easy stay in Nepal. Similarly, the travel, trekking, rafting agencies and tour guide, trekking guide, river guide, tourist police manpower are not sufficient in providing services. So it is also recommended that these sectors should be encouraged in the country.

BIBLIOGRAPHY

- Acharya, P. (2005). **Socio-economic Impact of Tourism in Lumbani, Nepal, Baglung**, Vol. V. Dhaulagiri Journal of Sociology and Anthropology, April, 193-206 through [www.nepjol.info/index.php/DSAJ/article/viewfile 290/281](http://www.nepjol.info/index.php/DSAJ/article/viewfile/290/281), accessed on 12 Jan 2009.
- Adhikari, A. (2005). **Briddim: A Building Model for Home Stay Tourism, Nepal Trade Reporter**, Vol. VIII, issue No. 43 (July 25-31) pp. 30-31.
- Crispo, N. and S. N. Diaz (1997). **Cuban Tourism in 2007: Economic Impact, Florida, Cuba in Transition**, Vol. 5, August 150-161. through lanic.utexas.edu/la/cb/cuba/asce/cuba7/crespo.pdf, accessed on 12 February 2009.
- Dahal, O. P. (2060). **Rural Tourism**, Kathmandu: Nima Pustak Prakashan.
- Dhakal, D. (2000). **Nepalese Culture, Society and Tourism**, Kathmandu: Mukta Dhakal.
- Dhakal, D. P. (2005). **Replicating Rural Tourism Development Model. Image Nepal Tourism News Digest** (Fortnightly). Vol. 13, No. 13, April, 2006.
- Fayissa, B. and B. Tadasse (2007). **The Impact of Tourism on Economic Growth and Development in Africa**. Johnnesburg, Department of Economics and Finance, Working Paper Series, August 1-21. Through <http://www.dialnet.unirioja.es/./listaarticulos?>, Accessed on 23 Jan 2009.
- Gautam, B. and N. Adhikari (2005). "Village Tourism: Prospect and Problems." **Nepal Travel Trade Reporter**. Vol. IX, issue No. 01, October, 2005, pp. 26-29

Gurung, J. B. (2010). "Tourism in Nepal: Arrivals, Earnings and Employment", **Economic Literature**, Vol. IX, April 2010, Pokhara: Department of Economics, Prithvi Narayan Campus, Tribhuvan University, pp. 105-115.

ICIMOD (1995). **Tourism for Mountain Community Development, Case Study Report on the Annapurna and Gorkha Region of Nepal**. Kathmandu: ICIMOD

Kunwar, R. R. (1997). **Tourism and Development**. Kathmandu: Science and Industry Interface.

----- (2006). **Tourism and Development**, New Delhi: Adroit.

MOF (2005). **Economic Survey Fiscal Year 2004/05**, Kathmandu: Ministry of Finance, HMG of Nepal.

----- (2009). **Economic Survey Fiscal Year 2008/09**, Kathmandu: Ministry of Finance, Government of Nepal.

----- (2009). **Economics Survey Fiscal Year 2007/08**. Kathmandu: Government of Nepal, Ministry of Finance.

NPC (1956). **First Five Year Plan, 1956-1961**. Kathmandu: HMG of Nepal, National Planning Commission.

----- (1962). **Second Three Year Plan, 1962-1965**. Kathmandu: HMG Nepal, National Planning Commission.

----- (1965). **Third Five Year Plan, 1965-1970**. Kathmandu: HMG of Nepal, National Planning Commission.

----- (1970). **Fourth Five Year Plan, 1970-1975**. Kathmandu: HMG of Nepal, National Planning Commission.

----- (1975). **Fifth Five Year Plan, 1975-1980**. Kathmandu: HMG of Nepal, Nepal Planning Commission.

- (1980). **Sixth Five Year Plan, 1980-1985**. Kathmandu: HMG of Nepal, Nepal Planning Commission.
- (1985). **Seventh Five Year Plan, 1985-1990**. Kathmandu: HMG of Nepal, National Planning Commission.
- (1992). **Eighth Five Year Plan, 1992-1997**. Kathmandu: HMG of Nepal, National Planning Commission.
- (1997). **Ninth Five Year Plan, 1997-2002**. Kathmandu: HMG of Nepal, National Planning Commission.
- (2002). **Tenth Five Year Plan, 2002-2007**. Kathmandu: HMG of Nepal, National Planning Commission.
- (2007). **Three Years Interim Plan, 2007-2010**. Kathmandu: Government of Nepal, National Planning Commission.
- NTTR (2005). **Tourism Sector Hopeful about Tsunami Recovery**. Kathmandu: Nepal Travel Trade Reporter. Vol. VIII, issue No. 21 pp. 12 January 10-16, 2005.
- Panta, A. (2002). **Tourism Development and Economic Impact in Nepal**. An Unpublished Master's Thesis Submitted to Department of Economics Prithvi Narayan Campus, Tribhuvan University.
- Poudyal, D. (1984). **The Growth of Tourism and its Impact on the Economy of Nepal**. An Unpublished Master's Thesis Submitted to Department of Economics, Tribhuvan University, Kirtipur.
- Poudyal, S. (2012). "Does Tourism Really Matter for Economic Growth? Evidence from Nepal", **NRB Economic Review**, Vol. 24, No.1, Kathmandu: Nepal Rastra Bank, pp.48-66.

- Pradhan, G. K. (1978). **Tourism in Nepal: A Case Study**. An Unpublished Master's Thesis Submitted to Department of Economics, Tribhuvan University, Kirtipur.
- Satyal, Y. R. (1988). **Tourism in Nepal: A Profile**. Varansi: Nath Publishing House
- Shakya, K. (2008). "Tourism-Yesterday, Today and Tomorrow", **Rural Tourism**, ed. R. P. Upadhyay, Kathmandu: Sunlight Publication, pp.31-42.
- Sharma, Om (2003). **Package Tourism in Nepal**. Pokhara: The Himalayan Geographer, vol. 2 (3).
- Sharma, Om (2008). **Economic Impact of Tourism on Investment and Employment in Pokhara City**. Pokhara, An unpublished Master's Thesis submitted to Department of Economics, Prithvi Narayan Campus, Tribhuvan University.
- Sharma, Om P. (2013). **The System of Tourism Development Planning in Nepal (An Integrated Approach)**, Second ed., Kathmandu: Nawaraj Pandey, Anand Chand, Saraswati Sharma
- Sutihar, D. N. (2010) **Quantitative Techniques**, Kathmandu: Pairavi Prakashan.
- TB (2001). **Tourism Annual Operation Plan, 2000-2001**. Kathmandu: Nepal Tourism Board.
- Thapa, K. R. (2012)"Cultural Tourism for Sustainable Development", **Economic Literature**, Vol. X, August 2012, Pokhara: Department of Economics, Prithvi Narayan Campus, Tribhuvan University, pp.27-32.
- The Kathmandu Post (2009). **New Tourism Policy 2065**. The Kathmandu Post, Year 7, Anka 259 March: 12.

Tripathee, S. (2004). **Prospect of Tourism Development in Lekhnath Municipality.** Pokhara, An unpublished Master's Thesis submitted to Department of Economics, Prithvi Narayan Campus, Tribhuvan University.

WTO (2008). **News World Tourism Organization.** Mydrid: World Tourism Organization, through.

Appendix-A

Year	Total Tourist Arrival (in'000) Y	\hat{Y}	e_t	$e_t e_{t-1}$	$(e_t - e_{t-1})^2$
1987	248	238.9	9.1	-	-
1988	266	251.8	14.2	129.22	26.01
1989	240	264.7	-24.7	-350.74	1513.21
1990	255	277.5	-22.5	555.75	4.84
1991	293	290.4	2.6	-58.50	630.01
1992	334	303.3	30.7	79.56	789.61
1993	294	316.2	-22.2	-681.54	2758.41
1994	327	329.1	-3.1	68.82	364.81
1995	363	342.0	21.0	-65.10	580.81
1996	394	354.8	39.2	823.20	331.24
1997	422	367.6	54.4	2132.48	231.04
1998	464	380.5	83.5	4542.40	864.81
1999	492	393.4	98.6	8233.10	228.01
2000	464	406.3	57.7	5689.22	1672.81
2001	361	419.1	-58.1	-3352.37	13409.64
2002	275	432.0	-157.0	9121.70	9781.21
2003	338	444.9	-106.9	16783.30	2510.01
2004	385	457.7	-72.2	7718.18	1204.09
2005	375	470.6	-95.6	6902.32	547.56
2006	384	483.46	-100.5	9607.80	24.01
2007	527	496.3	29.7	2984.85	16952.04
2008	500	509.2	-9.2	-273.24	1513.21
2009	510	522.1	-13.1	120.52	15.21
2010	603	534.9	67.1	-879.01	6432.04
2011	736	547.8	178.2	11957.22	12343.21
Total	9835	9835		81789.14	74767.85

Appendix-B

Calculation of Linear Equation of Tourist Arrival in Nepal

Year (t)	Total Tourist Arrival (in'000) Y	X = t-1999	X ²	XY
1987	248	-12	144	-2976
1988	266	-11	121	-2926
1989	240	-10	100	-2400
1990	255	-9	81	-2295
1991	293	-8	64	-2344
1992	334	-7	49	-2338
1993	294	-6	36	-1764
1994	327	-5	25	-1630
1995	363	-4	16	-1452
1996	394	-3	9	-1182
1997	422	-2	4	-844
1998	464	-1	1	-464
1999	492	0	0	0
2000	464	1	1	464
2001	361	2	4	722
2002	275	3	9	825
2003	338	4	16	1352
2004	385	5	25	1925
2005	375	6	36	2250
2006	384	7	49	2681
2007	527	8	64	4208
2008	500	9	81	4500
2009	510	10	100	5090
2010	603	11	121	6622
2011	736	12	144	8712
Total	9835	0	1300	16736

Equation of Straight Line Trend is

$$Y = a + bX$$

Where, Y = number of tourist arrival

X = time variable in year

a = regression constant

b = slope of regression line

$$a = \frac{\sum Y}{N} = \frac{9835}{25} = 393.4$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{16736}{1300} = 12.87$$

$$\hat{Y} = 393.4 + 12.87X$$

Calculation of t-test

$$t(a) = \frac{a}{Se(a)} \text{ and } t(b) = \frac{b}{Se(b)}$$

Where, Se (a) = Standard error of 'a'

Se (b) = Standard error of 'b'

$$Se(a) = \sqrt{\frac{\sum e^2}{n-k} \left(\frac{1}{n} + \frac{\bar{X}^2}{\sum x^2} \right)}$$

$$Se(\hat{b}) = \sqrt{\frac{\sum e^2}{n-2} \left(\frac{1}{\sum x^2} \right)}$$

Where,

n = no. of year

k = number of parameters

$$\sum x^2 = \sum (X - \bar{X})^2$$

Hypothesis for 'a'

Null hypothesis H_0 ; $a = 0$, i.e. the value of regression constant is not significant.
 Alternative hypothesis H_1 ; $a > 0$ i.e. the value of regression constant is positive and significant.

Hypothesis for 'b'

Null hypothesis H_0 : $b = 0$, i.e. the value of regression coefficient (annual growth rate) is not significant.

Alternative hypothesis H_1 : $b \neq 0$ i.e. the annual growth of tourist arrival is significant. The value of f-test is used to test the overall significance of the estimated equation by using following formula under null hypothesis.

$$F\text{-test} = (t\text{-test})^2$$

Null hypothesis is H_0 : The estimated equation is not valid. Alternative hypothesis H_1 : The estimated equation is valid.

Autocorrelation: The correlation among error terms is called autocorrelation. The auto correlation has been estimated by using following formula:

$$\rho = \frac{\text{Cov.}(e_t, e_{t-1})}{\text{Var.}(e_t)} = \frac{\sum_{i=2}^t e_i e_{i-1}}{\sum_{i=1}^t e_i^2}$$

Durbin-Watson test:

The test developed by J. Durbin and G.S. Watson for small samples in 1950 is called D-W test, which can detect the presence of auto correlation. They had tested the null hypothesis of non-autocorrelation i.e. $H_0: \rho = 0$ against the alternative hypothesis of positive auto-correlation of first order i.e., $H_1: \rho \geq 0$. They gave formula for the calculation of Durbin-Watson statistics named as 'd' and defined as follows (Sutihar: 2010, 578).

$$d = \frac{\sum_{i=2}^t (e_t - e_{t-1})^2}{\sum_{i=1}^t e_t^2}$$

where, e_t =residuals at the time period t.

$\sum_{i=2}^t (e_t - e_{t-1})^2$ = the square of difference in two successive errors summed from second observation.

$\sum_{i=1}^t e_t^2$ =the sum of square of residuals.

This statistic measures the correlation between each residual and the residual for the time period immediately preceding one.

For a positive autocorrelation

- i. If $d < d_L$, d is significant and null hypothesis is rejected which shows that there is positive autocorrelation.
- ii. If $d_L < d < d_U$, the test is inconclusive, i.e. the result does not have a universal application.
- iii. If $d > d_U$ and closer to 2 but less than $4 - d_U$ i.e. $d_U < d < 4 - d_U$, then test is not significant and accept null hypothesis i.e. there is no positive autocorrelation and error terms are independent.

For negative autocorrelation

- i. If $d > 4 - d_L$, d is significant and null hypothesis is rejected which shows that there is negative autocorrelation.
- ii. If $4 - d_U < d < 4 - d_L$, the test is inconclusive, i.e. the result does not have a universal application.

- iii. If $d_U < d < 4 - d_U$, then d is not significant and accept null hypothesis i.e. there is no negative autocorrelation and error terms are independent.

Chi-square test

The Chi-square test has been used to test that the sex and age of tourist arrival are independent under null hypothesis by using the formula given by Brandt and Snedecor formula (Sutihar: 2010, 567).

$$\chi^2 = \frac{N^2}{n_1 \times n_2} \left[\frac{a_1^2}{m_1} + \frac{a_2^2}{m_2} + \frac{a_3^2}{m_3} + \dots + \frac{a_k^2}{m_k} - \frac{n_1^2}{N} \right]$$

Null hypothesis H₀: The sex and age of tourist arrival are independent.

Alternative hypothesis H₁: The sex and age are not independent.