Bipin Dawadi TIGHTEN YOUR SEAT BELT, WE ARE ABOUT TO DESCEND The Importance of Air Transportation in Tourism, Tenzing-Hillary Airport, Nepal

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This thesis was done in order to focus on the importance of air transportation on tourism		
industry; it shows how an airport in the remote sector of Nepal develops the tourism		

industry; it shows how an airport in the remote sector of Nepal develops the tourism industry and the economic situation of the entire region as well as connects the region to the outer world. The thesis was based on Tenzing-Hillary airport in Lukla, Nepal. The airport is the only means of transportation in the entire region and a gateway to Mount Everest, therefore the airport plays a very important role in the development of tourism in the Everest region. Mrs. Manjani Shrestha Dangol, the sales and marketing manager from Tara Airlines in Nepal, commissioned the work.

The author of the thesis had himself visited the airport and also tried to analyze the situation of the airport and its importance on the locals. The nature of the thesis topic demanded a suitable research method in order to meet the objectives of the research. The method used to complete the work was a qualitative research method that included data analysis and semi-structured interview. The literature sources were included in the theoretical part and the empirical part consisted of the semi-structured interview which was chosen considering the aim of the thesis and degree of validity and reliability. The secondary information was collected from the published material of related authority, airport office and webpages. On May 2013, the semi-structured interview was conducted with the three experts in this field, which were airline manager, pilot and tourism consultant.

The research showed that the development of tourism and economic situation of the region would have been almost impossible without the means of air transportation. Even though the flight operation to this airport is a big challenge because of being a dangerous airport in the world, they are handled with excellent procedures. Thus, the airport has a huge positive impact on the entire region.

Key words Aircraft, development, Everest, Lukla, operation

ABBREVIATIONS

ADB	Asian Development Bank	
ATAG	Air Transport Action Group	
CAAN	Civil Aviation Authority of Nepal	
CCTV	Close Circuit Television	
CIA	Central Intelligence Agency	
FAO	Food and Agricultural Organization	
GDP	Gross Domestic Product	
IATA	International Air Transport Association	
ΜΟΤCΑ	Ministry of Tourism Culture and Civil Aviation	
TIA	Tribhuvan International Airport	
UNWTO	United Nation World Tourism Organization	

ABSTRACT

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1 INTRODUCTION

"Tighten your seat belt, place your carry-on bag under the chair ahead. We are about to descend!" It is a half an hour flight from Tribhuvan International Airport (TIA), Kathmandu, Nepal to Tenzing-Hillary Airport. Almost all the tourist travelling to this area have to take this flight and land in an airport surrounded with some of the highest and most spectacular peaks in the world. This airport is situated in a small town called Lukla in Solokhumbu district in Sagarmtha zone of Nepal, which is the only gateway to the Everest.

The only means of transport in this highly touristic region of the world is air transportation which has a great impact on tourism for one of the most popular trekking routes in Nepal. The airport in this region is the only gateway to the tallest mountain in the world, Mount Everest 8850 meter (Geology 2013). The Tenzing- Hillary airport also known as Lukla airport is one of the busiest airports in Nepal because of its high tourist demand.

Being known as the most dangerous airport in the world, the passenger flying to this airport experiences a very spectacular feeling, the roaring twin otter you are seated on heads for the runway that hits in the mountain ahead. With heart full of fair and excitement after boarding the plane, it takes 30 minutes to reach the airport. During the flight the passenger passes by the beautiful peaks and breath taking natural scenery.

Another reason for choosing this topic is because of the writer's strong interest in aviation industry as well as to promote the tourism of his home country. Almost all the tourist who comes to Nepal has Mt. Everest in their mind, who are either seeking for an extreme adventure or the beautiful mountains attracts them.

The thesis does not have any research question in particular; the aim of this thesis is to analyze the importance of air transportation for the development of tourism in Everest region. The first objective of the report is to explore the current state of air transportation in Lukla. The second objective is to conduct a semi-structured interview with tourism expert, airline manager and pilot, and present the interview. The interview will cover the issues regarding tourism and airline industry in Nepal, importance and current situation of air transportation in Lukla region, SWOT analysis of Tenzing-Hillary airport, history and factors that affects air transportation, effects of being the most dangerous airport, and possibilities of other means of transport and its advantages and disadvantages.

The commissioner of the thesis is Manjani Shrestha Dangol, sales and marketing manager from Tara Air. Tara Air is a subsidiary airline of Yeti airline with its main office in Kathmandu, Nepal. It was established in 2009 and has its main hub at TIA. The airline has been flying to the remote tourist destinations of the country and to Tenzing-Hillary Airport since its establishment. It has high contributions for the Nepalese tourism industry connecting the rural touristic places with the outer world. (Tara Air 2013.)

Concerning to the structure of the writing, the thesis will be structured considering the best account of academic style of written document and construction of a thesis. At first, the importance of air transportation for tourism and rural touristic destination is provided. The third chapter is about tourism in Nepal and Everest region as well as the domestic airline industry in Nepal. The fourth chapter will describe Tenzing-Hillary airport in detail, the location, importance and information of the airlines will be provided. The secondary data will be used and analyzed as one method to reach the aim of the thesis.

Following will be the description about conducting of thesis, this section will discuss about the objective and the methods used in the thesis process. The semi structured interview, which is another objective of the thesis will be presented and analyzed, the degree of validity and reliability will also be measured. The last chapter will conclude the thesis from the conclusion and discussion as well as the author's own opinion.

2 THE IMPORTANCE OF AIR TRANSPORT

The drastic achievements that the air transportation industry has made in a short period of time have contributed greatly to the development of modern society in which we live today. Air transportation is the world's most important industry. After the introduction of the first jet liners in 1949, the growth of the air fleets in commercial sector has grown 70 times, which is faster than any other means of transportation that has helped in the development of the economic situation. Air transportation has made it possible for millions of people to travel and transports billions of dollars worth of goods for trade purpose around the world. (ATAG 2011.)

At present days, the airline industry has become one of the most important part of the global economy. According to International Air Transport Association (IATA), 3.5 percent of the economy in the world depends on the airline industry and 57 million people are employed. Aviation delivers 6.4 trillion dollar of goods every year, which is 35 percent of the world trade value, and 3 billion people fly every year for business or leisure purpose. (IATA 2013.)

Air transportation is related to a large number of different expressions, thoughts and meanings. The most common and effective means of transportation that invokes many different images such as business productivity, leisure, social contact, cultural exchange and recreation is air transportation. No any other form of transportation can give an easy approach to international tourism, and wide range of choice of destinations and various advantages for travellers to discover new places. (Daley 2010, 1.)

2.1 Air transportation and tourism

Air transportation is one of the most important factors for the tourism industry; it renders a very important link between the tourist market and the particular destination by transporting people. According to the International Air Transport Group (ATAG), 40 percent of the international tourist travel by air. The relation between air transportation and tourism is very close, and both sectors affect each other. In one hand air transportation provides a very easy access to the destination, that is, it makes the destination better and in

the other hand gains a financial benefit from its customer and also develops and creates new destination. By providing the strong backbone for tourism industry, aviation helps in the economy by providing employment opportunities to the people, increases the revenues of the country and provides other large number of advantages. (ATAG 2011.)

2.2 Air transportation and rural development

Air transportation plays a very important role in the development of transportation in rural areas. It connects the remote areas with the rest of the world. Since 1950, the development of air transportation has been rapid because of its high speed and able to fly long distance. Many remote areas that are isolated from the centers highly depend on air transportation. The isolation could be because of various reasons such as long distances, mountains or ocean. Thus, air transport makes these places less isolated from the outside world. (George & Bråthen 2010, 7, 61.)

The importance of an airport in the region also depends on the other possible means of transport available. If the region already has other means of transportation form like highway or railways then the airport can be of low importance. In order to cross the physical and geographical barriers such as oceans and mountain ranges on the way to reach to certain destinations through other means of transportation than air transportation can be very expensive. Therefore the responsible parties for the development of air transport can make restrictions considering other various factors such as environmental aspects. But if there are no other alternatives then other factors are gradually neglected. (George & Bråthen 2010, 63.)

3 TOURISM AND AIR TRANSPORTATION IN NEPAL

In order to develop a case related to air transport for the development of tourism in one of the highly touristic region of Nepal, it is necessary to give some background information about the economic situation and development in the sector of air transportation and tourism industry in Nepal.

Nepal is an independent and small landlocked republic country in South East Asia with China in the North and India to the east west and south with an area of 147181 square kilometers and population of 30,430,267. The GDP of the county in 2012 was 40.49 billion dollars. It is a mountainous country with 8 of the 10 highest peaks in the world including Mount Everest. The country consists of 47 airports with 11 paved and 36 unpaved runways. (CIA 2012.)

Nepal does not have a long history of tourism industry, it opened its boarder to tourists in 1950 and since then the number of tourist arrival has been increasing. Since then, the tourism industry has been one of the most important sectors for the nation's development strategy. (MoTCA 2009b).

Tourism industry is a major income source for the most of the countries in the world and Nepal is not an exception for it. Tourism business in Nepal does not have a long history. Nepal opened its gate for the tourists in 1950 after the establishment of democracy in the country. Since then this industry has been a major source of income to the country and is attracting international tourist in rapid manner. (Agrawal & Upadhaya 2006, 24.) The increasing inflow of tourist in the country has given direct and indirect impact on the economic development of Nepal.

3.1 Tourism in Nepal

Nepal among the tourists is famous for the mountains, with rich and diverse natural and cultural attractions. Since 83 percent of the land is occupied by mountains landscapes, they are the most important factor for the Nepalese tourism industry. A survey that was conducted among 1600 international tourist revealed that 47 percent of the respondent

visited Nepal because of the beautiful mountains. (MARG, 1997.) The demand of the mountain tourism is rapidly increasing because of the various activities that can be experienced such as; rock climbing, trekking, mountaineering, camping, wildlife viewing, biking and other various forms of adventurous opportunities (Kruk 2010). Mountains are the second most popular tourist destination after the costal region in the world (Mieczkowski, 1995). It is estimated that 50 million people every year spend their vacations in the mountains (Mountain Partnership 2008). According to Food and Agriculture organization (FAO 2005), 15 to 20 percent of global tourism market is occupied by mountain tourism.

Mountains attract large number of tourist for various reasons. In order to gain the feeling of spiritual well being, escape from the crowded urban areas, another reason can be get rid of urban pollution, noise and other stress, likewise to enjoy the environment of the mountain regions. Furthermore, other motivational factors are to experience the adventure and to do many kinds of sports such as skiing, hiking, snowboarding during the winter, or rafting, canoeing, mountain biking, trekking, kayaking and camping in the summer seasons. (Agrawal & Upadhaya 2006, 6.)

The adventure tourism history started in Nepal six decades ago when early attempts were made to climb the Mount Everest. Now, trekking and mountaineering have become two important products of adventure tourism in Nepal that attracts adventure loving tourists from all over the world. There are more youth that are attracted to the country with adventure tourism as a priority. Due to the growing number of youth travelling in the country for adventure, Nepal has emerged as an adventure destination in the world. According to the Ministry of Culture, Tourism and Civil Aviation (MoTCA 2009) the number in the youth travellers visiting the country for adventure tourism has increase. Government figures shows that, in 2012 there was an increment of 21.7 percent in the tourist arrival who visited the country to seek adventure, which is trekking and mountaineering. The statistics shows that the number of tourist visiting the country for trekking and mountaineering in 2012 increased to 105,015 from the total number compare to 82,260 in 2011. MoTCA's statistics shows that in 2012, the United Kingdom, Germany, France, USA, Australia, Japan, Russia, India, Canada and China were the top countries to visit Nepal, where maximum number of tourist arrived for trekking and mountaineering. (Mac Trek and Expedition Pvt. Ltd, 2013.)

The Everest region is situated in the northeastern part of Nepal. The region provides a life time opportunity to explore the Sherpa community, Mt. Everest, which is the world highest peak, two other eight thousand meter high peak and other peaks above 6000 meter which is located inside the Sagarmatha national park that lies about 3000 meter in an area of 1,148 sq km. Nominated as a world heritage site in 1979, the park consists of glaciers, rugged terrain with deep gorges, and huge rocks. The park consists of different kind of vegetation ranging from pine, hemlock to shrubs, alpine and bare rock. The animals like ghoral, musk deer red billed cough yellow billed and many other also take the attention of many tourists. The trail which is usually 10 walking days to the Everest starts from Lukla, the tourist walks through the hills of Solu and ends in Everest base camp, on the way one experiences the Sherpa culture and their lifestyle. (Nepal Tourism Board 2013.)

Tourism plays a vital role in the development of remote and rural sectors (Nepal 2005). Many writers and experts have emphasized that the effective way for the development and the reduction of poverty in the rural areas that do not have any other ways of development opportunities is through tourism. (UNWTO 2010; Ashley, Meyer, Roe, & Goodwin 2004; Nepal 2005). Tourism is the most effective way to change the livelihood of the inhabitants and establishing the advantages in the region, in some remote areas it can be the only way for long-term development. Since the tourism industry is a mostly labor intensive market that requires less investment and in return with many employment opportunities, it can give large number of advantages to those rural and remote areas where the other resources are less. (Kruk 2010.)

The locals in the Khumbu region have been able to raise their standard of living to a good level through tourism compared to other mountain tourism regions in Nepal. Threequarters of the households major source of income by 1985 was due to tourism, the participation of the people since then has been increasing and most of the members in the family from every house are engaged. They are involved in numerous ways in tourism business and have the earnings working as tour leaders, potters, cooks, kitchen crew, mountain expeditors, camp crew and so on. (Stevens 1999.)

The booming tourism industry has changed the lifestyle of the Sherpa community in various ways. Tourism industry has provided great varieties of opportunities to the people

living in this region. Growth of tourism is the major primary source for the income in mountain areas; it has provided appropriate conditions for the locals to directly participate in the economy of the country. The Everest region of Nepal with the dwellers of the Sherpa community has been one of the most important attractions for the mountain tourism and the first choice of trekking and mountaineering in the world. The beautiful mountains are the key factors for the tourist that attracts large number of increasing tourist for various adventure activities.

3.2 The airline industry in Nepal

Air transportation plays a very important role in global business and the tourism industry; it provides a strong framework for the economic development especially in the developing countries. (ATAG 2011). Airline industry in Nepal has very important role for the development of the country. In most of the remote part of the country, air transportation is the only means of transportation and therefore promotes the social inclusion.

The aviation history of the airline in Nepal is not so long but has created a cold image in airline industry of the world. The aircraft rental companies that sell or rents airplanes have kept a high percentage of payment and a secure guarantee from internationally recognized banks and that resulted in difficulties to start an airline business in Nepal. It is because the companies before were not able to fulfill their agreements and payments. These various unprofessional and unregulated ways of doing business in domestic airlines of the country has resulted in the failure and a deplorable situation. (Sherpa 2013.)

Large number of private airlines have come and disappeared in the airline industry of Nepal the last two decades; the domestic airlines have been having a hard time to remain in the market. Even though liberalization of aviation in 1992 ending the monopoly of the Nepal Airlines Corporation gave the opportunity for many airlines like Nepal Airways, Necon Air, but failed in a long term perspective. These failures shows that they require a long term planning and should think about sustainability. Lack of proper infrastructure is another main disadvantage for the airline industry in Nepal. Even though the there is a growth in number of air fleets, the country still needs to improve a lot in infrastructure. The private companies grew after the liberalization in aviation but the private sectors are not allowed to participate in the development of infrastructure, the government does not allow them to enter the infrastructure sector. Unlike in many other countries, the private companies have a great influence on the development of infrastructure in the country. (Manandhar 2012.)

In case of Nepal, the 'open sky agreement' made after the liberalization of air transportation must be analyzed properly for the sustainable development of the aviation sector. The government of Nepal should change the rules through time and demand of the airline market to flourish the business. Since the geographical barriers and limit of roadways have disconnected the rural areas from the outer world, the development of safe, reliable and better air transportation is very essential. Many private airlines due to the lack of the sustainable view planning, failed after only a few years of operation and also more airline companies were closed due to high rate of accidents. Likewise, the other factors are the unexpended and unprofessional people at the management level, lack of long term planning, insufficient financial support and renting the aircraft in the short-term basis by massive insurance premium. (Sherpa 2013.)

After the liberalization of air transportation in 1992, Nepal experienced huge growth in air transportation. The numbers of passenger in 2010 rose to four million compared to one million passengers in 1992. Likewise, the movement of aircraft reached 99,000 in 2010 from 24600 in 1992. The private sector has a bright future that can have a leading role in the industry if investments are made in billions. Even though the number of air fleets is rising, the service provided in the rural part is not in the satisfactory level. Because the operational costs are very high in the remote areas, the private companies are not willing to fly to such destinations. Therefore, in those situations the government must give some inspiration by providing some incentives and helping in other ways to fly to such destinations. (Manandhar 2012.)

The government of Nepal has begun the expansion of the only international airport, TIA that is to be finished by 2015 with the loan from the Asian Development Bank (ADB). Likewise, other airports are also in the planning process of expansion as well as the development of the second international airport. Similarly, the Civil Aviation Authority of Nepal (CAAN) is opening a Trans- Himalaya 2 air space, which will be the profitable

business for airline industry. This route will be named as the Everest route where the passenger will be able to have a great view of the Mount Everest. These are some steps taken by the aviation industry for the development of air transport in Nepal. (Manandhar 2012.)

4 TEINZNG-HILLARY AIRPORT, LUKLA

Sir Edmund Hillary built the airport in 1964 as a part of the Himalayan trust project mainly to transport the necessary supplies, he purchased the farmland from the farmers for the government of Nepal in a sum of 635 dollar which was a substantial amount of money in those days. (Attractions Nepal 2008). The airport was renamed in 2008, as Tenzing-Hillary airport in honor of Sir Edmund Hillary and Sherpa Tenzing Norgay, the first people to reach the summit of the Mount Everest and also to note the effort made by them for the construction of the airport. (International Herald Tribune 2008). The flight operation are done only from TIA in Kathmandu, during high seasons the airport operates more than 50 flights a day, the airport is very popular and one of the busiest domestic airports. (Siwasti 2011).

Among all other domestic airports that are important for tourism, the Tenzing-Hillary airport in Lukla is always top on the list. The airport is very busy during the two tourist seasons during the year, the first one from March to April and the next from September to November. During the touristic season there are 50 to 60 flight operations as well as overfly in a day. (Tenzing-Hillary Airport Civil Aviation office 2010.)

The flight from Kathmandu to Lukla is one of the most exciting flights in the world, tourist experience the amazing view of the Himalayas during the flight. This flight is one of the most adventurous routes in the world where the airplane lands on a dramatic runway which is surrounded by mountains. The establishment of the airport has given the visitor an easy access to start the spectacular trekking route full of adventure on the tallest mountain in the world. If the weather is fine, it is twin-engine Dornier and Twin Otters that make frequent daylight flights between Lukla and Kathmandu. (Nepalflightinfo 2013.)

Lukla airport is located in the heart of the Himalayas surrounded by beautiful mountains and amazing landscape.



GRAPH 1. Location of Tenzing-Hillary Airport (adapted from Google 2013)

Tenzing-Hillary airport (LUA) also known as Lukla airport is a small airport situated in the town of Lukla. (Great circle mapper 2013). It is a small community in the Khumbu area of the Solokhumbu district in Nepal located at 9383 ft. Lukla is located in the eastern part of Nepal at the foot of the Mount Everest, before the establishment of the airport, this town could only be reached by road travelling from Kathmandu to Jiri and hiking for five days. Most of the tourists start their trek form Lukla, and it is now a popular trekking route in the world. (Nepalflightinfo 2013.)

4.1 The importance of the airport

Today, somewhere between 90 to 95 percent of the visitors go to this destination with the flight to Tenzing-Hillary airport. (Attractions Nepal 2008). Lukla does not have any other forms of transportation, the one and only means of transport we see is the aircraft. All the people living in this region depend on air transportation, all the supplies and goods also including the materials to build the houses are transported with airplanes. There is no way out from this place besides airplanes and helicopters. Most of the local people living here do not know what a bicycle or a car looks like, but since they have grown up with aircraft, aircrafts have a great importance in the daily life of the people.

Due to the geographical condition and the topography of the Everest region also known as Khumbu region, air transportation is the only and most effective way of transport and communication with the outside world. As air transport is the most valuable and the only means of transport in the region, it would be almost impossible to imagine the change that air transport has made in this region. With the development of air transportation, local people as well as the large number of tourist can travel to and from this destination. In general, aviation has change the life of the people drastically in this region, which had once been the most remote part of the country.

The airport is situated in the heart of the Himalayas and is the only gateway to the Everest and the post popular touristic destination of the country. Almost all the people living here are related to tourism work, thanks to the development of air transportation in this region because of which the people have the employment opportunities. Sherpa stand outside of the airport in the hope to be hired as potters for the trekkers going for trekking in the mountains. Likewise, various shops, hotels, lodges, restaurants and bars can be found in the surrounding of the airports that provides services to the tourist.

4.2 Airlines flying to Tenzing-Hillary airport

All the domestic airlines of Nepal do not have their air fleet in Tenzing-Hillary airport because they do not have the kind of aircraft and fully experienced and trained pilots that can fly to Lukla. Even being one of the most profitable destinations for the airlines, they cannot start flying to Lukla instantly; it needs lots of preparation, considerations of risk factors, manpower and infrastructures.

Currently, Nepal airlines, which is the flag carrier of the country has two flights in a week and only Tara air has its regular flight depending on the weather and the demand to Lukla. Agni air has again started its daily flight to Lukla one more time after a long break is also preparing to have more flights during the high seasons. Prices are the almost the same with all the airlines, therefore there is no price competition. (Shah 2013.)

Tara airline Pvt. Itd is a private airline company formed in 2009 with its head office in Kathmandu, Nepal. It is a subsidiary for Yeti airlines, which is one of the leading airlines in the country. The airline operates the most number of flights to the mountain regions of Nepal. The airlines major target destinations are the mountain and remote parts of the country. Currently, the airline has its regular flights to 18 destinations and provides charter services as well. It operates 7 aircraft, 2 Dornier Do 228, 3 De Havilland Canada DHC/6 Twin Otter and 2 Pilatus PC/6 porters that are especially designed to fly to the extreme and remote places. (Tara Air 2013.)

Agni Air Pvt. Ltd. is an airline company established in 2006 with one aircraft in the beginning, Dornier. It started its air operation by flying only to Lukla in the beginning. It has a major impact on the development of tourism sector and economic development in Nepal by giving a good connection of air transport and advertisement of Nepalese tourism in the world. Currently, the airline owns 3 Dornier/228 and 3 Jet stream 41 made in the United Kingdom. The airline flies and gives priority to the most important touristic destination of the country. It has connected the most rural and isolated regions by exposing it to the outside world. Agni air in future plans its expansion and providing air connection to other remote and touristic destinations of Nepal. (Agni air 2013.)

Nepal Airlines is the flag carrier of Nepal with its main hub at TIA in Kathmandu, it was

established in 1958 as Royal Nepal Airlines. Currently, the airline has its flight operation on more than 30 domestic and 7 international routes. The company owned some small aircraft like Twin otter and Pilatus Porter in 1970, and since then it is flying to the remote and mountainous region of the country. (Nepal Airlines 2013.)

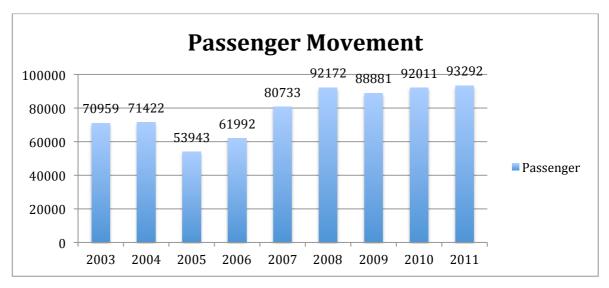


GRAPH 2. Dornier 228-202 (picture taken by Bipin Dawadi on 11 May 2013)

Graph 2 above shows the image of the kind of aircraft that are used for the flight operations in Tenzing- Hillary airport. The airplanes are those kind that has been in service around the world for decades to the remoter regions in the world. The airplane is small and normally has 20 seats, which are designed for the short takeoffs and landings. Only the best pilots from Nepal who have experience on Lukla operation are allowed to fly the aircfart in Tenzing-Hillary airport. (Shah 2013.)

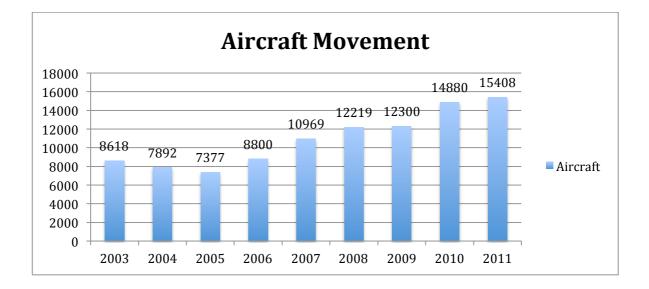
4.3 Statistical information on the airport

Graph 2 below depicts the number of passenger movement at Tenzing-Hillary airport for the time interval of 10 years, from 2003 to 2011. It shows that the number of passengers had comparatively increased by 22,000 in 2011 compared to the movement of passenger in 2003. The year 2005 had the lowest number of passenger movement that was 53,943, and year 2011 had the highest movement of passenger that was 93,292. The graph in general shows that there had been fluctuations in the passenger movement from the year 2003 to 2008, and since 2009 till 2011, the number was increasing gradually.



GRAPH 2. Passenger movement at Tenzing-Hillary Airport (adapted from CAAN 2012, 47)

Graph 3 below shows aircraft movement at Tenzing-Hillary airport for the time interval of 10 years, from 2003 to 2011. The graph shows that the number of aircraft in general has been increasing slowly within those 10 years. The number of flight operation in 2011 had increase by 6790 flights compare to the year 2003. In the gradual increase process of number of flights at this airport, year 2004 and 2005 had a little downward trend. The graph shows that, the year 2005 had the lowest number of aircraft movement that was 7377 and year 2011 had the highest movement of passenger that was 15408.



GRAPH 3. Aircraft movement at Tenzing-Hillary Airport (Adapted from CAAN 2012, 47)

According to the flight status data provided by the Civil Aviation Authority of Tenzing-Hillary airport in Lukla, it has witnessed a high fluctuation in number of flights during peak and off tourism season in Nepal.

TABLE 1. Flight movement at Tenzing-Hillary Airport on year 2011 (adapted fromTenzing-Hillary Airport, Civil Aviation Office, 2011)

Months	Total Aircraft	Total Pax Movement		Total Cargo Movement in K.G.	
	Movement	In	Out	In	Out
January	638	1307	2174	174159	1615
February	842	2033	1382	229446	92
March	1460	5149	3144	281507	1300
April	2372	8698	7209	240443	4978
May	1720	3313	6617	311894	17381
June	542	1187	2052	163222	20420
July	242	474	637	67707	1055
August	832	1148	1061	397301	11364
September	1144	3786	2260	313037	1654
October	2828	13121	6375	190093	6995
November	1738	4275	8492	313914	12562
December	1050	2893	4505	207143	4534
Grand Total	15408	47384	45908	28,89,866	83,950

The above table shows the number of aircraft, passenger and cargo movement at Tenzing-Hillary airport for each month in 2011. It shows that there aircrafts movement are higher two times a year. The first in March, April and May and the second time in September, October, November and December. July has the lowest number of aircraft movement and October has the highest number of aircraft movement. The table in general depicts that the passenger and cargo movement is directly related to the number of aircraft movement, when the movements of aircraft is higher than the number of passenger and the cargo is also high.

4.4 The most dangerous airport in the world

History channel in 2010 ranked Tenzing-Hillary airport as the most dangerous airport in the world. The airport has all the variables that make an airport extremely dangerous; altitude, mountains, turbulence, frequently changing weather and short runway. The airport is situated at the elevation of 9382 feet, which is one of the world's highest airports, it has a very short runway of 1600 feet with the gradient of 12 degree that is equivalent to 12 stored building and 20 meter wide. Even though it is only 85 miles apart from Kathmandu, they can have a completely different weather. Any other pilots flying any where in the world cannot just fly to Lukla, they need to get used to it first, the pilots are not allowed to land without instructions. The approach into Lukla is a big challenge because of the decreased horse power of the aircraft, at such a high altitudes. Therefore, once an aircraft approaches into Lukla valley and the landing attempt has begun, there is no chance of turning back, it requires a co-ordinate effort and everyone needs to be ready. (History Channel 2010.)



GRAPH 5. Tenzing-Hillary Airport (picture taken by Bipin Dawadi on 11 May 2013)

The above graph shows the picture of Tenzing-Hillary airport in Lukla. Runway starts with abrupt drop of river valley down below and ends with the big hill. Landing as well as

taking off from Lukla can have no chance of error at all. The airplane during the landing approach comes from north to the south of the runway, therefore it has to first go around the mountain and land in the uphill runway, the uphill runway helps the aircraft to decrease its speed so that it does not hit the mountain in the front. It is possible that the aircraft could fly very low and because of low visibility and fall on the cliff. Any kind of inaccuracy will either make the aircraft fall on the cliff or crash in the mountain. It has a very short runway and is often suffered by hazardous weather condition. Due to all these reasons the flight operations are often cancelled for days and people get stuck in the mountains and as well as wait in TIA for the weather to change and fly to Lukla. All tourists find it very scary to land here and are really surprised by seeing the runway, passengers in the airplane only sees mountains around and cannot see any flat land and it is very scary for them. The take offs are more dramatic, the airplane in the runway points down the air strip that ends at a drop into the valley down below.

Even though the operations are made with very close instructions and care, various incidents and accidents have occured through time. In 2008, a twin otter plane of Yeti Airlines crashed into the starting point of the runway; the aircraft caught fire and 18 people died on the spot. The reason for the accident was the heavy fog in the Lukla valley. Likewise, in 2010, a Dornier of Agni Air crashed when it was turning around because it was not able to land due to the condition of bad weather where 14 people lost their lives. These were a few big tragedies that happened during the flights to the airport, of the only gateway to the Everest. (The Australian 2013.)

5 CONDUCTING THE RESEARCH

This chapter will discuss the research methods applied to make this final thesis report and about the planning process of the research and settings on goals and objectives of the research itself and the target groups. Moreover, the method used and the information collection process will be mentioned, the presentation of the interview and analysis as well as examining the validity, reliability when writing this report will be explained.

5.1 Objectives and target groups

A research project includes various tasks, if the project is to be successful then every task must be done well, every project begins with a goal and then the goal is normally translated into objectives (Smith 2010). The main aim of the thesis is to analyze the importance of air transport for the development of tourism in the Everest region. The research carries three objectives; to highlight the region as a popular touristic destination, to describe the current state of air transport and factors that affects air transport in this region. The target groups of the research are an airline manager, pilot, and tourism experts. Collection of the information from these target groups seems challenging because of difficulties in reaching them. The reasons for choosing them as a target group is because they are working in this field and are engaged in tourism phenomenon in this region. Thus, quality information, different viewpoint and ideas can be collected.

5.2 Research method

The research has been made to gather information in the related case study area. The author has used both primary and secondary data to complete the whole writing and prepare the final work. The primary data are the semi structured interviews and text and data analysis. All the interviews and much of the research process were conducted in the author's home country Nepal, which made it a lot easier to get in contact with the related persons as well as getting the thesis commissioner. The secondary data are taken from journals, articles, published material from related authorities, the internet and the airport office itself. The author of the thesis himself visited the airport and collected data from the airport office during the research process.

According to Veal (2006) there are three different kinds of research; descriptive, explanatory and evaluative. Finding the right method for the research is very important, it is very important for the researchers to know about the method they are using. As the main aim of the thesis is to analyze the importance of air transport, the type of the research used is explanatory research. (Veal 2006, 3, 95.)

The information required for the research was collected mainly from the published material from the related authorities and semi-structured interviews. Some information presented in those materials was also documented for different goals which had different aims. The table 3 below shows the different sources and their descriptions.

Sources	Description
Primary Source: • Interview	Interview with airline manager, pilot and tourism expert
Secondary Source:	
Capacity Development Of Civil Aviation Authority of Nepal	National Transport Plan, current situation and Diagnostic
Civil Aviation Authority of Nepal (CAAN)	Civil Aviation Report 2011-2012
Tenzing-Hillary Airport, Civil Aviation Office	Monthly flight movement data, 2011

TABLE 3. Sources of data collection

5.3 Validity and reliability

"Validity is the extent to which the data collected truly reflect the phenomenon being studied" (Veal 2006, 135). It is the most difficult part of the research where the researcher faces challenges during the measurement of the behavior and attitude of the respondent. The researcher is not always sure about the exact meaning of the reply conducted in the interviews, surveys and oneself reported accounts of behavior. When comparing the accuracy level of the secondary information with the primary information, the secondary sources has a pre-established level of validity, and the researcher does not have to doubt while using such information. However, as the research may have been done for some other purpose the information used by the researcher may not be absolutely valid. (Veal 2006, 117, 153.)

"Reliability is the extent to which the research findings would be the same if the research were to be repeated at a later date, or with a different sample of subjects" (Veal 2006). During the process of the research it is really important that the information are collected from the reputed sources and the information been presented is consistence to the sources. The research work only exists only if the same results are produced while the research is done with the same conditions, regardless of the time and place. However, that rarely happens in the case of tourism research, the social science research deals with human beings and ever-changing situations. (Veal 2006, 41.)

The research method chosen in the thesis is the semi-structured interview and secondary data analysis. According to Smith (2010, 109), a reason that can decrease the quality of the interview result is an inexperienced interviewee. Therefore, to achieve the high quality information the interview has been conducted only with experienced personnel. Altogether 3 interviews were carried out, the interviewees were all experienced interviewer. They had an experience in the related field for many years, and therefore the information given by the interviewee can be taken as a legitimate outcome. Some information collected were those kinds that could not be found anywhere else. Regarding the secondary sources, the data were taken from the published material from the related authorities, Internet and airport office itself, therefore all the information is valid. In addition, the possibility of the

internet sources may not be authentic or true was carefully considered and the sources used were not just taken from the internet but also from the highly reputed webpages such as NTB, CIA and newspapers like International Herald Tribune. Even though all the materials collected were primarily documented for the research purpose they were somehow related to the main aim of the thesis. However, the reliability of the thesis may not be very high because the interview method only presents the opinion of the interviewees and their generalization is very difficult. Furthermore, the sources of information for writing this thesis were not primarily documented to relate to this particular hypothesis, therefore it is possible that the result may be slightly different from when a research for any other purpose was done.

5.4 Qualitative research method

In the qualitative research method, the major ways for data collections are interviews, participant observation, focus groups, delphi techniques, case studies, ethnography, action research and documentary methods. The main goal behind using the qualitative method for data collection and analysis is to understand the thoughts of the respondent that is based on their concepts and experiences. The information required for this report was collected from various qualitative methods that include semi-structured interview, observation and participation. (Jennings 2001, 158.)

The main research type for preparing this report is the qualitative research method, in this method the qualitative information collected is preauthorized in comparison to quantitative information. This method gathers more detailed information than the quantitative method. It is comparatively more flexible than other methods and provides more freedom. Unlike other research methods, this research method follows a recursive approach, where the elements of the research have more fluid relation to each other. In this method, the process of data collection, analysis and writing happens at the same time. (Veal 2006, 193, 196.)

5.4.1 Textual and data analysis

"Documents abound in everyday life. They comprise pieces of written, printed or electronic material that contain information of some sort" (Taylor, Sinha, & Ghoshal 2006, 114). Documents are a rich source of information that is practicable not only for personal and business matter but also for different kinds of research, and especially in social science research. They are simply a written text that can be found in electronic or printed form. While using the document as the source, it must be carefully analyzed that they might have been produced for a different purpose. However, they are the important source and provide key information for the researcher to achieve his aim of study (Taylor et al. 2006, 114-116.)

5.4.2 Interview

Often research in tourism is very productive using the semi-structured interview method, also known as personal interview or in-depth interview. Some matters such as history, experiences and opinions cannot be collected using the structured method. The reason behind using the semi-structured interview is not to collect the information in the numeric manner but to perceive the meaning how the interviewee thinks about the certain issues. (Smith 2010, 109.)

When it comes to semi-structured interview, it is normally implemented with few topics and is followed with the list of the topics to be discussed rather than a number of questions. The conversation is recorded in exactly the same words as were used originally, the minimum time interval is at least 30 minutes and can also be extended if needed. Repeated interviews can also happen. (Veal 2006, 198.)

In the semi structured interview method different themes are used to conduct the interview. Themes are like headings for a group of topics related closely to one another. Few themes are made and under which main questions or keywords are placed and if the respondents already take the matter to discussion then the same questions should not be in use.

5.5 Interview analysis

During the process of making the interview questions it was important to know what was necessary to be found. After some thinking and closely relating to the research aims and objectives, 3 themes for each interview were made and supported by some sub themes to conduct the interview in the best way. The supervisor of the thesis approved the themes used in the interview. The author came up with four different forms that are shown in appendices 1 to 3. The interviews were made with an airline manager, pilot, and tourism expert.

5.5.1 Interview with an airline manager

Theme 1 of the interview was about the airline company and a general picture of the domestic airline industry of Nepal. The reason behind this question was because Tara Air does most of the flight operation for Tenzing-Hillay airport. Airline sales and marketing manager Mrs. Manjani Shrestha Dangol explained that the airline since its establishment in 1998, that started with only two aircraft has been flying to the remote destination like Lukla, Slowly, they brought other airline and began to fly to other destination and in 2009 the airline introduced the other brand called Tara Air which looks now after only remote flight operations.

Ms. Dangol has a negative answer for the current state of airline business in Nepal,

The situation of airline industry in Nepal is not that good because of the geographical condition, unpaved runways and other risk factors, the increasing number of accidents makes insurance premium higher every time especially in stall operation

There are two airlines, which are Yeti Airlines, and Buddha Airways; they are key players in the context of the domestic airline industry in Nepal. These airlines are politically and financially strong and have enough aircrafts, due to which it is difficult to compete with them. The current state of the airline industry is bad due to various reasons. The geographical condition of the country does not favor the industry and most of the runways are unpaved which does not allow the operation of all kinds of aircrafts. Especially in the stall operation because of various accidents and incidents the insurance premium gets higher and it is difficult to pay that amount to the insurance company. Likewise, due to the lack of proper management and investment also in other sector it has resulted in that some airlines have gone bankrupt.

Theme 2 was about Tenzing-Hillary airport, the history of the airport operation, current situation, drawbacks and future of the airport.

The airport is the main gateway to the Everest region since its existence. Mrs. Dangol said that, the entire transportation for this destination is through this airport. Right after the airport was established there were two airlines, Lumbini airways and Skyline airline that had their flight operation. At the moment, 90 percent of the flight operation in Tenzing-Hillary airport is done by Tara air, however some other private airlines are planning their operation in the near future.

In Mrs. Dangol's opinion, due to the high demand, the number of incoming and outgoing flights to Lukla will increase in the near future and it will be impossible for the airport to handle all the passengers. There are no measures that can be taken to increase the capacity of the airport, the length of runway cannot be extended, the area of the air space cannot be increased, and neither the parking area can be increased because of the hills and mountains. She believes that the airport will continue to operate as it is doing for a long time still.

Theme 3 of the interview was about the different factors that stop air transportation in Tenzing-Hillary airport, the reason behind this theme was because the flights to Lukla are frequently cancelled.

Mrs. Dangol said that, in the most important factor that affects the flight operation in Lukla airport is the bad weather condition. The flights are only operating during the morning when the weather is clear, but slowly in the afternoon the clouds start to build up and there are no flights. It is quite normal that due to the bad weather during September and November there are no flights to Lukla for 8 to 10 days and weeks.

5.5.2 Interview with the pilot

Theme 1 of the interview was about the current situation of the air transportation in Lukla, This theme was chosen because it is very important to analyze the current situation of the airport before describing about the importance of the airport.

Captain Manish Shah thinks that the number of passengers flying to Lukla has been growing over time. There are some private airlines, the flag carrier airline of the state and helicopter flying to this airport. But, there are many challenges like, the rapidly changing weather and the small air space available, which are facing the flight operations at this airport. Several accidents have occurred over time during the process of Lukla approach. The flights are frequently cancelled for days and even weeks because of bad weather conditions. In October 2010 because of the bad weather the flights were cancelled for 10 days and again 7 days in November. Then the helicopter begins to operate to and from the airport transporting the passenger and daily supplies. The highest record of the cancellation of flights in Lukla is 13 days.

Theme 2 of the interview was to make the SWOT analysis to know the strength, weakness, opportunities and the threats of the airport.

Captain Shah, thinks that the most important strength of the airport is its location itself, the airport is situated at the foot of Mount Everest and is surrounded by the mountains. The location of the airport is in the heart of the Himalayas. Likewise, the next strength of the airport is that, the airport has provided large business opportunities to the local Sherpa community that has resulted in an economic growth of the region. Due to the existence of the airport the region has been able to get the basic needs for the development such as hospitals and schools and live a nice life.

Captain Shah thinks the weakness of the airport is mostly related to the operation of the aircraft, i.e. many variables that makes it challenging to land and take off from Lukla. The constantly changing weather, short runway, turbulence and narrow air space available are some of the variables that makes difficult to land and take off from Lukla. In addition, the airport is located at a very high altitude that reduces the performance of the aircraft, the

aircraft is not able to use its optimum horse power therefore the risk factor is high, the pressurized aircraft are not able to fly to Lukla because they need bigger and longer runway.

The airport in the area has given lots of opportunities to the people, Lukla has become the economic center of the entire Everest region; the locals are open to the rest of the world. They have been able to explore to new ideas and have established their own business.

Captain Shah adds:

The main threat to the airport is the bad weather

It can have a completely different weather condition than the airport in Kathmandu even though it is not really far. All the other airports have 360-degree approach to the runway but Lukla has only two approaches, one for landing and other for take off. Likewise, the other threat of the airport is the garbage, which has not been properly managed.

Captain Shah believes that the use of technological advances would to some extent help to deal with the bad weather condition and make Lukla approach easier. He stated:

We do not have a good weather forecast system, if we could install the CCTV camera, we could get a direct satellite images rather than asking to the airport staffs, then it could be far easier

CCTV camera would make the pilots to approach Lukla easier, the pilots would have a direct access to the weather condition of Lukla. The airline companies are now trying to develop that system and make the flight operations to Lukla more effective.

Theme 3 was about the factors that affect the air transportation in Lukla and to analyze if being known as the most dangerous airport in the world has affected the visitors demand to fly here, the flight operations are frequently cancelled for few days even to weeks.

Captain Shah adds again that the major factor that affects the flight operation in Lukla is the frequently changing weather and the location of the runway. Because of the high altitude and the decreased efficiency of the aircraft, the bad weather is always a difficult challenge to deal with. Landing at Lukla has only one chance to approach and it requires a very good coordination. He stated that:

Screaming passengers in the airplane only sees mountains around and cannot see the flat land, it is very scary for them, number of accidents and incidents that have occurred in Lukla due to various reasons will definitely strike the tourist mind and to some extent will matter before they decide to take a flight to Lukla'

In captain Shah's opinion the airport being one of the most dangerous in the world and news of various accidents through time has obviously affected the travellers mind before they choose this destination and fly to Lukla airport. Since it is expensive to fly to Nepal and also to Tenzing-Hillary airport, the tourist will definitely consider all the risk factors also.

5.5.3 Interview with a tourism expert

Theme 1 of the interview was about the present situation of the tourism industry in Nepal. The reason behind this theme was to start the topic with some background information on the current situation of the tourism in the country. The interviewee was Mr. Pradip Koirala, travel and trekking consultant of Nepal.

Mr. Pradip Koirala presented answers based on the tourist inflow of that current season when the interview was conducted. He said that recent tourism inflow is not satisfactory in Nepal. If we look at the current figure, due to the ongoing economic recession the number of tourist arrival has decreased from Europe. However, the Chinese market is growing and the tourist arrival from China is increasing rapidly.

Theme 2 of the interview was about the general picture of tourism in the Everest region, the demand as well as future of tourism in this region.

Mr. Koirala says that there are two kinds of travellers who choose to explore this destination, one to seek a real adventure in the mountains, around 60 percent and the rest

40 percent to see Mount Everest. The demand of tourist travelling to the Everest region is very high compare to other adventure destination of the country. It is the most popular destination the country for mountaineers, expedition group and trekkers. There are usually not less than 67 flights in a day in high seasons. He adds that it is comparatively expensive to fly to Lukla than to other similar rural airport in the country. The number of German tourist at the moment has slightly decreased because of the accidents that have occurred during the Lukla approach. He stated:

> (Smiles) As long as Everest is there the future for this region is brighter, adventure tourism is increasing every day, Everest is attracting more adventure lover tourist, because of lack of flight ticket to Lukla in high season many tourists also goes to other similar destination, especially during November

The tourism industry in the Everest region has a very good future; the increase in demand of adventure tourism has made this destination very popular among the adventure seekers. Furthermore, the excellent marketing effort done together to advertise Mount Everest and the entire region in a co-ordination between Nepal tourism Board, tour operators and the destination management companies have further promoted the region compared to previous years.

Theme 3 of the interview was about the possibilities of other means of transportation and its advantages and disadvantages for the tourism and economy of the region. The reason behind this theme was because the entire Everest region has to depend on the air transport for the transportation of the goods as well as the necessary daily supplies.

Mr. Koirala said that, there has been no official plan for the development of other means of air transport in Everest region so far. But, there was a plan 5 years ago on shifting the airport to another place in the region, but the local people form the Lukla region did not agree and since the participation of people is really necessary in such development projects, the project did not come into action because of lack of participation and will of the locals. The economy of the Lukla village completely depends on the airport is shifted to some other places.

Regarding the impacts on the access of other transportation mode in the region. He stated that:

Development of any other means of transportation can have both positive and negative on the tourism in Everest region

In Mr. Koirala's opinion, the constructions of road will definitely decrease the cost of the trip and all kinds of tourist and have the access to the area, therefore the number of tourist will increase in the area. There will be a drastic increase in the back packers and the budget travellers. Likewise, most of the tourists do not prefer to visit this destination because of the situation of the airport, the 40 percent of the category of tourist whose main aim is to see the Everest than to seek the adventure will rise rapidly, so another mode of transportation will increase the inflow of the tourist.

However, the other mode of transport will result in mass tourism and the decrease the number of tourist who spends more. Since, the spending of the tourist will be less the region will not be able to economically benefit less than it is doing at the moment. Likewise, the infrastructure available such as hotels, restaurants and lodges will not be able to handle the huge number of tourist. He adds that, since the main economic source of Lukla village is the airport, the people will be happier not having the other means of transportation in the Everest region.

5.6 Findings

The study in general analyzed the importance of Tenzing-Hillary airport for the development of tourism industry in the Everest region and the current situation of the air transportation. The semi-structured interview in the research part of the study fulfilled the objectives of the research work. The following will be the paragraphs revealing the findings of the research work.

The first interview of the research work showed the commitment of Tara Air for rural air transport operation and the current state of the domestic airline industry of Nepal. It also showed the current state, importance, drawbacks and the factors that affect air transport in Lukla. Tara Air has lots of commitment for the development of air transport in Lukla, even though it is a challenge for them to operate in this airport they have been flying to this destination since its establishment. There are two main important airlines in Nepal that have enough aircrafts, are politically and financially strong, they have a key role in the aviation industry. The airline industry in Nepal is not in satisfactory level because of various reasons such as geography, high insurance premium, unpaved runways and improper management. The interview also showed that there are few airline companies that have their flight operation in Lukla airport, the airport in near future will not be able to handle the increasing number of passengers because of high demand and there are especially no measures that can be taken to increase the capacity of the airport. The flights to Lukla are most of the time affected due to unpredictable bad weather conditions.

The second interview successfully made the SWOT analysis and showed the current state of the air transport at Tenzing-Hillary airport. It also showed the factors that affect the air transport in Lukla and effect of being the most dangerous airport in the world. There are some private and governmental airlines and helicopters flying to Lukla airport. The cancellation of the flights because of the bad weather condition for days and even weeks are not uncommon. The interview showed that the major strength of the airport is the location itself, it is located in the heart of the Himalayas and is the only way to the Everest, and the development of tourism because of the airport has provided the region with many business opportunities for the locals. The region is able to have basics needs of development such as hospitals and school only because of the airport. The frequently changing weather, short runway, narrow air space and high altitude are the weakness of the airport that makes the operation very challenging. The cancellation of flights and increase number of accidents due to the bad weather could be less to some extent if proper technological advances could be used. The interview also explored that because of being the most dangerous airport and increasing number of accidents and incidents during the Lukla approach it can affect the tourist mind to some extent before they decide to take a flight to Lukla.

The third and the last part of the interview showed the recent state of tourism industry in Nepal, the importance of the air transport and situation of the airport in high and low seasons. The interview also showed the advantages and disadvantages of the other means of transport in Everest region. The number of tourist arrivals from Europe at the present moment has decreased but the Chinese tourist inflow is increasing. Almost all the tourists travelling to this airport use air transportation. The Everest region has been the most popular destination of the country for the trekkers and expedition group and in the demand is increasing every year and has a great tourism future. There has been no attempt made for other modes of transportation, while the development of other forms of transportation can have both positive and negative impacts on the regions, there will be a high number of tourist arrival but will result in mass tourism and increase in numbers of backpackers who do not have more spending.

6 CONCLUSION AND DISCUSSION

Firstly, the inspiration behind choosing this topic and naming the thesis "TIGHTEN YOUR SEAT BELT, WE ARE ABOUT TO DESCEND" was because of the high motivation in the subject itself. The whole process has been very rewarding and instructive. Furthermore, finding a suitable commissioner from a reputed airline company, Tara Air was very essential when it comes to the outcome of the thesis.

To summarize the main points discussed in the thesis, aviation has a great impact on the tourism industry as well as the global economy. Air transportation connects the rural destination and is the most effective way compared to other means of transport. Adventure tourism has become a popular form of tourism in the world, and Nepal comes in the priority of the destination chosen and the arrival of tourist is also increasing because of its geography and high altitude mountains. The development of the tourism because of air transportation in the Everest region of Nepal has completely changed the economic situation of the region and has a great impact on the locals. Even though the airport in Lukla has been the most dangerous airport in the world because of many variables, and several accidents have occurred through time the number of aircraft operations and passenger movement is increasing annually, the airport operations are handled very carefully.

The research aimed to study the importance that air transportation has made in the development of tourism in Everest region and the current situation. Once a tiny village in the northeastern part of Nepal in the Himalayas has experienced the modernization only because of the airport. The theoretical framework of the thesis described the importance of tourism and role of aviation for the tourism development in Everest region and the evidence that supported the theoretical concept was brought up to the part of the research work. The empirical part of the work included the semi structured interview that explored the current situation of tourism and the airline industry of Nepal, and the importance, SWOT analysis and current state of the airport in Lukla.

Talking about the research, the whole process has given the author a valuable experience. A trip to the Everest region during the research work, collecting the data from the Civil Aviation office in Lukla and conducting the interview with the experts in the field was a great learning process. The interviews taught the author how to deal with the professionals in the field; being flexible, maintaining the behavior, speech and the level of language.

The knowledge gain by choosing this research topic has prepared the author to some extent to work in the aviation industry in Nepal in the future. The author hopes that the research work will be helpful for the airline companies and the government planning for the further development of the air transport and other modes of transport in the Everest region.

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APPENDIX 1

Interview themes for airline an manager

Research: TIGHTEN YOUR SEAT BELT, WE ARE ABOUT TO DESCEND: The Importance of Air transportation in Tourism, Tenzing-Hillary Airport, Nepal

Interview Type: Semi-structured interview

- Theme 1: Introduction of the interview, company introduction and current state of domestic airline industry in Nepal.
- Theme 2: Air transportation in Lukla; history, current situation, importance, drawbacks and future.
- > Theme 3: Factors that affect air transportation in Lukla.



APPENDIX 2

Interview themes for pilot

Research: TIGHTEN YOUR SEAT BELT, WE ARE ABOUT TO DESCEND: The Importance of Air Transportation in Tourism, Tenzing-Hillary Airport, Nepal

Interview Type: Semi-structured interview

- > Theme 1: Introduction of the interview and current situation of airport in Lukla.
- Theme 2: Air transportation in Lukla; strength, weakness, opportunities and threats, SWOT analysis of the airport.
- Theme 3: Factors that affect air transportation in Lukla region, affects on demand because of being the dangerous airport in the world.



APPENDIX 3

Interview themes for tourism expert

Research: TIGHTEN YOUR SEAT BELT, WE ARE ABOUT TO DESCEND: The Importance of Air Transportation in Tourism, Tenzing-Hillary Airport, Nepal

Interview Type: Semi-structured interview

- Theme 1: Introduction of the interview and present situation of tourism industry in Nepal.
- Theme 2: Importance of air transportation in Lukla, demand and capacity during the high and the low seasons.
- Theme 3: Alternative means of transport; possibilities, advantages and disadvantages.