

**Czech University of Life Science Prague**

**Faculty of Economics and Management**

**Department of Economics**



**Diploma Thesis**

**Economic impact of tourism in Nepal**

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# **DIPLOMA THESIS ASSIGNMENT**

MSc. B.Sc. Ishwor Gautam, MBA, BBS

Economics Policy and Administration  
Business Administration

Thesis title

**Economic impact of tourism in Nepal**

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## **Objectives of thesis**

- Prognosis of tourism in Nepal.
- Evaluate the base of analysis the touristic situation of Nepal.
- Figure out the relation between nature, tourism and economic growth.

## **Methodology**

- Analysis of documents
- Basic ctatistical methods
- Comparison
- Regression anaysis

## The proposed extent of the thesis

60 – 80 pages

## Keywords

Tourism, Economy, Nepal, Development, Adventure

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## Recommended information sources

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**Declaration**

I declare that I have worked on my master's thesis titled "Economic impact of tourism in Nepal" by myself and I have used only the sources mentioned at the end of the thesis. As an author of this diploma thesis, I declare that the thesis does not intersect the copyrights of any third person.

In Prague on April 2020

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Ishwor Gautam

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***Ekonomický dopad  
cestovního ruchu v Nepálu***

***Economic impact of  
tourism in Nepal***

## Abstrakt

Cestovní ruch v Nepálu byl trvale základním kamenem hospodářské a sociální výchovy vytvářením pracovních míst a infrastruktury pro rozvoj. Vzhledem k geografické poloze, bohaté na přírodní přitažlivost a levné cestování, je Nepál schopen přilákat velké množství turistů. Hlavním cílem výzkumu je prozkoumat vliv cestovního ruchu na ekonomiku Nepálu. Tento výzkum vyzdvihuje zejména hrubý domácí produkt, příliv turistů a jejich zapojení do různých turistických aktivit. Kromě toho se také diskutuje o hospodářském rozvoji a rozvoji infrastruktury, které přímo souvisejí s cestovním ruchem. Metodika výzkumu popsaného v této práci závisí na sekundárních datech ve vztahu k turistickému průmyslu. Data byla získána z autorizovaných zdrojů, jako je Nepálský statistický úřad, Nepál, Rada cestovního ruchu v Nepálu a publikovaná data z výzkumných časopisů a novin. Se shromážděnými sekundárními daty byl proveden různý statistický výpočet. Z výzkumu vyplývá, že nepálský HDP je přímo ovlivněn turistickým průmyslem. Výzkum dále zdůraznil problém, kterému čelí odvětví cestovního ruchu, jako je nedostatek komplexní politiky cestovního ruchu, omezený rozpočet na infrastrukturu cestovního ruchu a nedostatek marketingu.

Klíčové slovo: Nepál, cestovní ruch, ekonomika, rozvoj, dobrodružství

Abstract

Tourism industry in Nepal has been consistently a cornerstone for economic and social upbringing by creating employment and infrastructure for development. Due to geographical location, rich in natural attraction and budget travel, Nepal is able to attract large number of tourists. The main aim of the research is to explore the effect of tourism industry in the economy of Nepal. This research mainly highlights the gross domestic product, tourists inflow and their involving in various touristic activities. Additionally, economic and infrastructure development, which are directly related to tourism industry are also discussed. Methodology of the research described in this thesis depends on the secondary data in-relation to tourism industry. The data was collected from the authorized sources like Nepal Bureau of Statistics, Nepal, Tourism board of Nepal and published data from research journals and newspapers. Various statistical calculation was performed with the collected secondary data. The finding of the research implies that Nepal GDP is directly influenced by the tourism industry. Furthermore, research also highlighted the problem that are being face by tourism industry such as lack of comprehensive tourism policy, limited budget on tourism infrastructure and lack of marketing.

Keyword: Nepal, Tourism, Economy, Development, Adventure



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## **1 Introduction**

### **1.1 Motivation for research**

Nepal is a naturally beautiful country lies in between two giant countries China and India. According to the UN, Nepal is listed in the least developed countries. However, due to the rich in biodiversity and culture, Nepal has high potential in the tourism sector to underpin the economic situation. This research tries to explore the pros and cons of tourism on the Nepalese economy.

### **1.2 Background of study**

Nepal is a landlocked country with China from the North, and India from the South, east and west. Nepal is rich in biodiversity and unique in geographical position altitude ranging, from 60 meters from sea level to the top of the world Mt. Everest 8848 Meters. Nepal is roughly rectangle about 650 km long and about 200 km wide having a total of 147,181 square kilometers. Which is divided into three geographic areas, the Terai Region, the Mountain Region, and the Hilly Region. All three Regions parallel each other from east to west as continuous ecological belts.

Terai region covers plain land with Char Kose Jhadi forests known for wildlife and most with fertile land. Terai lies in the southern part of the country and contains around 23.1% of the total land of the country. Terai region accommodates around half of the country's population.

Hilly region is located between the Terai Region and Mountain Region. Hilly Region lies between altitudes of 610 meters above the sea level and 4876 meters. It contains several attractive peaks, Fertile Valley such as Kathmandu and Pokhara. It contains around 42 % of the total land of the country.

Mountain Region is in the northern part of the country. The altitude ranges from 4877 Meters to 8848 Meters above sea level. This Region consists of large numbers of snow-covered Mountains such as Mount Everest, Kanchenjunga, Machhapuchre, Dhaulagiri, Annapurna.

## *Economic impact of tourism in Nepal*

In compared to Hilly and Terai region Mountain region has low population density, Because of its geography and climate conditions (Government of Nepal Central Bureau Of Statistics, 2017) .

Nepal is considered one of the beautiful countries in world; however, country is not able to utilize the full potential from its natural resources in terms of economic development.

## **2 Objectives and Methodology:**

### **2.1 Objectives**

The core objective of the study is to relate and figure out how economic growth can be affected by tourism in Nepal, to explore what are the main factors that affect Economic growth and in the tourism sector. Mainly my research intends to figure out the relation between Nature, tourism and Economic growth. This paper will also deal with the prognosis of tourism in the country. Well, understanding the current situation of tourism in a country to distinguish the lack of tourism in Nepal. It will also deal with the infrastructure focused on the tourism and policy made by the government and other states or regions for a specific site. Also, to know how tourism is managed in the country and understand the critical economic situation of it. Another objective of this paper is to analyse the role of tourism in Nepalese economic growth. In this research the use of real Gross Domestic Product (GDP), international tourist arrivals and real operative exchange rates to explore the long-run and short-run relationship amongst tourism and economic growth. According to previous research, by using annual macroeconomic data for Nepal from 1995 to present, results exposed that there is a direct relationship between tourism and economic growth. Last but not least is to comprehend its pros and cons in the nation with the promotion of social and cultural understanding.

#### Hypothesis

H1: There is a positive association between annual tourism growth and GDP.

H2: Development in infrastructure increases tourism

### **2.2 Model of specification**

In this field, certain procedures were used. This chapter explains in detail the procedure approved in incoming at the implication of this research work. The research decision is the framework for examining a research problem. In other way, it refers to the methods used in collecting data which are to be used in studying and analysing a problem.

### **2.3 Justification of the Model**

In this section, methods of data collection were used in the collection of data from different major variables of GDP for the nation. The use of data was chosen for this study because it considered being the most appropriate method for the needed material at the tiniest amount of time. Though this has been chosen amongst other instruments of data collection for this revision because of some additional advantage it has over further methods.

### **2.4 Method of Evaluation**

Statistical econometric tests will be used to calculate the regression; this includes the coefficient of multiple determinant R<sup>2</sup> which measures the magnitude to which the explanatory variables explain the variation in the dependent variable. The F statistic measures the overall significance, the beta coefficients measure the relative significance of each of the independent variable t-statistic. The focusing purpose of the study is to examine and understand the effectiveness of tourism to promote growth in the Nepalese Economy. Thus, this study uses regression analysis to estimate the effects of tourism on economic growth. After analysing previous theoretical and empirical studies on tourism, I took into consideration the suggestions and shortcomings of those studies.

### **2.5 Research Approach**

The approach used in this study is basically gotten from a secondary foundation and sources. This is observed as the plan structure and strategy of investigation comprehended to obtain answers to research problems. It guarantees that the required data are collected and that they are precise. However, the secondary data used in this study was obtained mainly from the world trade organization, trading economics, and Ministry of Finance (Nepal), World Bank, Nepal Bureau of Statistics, Nepal Tourism Statistics, CEIC.

## **2.6 Methodology**

With the starting from literature review from the previous research, other different statistical analysis will be implemented. To conduct this research secondary data will be used and data will be taken from different official sites.

### **2.6.1 Trend Analysis**

Trend Analysis is a statistical tool that helps to govern future movements of a variable based on its historical trends. It will predict future behavior based on past data. Under this method, to collect information from multiple time periods and plots the information on a horizontal line to get meaningful information. The data will be taken from 2000 to 2017. It will help to analyse the economic condition of Nepal and support policymakers and the government to implement correct policies.

### **2.6.2 Regression Analysis**

Regression analysis is a reliable method of identifying which variables have the most impact on a selected topic. Regression analysis allows us to confidently determine which factors matter most, which factors can be ignored, and how these factors influence each other. However, to understand the regression analysis fully it is necessary to understand two main terms which are dependent variables and independent variables. In this research dependent variable will be country GDP and one of the main independent variables will be the GDP from tourism in Nepal. Since this research is trying to analyse and figure out the effect of tourism on the Nepalese economy, tourism will be the one of the most important factors. While collecting the data about the tourism sector, it will contain different purposes of tourism such as natural adventures, cultural visits, sports, business purpose and many more. The general form of regression analysis is:



### **3 Literature Review**

Nepal is developing country, having strong tourism destinations and activities. Tourism is the act of spending time outside the home, it includes various activities such as recreation, relaxation, leisure and sometimes also business. Tourism activities include transportation, accommodation, eating and drinking, shopping, business, sports, and other activities.

In the 21<sup>st</sup> century international tourism is the main aspect of the economics of developing nations such as Nepal. The largest sources for the Nepalese economy are seen as tourism. Nepal is one of the top destinations for people who want mountaineers, rock climbers or people who search for adventure. Major tourist activities include mountain climbing, trekking, rock climbing, jungle safari, rafting, hunting, bunji jumping, paragliding, cultural visit and so on. Nepal tourism also includes various historical and religious sites. The famous pilgrimages of Nepal are Pashupatinath temple, Muktinath, Lumbini (the birthplace of Gautam Buddha), and many more.

#### **3.1 Tourism**

Tourism is an activities or process of spending time outside the home or outside country for pleasure, recreation, relaxation or some commercial purposes. Tourism starts in the 17th century from western Europe. Tourism activities include traveling, entertaining, accommodating, eating and attracting to operate travel business. Tourism is also known as the service industry.

The tourism industry is a revenue-generating industry for any country. It is also known as the hospitality industry. The word tourism organization tourist means the people and their movement for leisure, business, and other various purposes. These days tourism is the main activities for people who want to spend a vacation or sometimes outside their usual area. Tourism plays a vital role in the development of country, Travel and tourism industry is one of the largest industries to generate employment and income, tourism helps to increase economic growth of the country as well as social stability, foreign investments, and currencies exchanges. According to WTO tourism can be classified in diverse types such as International tourism, internal tourism, national and domestic tourism. Tourism activities are also classified in various types such as sports

tourism, adventure tourism, historical tourism, religious and cultural tourism, holiday tourism, medical tourism, mass or group tourism, space tourism, eco-tourism, etc.

Tourism industry involves

1. Accommodation (Hotels, hostel, and homestays)
2. Travel agencies
3. Airlines
4. Trekking agencies
5. Touring companies
6. Rafting agencies
7. Sports and other recreational agencies such as bungee jumping, skydiving, paragliding, etc

### **3.2 Historical background of tourism in Nepal**

History of Nepal tourism begins with the year 1950. After becoming a democratic country in the 1951 tourism industry comes into effect. Nepal got international recognition in the year 1953 when Sir Edmund Hillary and Tenzin Norgay Sherpa conquered Mount Everest, Nepal starts its tourism with these two mountaineers. Afterward, the country obtained great attraction for mountain climbers. After the only country saw progression in travel and tourism. Then the Nepal tourism development board was created and in 1959 Nepal joined into world Travel organization. In 1958 royal Nepal airline cooperation started its operation and in 1959 Nepal becomes a member of the international union of official travel organization. For the past few decades, Nepal's travel and tourism business have been evolved, different progression on development travel and tourism has been added. This may lead the country to increase the number of tourists and their established lots of hotel to accommodate the tourists in hotel association Nepal was created to control them in 1966 (Lama, 2014).

From the late 60s and 70s, hippies start to move to Nepal. During these days Nepal was famous for hippies as Marijuana and hashish were easily available. But after 1973 the government banned selling drugs, so it becomes a turning point in Nepal tourism there was a decline in the number of travellers in Nepal. After these adventure seekers, tourist and cultural tourist starts increasing. In 1998, the Nepal tourism board

was established in cooperation with the Nepal government and private sectors to promote tourism attractions and promote tourism destinations. In the same year, Nepal celebrates visit Nepal in 1998. From the year 1999 tourism in Nepal declines because of its political instability and some other incidents like hijack of Indian airlines from Tribhuvan International airport (Nepal). And in 2001 royal massacre happen and King Gyanendra Take power by suspending the constitution which gives a negative impact on tourism.

The treaty agreement between Maoist and government in 2006 is a great achievement in Nepal tourism and Nepal celebrated visit Nepal 2011 to give a positive message for travellers. Again in 2015, there was a huge disaster made by an earthquake which leads to a decrease in the tourism business of Nepal. (Explore Himalaya Travel and adventure, 2017)

### **3.3 Importance of tourism in Nepal**

The travel industry is one of the essential factors in the monetary segment of Nepal which doesn't simply make business openings and pay age yet besides in remote money pay which demonstrates that the travel industry's improvement could prompt the finish of financial emergency in this nation. The travel industry is imperative for individuals as well as for the nation itself.

The travel industry is a medium or entry by means of which individuals around the world can share thoughts and learning while making a comprehension among themselves. The travel industry gives a chance to comprehend the diverse social orders, societies, custom, nourishments, and way of life of different nations around the globe. The travel industry doesn't simply help produce salary however it additionally keeps up the financial strength in the nation. The travel industry helps individuals by giving them business straightforwardly and in a roundabout way. Individuals chipping away at the travel industry are the immediate recipient however the general population taking a shot at farming, carriers, clinic, inns are the circuitous recipient. The items from the roundabout recipient can be advanced by means of the travel industry and get to the global market too. It encourages individuals to see one another and regard each other which keeps up the harmony in the nation and the world.

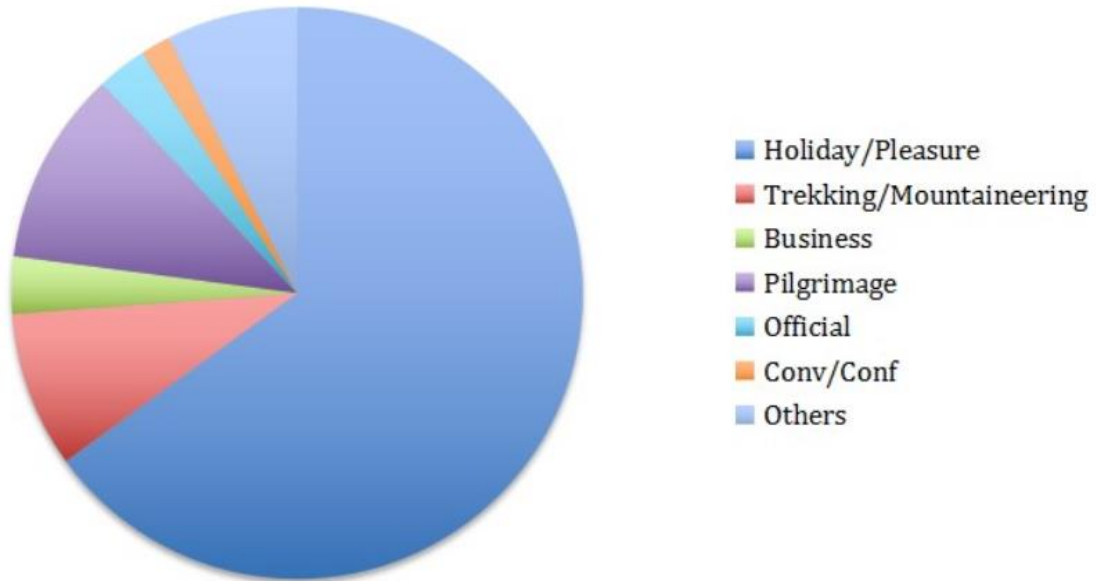
The travel industry is a medium that makes a shared connection among countries and helps convey differing individuals near one another and collaborate in closeness. It assumes a more prominent job in keeping companions, family, and relatives close and in contact with one another now and again which is imperative on the planet today. The travel industry additionally makes a request in the market which enables the neighbourhood items to get the market and increment its prevalence. (Junkiri, 2018)

### **3.4 Purpose to visit in Nepal**

Nepal has a wide decent variety of regular and social assets which gives it the advantage of having an assortment of the travel industry related exercises. Exercises, for example, climbing and trekking to touring. Nepal has a wide assortment of the travel industry exercises won where a huge number of vacationers appreciate every year. All the travel industry exercises accessible in Nepal are portrayed beneath.

Between the time period 1993-2014 the tourism industry in Nepal had seen a marvelous growth mostly due to the reassurance of the Nepalese government in the form of supports, incessant increase in the standard of living and elevations of the diversified country providing equally expanded and enough activities to the little-known world through social media. However, tourism manufacturing smarted a heavyweight loss in the year 2015.

*Figure 1: Inbound tourist by purpose*



Source: Type of tourism in Nepal 2014-2017

The number of tourists by determination of appointment is a major pointer for tourism sector output. This indicator is very useful for the assessment of physiognomies, type and economic and social charities made by tourists and to plan and achieve organization, facilities and market economy consequently. It also shows the inflow of high-value tourists. Historic data presented more than 60 percent of the tourist arrived with the purpose of holiday celebration and pleasure. The year 2018 displayed a higher proportion (60 %) visited Nepal for holiday and pleasure shadowed by adventure including trekking & mountaineering (16%), journey (14.4%) and other persistence (9.6%). (Tourismprof, 2018)

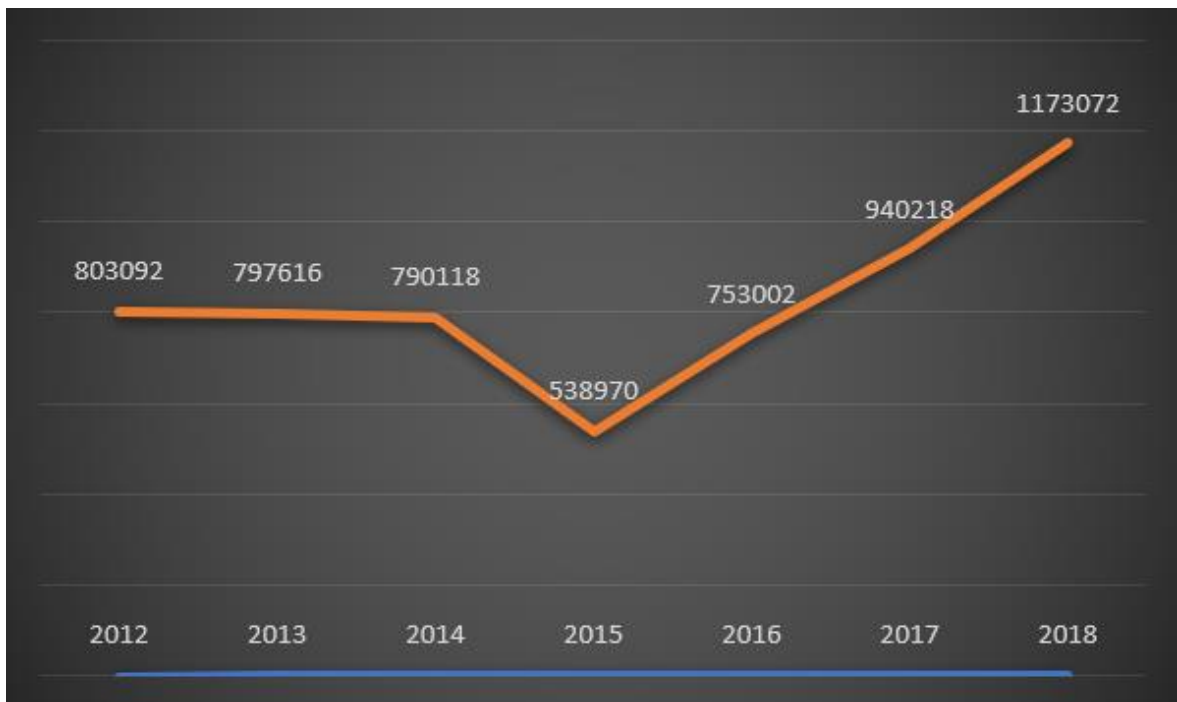
### **Trekking and Hiking**

Nepal is a standout amongst the best goals on the planet for trekking since it has a large portion of the most elevated mountains on the planet. Trekking to the base camp of those mountains is testing, audacious and fun. Every year an enormous number of voyagers come to Nepal with the motivation behind trekking to such places where the characteristic magnificence can be seen taking care of business. Contingent on the dimension of trouble, spending plan of the trekker, days accessible, regular or off

occasional goals, alone or bunch individuals can pick distinctive trekking goals all through Nepal. The most famous trekking goals in Nepal are Everest Base Camp, Annapurna Base Camp, Annapurna Circuit, Poonhill trek, Langtang trek, Manaslu trek, Gokyo trek, Upper Mustang trek, upper Dolpo trek, Kanchenjunga trek, Makalu base camp, Rara Lake, Phoksundo lake, Tilicho lake.

Alongside trekking, another prevalent decision of the travel industry movement in Nepal is climbing. Nepal is loaded with a green valley, gorge, lovely towns, White Water Rivers, lakes, characteristic landscapes which draws in a huge number of sightseers on climbing every year. Woodlands brimming with assortments of creatures, fowls, butterflies, creepy crawlies, reptiles and blossoms, and trees pull in voyagers also. It is also known for its many climbing destinations such as the Nuwakot and the Ghale Gaun.

*Figure 2: Numbers of Trekkers in Nepal – Stats 2012-2018*



Source: Own calculation using excel (accessed from Nepal Trekking stats-  
<https://www.ammoniteadventures.com/index.php/2019/06/07/trekking-in-nepal-stats-2012-2018/> )

As from the above chart, it is clear that in the nation, the number of visitors is steadily increasing. In the year 2012, the total number of visitors is 803092 and slightly

decrease in the following year 2013 and 2014. However, in the year 2015, the number of visitors is decreased to 538970 and it has a reason. Unfortunately, Nepal had to face a huge earthquake which harms the country the most ever. After some help from foreign countries, Nepal made some improvements in the infrastructure and so on. As per the above chart in the year 2016 and followed the number of visitors is increasing in a significant amount. As the latest target of Nepal made a campaign called visit Nepal 2020 which will lead the country's economy and many foreigners will have the chance to visit and see the nature and beauty of the nation.

### **Jungle safari**

Nepal's rich and remarkable bio-assorted variety makes it a perfect spot for the eco-travel industry. The marshes of Terai are brimming with tropical wildernesses which give an enormous assortment of natural life which makes it perfect for wilderness safari. Nepal has 9 national parks, 3 natural life holds, 6 protection zones and a chasing save which covers the all-out territory of 28,999 square kilometers which is 19.7% of all-out are of Nepal. Visitors can appreciate the elephant ride, kayak ride, jeep safari, nature strolling, feathered creature watching outings or brisk visits around in the wilderness regions where they can discover tigers, one-horned rhinos, peacocks, diverse kinds of deer, wild hog, wild buffalo, monkeys, bears, wild elephants, panthers, gharials, crocodiles. They can likewise discover sea-going flying creatures close by the streambanks. (Welcomenepal, 2019)

The well-known regions for wilderness safari in Nepal are Chitwan National park, Bardiya National park, Shivapuri Nagarjuna National park, Khaptad National park. Jungle safari tour in Nepal is finest especially for family, schools, academic groups, and incentive groups because in limit time frame get maximum satisfaction. Subsequently, Nepal jungle safari tour or wildlife safari tour in Nepal has been unlocked many Journey Trekking and excursion organizes several travellers, trekkers arrange a trip in Chitwan National Park, Bardia National park and Koshi Tappu wildlife conservation area. Most of the Jungle safari tour lies in southern lowlands, which is known as the Terai. Typically, this area has been covered in condensed tropical jungles and is home to thousands of bird and animal species, together with some of the world's most exotic, endangered and rare species.

### **Mountain climbing**

Along the 800 km stretch of Nepal on the Northern side, it comprises eight of the 10 tallest mountains on the planet including Mount Everest which is the world's most noteworthy mountain with an elevation of 8848 meters. As far back as the nation opened the entryways for individuals to ascend mountains in Nepal since 1994, it has turned into the best spot on the planet to climb the mountains and feel glad and achieved.

Numerous individuals fall flat and achievement in the endeavour to achieve the top which has given the general population impulse of climbing or attempting once. Every year a large number of individuals endeavour to ascend these mountains and some of them succeed and some don't yet the unadulterated of the delight of doing these bad-to-the-bone and daring exercises has pulled in individuals every year. A few people lost their lives while endeavouring these.

The most well-known mountains that the vast majority endeavour to move in Nepal are Mt. Everest, Mt. Annapurna, Mt. Manaslu, Mt. Yala crest, Mt. Mera crest, Mt. Dhaulagiri, Island crest, Pisang peak, Mt. Lhotse, Mt. Amadablam. (Welcomenepal, 2019)

About six decades ago, Tenzing Norgay Sherpa with Edmund Hillary reached the summit of Mount Everest, becoming the very first climbers to overcome the world's tallest mountain. Later that incredible achievement in May of 1953, the summit of Everest has become progressively overfilled and rubbish-strewn. Numerous climbers are now reaching the summit, thanks to advances in mountaineering equipment. Certainly, climbing Everest is becoming a rewarding business, with westerners diverging over anywhere between \$10,000 and \$100,000 for permits to climb it. (McCarthy, 2019)

### **Bungee jumping**

Arranged more than 160 meters above Bhote Koshi waterway, the bungee hop here is magnificent and exciting. Sheer drop from the steel suspended scaffold towards to blue streaming waterway and that feeling of adrenaline scramble for few moments is the thing that the bungee bounce in Nepal gives. Another bungee in Nepal is



at Pokhara where one can bounce from a pinnacle. The vertical drop of 60 meters. (Welcomenepal, 2019)

### **Rafting, Kayaking, and Canyoning**

Nepal is one of the extravagant nations in water sources on the planet as far as land and water proportion. Nepal has various waterways and rivulets, lakes and water sources that offer experience sports exercises, for example, boating, kayaking, and canyoning.

Rafting in the rivers such as the Trishuli, Kali Gandaki, Bhoté Koshi, Marsyangdhi, Karnali, Sun Koshi is unadulterated fun. Nepal's prevalent for wilderness boating. Trishuli River Rafting which is grade 3 boating is the most famous one in Nepal. Rafting, as well as voyagers, can go for kayaking also in these streams. Kayaking should be possible in the pools of Nepal also, for example, Fewa lake, Begnas lake, Rupa lake. The different landscape of Nepal influences it workable for having numerous cascades in Nepal where individuals can go for canyoning. Canyoning is an outrageous game that is mainstream in Nepal. A huge number of individuals go canyoning every year. (Nepaladventure, 2019) (Welcomenepal, 2019)

### **Zip flying**

Zip flying recently becomes very popular among Nepalese as well as foreigners. Where one can drive the world's highest and lengthiest zipline 2000 feet up in the air, zoom down at 140km per hour covering 1.8 km. Travel to the charming Pokhara valley with its great lakes and attractive views of the Himalayan mountains. Pokhara now offers the rush of thrilling zip lining, the first of its kind in Asia. Head for the peak of Sarangkot overlooking the Pokhara valley down below, offering the most spectacular views of the Annapurna mountain range. The zip flying in Pokhara, it helps the four economies. Tourists will enjoy the view of Mt. Machhapuchchhre, Annapurna, Dhaulagiri mountains. (Nepal tourism board, 2019)

### **Mountain biking**

The most ideal approach to explore Nepal and the magnificence of Nepal is to go on mountain biking. The harsh landscape of Nepal gives the chance to ride on the tough and downhill and the no-nonsense street. Mountain biking offers a domain agreeable approach to investigate the magnificence of Nepal, be it a characteristic or chronicled. One can lease an off-road bicycle and go on a long ride. The best spot to ride on the city regions, for example, Kathmandu and Pokhara and for the individuals who look for rush and have a gut, they can ride to the fascinating spots like Namche Bazar. (Welcomenepal, 2019)

### **Paragliding**

Nepal ranked 5th in paragliding through the world. Many national and global travellers appreciate this stunning game every day. The floating begins from the highest point of Sarangkot and terrains on the bank of Fewa Lake in Pokhara. Travellers can enjoy over Phewa lake for 25-30 minutes. (Welcomenepal, 2019)

### **Cultural exchanges**

Nepal is featured with a diverse culture. People from Nepal have different religious values and their culture varies from a different region. Many travellers from different corners of the world have got the advantage of exchange culture which benefits both.

### **Bird watching**

Nepal is the top destination for bird watching. Over 850 species of birds are found in Nepal. The national bird of Nepal is Danphe (Lophophorus) which is found in Himalaya. Many species of endangered birds are recorded in Nepal. To protect and promote bird species there are some conservational areas and national parks. Birds watching is possible near Kathmandu valley also. (Nepal Tourism Board, 2019)

### **Butterfly watching**

Nepal is a wonderland for people who love nature, Butterfly watching is also one activity for many travellers who are real lovers of nature. Over 651 species of butterfly are found in Nepal, it is 3.72 % of the world butterfly found in a different region of Nepal. More than 350 species of butterflies are found near Kathmandu valley and its surroundings. (Nepal Tourism Board, 2019)

### **Meditation and yoga**

Yoga and Meditation help being developed of sound body, brain and thought. It accomplishes adjusted, agreeable and coordinated improvement of the considerable number of parts of one's identities and manual for the upbeat, genuine and solid living of life. Reflection is accepted revives one's vitality and enthusiasm. It unwinds and investigates the profound side of oneself. Consequently, relaxation explorers who visit Nepal entertain themselves with these exercises.

Numerous spots around Kathmandu valley and Pokhara offer yoga and reflection administrations and courses also. Numerous lodgings and eateries likewise offer these administrations to their visitors. (Welcomenepal, 2019)

### **Food and culinary**

Regular food for Nepalese people is boiled rice, dal (lentil soup) and mixed curried vegetables cooked with various spices. Most often also served pickle and fresh raw chilies. The most popular snacks for Nepalese these days are MO: Mo (steamed or fried dumplings) with some sauces. Nepalese cuisine mostly spicy and sour but it can be reduced as per the taste of people.

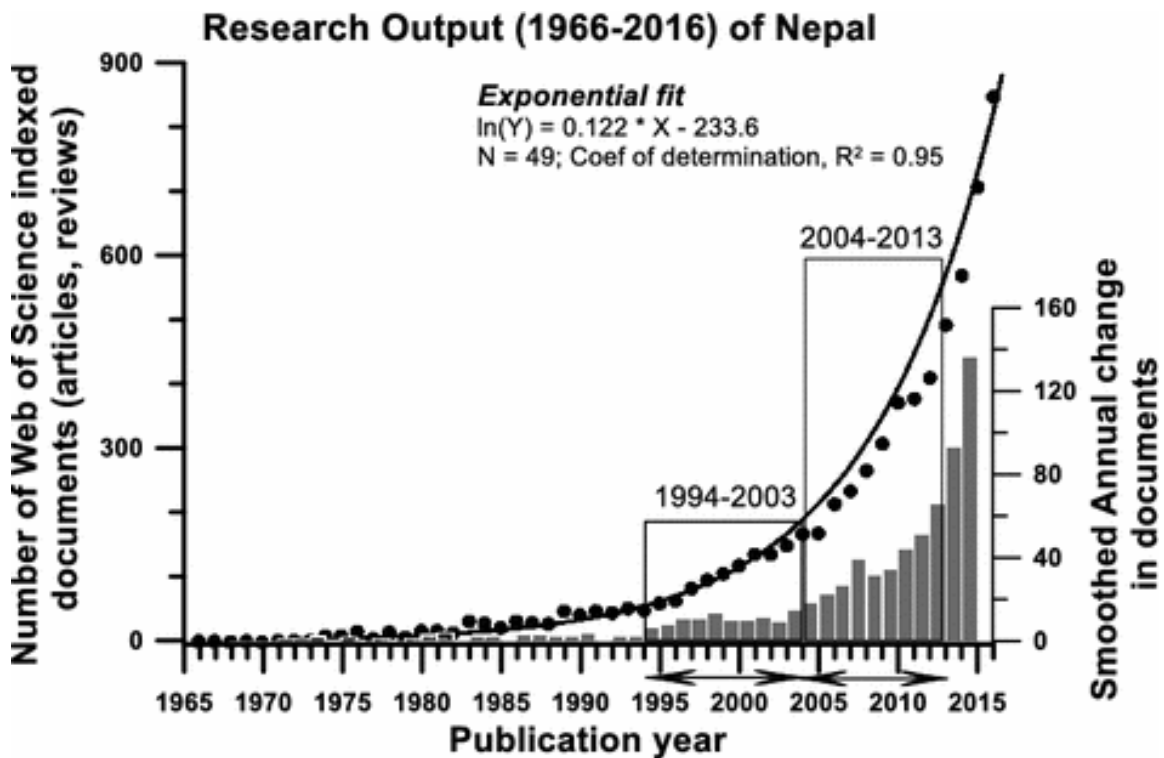
In the Himalayan area, people mainly use yak cheese, butter and in lower lands, people used to grow grains, so this region people consume more grains products. In Kathmandu valley there we found mixed cuisine influenced by Newari cuisine. Newari people generally used a different part of buffalo meat. They cater to the best snacks in the country. Typical Nepali food is dhedo (Prepared with millet or maize flour mashed

and cooked) with gundruk (preserved underground spinach) and flavoured with species and cooked in water. (Welcomenepal, 2019)

### Scientific Research and studies

Nepal is a hub for the researcher. Every year many numbers of foreigners visit Nepal for research and studies. Nepal is also known as the top of the world, so it is the best destination for an ecological and geographical researcher. Nepal is also a habitat for many rare animals, birds, plants, etc.

Figure 3: Number of scientific researchers in Nepal



Source: <https://link.springer.com/article/10.1007/s11192-017-2538-0>

Before 1989 is the pioneering period for scientific researchers in Nepal, only a few numbers of traveller's travel for the purpose of research in Nepal. Only few numbers of publication were made. From the year 1990-2005, there seems to be a period of improvement and the number of scientific researchers increases this period is known as the growth period. As well as some publisher start to publish and the numbers of publication increase. After 2005 there the numbers of scientific researchers increase, and the period is known as the period of acceleration. The end of the peoples' war in 2006,

abolition of kingdom and creation of new democratic Nepal covered ways for extra access to Nepal and its geography for research and, though with some time interval, resulting in quicker growth of research activities and output as publications in academic papers. In the year 2015 and 2016 have been especially fruitful due to the creation of publications in the outcome of the devastating Earthquake of 7.8 magnitude in that triggered globally collaborative field research in engineering geology, civil engineering and other fields, resulted in an quicker growth of research activities and productivity as publications in academic journals again.

From the above figure, the research output shows coefficient of determinant R square value is 0.95, which means that model is very strong.

### **Sightseeing**

This is the most famous relaxation action that the recreation voyagers do in Nepal. They head out from spots to places touring and getting a charge out of the normal and recorded magnificence of Nepal. They travel to spots, for example, old sanctuaries, royal residences, historical centers, religious communities, regular scenes, for example, slopes, waterways, falls, lakes, lakes. Places all through Nepal, for example, Kathmandu, Bhaktapur, and Patan Durbar Squares, Chitwan National Park, Fewa lake, Begnas lake, bat cavern, Davis fall, World Peace Stupa, Lumbini – The origination of Lord Buddha, Janaki Temple at Janakpur, Nagarkot, Champadevi, Kulekhani, Shivapuri Conservation Area are well-known spots that the relaxation holidaymakers will in general visit most. (Welcomenepal, 2019)

### **Village tour**

Wherever you are in Nepal, a town visit in Nepal would demonstrate to you what customary Nepal used to be and the genuine battle and life of Nepal. It is an incredible chance to find Nepal through that experience. Town visit is a method for understanding the underlying foundations of culture, convention, traditions, practices, and way of life of Nepal.

Nepal is a rural nation with over 75% of individuals relying on agribusiness, cultivating, creature farming and angling which clear the possibility that a large portion of the general population in Nepal lives in a town or remote territories. Individuals who visit these spots can get familiar with a great deal about how to get to know nature and how to appreciate the straightforward life.

Network homestays are prominent methods for convenience in such places. These spots additionally sort out social projects, tunes, and moves for the visitors for their happiness and to demonstrate the custom and way of life of theirs. (Welcomenepal, 2019)

### **3.5 Tourist destinations**

#### **Kathmandu**

Kathmandu is the capital city of Nepal, situated 1400 meters above sea level. Kathmandu is also known as the city of the temple. The capital of Nepal is inside the valley, the valley consists of three districts i.e Kathmandu, Bhaktapur, and Lalitpur. A valley is a place for sightseeing of historical and artistic temples and monuments, Also the view for mountains and hills. Inside the capital, you can enjoy different services like accommodation and food, international airports, and many more attractions. Major of attractions in Kathmandu valley are Pashupatinath temple, Swayambhunath temple, Boudhanath stupa, Budhanilkantha, Gardens of dreams, Patan Durbar square, Bhaktapur Durbar Square, Nagarkot, Changunarayan temple, National Museum, The art gallery, etc.

Kathmandu is the first attraction for the tourist who visits Nepal by air, which hosts only international airport in Nepal. Kathmandu is well known for the city tour, various religious and cultural as well as a historical attraction, and also known for nightlife experiences.

#### **Pokhara**

Pokhara Metropolitan city is the second-largest in terms of population and largest in terms of area. Pokhara is the headquarters of Kaski district and also for Gandaki Pradesh. The city is located 200 km. far from the capital city of Nepal to the west.

Pokhara is the main attractive city for tourists, most of the adventurous activities are done near the city. This city is also known as the city of lake, It is also the starting point for various trekking like the Annapurna circuit, Machhapuchhre circuit, Dhaulagiri and trekking to Manang and Mustang. Paragliding over the lake of Phewa and over the view of a beautiful city is another thing that tourists would never forget in Pokhara.

A major attraction of Pokhara is Davis falls, Mountain Museum, Paragliding, lakes, Tal Barahi temple, World peace Pagoda, Bindhyabasini temple, Viewpoint for different mountains like Mt. Machhapuchhre, Mt. Annapurna, Mt. Manaslu, Mt. Dhaulagiri.

### **Janakpur**

Janakpur is the headquarters of Dhanusha district. The city is well known for its religious and cultural tourism. Ram Janaki temple is the main attraction of the city. Janakpur is one of the holy sites for the Hindu religion. It is mentioned in Ramayan that Lord Ram and Sita met and were married to each other. The place is also known as Nau Lakha Mandir. It is a beautiful temple with unique architecture. In the year 2008, this temple was listed as a UNESCO World Heritage site.

### **Chitwan**

Chitwan is well known for Chitwan national park, renowned for its wildlife, and unique diversity. Chitwan is also known as the heart of the jungle. One of the largest forest regions in Asia teeming with rare wildlife such as great one-horned Rhinoceros, various species of deer, Bengal Tiger, sloth bear, wild boar, leopard, dolphin, crocodile and 350 species of birds. Chitwan national park is listed as a UNESCO World Heritage site. Visitors can enjoy rafting, jungle safari, birds watching in Chitwan.

### **Gorkha**

Gorkha is the birthplace of King Prithvi Narayan Shah, who unified Nepal. Gorkha is located on a hill overlooking with snowy peaks of the Himalaya. Gorkha is

well known for Gorkha palace. There are two famous temples one is Gorakhnath and another is Kali inside the palace. Another attraction of Gorkha is the Manakamana temple, It is believed that the Manakamana goddess fulfills the wishes of all people. Manakamana is just 3 hours by drive and access by cable car, over the river of Trisuli.

### **Muktinath and Jomsom**

Muktinath is the holy place for Hindu religious people, and the area is also known for trekking routes. All people from Nepal sorrows relieved once to visit this temple. Mukti means Nirvana and Nath means the god. Jomsom and Muktinath are well known for hiking, trekking, mountain biking, historical and religious tourism.

### **Lumbini**

Lumbini is also called the pride of Nepal. It is the place where Lord Buddha was born. It is the place where queen Mahamayadevi gave birth to Siddhartha Gautam in around 563BC. And become Buddha and found Buddhism, there are many famous temples around Lumbini such as Maya Devi temple, China temple, Korean temple, and many more under construction temples. Lumbini is a religiously very important place for religious travellers. The place carried the historical and cultural importance. Lumbini is also listed as a UNESCO World Heritage site.

### **Rara lake**

Rara lake is the largest lake in Nepal. It lies in an altitude range of 2972 m from the sea level. It is said that Rara lake keeps changing its color of water according to time in a day. The beautiful lake in Himalaya is the main attraction for the travellers. Rara national park is also the attraction of Rara lake in the area. (Times, 2019)



### **3.6 National parks and conservation areas for research purpose**

#### **Chitwan national park**

Chitwan national park is the first national park of Nepal. It has an area of 952.63 square kilometers. This national park includes Chure mountain, Rapti river, Narayani river, and Reu river. Around 70% of the park vegetation is sal forest. The remaining vegetation types contain grassland (20%), riverine forest (7%), and sal with chirpine (3%), the latter occurring at the top of the Churiya range. The riverine forests comprise mainly of Khair, sissou, and simal.

In Chitwan national park there found more than 544 species of birds, 68 species of mammals, 56 species of herpetofauna and 126 species of fish. This national park is well known for its protection of one-horned rhinoceros, royal Bengal tigers, gharial crocodile, Asian elephant, Dolphin, etc. (Department of national parks and conservational area, Government of Nepal, 2015)

#### **Bardiya national park**

Bardiya national park was established in the year 1975 as the Sahi Karnali Hunting reserve. In the year 1988, it's named Bardiya national park and listed as the national park of Nepal. It is the largest national park in Nepal. It covers an area of 968 square km. It includes a wide variety of wildlife. This national park is able to protect various ecosystem founded in the area. Lush dense forest, Some plane land, savannah and riverine woodlands are home for a diverse range of flora and fauna.

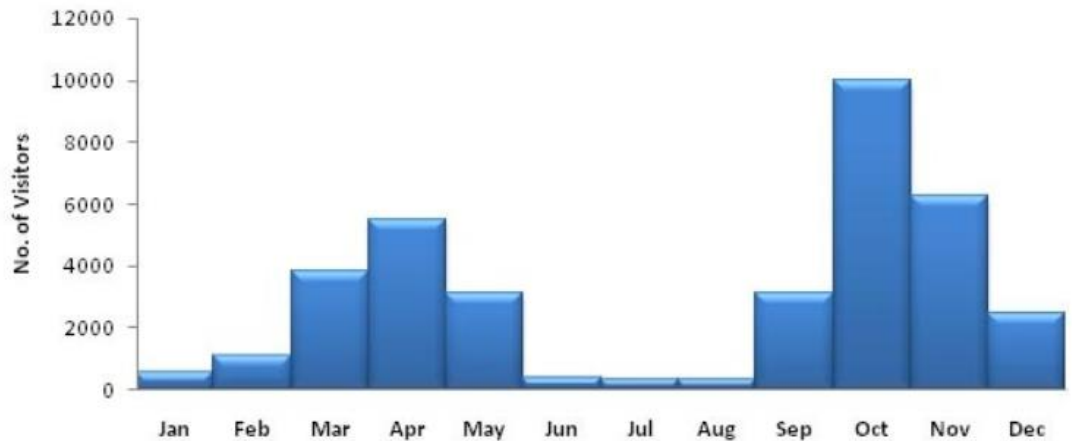
Endangered species of Rhinoceros, Wild elephant, Royal Bengal Tiger, Swamp deer, Gharial crocodile, Black Buck and many birds such as sarus crane, Black stork, White stork, Giant Hornbill, Lesser Florican, etc. (Department of national parks and conservational area, Government of Nepal, 2017)

#### **Sagarmatha national park**

Sagarmatha national park is located in Solukhumbu district and is the glory of the world's highest peak Sagarmatha. The area is located in a high Himalayan ecological system, which includes Plants such as birch, juniper, blue pines, firs, bamboo,

rhododendron, etc. The park boasts of a diversity of wildlife and over 118 types of bird, animals such as musk deer, the Himalayan tahr, the ghoral, snow leopard, Red panda, the wild yak the serow, the wolf, and the Himalayan black bear has been spotted by tourists in this region. The best place for tourists in this area is October-November and March-May. (Ministry of forest and environment, Government of Nepal, 2018)

*Figure 4: Seasonal pattern of visitors in Sagarmatha national park*



Source: Sagarmatha National park

<https://www.sagarmathanationalpark.gov.np/index.php/tourism>

There were two main seasons to visit one in March April and May and another September, October, November, and December. Most numbers of visitors visit in these two seasons. During other season the number of visitors is less than 1000 per month.

### **Langtang national park**

Langtang national park is the nearest Himalayan national park from the capital city of Nepal. This national park Extended over the part of Rasuwa district (57%) Nuwakot (7%) and Sindhupalchok (36%). This national park border to China(Tibet).

Langtang represents a good range of plant types along with an attitude between 1000m to 7245 m. The park rich plants include sal forest in the southern section and gradually taken over to the hills consisting of Chirpine, Rhodendron and Nepalese alder and oak forest.

Langtang is an advantage for numerous wildlife species because of its altitude variation. More than 250 species of birds are found in this national park. This national park is well known for the red panda, Musk deer, Himalayan black bear, Himalayan Tahr, Snow leopard, Wild dog, Ghoral, Serow etc. (Government of Nepal, Department of forest and environment, 2014)

#### **Rara national park**

Rara National park is the smallest national park located in the Himalayan region of Mugu and Jumla district. This national park has more than 272 species of birds as well as 51 species of mammals. The rare species found in Rara national parks are Himalayan black bear, Red panda, Musk deer, Leopard cat, Assamese monkey, Grey wolf, etc. Rara national is more popular for Rara lake the biggest and deepest lake in Nepal. (Times, 2019)

#### **Shey Phoksundo national park**

Shey Phoksundo national park is located in Dolpa and Mugu district in the mid-western region of Nepal. This national park is a habitat for endangered species like snow leopard, Musk deer, Himalayan blue sheep, Himalayan Tahr, Himalayan black bear, Jackal. More than 200 species of birds including rare Danphe, Munal, Chie Kalij are found in this national park. Also, more than 32 species of butterflies are founded in this national park. According to the researcher, this national park is a perfect habitat for snow leopard. (visitor, 2019)

#### **Khaptad national park**

Khaptad national park is located in the western region of Nepal widening over 4 districts Bajhang, Bajura, Achham, and Doti. Having an area of 225 sq. kilometer. The landscape consists of moorland, steps, and streams. More than 567 species of the flowering plant are founded in this national park. The dense forest of rhododendron forest, Pine trees forest, oak forest included in this park. This national park is a habitat

for leopard, Himalayan Black bear, Wild dog, musk deer and more than 23 mammals, 287 birds and 23 reptiles. (Nepal Tourism Board, 2019)

### **Shivapuri Nagarjun national park**

Shivapuri Nagarjun national park is spread over Kathmandu, Nuwakot and Sindhupalchok district. Having a total area of 118.61 square kilometers. More than 318 species of birds, 23 species of wild animals, 102 species of birds and 129 species of mushroom are found in this national park. Furthermore, this national park also accommodates religious attraction for Hindus and Buddhists deity. In addition, this national park also plays an important source of water for the Kathmandu valley.

The major attraction for this park are rare animals like the leopard cat, Assamese monkey, clouded leopard, Chinese and Indian pangolin, black bear, etc. And some Hindu and Buddhist historical attractions. (Uperety, 2018)

### **Banke national park**

Banke national park is located in the mid-western region of Nepal. This national park is recognized as the gift of earth. This national park spread over Banke, Salyan and Dang district. More than 113 species of trees, 107 species of herbal plant. More area is covered by dense forest, River, grassland, hills. This national park is home for more than 300 species of birds, 34 species of mammals, 24 species of reptiles including Gharial, crocodile, and python. (Government of Nepal, Department of national park and wildlife conservation, 2018)

### **Shuklaphanta national park**

Shuklaphanta national park is located in the far-western region of Nepal at an altitude of 174m to 1386m from sea level. This national park is home for different mammals like Pangolin, hispid hare, one-horned rhino, leopard cat, Asian elephant, royal Bengal tiger, swamp deer, pigmy hog, blackbuck etc and different birds found in this

park are Black stork, giant hornbill, Bengal florican, lesser florican, white stork, sarus crane, yellow-eyed babbler, etc. (WWF, 2017)

#### **Parsha national park**

Parsha National park is located in south-central lowland of the terai region at an altitude of 100 m to 950 m from the sea level. It was declared as a wildlife reserve in 1984 and a national park in 2017. This national park is home for wild elephant, Bengal tigers, leopard, wild cat, Pangolin, one-horned rhino, etc. (Vivanadventure, 2019)

#### **Koshi tappu wildlife reserve**

This wildlife reserve is located in the eastern region of Nepal at an altitude of 75 m to 81 m. Spread over 4 districts with an area of 175 square km. This national park comprises of fast-flowing rivers, forest, grasslands with various native and migratory species. The main purpose of this national park is to protect rare wild water buffalo (Arna). More than 200 species of fish, 9 species of frogs, 5 species of snakes, 31 species of mammals and more than 465 species of birds are the main attraction of the Koshi tappu wildlife reserve.

Birds watching, jungle walking, rafting are the main touristic activities done in this park. Many people from that region are involved in tourist activities which help them with an easy lifestyle. (Trek, 2019)

#### **Dhorpatan hunting reserve**

Dhorpatan Hunting reserve is the only conservation area where hunting is allowed for specific animals, which was established in 1987. It covers an area of 1325 square km. It is located in the western part of Nepal in the Dhaulagiri range. The land of Hunting reserve is connected with Baglung, Rukum, and Myagdi district.

Single hunting reserve of Nepal to meet the needs and desires of hunters from different countries. Himalayan Blue Sheep, Himalayan Tahr (Jharal), Naur, Leopard, Goral, Serow, Himalayan Black Bear, Barking deer, Red Panda, Musk Deer, Wolf,

Muntjac and Wildbourn, etc. are the main attraction for the conservational area. Cheer pleasant, Danphe, Munal and more than 164 species of birds are in this Reserve.

Hunting is allowed only for two seasons a year, Chaitra- Baisakh (Feb-April) and Ashoj – Kartik (Sept-Nov). The hunting of only Himalayan blue sheep and Himalayan Tahr is allowed to shoot. Shooters are allocated to shot these animals which are old. Hunting is escalated till the height of 5500 meters. Hunters can go for an adventurous hunt for a maximum of 15 days or 7 days minimum.

Each Year the national park and wildlife conservation department counts the numbers of Himalayan blue sheep and Himalayan tahr and calculates annual quota for hunting so that it helps to balance in the numbers of animals. (Nepal, 2019)

#### **Annapurna conservation area**

Annapurna conservation area is the first and largest conservation area of Nepal. Located in Annapurna Himalayan range, stretch over Manang, Mustang, Kaski, Myagdi and Lamjung districts. The main attraction of this area includes Machhapuchre and Dhauligiri Mountain. Additionally, the trekking circuit in this region is famous like in Dhauligiri, Manang and Mustang valley. Rich in bio-diversity and house for 105 mammals, 518 species of birds, 40 species of reptiles and 1226 species of a flowering plant. (National trust for conservational area, 2019)

#### **Manaslu Conservation Area**

Manaslu conservation covers 1663 sq. km located in Mansiri Himalayan Range. Located in the Gorkha district. Altitude range from 600 m. to 8th tallest mountain Mt Manaslu (8163m.) from sea level. Most area is covered by Mountain, Glacier, rocks and watercourses.

This conservation area is a habitat for Red panda, Musk deer, snow leopard, leopard cat, Himalayan tahr and more than 39 species of mammals. More than 200 species of birds including Impeyan Pheasant and Crimson Horned Pheasant. Manaslu is famous for eco-tourism and for trekkers. (National trust for conservational area, 2019)

### **Kanchenjunga Conservation area**

Kanchenjunga conservation area is located in the Kanchenjunga Himalayan range, spread in Taplejung district at an altitude of 1200m – 8586 m. This conservation area is also bordered with China to the north. The area comprises of cultivated land, forest, rivers, high altitude, lake, glaciers, red panda, snow leopard, musk deer, leopard cat, Himalayan brown bear, grey wolf, blue sheep, golden breasted fulvetta, snow cock, blood pheasant, crimson horned pheasant are the main conserved animals and birds of this park. (tours, 2017)

### **Gaurishankar conservation area**

Gaurishankar conservation area is located in the Gaurishankar Himalayan range. Spread over Ramechhap, Dolakha and Sindhupalchok district of Nepal. This conservation area is full of natural, cultural and historical significance. Rich in biodiversity mainly dense forest of Alnus forest, pinus forest, Rhododendron forest, Grassland, Glaciers.

Gaurishankar conservation area is a habitat for more than 365 species of plant, 35 species of mammals, 235 species of birds and 22 species of reptiles. (National trust for natural conservation , 2019)

### **Krishnasar (Blackbuck) conservation area**

Krishnasar conservation area is located in the mid-western region of Nepal, In Bardia district. It covers an area of 16.95sq. km. The main purpose of the establishment of this conservation is to protect endangered blackbuck. (National trust for natural conservation, 2019)

## **3.7 Types of tourism in Nepal**

Contingent on the geological structure of the nation, regular scenes, mountains, waterways lakes, the landscape just as man-made landmarks, sanctuaries and

places alongside the assorted and broadly spread assortment of vegetation all through the nation, Nepal has diverse sorts of the travel industry exercises for visitors who need to investigate Nepal. In an unadulterated structure, there are not many essential travel industry exercises in Nepal which are stretched out to different travel industry exercises inside themselves. For those individuals who look for an excursion place, Nepal has as relaxation the travel industry goal. In like manner, for those individuals who look for experience and rush in their life, Nepal has extraordinary the travel industry. For individuals who need to investigate the world and the things and acclimate inside those, Nepal has a religious or social the travel industry. Besides, Nepal has other travel industry exercises, for example, business the travel industry, eco-the travel industry, and authority the travel industry.

#### **Religious and cultural tourism**

Religious the travel industry is a type of the travel industry, whereby individuals of confidence travel separately or in gatherings for reasons identified with religion or otherworldliness as they continued looking for importance. Tourists going with the end goal of religious movement leaving their nation or homemaking a trip to religious and heavenly places are religious the travel industry which is likewise the most established type of travel industry action on the planet. It started nearly with the beginning of mankind itself. Religious the travel industry isn't just a visit to the particular heavenly sanctuary or site, yet it might be a movement for a compassionate reason too. It implies that the traveler or guest will not be of explicit religion. Anybody can visit for this reason. Religious and social the travel industry is a major market on the planet.

Religious and Cultural the travel industry in Nepal is another well-known travel industry type where every year a huge number of individuals visit Nepal for this reason. This action is instituted 'Journey Tourism' too. Individuals everywhere throughout the world visit Nepal to head out to religious spots and journey. Nepal has a greater part of Hindu individuals however it doesn't stop other individuals following diverse religions to travel Nepal for a religious reason. Individuals following Buddhism travel Nepal in high number every year since Nepal is where Lord Gautam Buddha was conceived. Nepal has numerous world celebrated religious locales, for example, Pashupatinath, Swyambhunath, Bouddha, Dakshinkali, Asura Cave, Lumbini, Bhaktapur Durbar



Square, Kathmandu Durbar Square, Patan Durbar Square, Muktinath, Gosainkunda, Manakamana, Janakpur, Namobuddha which are the mainstream ones. Among these, few are recorded on the planet legacy destinations by UNESCO too.

### **Adventure tourism**

Nepal is a hub for tourists who are searching for real adventure. Himalayan kingdom of Nepal is one of the most remarkable adventure destinations from all over the world. Its mountains, fast-flowing rivers, lakes and natural beauty offers unlimited opportunities for travellers who really love to travel in search of adventure. Different travel companies offer adventures package for unexperienced travellers.

Major adventurous activities are trekking, rock climbing, peak climbing, mountaineering, bunjee jumping, rafting, canyoning, jungle safari, hunting and many more. Geographical, natural diversity and a wide range of exotic cultures make Nepal an ideal place for adventure. Trekking in the Himalayas of Nepal is one of the lifetime achievement and opportunity to observe and get the experience of adventure. Similarly, white water rafting on the rivers flowing from the Himalayas is equally popular adventure done in Nepal by many tourists. Tourists can enjoy rafting in Nepal with a travel package that includes adventure, transport and accommodation. According to data of different rafting agencies Trisuli river, Bhotekoshi river, and Dudhkoshi river are the world's best rivers for rafting.

Mountain biking is another thrilling activity for tourists who want to make their travel more adventurous. Due to the geographical situation of Nepal mountain biking is at the heart of Himalayan and one of the best parts for adventure tourism. Similarly, skydiving and paragliding is another adventure done here in Nepal. Skydiving in Nepal is more challenging in Nepal, for paragliding Pokhara valley offers a great experience of paragliding over the Phewa lake. (ADHIKARI, 2017)

As Nepal geographical variation from 57 m to the world's highest point 8848 m make Nepal as the more adventure spot for the people from all over the world who want to make the experience and search for doing adventure. Thousands of tourists visit Nepal for making mountaineering activities each year. Mountaineering activities are also classified like above 8000 m, above 7000 m, above 6000m and so on. Many Nepalese

citizens are benefitted by such tourism directly or indirectly. Various skilled and non-skilled jobs opportunities are generated in the field of adventure. (Adhikari, 2018)

### **Leisure tourism**

Leisure travel is travel in which the essential inspiration is to get away from regular day to day existence. Recreation travel is frequently described by remaining in decent lodgings or resorts, unwinding on shorelines or in a room, or going on guided visits and encountering nearby vacation spots. The reason for relaxation in the travel industry is for entertainment. Relaxation voyagers appreciate sorted out diversion and sports. Relaxation of the travel industry frequently incorporates visits and touring of various fascinations.

In the setting of Nepal, the relaxation of the travel industry is well known. Individuals all around the globe venture out Nepal trying to lay on the lap of nature. Nepal is loaded with amazements for individuals who need to take a load off. Vacationers who look for joy can go appreciate the excellence of lakes, streams, niches, falls, slopes, Himalaya. They can likewise appreciate the sorted-out voyage through the city and the popular spots of Nepal, for example, sanctuaries, religious communities, landmarks, regular zones.

Recreation explorers who visit Nepal will, in general, spend a great deal of cash on sustenance, transportation, and convenience. They will, in general, appreciate Nepali Cuisine and like to go on taxicabs as opposed to open transport. They search for lodgings with numerous offices and highlights which are typically costly in Nepal. Additionally, the items and administrations have a higher edge in cost for universal sightseers. Recreation explorers likewise burn through cash on purchasing the nearby painstaking work and things which are costly also. This demonstrates the recreation visitors are the wellspring of salary for not simply the general population who are straightforwardly profited by them yet, in addition, the individuals who are in a roundabout way profited and the country itself.

### **Agritourism**

Manageable agro-tourism in Nepal is an agricultural the travel industry openings in rural Himalayan country Nepal, first-time natural homestead Nepal present farming the travel industry in Nepal. Rustic advancement, improve the wellbeing and financial matters Agricultural the travel industry - Sustainable agro the travel industry in Nepal condition of residents is our fundamental objective, being the mindful ranchers gathering of creating country Nepal we welcome voyagers from around the globe to contribute your agrarian expertise in the network just as learn neighbourhood conventional natural cultivating procedures. We utilize present-day horticultural gear's just and pursue the regular agrarian exercises to develop the delectable sound natural rural items.

Amid your rural travel and the travel industry period, voyagers get a chance to investigate ranch, top regular leafy foods by their very own hand and appreciate the grass feed meat of fowls and creatures on the decision. We have 50 distinctive natural ranches in Nepal in the same area all homestead open all year any time travellers can visit natural ranch Nepal. Agrarian the travel industry demonstrates the reality of horticulture that we practice in Nepal manageable cultivating assumes the essential job to save condition. Farming the travel industry advances neighbourhood agrarian items on the planet. Natural agribusiness rehearses the combination of customary and present-day cultivating innovation in Himalayan countries. Voyagers acquainted with natural horticulture business and its significance after total farming travel in Nepal.

Agri the travel industry is the mix of the travel industry and horticulture. It is the quickest developing section of the moving industry that offers visit agrarian businesses, working in ranches, purchase natural items, appreciate solid and nutritious organic products, amusement with neighbourhood culture, instruction, unwinding, outside undertakings, picking the natural product, sustaining creatures and so on. We offer manor, reaping and minding opportunity on the homestead for all plants, trained creatures and winged animals that developed in indigenous habitat. on the off chance that you intrigued for Agriculture the travel industry in Nepal, at that point our agrarian visits, cultivating visits and volunteer in natural homestead, a volunteer with creatures are reasonable for you. Try not to delay getting in touch with us for horticulture occupations and vocations in agribusiness Nepal. (Mission2nepal, 2018)

### **Ecotourism**

Ecotourism is also known as sustainable tourism, eco-tourism gives importance for ecological resource integrity, environmental conservation, economic development by maintaining low impact or without consuming local resources. Different types of tourism based on ecotourism are community-based eco-tourism, ecosystem-based eco-tourism, culturally based eco-tourism, natural-based eco-tourism, conservation area based eco-tourism, rural eco-tourism. Eco-tourism is also the major type of tourism to gain revenue for a country like Nepal. Eco-tourism provides a direct benefit for employment in hotels, lodge, restaurants, etc.

In Nepal, eco-tourism helps to enhance forest covers, flora, fauna, greenery, natural resources, biodiversity, alternative energy sources, and other environmental benefits. It helps to protect anti-social activities, preserving religious and cultural heritage, increasing cooperation between people with religious beliefs. The main focus of eco-tourism is to respect the cultural heritage, biodiversity, and wildlife of the visited area. Eco-tourism helps to build environmental awareness, provide a direct benefit for the conservational area.

Nepal is rich in biodiversity and cultural values, eco-tourism shows increasing trends over the period, thousands of people from all over the world visit Nepal for the purpose of research based on ecosystem and sustainability. (Mentor, 2019)

### **Business tourism**

Business tourism is the arrangement of offices and administrations to a huge number of representatives who every year go to gatherings, congresses, displays, business occasions, motivating force travel and corporate neighbourliness. Business the travel industry is the utilization of movement administrations, inn offices and different luxuries by individuals who are going on business. Business the travel industry is on the expansion and the travel industry isolates business the travel industry from relaxation the travel industry with an end goal to advance the previous by offering specific administrations for agents.

There exists a solid and common connection between the economy of the country and the business in the travel industry. The business the travel industry advances the national business improves correspondence areas and overhaul the nature of labour in various financial segments, for example, the travel industry, training, horticulture, wellbeing. Business the travel industry is viewed as a key driver for impermanent and lasting occupations in the field of occasions production network, association and the board notwithstanding went with administrations. (Scth.gov.sa, 2012)

### **Sports tourism**

Sports tourism includes playing games, watching games. Sports tourism is fast-growing tourism for an underdeveloped country like Nepal. Sports tourism is also classified as entertainment. Mostly sports tourism is done in a group or with a team member. Nepal has yet to reach millions of tourists annually for the purposes of sports activities. Major sports for tourists in Nepal are great Himalayan trail, Mountain biking, Sky-diving and paragliding, golf, Skiing, Canyoning, rafting and kayaking. (planner, 2018)

## **3.8 Tourist arrivals and average length of stay**

Length of stay plays vital role to earn more revenue from tourism. As Nepal is landlocked country so there are only two ways of tourist arrivals i.e by air and by land. Average length of tourists can be increased by creating more tourist's destination and by fulfilling the demand of the tourists. More promotional activities should be done to extend the days spend by tourists. The attraction of the tourists may be artificial or natural. Tourism is known as complicated human movement which is the chief and wildest increasing smokeless industry in the world. It is of important monetary, social, cultural, educational and political significance which provides a valuable basis of foreign exchange earnings and income for many countries and has a positive effect on stability of payment.

*Table 1: Tourist arrivals and length of stay*

Year	Total		By Air		By Land		Average Length of Stay
	Number	Growth Rate (%)	Number	Percent	Number	Percent	
1994	326,531	11.2	289,381	88.6	37,150	11.4	10.00
1995	363,395	11.3	325,035	89.4	38,360	10.6	11.27
1996	393,613	8.3	343,246	87.2	50,367	12.8	13.50
1997	421,857	7.2	371,145	88.0	50,712	12.0	10.49
1998	463,684	9.9	398,008	85.8	65,676	14.2	10.76
1999	491,504	6.0	421,243	85.7	70,261	14.3	12.28
2000	463,646	-5.7	376,914	81.3	86,732	18.7	11.88
2001	361,237	-22.1	299,514	82.9	61,723	17.1	11.93
2002	275,468	-23.7	218,660	79.4	56,808	20.6	7.92
2003	338,132	22.7	275,438	81.5	62,694	18.5	9.60
2004	385,297	13.9	297,335	77.2	87,962	22.8	13.51
2005	375,398	-2.6	277,346	73.9	98,052	26.1	9.09
2006	383,926	2.3	283,819	73.9	100,107	26.1	10.20
2007	526,705	37.2	360,713	68.5	165,992	31.5	11.96
2008	500,277	-5.0	374,661	74.9	125,616	25.1	11.78
2009	509,956	1.9	379,322	74.4	130,634	25.6	11.32
2010	602,867	18.2	448,800	74.4	154,067	25.6	12.67
2011	736,215	22.1	545,221	74.1	190,994	25.9	13.12
2012	803,092	9.1	598,258	74.5	204,834	25.5	12.16
2013	797,616	-0.7	594,848	74.6	202,768	25.4	12.60
2014	790,118	-0.9	585,981	74.2	204,137	25.8	12.44
2015	538,970	-32	407,412	75.6	131,558	24.4	13.16
2016	753,002	40	572,563	76	180,439	24	13.4
2017	940,218	25	760,577	81	179,641	19	12.6
2018	1,173,072	25	969,287	82.63	203,785	17.37	12.4

Source: Nepal tourism statistics 2018

The table exposes that figure of tourists has been increasing every year since the beginning excluding in the years 2000, 2001, 2002 and 2005. Nepal received 326531 tourists in 1994 and after a decade it reached 385297 in 2004 and 790118 in 2014.

The above table also shows that the progress percentage of tourists has not been the same from 1994 to 2018. From the numerical information displays that the highest decline of tourist arrivals is in 2001 and 2002, the declined percentage was 22.1 and 23.7 percent respectively. About this, one of the reasons might be CPN Maoist insurgency against the government of Nepal at that time. Tourist arrivals in 2005 were also declined

due to the cause of unstable political conditions and might be the lack of appropriate safety in the country. And in the year 2008, 2013,2014 the percentage of growth rate was negative. In the year 2015, the percentage was -32 it is because of the 7.8 magnitude earthquake hit Nepal. The highest growth rates from 1994 to 2018 were recorded in 2003,2007,2011,2016,2017 and 2018 representing 22.7,37.2,22.1,40,25 and 25percent respectively.

The length of stay of tourists plays a dynamic role in the tourism industry. The average length of stay from 1994 to 2018 was around 12 days. Inability to lengthen the average stay of tourists is measured to be one of the problems of tourism in Nepal. To increase the average stay of tourists, more touristic activities, infrastructures facilitated, promote tourist destinations as per the requirement of visitors.

Normally, above 80 percent of tourists arrive in Nepal by air and the remaining by land. So, air transport plays a dynamic role in the Nepalese tourism industry because of the landlocked nature of the country with a lack of adequate road facilities. The table shows that the highest percentage of tourist comings by air was 89.4 in 1995 and the lowest was 68.5 in 2007. The recorded data shows the high dependency on air transportation for the arrival of visitors in the country. Therefore, the need ratio on air transportation appears too much high than the roads.

### **3.9 Foreign exchange earnings from tourism**

Tourism is the chief source of foreign exchange earnings for Nepal, it contributes to creating employment and revenue for the nation. It supports the consumption of the local product and the use of hotels and restaurants. It added support to the demand for goods and services, which supports the supply of creation and create chances to advance the local productions. In Nepal, government income from tourism is created directly from airport and hotel taxes, authorisations and fees levied upon the establishments of hotels, travel agencies, trekking agencies, etc which are directly involved in the running of tourism connected goods and services. There are no proper statistics on tourism revenue and employment, so the tourism-related revenue is unknown.

Comparable with an individual, each country has unique competitive areas that necessity to be more attentive in order to take a competitive and comparative benefit. For Nepal, an agricultural area, travel and tourism sector, hydro-power sector, natural resources, handicraft, between others viewed as a competitive area for the country. These divisions have an important impact on the Nepalese economy in terms of their influence on the national Gross Domestic Product (GDP). (Atlas, 2019)

Income from the tourism sector is observed from foreign exchange made by tourists and tourism industries as substitution of revenue. All domestic contribution is not captured. Nepal Rastra Bank report shows total foreign currency exchange for 2018 raised around 617,263 thousand US\$. This is almost 17% higher than in the previous year 2017. There is less increase in currency compared to tourist arrivals results decreased per tourist per day expenditure at 44 USD which is 18% less than last year. Around 2% of country GDP depends on tourism. (Ministry of culture, tourism and civil aviation, 2019)

The table below presents the total foreign exchange from tourism, The total revenue from tourism is 11717 million RS in the year 2000/01, The revenue goes declined to 8654.3 million Rs in the next year, In the year 2002/03 again it starts increasing and as well as next year. And again, trend goes increasing and reach maximum of 67094.6 in the year 2017/18.

The percentage of total value of merchandise seems to be increasing every year. In the year 2001/02 it is recorded as 14.9 percent which is lowest between 2000 to 2018.and it reaches maximum in the year 2017/18 by the 71.9 percent. Percentage of total value of goods and non-factor service is also increasing in every year.



*Table 2: Foreign exchange earnings from tourism*

Year	Total Foreign Exchange Earning from Tourism (Rs. in millions)	As % of Total Value of Merchandise Exports	As % of Total Value of Exports of Goods & Non Factor Services	As % of Total Foreign Exchange Earnings	As % of GDP
2000/01*	11,717.0	16.8	11.8	5.8	2.7
2001/02	8,654.3	14.9	10.6	4.8	1.9
2002/03	11,747.7	23.1	15.2	6.1	2.4
2003/04	18,147.4	32.9	20.3	8.2	3.4
2004/05	10,464.0	17.5	12.2	4.7	1.8
2005/06	9,556.0	15.5	10.9	3.6	1.5
2006/07	10,125.0	16.5	10.8	3.8	1.4
2007/08	18,653.0	30.1	17.9	5.6	2.3
2008/09	27,960.0	40	22.8	6.5	2.8
2009/10	28,139.0	44.5	24.6	6	2.4
2010/11	24,611.0	35.8	20.2	4.9	1.8
2011/12	30,703.8	37.7	20	4.5	1.8
2012/13	34,210.6	39.8	18.9	4.5	2
2013/14	46,374.9	45.9	20.5	4.7	2.4
2014/15	53,428.8	54.4	21.6	4.9	2.5
2015/16	41,765.4	55.8	19.6	3.7	1.9
2016/17	58,526.9	71.3	24.3	4.5	2.3
2017/18	67,094.6	71.9	24.8	5.0	2.2
2018/19*	47,584.9	66.5	24.3	4.8	

Source: Nepal tourism statistics 2018

As percentage of total foreign exchange earnings, the highest percentage was 8.2 in the year 2003/04. And the lowest was below 4 percent in the year 2005/06, 2006/07, 2015/16. The average percentage as per foreign exchange earning was more or less 5 percent.

It is observed that the contribution of tourism to GDP was around 2 percentage. The highest contribution of tourism in GDP was in 2003/04 which was 3.4 percent, but it has started to decline in 2004/05, 2005/06, and 2006/07 and reached below 2 percent. Again, it has started to increase more than 2 percent remained more or less constant in 2.5 percent. In the year 2015/16 the tourism contribution to GDP goes below 2 percent it is because of the earthquake; it helps decline in the numbers of visitors. And again, it shows the percent goes more than 2 percent in the next year and become constant.

### **3.10 Impact of tourism**

The travel industry is a standout amongst the most vital enterprises on the planet which gives a noteworthy wellspring of financial results and the likelihood and open door for business. It is additionally an unpredictable industry which requires gigantic capital venture and assets too. It makes both positive and negative effects contingent on how it is overseen. If it is overseen legitimately, at that point it can positively affect all social, financial and ecological perspectives. On the off chance that it isn't overseen legitimately, at that point the effect can be negative which would be deplorable.

#### **3.10.1 Socio cultural impact**

On the positive aspect of tourism impact, the development of the infrastructures that result from tourism would be advantageous to the community and its people. Tourism encourages the preservation of historical features, native customs, festivals and handicrafts which would otherwise have vanished or been lost to time. The social correspondence between the guest and the host helps to facilitate further cultural understanding. This allows raising global awareness of critical issues such as poverty. On the negative aspect, the bad influence might enter in the community along with the guest in the community such as the use of drugs and alcohol as well as prostitution. The crime level might increase as well along with the increment of the crowd. The entry of the new culture in the host community might affect the pre-existing culture of the community. The loss of traditional values and customs coincides with the increase of tourists in the area.

#### **3.10.2 Environmental Impact**

The environment and its resources are essential for the travel industry since the travel industry is legitimately identified with conditions. This can prompt having both positive and negative impacts on nature. The travel industry advancement may prompt the preservation and insurance of condition which is something to be thankful for. It would raise worldwide mindfulness about the ecological qualities and help ensure the regular regions by expanding their monetary significance. Better and affordable

utilization of the ecological assets may be fruitful then after. Alongside these, the development of streets, structures, houses, inns, airplane terminals may adversely affect the earth.

### **3.10.3 Economic Impact**

The travel industry has the greatest effect on the economy of wherever or the world. As a matter of first importance, the travel industry helps in making the chance of work. The augmentation of utilized individuals produces pay and raise the standard of their living. It causes individuals to make new industries in provincial zones and increment their generation. In urban regions, it gives a chance to speculate and improvement of the framework. These all expand the expense accumulation which later aides in the economy of the nation. Nepal is a country of scenic beautiful views with natural, cultural, traditional heritage. Nepal is a landlocked country having the potentiality of different types of tourists. As compared with two giants India and China, Nepal remains an underdeveloped country. Nepal has been able to prosper so much economically or even infrastructure wise in all these years but not achieved the expected economic growth. The neighbouring country has achieved the two digits in the GDP, whereas Nepal is limited only in the 5% GDP. So, here the Tourism industry is taken as the main source of the national economy. It might be the potential sectors for the economic development of Nepal. It might be the major source of economy which provides employment in both urban and rural areas and will help to reduce the line of poverty. Nepal has initiated various activities to promote the tourists in international as well as in the domestic market. Nepal has already celebrated Visit Nepal 1998, Nepal Tourism Year 2011, Visit Lumbini Year 2012, and Everest Diamond jubilee 2013. Tourism is given as one of the priority sectors because of employment opportunities and revenue. More than 1.50 million people are employed directly or indirectly in the tourism industry generating about 2.1 Billion USD.

### **3.11 Problem faced by tourism In Nepal**

#### **3.11.1 Problems and Challenges Faced by Tourism Industry of Nepal**

In course of the travel industry advancement in nation, Nepal needed to confront numerous difficulties and issues in transit. Because of these issues, the travel industry segment of Nepal is still in newborn child stage endeavouring to become greater and better. These issues were in the past as well as some of despite everything them exist today. From the issue of financial emergency to the catastrophic event, Nepal confronted a great deal of difficulties yet by one way or another it has defeated these, and the travel industry stops.

To start with, Nepal was unfit to utilize the conceivable outcomes of equivalent and proportionate improvement of frameworks in various traveller goals of the nation. Likewise, to circulate the benefit from this area to concerned experts in a proportionate way had been testing. Being unfit to extend the current offices and administrations just as being unfit to present new administrations and offices made an extraordinary misfortune Nepal. Not having the capacity to give a common sense preparing to the general population in the travel industry division is likewise one noteworthy issue of the travel industry area of Nepal. The absence of advancement of neighbourhood items in Nepal was an obstacle which caused to not get anticipated advantages and pay. Essentially, it was a testing assignment to run the travel industry related projects in condition agreeable way because of inner contentions.

Absence of appropriate foundations in the country is the serious issue which has made it troublesome for different parts of the travel industry to create and develop. Foundations, for example, streets, vitality, wellbeing and correspondence need in Nepal and the accessible ones are in poor conditions. The absence of cutting edge and dependable of avionics industry is additionally a noteworthy obstacle for the travel industry advancement in Nepal. Absence of legitimate settlement industry in all pieces of Nepal is additionally the reason for less spreading of the travel industry business in Nepal. Remote regions of Nepal do not have every one of these things which make it difficult to pull in vacationers to such goals.

### **3.11.2 Problems and Challenges of Tourism in Remote Areas**

Over 80% of territory of Nepal is remote zones. In this manner, it is basic to build up the travel industry in such places and present the travel industry exercises with the goal that the area can create. This would help the general population in remote places as well as the administration of Nepal. Yet, there are different difficulties and issues in doing as such in the remote zones.

The above all else issue is transportation which is the foundation of the travel industry. Nepal does not have a roadway in all spots of Nepal just as the current roadways are in poor condition. Because of various landscape and geographic structure in landmass, it is hard to make streets in Nepal. Since, the street ways are not unreasonably great; it is protected to state that there is no appropriate convenience in the provincial territories. Hardly any provincial spots of Nepal have set up a homestay projects to pull in sightseers, yet these does not fulfil the guideline of settlement. Because of absence of street and geographic condition, there are no appropriate methods for correspondence all through the nation. Numerous towns of Nepal don't have phone lines. The absence of wellbeing offices and instructive offices are additionally the gigantic issue in these regions. Bunches of individuals are unskilled, and they don't get legitimate wellbeing administrations. They have faith in superstitious method for recuperating which does not work. Notwithstanding being wealthy in water asset, Nepal does not have appropriate power vitality all through the country. Not all pieces of nation get the power. The towns additionally come up short on the talented human asset which makes it unthinkable for them to raise individually and accomplish something for the town. The absence of different administrations, for example, banks, air administrations for simple transportation, showcase regions, recreational offices, data focus and furthermore the exceptionally poor advertising and advancement of those zones are the serious issues which makes it hard for the travel industry improvement in such regions.

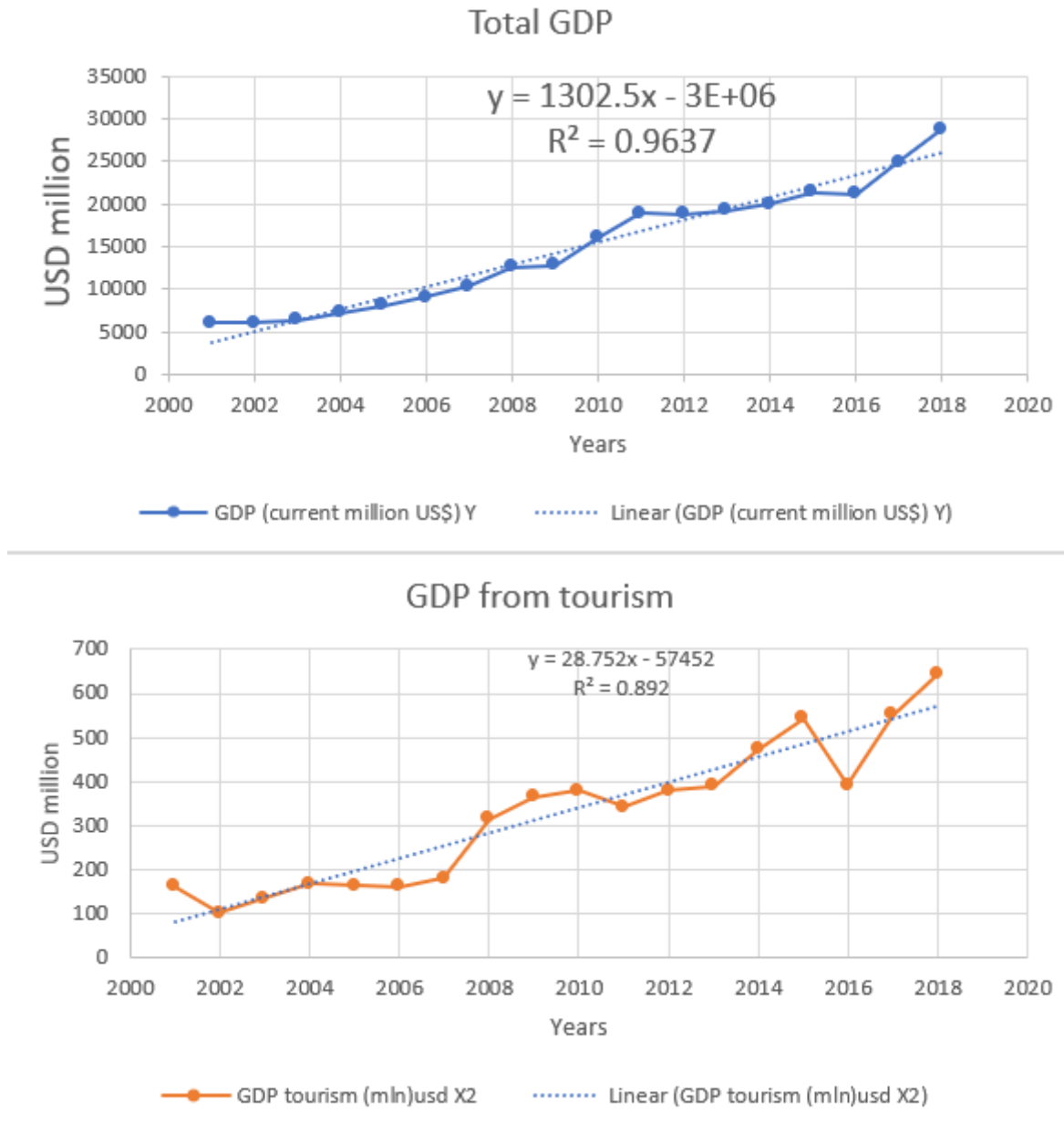
## **4 Empirical Analysis**

Numerous pragmatic studies have been directed to measure the economic effects of tourism on the Nepalese economy. But only a limited number of empirical studies have struggled to measure the effect of tourism on the economic growth in developing countries like Nepal. Even though in Nepal, there has been lots of research complicated to know the factor that really affecting in the tourism sector. The main difficulty with building an empirical study that measures the impact of tourism on economic growth is since many factors and guidelines have been significant roles in the rate of economic growth. To get a coefficient of tourism, it is necessary to run the regression using each possible combination of independent variables in tourism. After the process is complete, all the statistically significant coefficients of tourism are used for estimation of the base coefficient of tourism as well as the maximum extreme coefficient and minimum extreme coefficient. The empirical results are contingent heavily on the regulator variables used in the regression analysis. Firstly, trend analysis has been done to see the fluctuation and an improvement in the last 20 years in Nepal. Trend analysis will be quantified and explain trends and patterns in a “noisy” data over time. A “trend” might be upwards or downwards shift in a data set over time.

### **4.1 Trend Analysis**

Time series data from 2001-2020, will be analysed using trend analysis. It will help to figure out economy is moving forward or downward. Increasement of facilities and infrastructure highly helps to develop tourism and country GDP. However, extreme natural events such as Earthquakes and landslides in the plain region of Nepal directly affect the tourism and growth in Nepal. To achieve the result as a tool, excel has been used.

Figure 5: GDP country and GDP from tourism



Source: Own calculation (Data taken from World Bank)

Those data were collected from 2001 to 2018 shows the effect is positively impacted. In the first 8 years, the trend is normally steading up for both the GDP of the nation and for the GDP from tourism. However, in the year 2009/10 growth on both sides seems negative as per the above figure and finds out the reason after discussion with other related papers it is because of the global financial crisis. As it is well known that in 2015, there was a huge earthquake in Nepal, that hits the country's economy

desperately and this is the reason the trend declines in the year 2016. However, after damage from the earthquake country started very well to reconstruct with the help of foreign aid and investment. Also, one of another reason for steady growth in the last economy is considered due to stability in the government.

R-squared is a handy, seemingly intuitive measure of how the well linear model fits a set of observations. However, as we saw, R-squared doesn't tell us the entire story. While R-squared provides an estimate of the strength of the relationship between your model and the response variable, it does not provide a formal hypothesis test for this relationship. In the above line, our R square value is 0.9637, which means that our model is very strong, and the relationship between the GDP of the nation and tourism accounts for 96% of the variation. Said yet another way, the economy from tourism is a good predictor of the GDP of the country and vice versa. Based on this trend analysis it is clearly seen the that there is relation between tourism and economy of the country. For instance, in 2016 trend line for both, tourism and GDP had decrease because there was huge earthquake in 2015. This evidence also tells us that there is interconnection between tourism and economy of the country.

## **4.2 Regression analysis:**

The regression analysis has been done by using Excel and data taken from the World Bank, CEIC data, Nepal tourism statistics, central bureau of statistics Nepal. Regression analysis will show the relationship between the dependent variable and independent variables. In this research, our dependent variable is the economy of the nation or GDP and independent variable is tourism growth. The model can be expressed as:

$$Y = \beta_0 + \beta_i x_i + \epsilon$$

where Y = dependent variable, X = independent variable,  $\beta_0$  = intercept,  $\beta_i$  = coefficient to be estimated.



*Economic impact of tourism in Nepal*

Table 3 Regression analysis 1

Regression Statistics						
Multiple R	0.961021732					
R Square	0.92356277					
Adjusted R Square	0.918785443					
Standard Error	2018.571096					
Observations	18					
ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	787715810.4	787715810.4	193.3220812	2.37043E-10	
Residual	16	65194068.31	4074629.269			
Total	17	852909878.7				
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	1278.836068	1087.978728	1.17542378	0.257020697	-1027.575802	3585.247938
X2	41.88441379	3.012393561	13.90403111	2.37043E-10	35.49842472	48.27040287

Source: own calculation using excel (data taken from Nepal tourism Board, below Appendix 1)

Interpretation:

Above table results shows that the Multiple R is 0.961, which means correlation between dependent and independent variable is very strong. And our R-square is 0.923, which refers that the dependent variable (GDP) has been explained by 92% by our independent variable. Another most important part of the above table is the F-test, which tells about the significance of the model.

If  $F \text{ value} > \alpha \text{ value} = \text{model is significant}$

If  $F \text{ value} < \alpha \text{ value} = \text{model is insignificant}$

Our values are,

Significant level ( $\alpha$ ) = 0.05

F-value = 193.32

Or,  $F > \alpha = \text{model is significant}$

Or,  $193.32 > 0.05 = \text{model is significant}$

## Economic impact of tourism in Nepal

Since our model has a higher “F” value than  $\alpha$  value, it represents our model is significant.

The results show that the p-value is 2.37043E-10, which is less than 0.05 ( $p < 0.05$ ), that indicates that there was a significant influence on the annual growth of tourism to the GDP.

Also looking at the equation,

$$Y = \beta_0 + \beta_2 x_2 + \varepsilon$$

$$Y = 1278.836 + 41.884 x_2 + \varepsilon,$$

This equation explains that if we increase investment by 1 million USD in tourism sector, that will lead to increase in GDP by 41.884 million USD. This represents that there is positive association between annual growth of tourism and GDP.

Table 4 Regression analysis 2

SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.948571218					
R Square	0.899787355					
Adjusted R Square	0.893524065					
Standard Error	53.03146332					
Observations	18					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	404021.582	404021.582	143.6604898	2.09294E-09	
Residual	16	44997.37763	2812.336102			
Total	17	449018.9597				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-177.605305	43.74075584	-4.060407773	0.00090902	-270.3315651	-84.8790449
Infrastructure (x3)	0.969207352	0.080862661	11.9858454	2.09294E-09	0.797786169	1.140628536

Source: own calculation using excel (data taken from Nepal tourism Board, World Bank, below Appendix 1)

Interpretation:

Above table results shows that the Multiple R is 0.948, which means correlation between dependent and independent variable is very strong. And our R-square is 0.899, which refers that the dependent variable (GDP from tourism) has been explained by 89.9% by our independent variable (GDP from infrastructure). Another most important part of the above table is the F-test, which tells about the significance of the model.

If  $F \text{ value} > \alpha \text{ value} = \text{model is significant}$

If  $F \text{ value} < \alpha \text{ value} = \text{model is insignificant}$

Our values are,

Significant level ( $\alpha$ ) = 0.05

F-value = 143.66

Or,  $F > \alpha = \text{model is significant}$

Or,  $143.66 > 0.05 = \text{model is significant}$

Since our model has a higher “F” value than  $\alpha$  value, it represents our model is significant.

As per above results, our P-value is 2.09294E-09, which is less than significant level at confidence interval 95%.

$P = 2.09294E-09$ ,

Significant level ( $\alpha$ ) = 0.05

$P < \alpha = \text{significant}$ ,

Or,  $2.09294E-09 < 0.05 = \text{significant}$ ,

This result shows that infrastructure has significant effect on the tourism.

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Also looking at the equation,

$$Y = \beta_0 + \beta_3 x_3 + \epsilon,$$

where Y= Tourism,  $x_3$  =infrastructure

$$Y = -177.60 + 0.969x_3 + \epsilon,$$

This equation explains that if we increase investment by 1 million USD in infrastructure, it's contribution to the tourism will increase by .969 million USD. This represents that, infrastructure has significant contribution to the tourism. In overall, impact of infrastructure affects the growth in tourism.

According to the government of Nepal and other research also found out that, the tourism industry is one of the world's biggest active industry and business. It is more profiting than others, such as the Defence Industry, oil, industrial Products, and agriculture. Tourism has been invested in developed and developing countries like Nepal. The tourism industry, over attracting a high number of tourists, flourishes a wide range of businesses or regional economic activities in the host area. As mention in the above literature, many people move to Nepal for different purposes such as research, travel, cultural visit, business, and likewise. To improve this sector, it is necessary to develop well in the other sector and one of the important is infrastructure. It is important to develop the tourism industry in developing countries like Nepal which suffers from unemployment, limited capital resources and so on. Many countries, these days, consider this dynamic industry as a creation of employment opportunities and infrastructure development. Thus, the above table clarifies that development in the infrastructure let an increase in the tourism sector and GDP of the nation. Since Nepal is considered one of the most touristic countries, it is more obvious that there should be more priority to develop in the infrastructure to increase the tourism area.

## **5 Result and Discussion**

With the extension of existing literature by showing that tourism development affects income via standard income factors. Our findings have significant theoretical and moreover practical suggestions. In terms of theoretic view, our findings recommend that imminent research should concentrate on how tourism development cooperates with infrastructure factors, instead of just focusing on the association amongst tourism development and economic growth. In terms of practical consequence, our results advocate that governments should support the tourism industry enlarge to the extent that tourism is shown to support growth in infrastructure development and trade balance and fair business. All these findings show that Nepal has huge potential in the tourism sector and if the government continues to spend and invest in the tourism sector it will lead the country to economic growth. One of the most important policies of any country is economic growth. The efficiency of economic policy is measured by the growth of the nation in terms of economic perspectives called economic growth rate. It is viable that there are different ways to increase the welfare of the nation. In the context of Nepal, tourism seems the most important and significant factor for economic growth. In the meantime, with an increase in economic growth means there is higher income, lower unemployment, more job opportunities, more supply of goods and services and last but not least welfare of citizens.

As per (Sugiyarto, et al., 2003) policy implication is reliable with studies that find tourism development grows not autonomously but in combination with other different economic policies. For instance (Sugiyarto, et al., 2003) claimed that the combination of international tourism development with trade liberalization policies created a positive economic impact for Indonesia, together with enlarged economic production, compact government deficits, and a lower national balance of trade. This has been particularly true for smaller destinations that have a high tourism impact ( Lanza & Pigliaru, 2000).

In the different geo and demographical structure, I found another example that supports our findings, (Vanegas & Croes, 2003) find that in the case of the Caribbean island of Aruba, international tourism has been the most successful growth concerned sector of the economy since the late 1980s, in large part because it has been part of a wider export-oriented and neo-liberal economic policy approach.

## **6 Conclusion and recommendations**

After done with whole research I came to conclusion as tourism has impacted the Nepalese economy by virtue of demand for goods and services, research and development, sports, business, cultural purpose, learn history, purchase of handicrafts, trekking and mountaineering, rafting, sight-seeing, city tours, and many other activities.

In the empirical analysis, I analyse the relationship between tourism and economic growth as well as factors that stimulate tourism activity. I have chosen 7 different factors and after testing with regression analysis found out all of them have positive effect except construction, manufacture, and transportation. It is obvious that those factors usually got negative since they get less profit for developing countries like Nepal. Despite developed countries have also spend more on transportation than they received. I have analysed how the infrastructure impact on the economy and in the tourism sector. Analysis shows that tourism is highly affected by the manufacture, road and transportation, and development of communication. Considering these results, it is likely to propose a satisfactory economic policy that stimulates tourism activity and has a resultant optimistic effect on economic growth. In this view, policies designed to expand entrepreneurship activity, reduce prices and increase income would be beneficial. At the same time, the government should more focus on activities for tourists. Most of the tourists come for moderation and if there are not combined views such as natural and some artificial activities, they might not continue again.

While discussing with previous studies have supported that there is a positive connection between tourism and economic growth. While dealing with tourism it covers national and international tourism, internal and external tourism.

My findings suggest a redirection of the goals of tourism development from one of participating in tourism for its own sake to one where tourism investments are made to tactically support standard income factors, such as promoting capital accumulation. Tourism is seeming dependent on effective of infrastructure that supports the movement of goods and people. Therefore, for most countries, an extensive and expanded economic development strategy is more likely to sustenance international tourism development than a narrower policy that emphasizes largely on tourism in only.

The above findings have significant consequences for future research on the macroeconomics of tourism growth. With the presumptuous our findings are valid; a subsequent implication is a need for finer comprehensive considerations of how tourism would best support the country economy. Such analysis perhaps helps with policy decisions on how to make tourism investments most operative in supporting long term growth for a destination economy like Nepal. If tourism development affects growth mainly via its effects on R&D, optimum tourism policy may be to encourage business travel. It is suggested that having more developed infrastructure leads to tourism development and the policy makes should let to the government increase in the infrastructure even though in the beginning it will be lost. Policymakers need to elect where to invest public profits and how to distribute incentives to encourage the long-term economic livelihood of citizens.

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## 8 Appendix

### Appendix 1

year	GDP (current million US\$)	Agriculture, forestry, and fishing, value added (million USDGDP) X2	GDP tourism (mln)usd	GDP from wholesale and retail trade, US dollar Million	GDP from Infrastructure, USD Million	GDP from Mining, USD Million	GDP from construction, USD Million	GDP from manufacturing, USD Million
2001	6007.055042	2117.346939	162.513	558.6049292	301.3716814	17.41362832	240.9296637	321.8055796
2002	6050.875807	2187.409456	101.628	573.2580177	317.0353982	17.96411504	245.999646	321.9463761
2003	6330.473097	2222.367978	134.245	607.9199558	340.7834513	17.97475398	245.1422752	328.8777283
2004	7273.938315	2522.336826	168.163	701.0494867	362.699115	19.19644248	252.242823	337.485692
2005	8130.258041	2750.051382	164.644	706.5357168	371.689823	20.78170796	271.5929204	344.2330071
2006	9043.715356	2927.132778	162.086	798.3580088	390.2150796	21.14159292	278.3451327	353.0176991
2007	10325.61802	3217.91807	180.165	819.8939292	426.7771681	22.23893805	292.4159292	349.9589752
2008	12545.43861	3801.985041	314.275	931.9090177	456.5044248	22.39823009	298.8584071	346.2994133
2009	12854.98546	4026.52237	365.106	1098.411726	483.6858796	22.87755221	313.5364814	356.5585018
2010	16002.65643	5309.581947	379.022	1425.372496	508.8849558	23.33739027	328.5454752	370.9991212
2011	18913.57437	6615.80907	341.485	1586.782327	550.0889248	24.51037699	329.2654867	384.4663894
2012	18851.51389	6248.899959	380.375	1753.66477	592.1716735	24.99680531	337.3381982	398.7516221
2013	19271.16802	6077.086446	390.264	2034.261168	623.1858407	27.95575221	367.9617274	423.7908319
2014	20002.96884	6054.328262	471.769	2403.304274	662.0088496	28.61061947	378.463769	425.380531
2015	21410.84091	6291.135797	544.1	2562.53431	675.3451327	27.81415929	361.9734513	391.3539823
2016	21185.92241	6175.526539	392.7	2595.11092	719.0176991	31.63716814	406.9681416	429.2920354
2017	24880.26691	6528.785637	551	2929.342168	752.380531	34.44247788	447.7433628	468.6460177
2018	28812.49189	7193.051375	642.9	3372.263496	796.8053097	37.7079646	487.7964602	495.7345133