



Nepal-India Cross Country Tourists' Mobility: Socio-Economic Impact

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Abstract

This study analyzes the economic impact of the mutual tourism relationship between Nepal and India on the economies of both the countries. The main objective of this study is to study the exchange earning due to mutual tourism of both the countries and its effect on the economic development. Its method of study is to fit simple regression models for to analyze the trend of tourism of both the countries by using the use secondary data for this applying descriptive and analytical research design. In the discussion of this study, it is said that mutual tourism in Nepal and India as well as in the world community has helped to raise the country's foreign exchange earnings. Also, this study concludes that there is a positive relationship between tourist arrival and exchange earning. From this, tourism has made a great contribution to the economic development of both the countries. This is further confirmed by economic model R^2 and P -value. The study demands more attention should paid for the development of tourism economy in both countries and tourism and travel facilities should improve to excess of tourism economy in Nepal and India.

Key words: Tourism economy, comparison, contribution, impact, socio-economy

Introduction

The tourism sector has evolved into one of the most important components in boosting the national economy by adding to GDP, employment, foreign exchange profits, and other socio-economic benefits. According to the evidence, Nepal and India are the most feasible nations for the growth of the tourist sector in terms of country-specific and cross-country gains from single initiation and cooperation activities. In terms of tourist development, Nepal and India have a lot of promise. Tourism is mostly dependent on natural and cultural assets in both nations. Since the history, people have been migrating from one place to another. Since tourism products are perishable, tourist facilities must be scaled to allow for flexibility. As a result, it has become a crucial connection in accelerating global socioeconomic growth.

As per Jenkins and Henr (1982), a range of activities that are linked horizontally and vertically to other economic sectors affect the extent and quality of tourism. The world's recognized industrialized and emerging nations have focused on creating a robust tourism sector as one of the most important indicators for long-term economic growth based on services provided, which in turn enhances the country's infrastructure and it is one of the world's most important industries and major businesses, earning around 8.8 trillion US dollar per annum and employing 318.9 million people, from the annual survey of the World Travel & Tourism Council in 2018. Over 600 million international visitors are visiting various regions of the world each year (Mahatara, 2019).

The tourist sector has contributed significantly to the establishment of job of Nepal and India provides several chances. Throughout the research period, the tourist business directly employed over one lakh individuals and indirectly employed over three lakh people. In India, the tourism sector has contributed to the creation of a significant number of job opportunities. In 2000/01, this industry supplied 481313.3 thousand job openings, in 2015, 37315 thousand new jobs were created in India, and in 2019, India's tourist industry created 4.2 crore jobs, accounting for 8.1 percent of the country's overall employment.

The tourist industry is one of the potential drivers of economic growth and development. Tourism has the potential to be a powerful tool for regional development, with benefits to revenue, employment, and production. To determine the tourism industry's contribution, calculate the participation of tourist revenues to domestic economic growth and job creation in the country. According to the survey, China is ranked 15th in the world, India is ranked 40th, and Nepal is placed 103rd. The study's purpose is to evaluate the tourist sector and its influence on the economies of Nepal and India.

Literature Review

The tourism economy has been identified as one of the most effective indicators of national economic contribution. During the 1970s and 1980s, tourism academics began to pay close attention to the larger context and results of tourist growth. The dependence perspective (Britton, 1982) and the life-cycle model (Butler, 1980) were essentially two major approaches that dominated most of the conversation on tourism and development during that era. Both ideas sprang from distinct theoretical lineages but had a common basis. Both approaches have been criticized, with the dependency theory being accused of being obsessed with the global level and the world system (Corbridge, 1986), thereby ignoring the possibility that events occurring within a nation or region may be just as important as those occurring outside its borders (Storper, 1990).

In the 1980s, a new strategy to stressing local agency arose, with communities and its constituent members having an active part in deciding and influencing the consequences of tourism (Murphy, 1985). Murphy (1994, p. 284) argues that if host towns can identify the forms of tourist they want to attract and accept in the long run, they may mold the type of enterprise that is thought to be the fit for their requirements. Throughout most of the 1990s, the flexible specialization method (Piore & Sabel, 1984) and the regulatory school (Lipietz, 1987) were influential. Capitalism is thought to be an unstable, contradictory system that must reconstruct itself in order to overcome, if temporarily, its recurrent crises, according to the regulatory approach. The regulatory hypothesis is the one that has had the most influence on the tourist literature (Iaonnides, 1995).

Milne and Ateljevic (2001) investigated and analyzed the complicated relationships that exist between the tourist sector and economic development processes. They emphasized the need for a more thorough grasp of the expanding tourist sector and how it affects local economic development processes. The theory of change in tourism is concerned with determining why and how change occurs so that development plans may maximize the sector's growth potential.

The tourist business contributes to the national economy through creating jobs, earning foreign currency, contributing to GDP, and improving national socioeconomic conditions. Tourist traffic between Nepal and India supports economic activity and inflows of foreign currency in both nations. The tourist sector contributes to the country's economy both directly and indirectly. According to Zurub, Ionescu, and Valentina (2015), tourism is the basic industry for economic growth and other production sectors in the majority of developed nations by establishing infrastructure for the economic circle. The tourist sector, government authorities, and the community as a whole all benefit from a detailed hold of the economic effect of the tourism industry (Stynes, 1997).

Tourism's impact on destinations is influenced by a number of factors, including the volume, kind, and seasonality of tourism activities. Unplanned tourist operations can have a negative impact on the host country's social and economic lifestyles, as well as contaminate the natural and cultural environment (Shrestha & Shrestha, 2000). The travel and tourism industry, according to Anupriya and Rajasekaran (2016), is focused on economic and social benefits that encourage sustainable growth in industrial development. Malik and Nusrath (2014) emphasized the tourist business contributes considerably to the Indian economy's GDP, employment, and foreign currency income. They investigated at tourist arrivals, economic growth, and the tourism industry's development.

WBG (2018) study report, tourism is a major driver of economic growth and job creation, particularly in emerging nations. According to that study, community-based tourism has the potential to have a large beneficial influence on rural families in the majority of nations. Similarly, by boosting the monetary worth of living species, the tourist industry helps to the conservation of biodiversity and natural regions. Tourism is also one of the limited industries in which female labor participation is above parity in some areas.

Leelavathi and KC (2016) noted, the tourist sector's growth has resulted in the creation of jobs, foreign currency revenue, fixed investment, and socioeconomic growth, hence boosting its contribution to GDP. Many research studies have determined that the tourist sector makes considerable contributions and has a major economic impact in terms of employment generation. According to several research studies on the influence of the tourism sector on the national economy in various nations' situations. In order to meet contemporary demands, a study of bilateral tourism interactions between Nepal and India is required. The two countries appear to be comparable from a sociocultural standpoint. The tourism trade between Nepal and India has significant socioeconomic impact.

Research Methodology and Data

The main objective of this research methodology is to study the exchange earning due to mutual tourism of both the countries and its effect on the economic development. This study analyzes and reviews the various sectors of the tourist industry using secondary data and a descriptive and analytical research approach. The economic impact is measured in terms of

foreign exchange earnings, employment creation, and contribution to the gross domestic product (GDP). Using total tourist arrivals as independent variables and foreign exchange profits as dependent variables, a statistical method is used to demonstrate the relationship between variables components, as well as to quantify the economic impact on the economy. In a descriptive study, the influence of tourism on GDP and other economic parameters was examined. To explain the data, descriptive statistics such as a table and a line graph are utilized. The essential data and information for analysis and discussion was gathered from secondary sources released data from 1995 to 2019.

Information for the Model. The impact of total tourist arrivals on foreign exchange profits and the impact of foreign exchange earnings on GDP in Nepal and India are calculated using the equations below:

To calculate the effect of total tourist arrivals (TTA) on Nepal's foreign exchange earnings (FEEN), use the formula below:

$$FEE_N = \alpha_0 + \beta_1 TTA_S + \epsilon_t \dots \dots \dots (i)$$

The equation (ii) is determine the influence of total tourist arrivals (TTA) on India's foreign exchange earnings (FEEI):

$$FEE_I = \alpha_0 + \beta_1 TTA_S + \epsilon_t \dots \dots \dots (ii)$$

The following formula is used to evaluate the impact of foreign exchange earnings (FEEs) on Nepal's GDP (GDPN):

$$GDP_N = \alpha_0 + \beta_1 FEE_S + \epsilon_t \dots \dots \dots (iii)$$

The impact of foreign exchange earnings (FEEs) on India's GDP (GDP_I) is estimated using the following formula:

$$GDP_I = \alpha_0 + \beta_1 FEE_S + \epsilon_t \dots \dots \dots (iv)$$

Foreign exchange earnings (FEEs) from Nepal's and India's tourism industries are predicted to have an impact on both countries' GDP. The parameters are β_0 and β_1 .

Due to an increase in overall tourist arrivals in Nepal and India, foreign exchange revenues are likely to rise. Both qualitative and quantitative factors were used to analyze and interpret the data collected from various sources during the presentation and analysis phase. The necessary econometrics, accounting, and statistical tools and methodologies were used. Tables, graphs, and diagrams are used to convey data as needed.

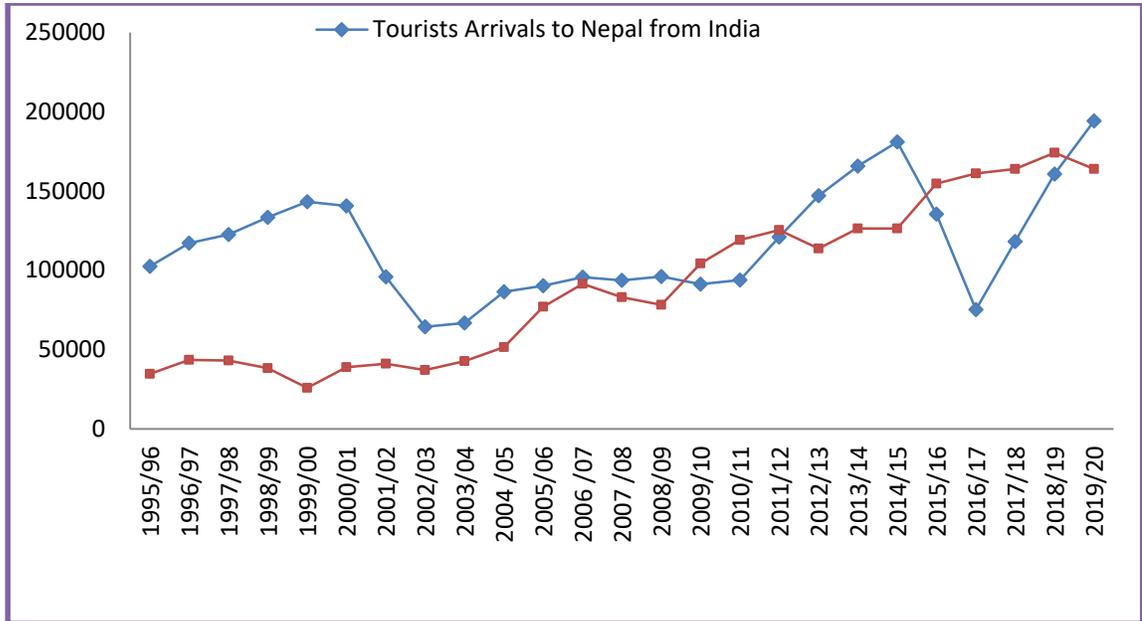
Results and Discussion

Tourist industry seems to have a major effect and impact on the economics of any country and the entire planet. The tourist industry helps a country generate job opportunities and foreign exchange benefits. Increased employment aids in the creation of money and the improvement of people's living conditions. It allows rural residents to create new enterprises and increase their productivity. The tourist industry is growing these days, and the number of visitors is increasing as well. Several projects for the growth of the tourist sector have been executed, as well as the liberalization of tourism policy. Nepal and India have attracted a large number of travellers for decades.

Trends of Total Tourist Arrivals of Nepal and India. Total figure of tourists that arrive and their usual time of stay are crucial economic factors. The increased arrival of travelers creates

new opportunities in a range of industries. The total number of tourists arriving in Nepal and their average length of stay are depicted in Figure-1. Tourist arrivals in Nepal fluctuate year to year due to political factors as well as other unneeded changes in the tourist environment.

Figure-1: During 1995/96 to 2019/20, total tourist arrivals in India and Nepal. (NRs.in Million)

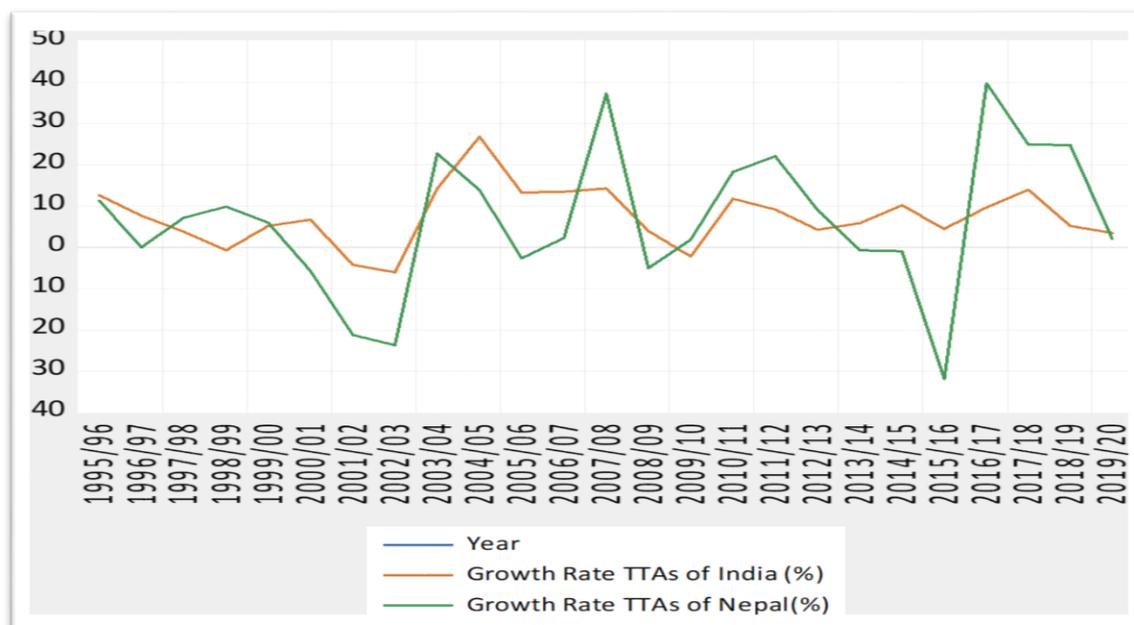


Source: Ministry of Tourism, India (2003/04, 2019/20 & 2020/21) and MoF, Economic Survey (2010/11, 2019/20 & 2020/21) Nepal.

From 1995/96 to 2019/20, Figure 1 shows total tourist arrivals in Nepal and India. In 2018/19, the biggest number of tourists arrived, while the bottom figure arrived in 2002/03. However, the pattern of overall tourist arrivals in Nepal indicates an upward tendency in recent years. Similarly, India's flow of foreign tourist arrivals (FTAs) climbed to 10.56 million in 2018 from 10.04 million in 2017. Over the course of 2017, FTAs grew at a rate of 5.2 percent, matched to 14 percent in 2016. In the year 2019, India's FTAs were expanded by 3.5 percent. During the study period, foreign tourist arrivals in India were generally on the rise.

Foreign Tourist Arrival Trends in India and Nepal. The pace of rise in tourist arrivals from Nepal and India appears to be changing. In 2016, the biggest percentage rise in total tourist arrivals was 39.7 percentages while the lowest percentage decline was -31.8 percent in 2015. The largest rate of rise in India was 26.8 percentages in 2004/05, while the lowest rate of decrease was -6.0 percent in 2002/03. When the rate of change in total tourist arrivals between Nepal and India is compared, Nepal has a higher rate of change than India.

Figure-2: Foreign Tourist Arrival Trends in India and Nepal, 1995/96-2019/20.



Source: Ministry of Tourism, India (2003/04, 2019/20 & 2020/21) and MOF, Economic Survey (2010/11, 2019/20 & 2020/21) Nepal.

From 1995/96 to 2019/20, Figure 2 displays the growth of total tourist arrivals in Nepal and India. The volatility in the rate of growth of total tourist arrivals during the research period may be seen in the rate of growth of total tourist arrivals.

Nepal's total tourist arrivals from India vs. India's total tourist arrivals from Nepal. The difference between total visitor arrivals in Nepal and total tourist arrivals in India has been significant. Since the 1970s, Indian tourists have ranked first in Nepal, while Nepalese tourists have placed 14th in India in various years. Indian tourists play a momentous role in the Nepalese tourism sector, with Nepalese tourist arrivals from India accounting for a significant portion of the total throughout the research period.

Figure-3: Nepal's total tourist arrivals from India vs. India's total tourist arrivals from Nepal (1995/96-2019/20).

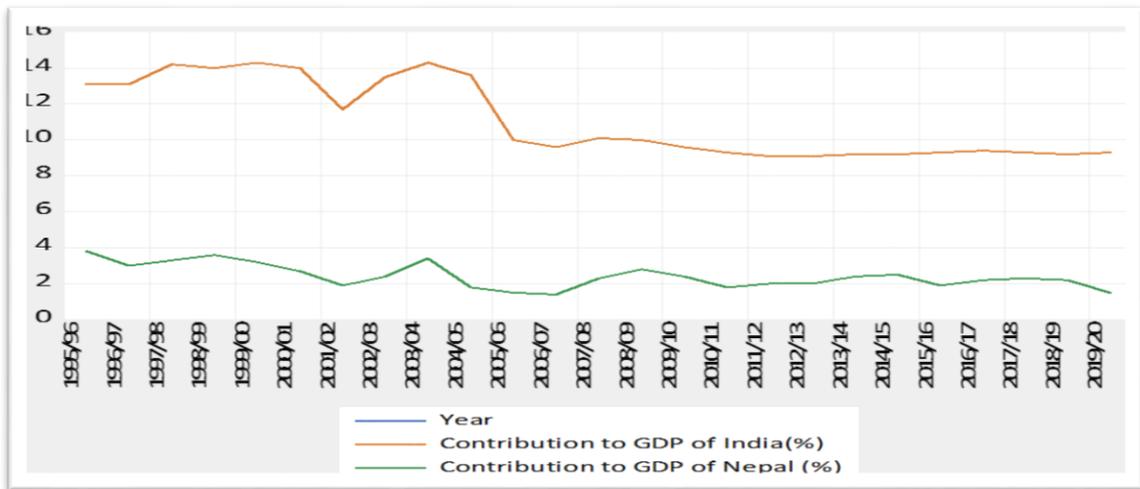


Source:Ministry of Tourism, India (2003/04 & 2019/20) and MOF, Economic Survey (2010/11, 2019/20 & 2020/21) Nepal.

Figure 3 illustrates the proportion of Indian tourist appearances to total visitor arrivals in Nepal from 1995/96 to 2018/19, and even the proportion of Nepalese tourist arrivals to total tourist arrivals in India from 1995/96 to 2018/19. The proportion of Nepalese tourists arriving from India ranges from 13 to 26 percent, while the proportion of overall Indian tourists arriving from Nepal is only 1-3 percent.

Tourism's contribution to Nepal's and India's GDP.The tourism industries of Nepal and India have made a substantial contribution in terms of foreign exchange revenues. During the research period, foreign exchange profits contributed between 1 and 3 percent to Nepal's GDP, while foreign exchange earnings contributed between 7 and 14 percent to India's GDP. In India, rather than Nepal, the tourism industry has made a greater contribution.

Figure-4:Tourism's contribution to Nepal's and India's GDP (1995/96-2019/20).



Source:MOF, Economic Survey of Nepal (2010/11, 2019/20 & 2020/21), Ministry of Tourism of India (2019) and Knoema (2021).

Figure 4 illustrates the contribution of the tourist sector in India and Nepal from 1995/96 to 2019/20. The entire contribution of the travel and tourism sector to India's GDP is expected to increase in 2018, from Rs.15.24 lakh crore in 2017 to Rs.32.05 lakh crore. India is estimated to gain \$50 billion from this industry by 2022.

Economic Impact of Tourism Industry.The tourist industry has a significant economic influence on Nepalese and Indian economies in numerous ways. The influence on Nepal's economy is dignified in terms of foreign exchange earnings and GDP contribution. Similarly, the Indian economy's economic effect is measured in terms of foreign exchange earnings, and its influence to GDP is explained. With total tourist arrivals as independent variables and other variables as dependent variables, a correlation is used to demonstrate the link between the variables of the study, and a simple linear regression model is used to measure the economic impact on the Nepalese and Indian economies. During testing hypotheses, regression analysis was done in EViews 11 using the appropriate regression model.

Model-I

Variable	Coefficient	Std.Error	t-Statistics	Prob.
C	-1520.61	443.0314	-3.432	0.0023
TTAS of Nepal	0.0074	0.0007	10.659	0.0000
R-squared	0.8316	Mean Dependent Var		2806.93
Adjusted R-square	0.8243	S.D. dependent Var		2115.34
S. E. of regression	886.61	Akaike Info Criterion		16.48
Sum squared resid.	180800	Schwarz criterion		16.58
Log likelihood	-204.11	Hannan- Quinn criterion		16.51
F-statistics	113.616	Durbin-Watson stat		0.69
Prob.(F-statistics)	0.00000			

Total tourist arrivals and foreign exchange income show a strong favorable relationship ($p < 0.05$), according to the R value of 0.883. An R^2 value of 0.780, on the other hand, implies that the independent variable is responsible for 78.80 percentage of the change in direct employment. A standard error of 0.001 also indicates that the practical value of foreign money profits from the regression curve is 0.0001 units variable. According to the statistics, overall tourist arrivals have a significant influence on foreign exchange income. It indicates that a rise in overall tourist arrivals strengthened the situation with foreign exchange revenues. According to the results of the regression analysis between total tourist arrivals and foreign exchange profits, total tourist arrivals are a strong predictor of foreign exchange earnings.

Model-II

Variable	Coefficient	Std.Error	t-Statistics	Prob.
C	-4674.44	247.33	-18.89	0.000
TTAS of India	0.0031	4.17E-05	76.60	0.000
R-squared	0.99	Mean Dependent Var		12064.04
Adjusted R-square	0.99	S.D. dependent Var		9078.07
S. E. of regression	579.41	Akaike Info Criterion		15.63
Sum squared resid.	77217	Schwarz criterion		15.73
Log likelihood	-193.48	Hannan- Quinn criterion		15.66
F-statistics	5868.31	Durbin-Watson stat		0.61
Prob.(F-statistics)	0.0000			

The R value of 0.997 suggests a significantly favorable connection ($p < 0.05$) between total tourist arrivals and tourism economy foreign exchange revenues. Similarly, an R-square value of 0.995 indicates that independent factors are responsible for 99.5 percent of the change in foreign exchange earnings. The results reveal that overall tourist arrivals have a significant impact on foreign money revenues. It signifies that an increase in overall tourist arrivals has boosted India's foreign money earnings tremendously. It shows a strong correlation between deviations in total tourist arrivals and differences in foreign money income (Model-II).

Model-III

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	-14078.5	9295.31	-1.514	0.143
FEES of Nepal	55.306	2.664	20.760	0.000
R-squared	0.94	Mean Dependent Var		141643.
Adjusted R-square	0.94	S.D. dependent Var		12004.2
S. E. of regression	2760729	Akaike Info Criterion		23.366
Sum squared resid.	1.75E+10	Schwarz criterion		23.463
Log likelihood	-290.07	Hannan- Quinn criterion		23.393
F-statistics	431.007	Durbin-Watson stat		1.663
Prob.(F-statistics)	0.00000			

The R value of 0.949 suggests a significantly favorable connection ($p < 0.05$) between total tourist arrivals and tourism economy foreign exchange revenues. Similarly, an R-square value of 0.947 indicates that independent factors are responsible for 94.7 percent of the change in foreign exchange earnings. The results reveal that overall tourist arrivals have a significant impact on foreign money revenues. It signifies that an increase in overall tourist arrivals has boosted India's foreign exchange earnings tremendously. It shows a strong correlation between deviations in total tourist arrivals and variations in foreign money revenues (Model-III).

Model-IV

Variable	Coefficient	Std.Error	t-Statistics	Prob.
C	200.230	24.95	8.022	0.000
TTAS of Nepal	90.85	1.665	54.561	0.000
R-squared	0.992	Mean Dependent Var		1296.27
Adjusted R-square	0.992	S.D. dependent Var		827.94
S. E. of regression	74.053	Akaike Info Criterion		11.524
Sum squared resid.	126130.9	Schwarz criterion		11.621
Log likelihood	-142.05	Hannan- Quinn criterion		11.551
F-statistics	2976.9	Durbin-Watson stat		0.861
Prob.(F-statistics)	0.0000			

The R value of 0.992 suggests a significantly favorable connection ($p < 0.05$) between total tourist arrivals and tourism economy foreign exchange revenues. Similarly, an R-square value of 0.992 indicates that independent factors are responsible for 99.2 percent of the change in foreign exchange earnings. The results reveal that overall tourist arrivals have a significant impact on foreign exchange revenues. It implies that an uptick tourist arrivals has boosted India's foreign exchange earnings tremendously. It showed a extensive correlation between deviations in total tourist arrivals and changes in foreign money income (Model-IV).

Conclusions

The tourism business makes a significant contribution to the global economy today. Tourism is a terrific way for individuals to spend money while also attracting new tourists to communities. Traveling a new place and learning about its culture, belief, cuisine, athletic, entertaining programs, and overall way of lifetime is an excellent approach to get the most out of life. The availability of modern tourist hotels, motels, and lodges is crucial to the industry's

success. To lead the company's reaction to escalating market issues, create a common vision or a cohesive mission. Tourist arrivals fluctuate from year to year due to changes in the tourism climate. The tourist industry makes a considerable contribution to several areas of the Nepalese and Indian economies. Tourism contributes significantly to employment and foreign exchange earnings in Nepal's and India's gross domestic product (GDP). In terms of foreign exchange profits, job creation, and GDP contribution, the contribution and economic impact are measured. There is a strong link between total tourist arrivals and foreign exchange profits, as well as a relatively weak link between total tourist arrivals and employment and GDP contribution.

Total tourist arrivals are important forecaster of foreign money profits, according to the results of the regression study between TTA and FEE in both nations. Total foreign tourists and average duration of stay had a significant influence on employment group, GDP, and government fees in both nations throughout the research period. For the tourist industry to thrive, vision and concentration are required, as well as political stability and government and bureaucracy continuity. It's challenging to attract international visitors while also marketing a good. It surely needs the progress of tourist conveniences, the protection of present tourism capitals, adequate tourism sector guideline and oversight, improved staff education, and the identification and development of new tourist destinations. The tourism sector is heavily reliant on the expertise of tour guides. As a result, specific security arrangements should be made in tourist locations, as well as the increase of tourist facilities.

References

- Anupriya, M. & Rajasekaran, R. (2016). Tourism industry: The impact on Indian gross domestic product. *Advance in Economics and Business Management*, 3(6), 612-617.
- Athma, P. & Nalini, G. (2017). Employability in tourism industry in India: An analysis. *International Journal of Management Studies*, 4, Special Issue, November 2017.
- Britton, S.G. (1992). The political economy of tourism in the third world. *Annals of Tourism Research*, 9(3), 331- 358.
- Butler, R.W. (1980). Concept of a tourist area cycle of evolution and implications for management of resources. *The Canadian Geographer*, 24(1), 5-12.
- Corbridge, S. (1986). *Capitalist world development: A critique of radical development geography*. MacMillan.
- Iaonnides, D. (1995). Strengthening the ties between tourism and economic geography: A theoretical agenda. *Professional Geography*, 47(1), 49-60.
- Jenkins, C. & Henr, B. (1982). *Government involvement in tourism in developing countries*. *Annals of Tourism Research*, 499-521.
- KC, D. & Leelabati, D.S. (2016). Tourism development and economic growth in India. *IOSR Journal of Humanities & Social Science*, 21(11), 43-49.
- Knoema (2019). *World data Atlas*. Knoema Enterprises Data Solutions.
- Lipietz, A. (1987). *Mirages and miracles: The crisis of global fordism*. Verso.
- Mahatara, B. (2019). *Tourism industry in Nepal: Make it backbone of economy*. Himalaya Times, Nepal.
- Malhotra, R.K. (1995). *Socio-environmental and legal issues in tourism*. Anmol Publication, New Delhi, p.25.

- Malik, M. M. &Nusrath, A.(2014). A review of tourism development in India. *Golden Research Thoughts*, 3(11). ISSN 2231-5063.
- Milne, S. &Ateljevic,I. (2001). Tourism, economic development and the global- local nexus: Theory embracing complexity. *Tourism Geographies*3(4), 369-393.
- MOF. (2019). *Economic survey 2019/20*.Ministry of Finance. Government of Nepal.
- MOF. (2020). *Economic survey 2020/21*. Ministry of Finance. Government of Nepal.
- MOF. (2010). *Economic survey 2010/11*.Ministry of Finance. Government of Nepal.
- Murphy,P.E.(1994). Tourism and sustainable development. *In global tourism: The next decade*. utterworth-Heinemann.
- Piore, M. J. &Sabel,C.F.(1984).*The second industrial divide: Possibilities for prosperity*.Basic Books.
- Shrestha, M.B. & Shrestha, P.(2000). *Nepalese aviation and tourism*. Kathmandu, Nepal.
- Storper,M.(1990). Industrialization and the regional question in the Third World: Lessons of post imperialism, prospects of post Fordism. *International Journal of Urban and Regional Research*, 14(3), 423-444.
- Stynes,D.J.(1997). *Economic impacts of tourism*. A Handbook for Tourism Professions. Urbana, IL: University of Illions, Tourism Research Laboratory.
- WBG (2018). *Tourism theory of change: Tourism for development*. The World Bank Group.
- WTTC (2019). *Travel and tourism reports of India-2019*. World Tourism & Travel Council Queen Victoria, Terrace.
- WTTC (2015). *Travel and tourism economic impact in Nepal*. World Tourism and Travel Council, Queen Victoria,Terrace.
- Zurub,H.,Ionescu, A.C.&Valentina, D.(2015). Measuring the economic impact of tourism in European emerging markets.*Procedia Economics and Finance*, 32, 95-102.