

## Research Article

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# Indian tourism industry – a yardstick to GDP

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**Abstract:** Tourism industry plays a pivotal role in the economic development of a nation. This industry infuses opportunities with commendable impact on the economy in the areas of generating income, employment opportunities, one of the sources of foreign exchange earnings, infrastructure development and promotion of national heritage and culture, which contributes towards the national gross domestic product (GDP). This article is empirical about the contribution and impact of foreign exchange reserve, earning and the arrival of tourists on the growth of tourism industry and GDP in India. The researcher has collected secondary data, and the variables are assessed with the help of correlation and regression analysis to analyse the impact of tourism towards GDP in the country. The finding of this article is that domestic tourism is the only independent variable having significance in the GDP.

**Keywords:** GDP; Foreign exchange reserve; Tourism, and earnings

## 1 Introduction

Tourism refers to the process of travelling to different places domestically or internationally for business, adventure, holidaying, medical help, education, research, sports, collaborations, entertainment, business events and many other factors. It is one of the important sources of revenue generation, increase in gross domestic product

(GDP) and foreign exchange earnings, which has impact on the economic development driven by the socio-economic factors. It is also influential in the creation of employment opportunities. The service industries that are benefited from tourism include transportation services such as airlines, railways, cruise ships and taxicabs. The hospitality industry that is associated and operates an integrated link with tourism industry offers services such as accommodation in hotels and resorts, entertainment venues such as amusement parks, casinos, shopping malls, music planetariums and theatres.

The tourism industry has proved to be the second highest in generating revenue to the nation and reflects enormous contribution towards the GDP. Indian tourism has resulted in being the second largest attraction places in the world because of robust tourism policy, improvement in infrastructure and associated service sector, rich cultural diversity, heritage, increasing disposable income and emerging trends in tourism products. India has been elected as the head of the UN tourism organisation. India is the leading country in attracting tourists in Asia. Indian tourism contributes 6.7% of GDP against a global average at 9.8%. The GDP is expected to grow, on an average, 7.2% annually.

Indian tourism industry offers diversified quality in terms of culture, historical references, multi-linguistic diversity, diversity of religion and medicinal healing resulting in the significant explosion and expansion of the industry based on the standard of living, increase in the purchasing power, liberalisation privatisation globalisation (LPG), development in the infrastructure supporting the substantial growth in the industry. GDP during 2015 reflected 7.4%. Indian tourism contributes 6.7% of GDP against global average at 9.8%. The GDP is expected to grow, on an average, 7.2% annually with enormous growth in the tourism industry in India.

Tourism holds immense potential for the Indian economy. It can provide impetus to other industries through backward and forward linkages and can contribute significantly to GDP. The travel and tourism industry can be divided into inbound and outbound tourism; inbound refers to countries attracting the largest number of tourists and outbound refers to countries from where the largest number of tourists originate. One-third of

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the foreign exchange earned by India is contributed by the tourism industry. Fifty per cent of foreign exchange earned is exempted from income tax, which increases the scope for the rapid explosion in the service sector through the tourism industry.

The components of tourism industry consist of tourist attractions, transportation (different modes), travel agents, tour operators and tourism information with guide services and hospitality (accommodation and catering). Tourism industry does have an impact on GDP infusing more infrastructure facilities, generation of employment, economic development, boosting foreign reserves and foreign earnings.

The emerging trends in designing tourism products in India comprises of medical tourism, wellness tourism, adventure tourism, heritage tourism, ecotourism, rural tourism, wildlife tourism, MICE (meetings, incentives, conferences and exhibitions) tourism and pilgrimage tourism.

Medical tourism has emerged as one of the important segments of the tourism industry with an average growth of 13% annually. The improving healthcare infrastructure facilities, relatively low cost of treatment and availability of alternative forms of treatment such as homeopathy, ayurveda, yoga, siddha, unani and naturopathy are the key factors in attracting more foreign tourists. Wellness tourism is regarded as a sub-segment of medical tourism which includes ayurvedic therapies, spa visits and yoga meditation. Adventure tourism refers to the performance of acts that require significant efforts and some degree of risk or physical danger. India with its diverse topography and climate offers tremendous scope for adventure tourism, mountaineering, rock climbing, trekking, skiing, skating, mount biking, safaris, river rafting, canoeing and kayaking, scuba diving and snorkelling.

India is well known for its rich heritage and ancient culture. The country's rich heritage is amply reflected in various temples, majestic forts, pleasure gardens, religious monuments, museums, art galleries and urban and rural sites that are citadels of civilisation. Ecotourism is travel to natural areas to appreciate the cultural and natural history of the environment while not disturbing the integrity of the ecosystem and creating economic opportunities that make conservation and protection of natural resources. Rural tourism showcases rural life, art, culture and heritage of rural locations, benefitting the local community economically and socially as well as enabling interaction between the tourists and locals for a more enriching tourism experience. Wildlife tourism, one of the fastest segments of tourism, involves travel to different locations to experience the wildlife in natural

settings with various forms of flora and fauna, and it has numerous species of birds, mammals, reptiles, amphibians, plants and animals.

MICE tourism is also one of the fastest growing sectors in the global tourism industry. It largely caters to business travellers, mostly corporate people in the forms of business meetings, international conferences, conventions, events and exhibitions with pleasurable events for delegates and attendants. India can be competitive with other MICE tourism destinations owing to its natural beauty, rich heritage and geographical diversity. Pilgrimage attracts tourists based on the mythological, historical, spiritual stories and ancestral inheritance of various practices that encourages in upholding the cultural diversity. India is diversified with culture, a religion that brings together enormous tourist attractions in the form of temples, churches, mosques and gurudwaras.

#### Objectives of the study

- To study the Indian tourism industry.
- To analyse the impact of the tourism industry on GDP.

#### Hypothesis

- $H_0^1$ : There is no relationship between the GDP and tourism industry in Indian economy.
- $H_0^2$ : There is no impact of tourism on the GDP in the country.

## 1.1 Methodology

### 1.1.1 Research design

The study is empirical in nature and mainly based on secondary data only.

### 1.1.2 Selection of sample and data collection

The required data for the present study were collected for a period of 10 years (2006–2015) from Ministry of Indian tourism website and Indiastat Database.

### 1.1.3 Variables used in the study

The variables taken for the study includes foreign tourist arrival, domestic tourist arrival, GDP, foreign exchange reserves, service sector and foreign exchange earnings.

### 1.1.4 Tools used for analysis

The summary statistics and per cent analysis are used to study the tourism sector and the foreign and domestic tourist arrivals in the country. The correlation and regression analysis are used to analyse the impact of tourism towards GDP in the country.

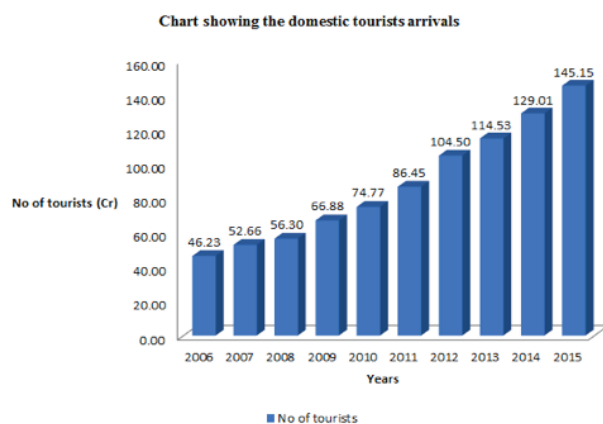
### 1.1.5 Period of the study

The study period consists of 10 years from 2006 to 2015, focusing mainly on tourist arrival data and the GDP of the country.

## 2 Indian tourism industry

The study of Indian tourism industry consists of variables such as domestic tourists, foreign tourist arrivals, GDP, foreign exchange reserve, foreign exchange earning and service sector in a country. Table 1 shows the number of domestic tourists arrival in India during the years 2006–2015; for its graphical representation, see Figure 1.

Figure 1 and Table 1 show that there is a steady increase in the arrivals of domestic tourists within the country because of the awareness created by mass media,



**Figure 1:** Graphical representation of the domestic tourists' arrivals during 2006–2015

**Table 1:** Number of domestic tourists arrival in India during 2006–2015

Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
No of tourists (Crore)	46.23	52.66	56.30	66.88	74.77	86.45	104.50	114.53	129.01	145.15

Source : Annual report, Ministry of Tourism and Indian statistics (2016).

increase in the standard of living, longer holidays with certain incentives granted by various public and private organisations to their employees, changing lifestyles, availability of low cost airlines, easy finance and employment opportunities across country. The Government of India has been promoting Indian tourism extensively at the state level with a campaign named 'Incredible India'. Owing to this, various employment opportunities are available in the form of tourist operators, tourist guides and travel agencies. Table 2 shows the number of foreign tourists arrival in India during the years 2006–2015; for its graphical representation, see Figure 2.

Both Figure 2 and Table 2 reflect that there is a sustainable increase in the arrivals of foreign tourists in India till the year 2008 and drops the post year 2009 because of economic downfall as an impact of global recession. There is a steady increase from the year 2010 as a result of improved economy, growth in IT and outsourcing sectors, ad campaigns by the ministry of tourism, new product offerings, diversified culture and resources, government initiatives and policy support dilution in Visa process and host nation for major international events. We can see fluctuation because of fear of safety of tourists in India, which have resulted in a drop in the number of arrivals. Table 3 shows the foreign exchange earned during the years 2006–2015 in rupees; for its graphical representation, see Figure 3.

Table 3 emphasises a massive increase in the foreign exchange earned through foreign direct investments (FDI) in the tourism industry, which encourages receiving various tax benefits, incentives, subsidies and 100% investment, which is one of the major type forms of investments. Improved economy, greater industrial policies in terms of tourism, exports of art and handicrafts representing heritage culture of various tourists' destinations result in the eventual growth of the inflow in foreign exchange. There is a fluctuation in the earnings as a percentage when compared to previous years because of non-stability of INR against various globally accepted currencies. US dollar (USD) is one of the strongest and globally accepted currencies, which has an impact on the foreign reserves of India. Table 4 shows the foreign exchange earned during the years 2006–2015 in USD; for its graphical representation, see Figure 4.

**Table 2:** Number of foreign tourists arrival in India during 2006–2015

Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Arrivals (Crore)	4.45	5.08	5.28	5.17	5.78	6.31	6.58	6.97	7.68	7.10

Source : Annual report, Ministry of Tourism and Indian statistics (2016).

**Table 3:** Foreign exchange earned during 2006–2015.

Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Foreign exchange earnings (rupees in crores)	39,025	44,360	51,294	53,700	64,889	77,591	94,487	1,07,671	1,23,320	82,225

Source: Annual report, Ministry of Tourism and Indian statistics (2016).

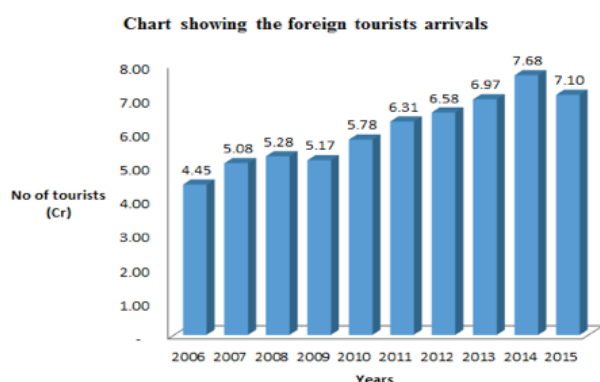
**Figure 2:** Graphical representation of the number of foreign tourists arrival in India during 2006–2015

Table 4 projects an increase in the foreign exchange earned in terms of USD until the year 2008, which has dropped in the year 2009 as a result of aftermath effects of global recession. The year 2010 sets the trend in infusing the foreign exchanges on an account of hosting Commonwealth games. The year 2015 shows the highest earnings because of more inbound tourists on an account of an International Film Festival of India (IFFI) being hosted at Panaji, Goa. There could be more inflow of foreign exchange to India in the form of reserves if the government encourages more FDI through 100% investment. Table 5 shows the GDP during the years 2006–2015; for its graphical representation, see Figure 5.

Figure 5 and Table 5 reflect that GDP is the highest (13%) in the year 2010 because of the growth in the manufacturing and service sectors (financing, insurance, real estate, transport, storage and communication) contributing towards the development of the nation. Liberal government policies, tourism entrepreneurship, enormous employment opportunities to various types of labour

**Figure 3:** Graphical representation of the foreign exchange earned during 2006–2015.

(skilled and unskilled), the impact of direct economic activities related to sectors of hospitality such as accommodation, transportation, entertainment and indirect economic activities such as investment in tourism and hospitality sectors. There is a fluctuation from the year 2011 through 2015 because of foreign exchange reserves and a ban on various exportable goods by western countries because of low standards.

### 3 Impact of tourism on gross domestic product

The impact of tourism is assessed using the following variables: foreign exchange reserve, foreign exchange earnings, foreign tourist arrivals, domestic tourist arrivals and service sector along with the GDP. The correlation and regression analysis are used to assess the impact of tourism on GDP using the abovementioned variables.

**Table 4:** Foreign exchange earned in USD during 2006–2015.

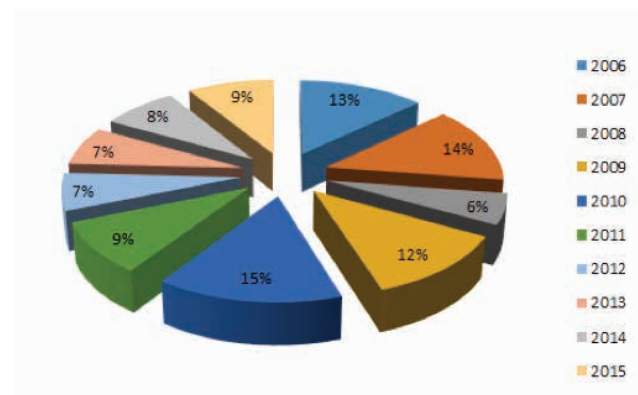
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Foreign Exchange earnings (in million USD)	8,634	10,729	11,832	11,136	14,193	16,564	17,737	18,445	20,236	21,071

Source: Annual report, Ministry of Tourism and Indian statistics (2016).

**Table 5:** Gross domestic product (GDP) during 2006–2015.

Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
GDP (%)	9.3	9.8	3.9	8.5	10.3	6.6	4.7	5.0	5.6	6.4

Source: Annual report, Ministry of Tourism and Indian statistics (2016).

**Figure 4:** Graphical representation of the Foreign exchange earned in USD during 2006–2015.**Figure 5:** Graphical representation of the gross domestic product (GDP) during 2006–2015.

$H_0^1$ : There is no relationship between the GDP and tourism in the country

Table 6 depicts the relationship between the tourism variables and the GDP in the country. It is observed that it is significant at 0.01% level on foreign tourist arrival, domestic tourist arrival, foreign exchange reserve and foreign exchange earnings and is significant at 0.05% level on service sector. Hence, the null hypothesis is rejected ( $H_0^1$ ), so there is a significant relationship between the GDP and tourism in the country. The service sector shows negative significance towards the GDP in the country, because of the recession as an impact of the downfall of Lehman brothers in the United States. The recession during the year 2008–2010 restricted various financial institutions from funding service industries.

Table 7 predicts that the independent variables such as a foreign tourist, foreign exchange reserve, service sector and foreign exchange earnings are not significant but the domestic tourist alone is significant at 0.10% level

towards the dependent variable GDP. The overall model of simple linear regression fits the equation because of the ANOVA (F) is significant at 0.001% level. The R-squared value .984 (98%) means that the independent variables have more effect on the dependent variable. As the P value (F) is significant, it rejects the null hypothesis ( $H_0^2$ ), so domestic tourist has an impact on the GDP of the country as a result of increasing disposable income, improved travel services offered across tourist operating agencies and spiritual as well as health awareness.

## 4 Conclusion

The tourism industry is one of the most important sectors in the economic development in India. The result shows that there is a significant relationship between GDP and tourism in Indian economy. It is mainly due to the impact

**Table 6:** Relationship between gross domestic products and tourism

Pearson correlation coefficients (two-tailed significance levels)						
Particulars	GDP	FTA	DTA	FER	SER	FEE
GDP	1	(.957)**	(.991)**	(.966)**	(-.659)*	(.907)**
FTA		1	(.907)**	(.989)**	-.589	(.969)**
DTA			1	(.976)**	(-.654)*	(.927)**
FER				1	-.550	(.941)**
SER					1	-.577
FEE						1

\*\*Correlation is significant at the 0.01 level (two-tailed).

\*Correlation is significant at the 0.05 level (two-tailed).

Source: Computed results based on compiled data collected from annual report, Ministry of Tourism.

**Table 7:** Impact of tourism on the GDP of the country

Particulars	Coefficients	t value	Significance
Constant	2.177	2.392	.075
Foreign tourist	-.015	-.176	.869
Domestic tourist	-.048	2.516	(.066)*
Foreign exchange reserve	.013	.292	.785
Service sector	.000	-.323	.763
Foreign exchange earning	-.003	-.206	.847
R squared value	.984		
Adjust R squared value	.964		
F value	49.281		
P value	(.001)**		

\*\* Significant at 0.01% level.

\* Significant at 0.10% level

Source: Computed results based on compiled data collected from annual report, Ministry of Tourism.

of foreign tourist arrivals, domestic tourist arrivals, foreign exchange reserves and foreign exchange earnings on GDP. There is also the negative impact of service sector on the GDP because of the downfall of the global economy. However, domestic tourist arrivals have a significant bearing on the GDP because of factors such as disposable incomes, improved standard of living, tourism policies and spiritual commitments. The tourism industry can be robust in generating more foreign exchange reserves, contributing to foreign exchange earnings if the government of India concentrates on increasing the infrastructure and

upgrading the products, tourism policies and encourages to host various international events.

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