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## Analysis of Trend and Pattern of Tourists' Arrival: A Case Study of Desert Tourist Circuit, Rajasthan

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# Analysis of Trend and Pattern of Tourists' Arrival: A Case Study of Desert Tourist Circuit, Rajasthan

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## Abstract

Tourism is one of the fastest-growing industries in the world economy particularly in developing countries. It is an important tool for the development of destinations' economies and provides various socio-cultural and economic benefits such as employment generation, foreign capital exchange, infrastructure development, investment of capital, preservation of heritage sites, etc. Rajasthan is one of the most popular tourist destinations on the world's map due to its diverse socio-cultural landscape. The desert tourist circuit has immense potential for attracting a large number of domestic as well as foreign tourists. The main aim of this study is to examine the trend and pattern of tourist arrival in the desert tourist circuit. This study is based on the secondary data collected from the Rajasthan Tourism Development Corporation (RTDC), Jaipur. The annual growth rate and regression analysis have been calculated to achieve the study's objective.

**Keywords:** Tourist arrival, Trend, Annual growth rate, Desert circuit

## Introduction

Tourism is one of the ways through which our perception of 'world-view' is shaped. It is a type of travel in which individuals go to a specific location for several purposes, such as leisure, commerce, education, and religious activities. The travel and tourism industry has now been among the fastest-growing economies on the globe (World Travel and Tourism Council, 2006). It's a crucial instrument for boosting tourism destinations' economies and improving the nexus of international, national, and interregional ties. (Gill and Singh, 2013). This sector contributes significantly to the economy of any country, giving several socio-economic benefits such as job creation, foreign capital exchange, and the expansion and development of other industries like agriculture, construction, and handicrafts, among others. (Jaiswal et al., 2017). Ethnic

tourism, cultural tourism, environmental tourism, recreational tourism, rural tourism, pilgrim tourism, medical tourism, spiritual tourism, business tourism, adventure tourism, and so on are examples of many types of tourism that exist based on forms, nature, preferences, and purposes (Singh & Sah, 2017). The tourist business is a major source of gross revenue and foreign exchange profits, and it is critical to any country's economic development. In 2019, Travel and tourism activities contributed US \$ 9.2 trillion to the global economy, accounting for 10.4 percent of the global GDP. In 2019, this sector supported 374 million employments globally (10.6 percent of all jobs) and organized \$ 1.7 trillion in exports (6.8% of overall exports, 27.4% of global services exports) (WTTC, 2019). The tourism industry in India has long been seen as a major source of economic development due to its strong forward and backward links with the country's other major sectors (Rana and Kumar, 2016). According to the WTTC (2019) report, India is anticipated to become the world's third-largest travel and tourism economy by 2028, in terms of both direct and total GDP. In 2019, India's tourism industry earned \$194 billion (6.8% of GDP), and it is predicted to generate \$460 billion (9.9% of GDP) by 2028, with an annual growth rate of 6.9%. In India, this business supported 39.80 million jobs in 2019, and it is predicted that by 2028, this industry will have generated over 10 million jobs (WTTC, 2019). Rajasthan is one of India's most enticing tourist sites for domestic and foreign travelers. Rajasthan is known for its diversity and has a distinct place on the world tourism map in terms of natural resources, culture, heritage, and historical hotels, and the lure of touring the state on wheels has been the state's unique selling offer for visitors. Tourists also appreciate colorful fairs and festivals. The state's western region's distinctive desert landscape is also a big draw for travelers. It is known as the world's most opulent art and craft center.

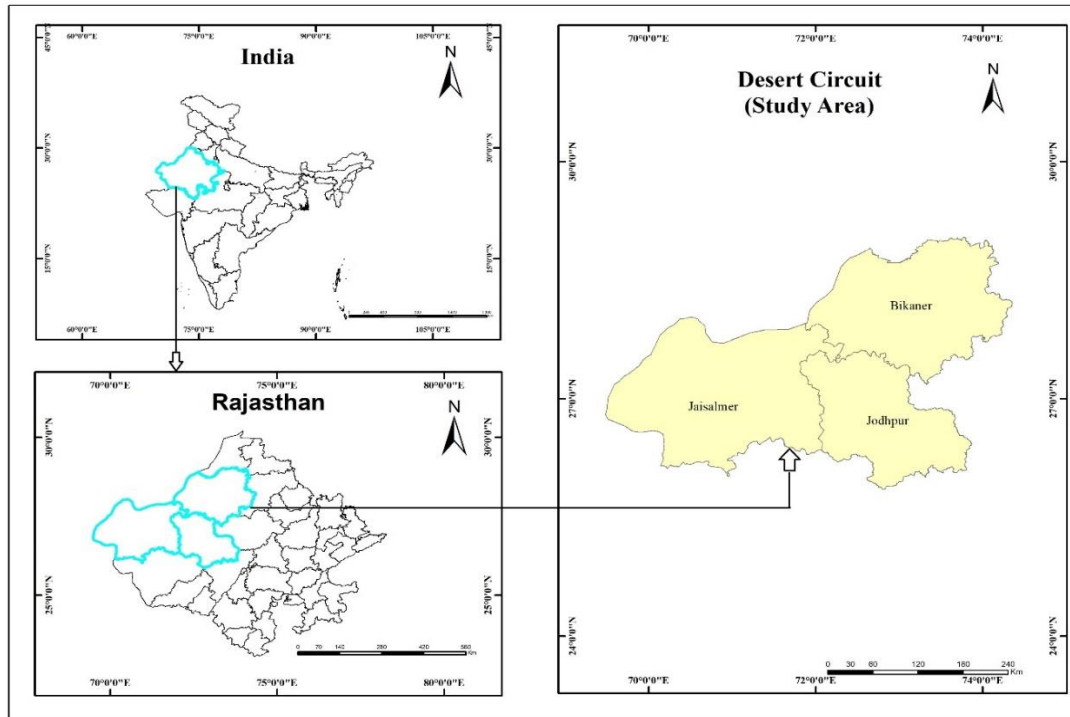
### **Objectives:**

The following are the objective of the study:

- To analyze the trends of tourists' arrival in the Desert circuit from 2001-to 2020.
- To examine the growth and pattern of tourists' arrival in the Desert circuit from 2001 to 2020.
- To analyze the tourist accommodation in the study area.

### **Study Area:**

Due to its wonderful and scenic landscape, the desert tourism circuit is one of the most attractive tourist destinations. The study is located between 26°20' N to 28°01' N and 69°20' E to 73°18' E. It is situated near the Indo-Pak border. The study area consists of 88,495 km<sup>2</sup> which is 25.85% of the state's total area. This circuit has a population density of 76 persons per square kilometer with a total population of 6721021 persons. 229 meters is the average elevation of the study area. The climate of the area is hot and dry throughout the year except for a short period of Monsoon.



### Database and Methodology:

The systematic process of identifying an issue, collecting facts or data, interpreting the evidence, and reaching a conclusion is known as research. The following is a list of research methods:

#### Data Collection:

The present study is based on secondary data published by various government or non-government agencies and organizations. The data has been collected from the official website of the World Travel and Tourism Council (WTTC), the United Nations World Tourism Organisation (UNWTO), the Ministry of Tourism, Govt. of India, and the Rajasthan Tourism Development Corporation (RTDC). The study also used the data and information provided by various reports, articles, literature, and internet sources.

#### Data Analysis:

The annual growth rate (AGR) was calculated to examine the percentage change in each year:

- **Annual Growth Rate (AGR) = Present year – Base year / Base year × 100**

To analyze the annual trend in tourist arrivals in the study area, a linear regression model has been used: -

- **$Y = mx + c$**

Where  $m$  is the rate of change and  $c$  is the Y-intercept of the line

Various cartographic tools were used to characterize the trends and patterns of tourist arrivals and the availability of tourism accommodation in the state.

**Result and Discussion:**

**Figure 1. Domestic Tourist Arrival in Desert Circuit**



Source: Rajasthan Tourism Development Corporation, Jaipur

Figure 1 shows the year-wise domestic tourists’ arrival in the desert circuit of Rajasthan from 2001 to 2020. The number of domestic tourists arriving in this circuit was 6.72 Lakhs in 2001 and gradually increased to 9.96 Lakhs in 2011. The number of tourist arrival suddenly decreased in 2012 to 8.34 Lakhs. There are various reasons for this, including malpractice in shopping, poor tourist safety at destinations, lack of instructions, and lack of public awareness of the destinations. All these factors have adversely affected the tourist’s arrival. In 2013, the number of tourists increased to 8.84 Lakhs and continuously grew to 17.83 Lakhs in 2019. Again in 2020, the number of tourist arrival drastically decreased to 4.30 Lakhs due to the Covid-19 pandemic.

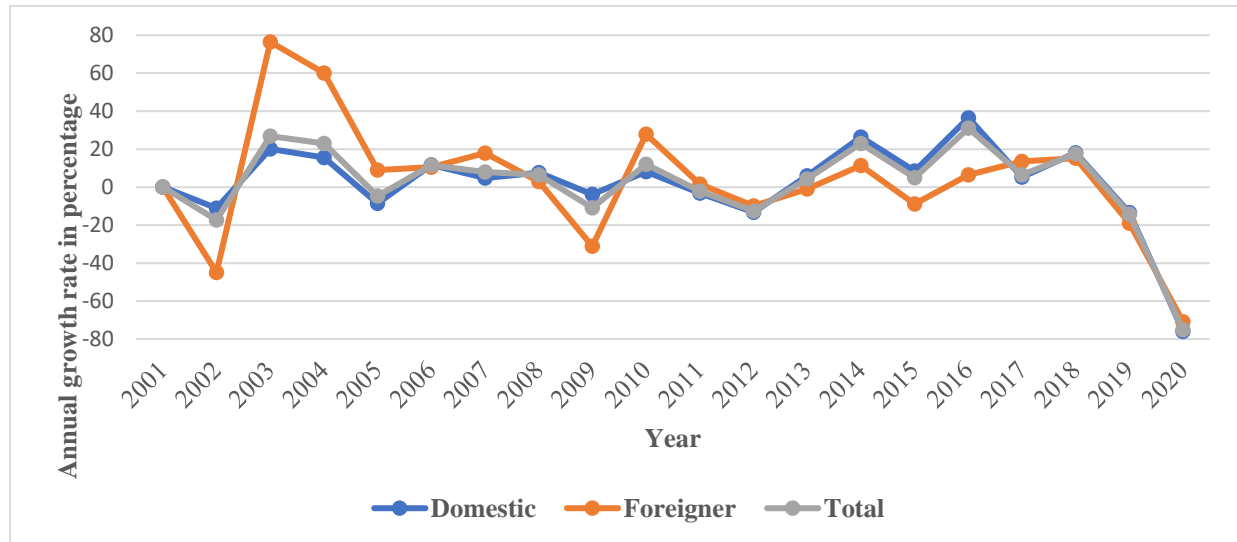
**Figure 2. Foreign Tourist Arrival in Desert Circuit**



Source: Rajasthan Tourism Development Corporation, Jaipur

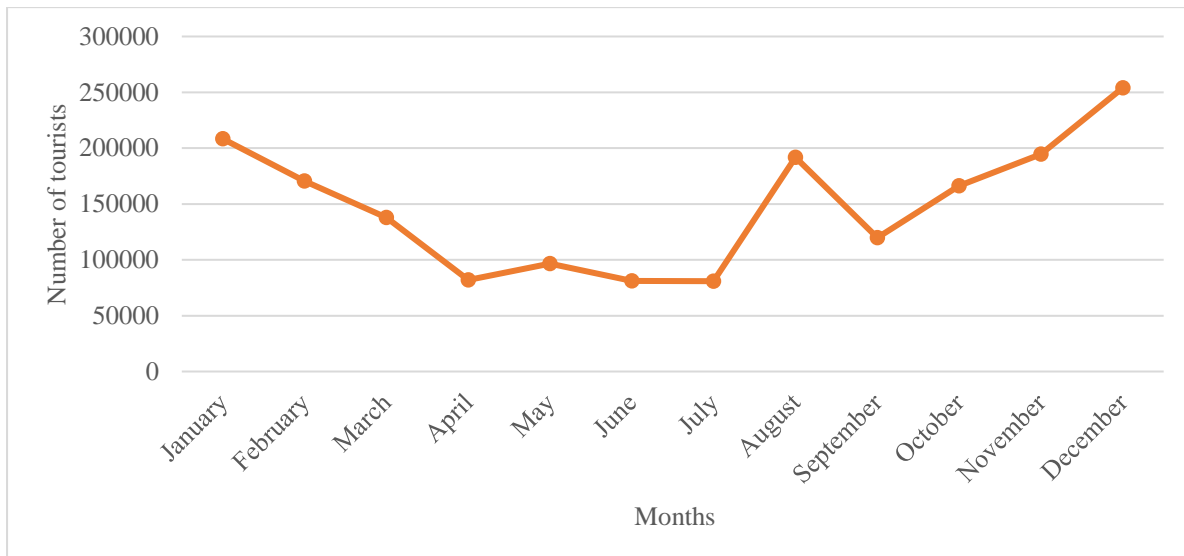
Figure 2 shows the year-wise foreign tourist arrival in the desert circuit of Rajasthan from 2001 to 2020. The number of foreign tourists arriving in this circuit was 1.48 Lakhs in 2001 and continuously increased to 3.36 Lakhs in 2008. But in 2009, the number of foreign tourists arriving suddenly declined due to 9 serial bombs explosion in Jaipur city. After that, the number of foreign tourists continuously increased from 2.96 Lakhs in 2010 to 3.07 Lakhs in 2019. In 2020, the number of tourist arrival declined to 0.89 Lakhs due to the Covid-19 pandemic.

**Figure 3. The annual growth rate of tourist arrival in Desert Circuit**



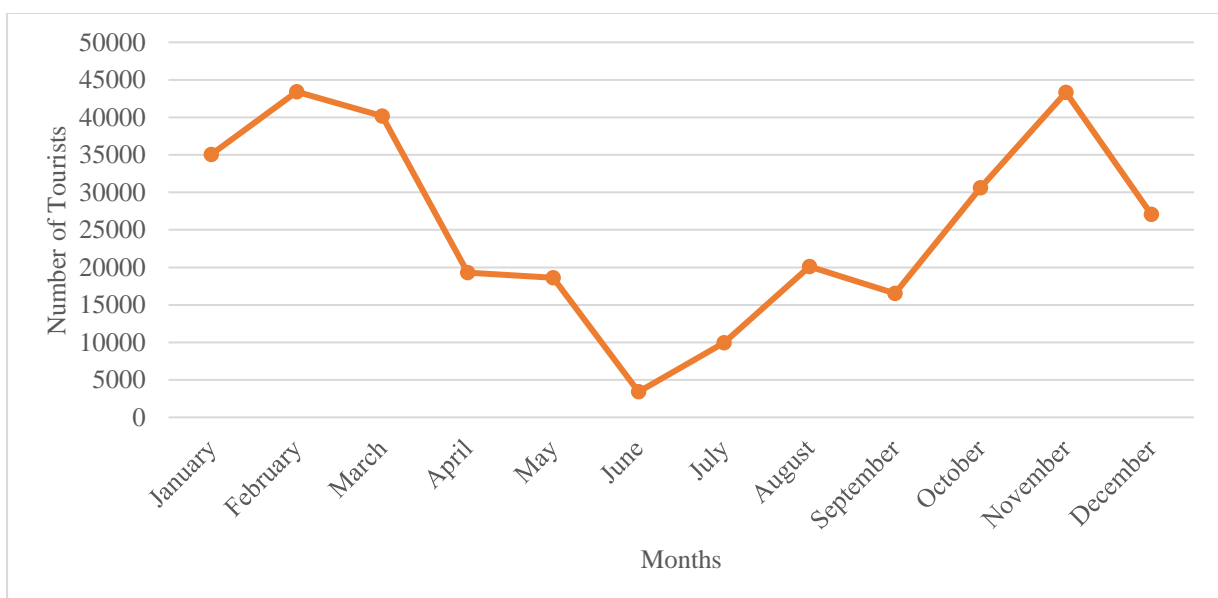
Source: Rajasthan Tourism Development Corporation, Jaipur

Figure 3 shows the annual growth rate of domestic, foreign, and total tourist arrival in the study area from 2001 to 2020. Data examines a continuously increasing trend in tourists' arrival in the study area. In 2002, the AGR of domestic, foreign, and total tourist arrivals were negative at -11.10 percent, -45 percent, and -17.22% respectively. The AGR of domestic, foreign, and total tourist arrivals increased by 11.76%, 10.43%, and 11.43% in 2006 respectively. The highest AGR of domestic tourist arrival has been observed in 2016 is 36.50 percent, while in foreign tourist arrival, it has been observed in 2003 that is 76.44 percent, and in total tourist arrival, it has been observed in 2016 that is 31.01 percent. Due to the Covid-19 pandemic, a negative AGR of domestic, foreign, and total tourist arrival has been reported in 2020 with -75.89 percent, -70.85 percent, and -75.14 percent respectively.

**Figure 4. Month Wise Domestic Tourists' Arrival, 2019**

Source: Rajasthan Tourism Development Corporation, Jaipur

Figure 4 shows the month-wise domestic tourists' arrival at the desert tourist circuit of Rajasthan in 2019. According to this graph, the peak month for domestic tourist arrivals in this circuit was December and January month with 2.53 Lakhs and 2.08 Lakhs followed by November and August month with 1.94 Lakhs and 1.91 Lakhs respectively. This circuit lies in a hot and dry climate; therefore, visitors have preferred these months. The monsoon is arriving in August month; therefore, the number of tourists is high. On the other hand, the lean month for domestic tourist arrival was June and July with 0.81 Lakhs and 0.80 Lakhs respectively. The following months of the lean month are April (0.82 Lakhs), May (0.96 Lakhs), and September (1.19 Lakhs) respectively.

**Figure 5. Month Wise Foreign Tourists' Arrival, 2019**

Source: Rajasthan Tourism Development Corporation, Jaipur



Figure 5 shows the month-wise foreign tourists' arrival in the desert circuit of Rajasthan in 2019. This graph shows that the two peak months observed from FTAs were February and November, with 43.41 thousand and 43.33 thousand tourist arrival followed by March and January, with 40.16 thousand and 35.05 thousand tourist arrival respectively. Because the top 6 source countries of FTAs belong to the temperate region, they have preferred to visit in these months. On the other hand, the lean month for FTAs was June and July month with 3408 and 9947 tourists followed by September and May month with 16.51 thousand and 18.59 thousand respectively.

**Table 1. Tourism Accommodation Unit in Desert Tourist Circuit**

Years	Hotels & Dharmshalas			Paying Guest House			Total		
	Hotels	Rooms	Beds	PG	Rooms	Beds	Hotels & PG	Rooms	Beds
2015	385	8609	18906	112	511	965	497	9120	19258
2016	408	8393	18293	111	501	985	519	8894	19891
2017	412	8495	19106	111	503	965	523	8998	20071
2018	415	9121	21120	113	509	977	528	9630	22097
2019	415	9023	19634	113	509	977	528	9532	20611
2020	430	10374	20781	163	750	1475	593	11124	22256

Source: Rajasthan Tourism Development Corporation, Jaipur

Table 1 shows the availability of tourism accommodation units in the desert tourist circuit from 2015 to 2020. In 2015, there were 385 hotels unit and 8609 rooms with a bed capacity of 18906 and 112 paying guest houses, and 511 rooms with a bed capacity of 965. The number of these units increased as the number of tourists arriving in the study area increased. The number of hotel units increased from 408 hotel units and 8393 rooms with a bed capacity of 18293 in 2016 to 430 hotel units, and 10374 rooms with a bed capacity of 20781 in 2020. On the other hand, the number of paying guests' houses increased from 111 paying guests' houses, 501 rooms with a bed capacity of 985 to 163 paying guest houses, and 750 rooms with a bed capacity of 1475.

### Conclusion:

The tourism industry has become one of the keys to the development of any nation. It is a vital tool for developing countries like India to build their economies. It provides a variety of socio-economic benefits to the countries such as job creation, foreign capital exchange, etc. The study shows that there is an increasing trend of domestic as well as foreign tourist arrival. The number of domestic tourist arrival in 2001 was 6.72 Lakhs which increased by 17.83 Lakhs in 2019. While the number of FTAs in 2001 was 1.48 Lakhs which increased by 3.07 Lakhs in 2019. The study also reveals that there is a fluctuation in AGR of domestic, foreign, and total tourists' arrival in the study area. Three peaks and three dips have been observed in domestic tourist

arrival. The peaks have been observed in 2003, 2014, and 2016 and the dips have been observed in 2005, 2008, and 2019. On the other hand, there were two peaks and three dips have been observed in FTAs. The peaks were shown in 2003 and 2010, while the dips have been observed in 2002, 2009, and 2019. The study also reveals that there is a seasonal fluctuation in tourists' arrival in the study area. The highest number of domestic tourists arrived in January, February and November, and December months, while the lowest number of tourists arrived in April, May, June, and July months. On the other hand, the highest number of FTAs observed in November, February, and March months while the trend of the lowest number of tourists follows the trend of domestic tourists' arrival.

The government's ongoing marketing and promotional operations strategy has increased with visitor arrivals. The state govt. has taken many steps, including a new tourism policy, to make the state one of India's most popular tourist destinations.

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