# Assessing the Contribution of Tourism to Economic Growth in Nepal

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#### **Abstract**

This study examines the impact of tourism on Nepal's economic growth using time-series data from 2001 to 2024. Employing linear and multiple regression analyses, results show a significant upward trend in tourist arrivals, increasing by approximately 1,493 visitors annually, and a corresponding rise in tourism's contribution to GDP by 0.0184 percentage points per year. A strong positive correlation (r = 0.87) between tourist arrivals and GDP contribution underscores tourism's key role in economic development. Despite a sharp decline in tourism during 2020 due to the COVID-19 pandemic, structural break analysis indicates a resilient recovery in subsequent years. Stationarity tests show that important variables were not stable, so we adjusted the data to make it suitable for accurate time-series modeling. Findings highlight the sustained and growing economic importance of tourism in Nepal and suggest avenues for future research incorporating advanced modeling techniques.

## Article Info

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## 1. Introduction

Among the various sources of economic growth in Nepal, tourism is a potential source. It also contributes to the revenue of Nepal. Here's an overview of the tourism sector from 2001 to 2024, focusing on annual arrivals of tourists, contribution to GDP, and average length of stay of tourists. The tourism sector in Nepal faced a major setback during 2015 due to the earthquake and the border blockade, which caused a substantial drop in tourist arrivals and GDP contribution. However, the sector showed a strong recovery from 2016 onwards, especially in 2018-2019, before the global COVID-19 pandemic caused another sharp decline. In 2022, 2023, and 2024, the sector rebounded significantly, and the contribution of tourism to GDP continued to grow, reflecting a recovery after the pandemic. In 2020, international tourist arrivals dropped by 73.1% compared to 2019, mainly due to the COVID-19 pandemic (UNWTO, 2021b). Excluding the pandemic period, tourism is one of the fastest-growing sectors in the global economy, driven by higher incomes and better air connectivity. As tourism's importance in the global economy grows, studies examining its effects on growth, employment, and foreign exchange earnings are also increasing. Research has shown that tourism contributes to economic growth (Balaguer & Cantavella-Jorda, 2002; Cannonier & Burke, 2018; Gunduz & Hatemi-J, 2006; Neuts, 2019). A review of nearly 100 studies by Brida et al. (2014) confirmed that, with few exceptions, the tourism-led growth hypothesis holds true in most countries. This has led many countries to prioritize the development of their tourism industry. In developed nations, tourism is a crucial part of the economy and well-being, while even developing countries have successfully boosted their economic profile through tourism expansion (Khizindar, 2012).

Nepal stands out as a premier tourist destination, offering a rich blend of historical, natural, and cultural attractions. As the birthplace of Lord Gautam Buddha, Lumbini is a major pilgrimage site for Buddhists worldwide, while Pashupatinath is revered as a sacred Hindu

temple, attracting millions of devotees annually. Nepal is also home to some of the world's most famous mountain peaks, including Mount Everest, the highest peak on Earth, as well as Kanchenjunga, Lhotse, and Makalu. The country boasts eight peaks exceeding 8,000 meters in height, out of only 14 such mountains globally. Beyond its natural beauty, Nepal is also renowned for its rich cultural diversity, both tangible and intangible, making it an exceptional destination for cultural and religious tourism.

To promote and develop tourism, the Government of Nepal established the Nepal Tourism Board through the Nepal Tourism Board Act of 1997. The Tourism Act of 1978 and the Tourism Policy of 2008 were designed to expand tourism and use it as a tool for economic transformation. Furthermore, the National Tourism Strategic Plan (2016-2025) was adopted to strengthen the sector's role in the country's development. Despite these efforts, tourism's contribution to Nepal's economy remains modest. According to Bhattarai et al. (2021), tourism's impact on foreign exchange generation and employment has been limited. From 2011 to 2019, the foreign exchange earned from tourism averaged only 1.87% of GDP (MOCTCA, 2021). The government's initiative to declare 2020 as Visit Nepal Year was unfortunately disrupted by the COVID-19 pandemic, which further delayed the sector's growth. A substantial body of research exists on the relationship between tourism and economic growth in various countries, as the tourism industry has been recognized as a potential driver of economic development. However, in the context of Nepal, studies on this topic remain limited, despite the government's significant emphasis on the tourism sector. This study seeks to address this gap and contribute to the existing literature on tourism and economic growth. Specifically, the objective of this research is to analyze the impact of foreign tourism on the economic growth of Nepal.

## 1.1. Review of literature

The nexus between tourism and economic growth has been widely explored through multiple theoretical frameworks. The Tourism-Led Growth Hypothesis (TLGH) suggests that tourism serves as a catalyst for economic development by stimulating foreign exchange earnings, employment creation, infrastructure investment, and cultural exchange (Balaguer & Cantavella-Jorda, 2002). This perspective asserts that increased tourism demand contributes to income generation, which supports capital accumulation and long-term economic expansion.

Complementing this view, the Keynesian framework emphasizes tourism's role in enhancing aggregate demand via multiplier effects, wherein tourist expenditures circulate through various sectors of the economy (Fayissa, Nsiah, & Tadasse, 2008). The endogenous growth theory further underscores tourism's capacity to drive development by fostering human capital, encouraging technological spillovers, and strengthening institutional frameworks, particularly in low- and middle-income countries (Sequeira & Nunes, 2008).

Conversely, some scholars highlight limitations to the tourism-growth relationship. The reverse causality argument posits that economic growth may itself stimulate tourism through improved infrastructure, income levels, and governance (Dritsakis, 2004). Moreover, the resource curse theory warns against over-reliance on tourism, citing risks related to economic volatility, environmental degradation, and seasonal instability (Sharpley, 2009).

In developing economies such as Nepal, tourism is widely regarded as a strategic sector for achieving inclusive and sustainable development. The industry not only contributes to foreign exchange reserves and job creation but also promotes regional economic diversification and supports small and medium-sized enterprises (UNWTO, 2021; WTTC, 2023).

Tourism is widely recognized as a vital sector for fostering economic development, as evidenced by numerous studies conducted globally up to 2024. Various methodological approaches have been applied to examine this relationship in different contexts. For instance, Ghali (1976) analyzed tourism's role in Hawaii's economic growth through an expanded growth equation, while Diamond (1977) explored tourism's contribution to economic development in Turkey and other countries. Jimenez and Ortuno (2005) proposed a framework to assess tourism's economic impact across developed and developing nations, and Zhang (2001) demonstrated the applicability of regional economic models to analyze tourism's effects on policy areas such as agriculture and transport.

In Nepal, researchers have applied various models to study tourism's economic role. Burger (1978), Khadka (1993), and Pradhananga (1993) employed the Input-Output Model, whereas Shrestha (1998), Sharma (2001), and Upadhyaya (2004) used simple regression analyses. Internationally, Balaguer and Cantavella-Jorda (2002) tested the TLGH in Spain using quarterly data and found that economic growth was significantly influenced by international tourism expansion. Similarly, Zortuk (2009) and Khalil et al. (2007) investigated tourism's economic impact in Turkey and Pakistan, respectively, applying Granger causality and co-integration tests, which confirmed a unidirectional causal relationship from tourism to economic growth.

Early works like Balaguer and Cantavella-Jorda (2002) laid the foundation for the tourism-led growth hypothesis (TLGH), which suggests that tourism fosters long-term economic growth. Their study on Spain (1975-1997) found that tourism positively impacted the country's economic growth, affirming the validity of the TLGH. This hypothesis was further supported by Dritsakis (2004), who found that international tourism earnings contributed to Greece's economic growth between 1960 and 2000. Subsequent studies also corroborated the tourism-growth relationship, albeit with some variations depending on the context. Tourism is often seen as an important factor that supports economic growth, especially in developing countries. The tourism-led growth theory suggests that tourism helps boost the economy by creating jobs, attracting investment, and increasing demand for local goods and services. For example, Durbarry (2004) found that tourism income had a strong positive effect on economic growth in Mauritius between 1970 and 1999. Likewise, Fauzel et al. (2016) showed that both tourism and foreign investment helped improve economic growth in Mauritius from 1984 to 2014.

Studies in developing economies revealed similar trends. For example, Pan and Dossou (2019), in a study on the Republic of Benin (1995-2015), found both short-term and long-term positive relationships between tourism and economic growth. In the Caribbean, Cannonier and Burke (2018) analyzed 15 countries from 1980-2015, concluding that tourism positively influenced economic growth in the region. Salifou and Haq (2016) validated the tourism-led growth hypothesis for 11 West African countries, showing that tourism played a significant role in regional economic growth. However, there were exceptions to the tourism-led growth model. Bouzahzah and Menyari (2013) found mixed results for Morocco and Tunisia (1980-2010). While tourism receipts had a positive impact on GDP in the short run for both countries, long-term results were inconclusive for Tunisia, indicating that the relationship may not be as strong or consistent. Similarly, Srinivasan et al. (2012) found that tourism had a positive impact on Sri Lanka's economy, though the effect was more substantial in the long run than in the short term.

In the case of Nepal, studies like Gautam (2011) highlighted a dynamic short-term relationship between tourism income and GDP, as well as a long-run cointegrating relationship. This is consistent with other studies in the region, where tourism plays a role in economic growth, though the extent and nature of this relationship may vary. More recent studies continue to explore this dynamic relationship. For instance, Dogru and Bulut (2018) and Ridderstaat et al. (2014) found evidence of a bidirectional relationship between tourism and economic growth, challenging the notion of a purely unidirectional influence. These studies suggest that tourism may both contribute to and be influenced by economic growth, depending on the socio-economic and political context.

Tourism in Nepal has experienced significant fluctuations since the country opened its doors to foreign visitors in 1951 (MOCTCA, 2016). According to the Ministry of Culture, Tourism, and Civil Aviation (MOCTCA), tourism statistics have been published for a span of 57 years, from 1964 to 2020, providing valuable insights into the sector's growth and challenges (MOCTCA, 2021). In 1964, Nepal recorded 9,526 tourist arrivals, and by 2019, this number had risen to 1,197,191, reflecting a steady increase in foreign tourist visits. However, the year 2020 witnessed a dramatic drop in tourist arrivals to just 230,085, largely due to the COVID-19 pandemic, which severely disrupted global travel. Despite this setback, the average annual growth rate of tourist arrivals from 1964 to 2020 stood at 10.29%. The data reveals that from 1966 to 1980, Nepal saw a continuous rise in tourist arrivals, followed by periods of fluctuation in the 1981-1993 and 2000-2015 intervals. From 1994 to 1999, there was another phase of consistent growth, and from 2016 to 2019, a notable and uninterrupted increase in tourist numbers was observed.

However, the pandemic in 2020 marked a sharp decline in arrivals, underscoring the vulnerability of Nepal's tourism industry to external shocks. The situation improved in 2021, with tourist arrivals reaching 150,000, marking a 34.8% decline compared to pre-pandemic levels (MOCTCA, 2021). By 2022, the number of tourists rebounded to 614,869, showing a substantial recovery with a growth rate of 309.91%. This recovery trend continued into 2023, with arrivals reaching 1,014,885, a remarkable growth of 65.05% compared to the previous year. In 2024, Nepal saw a continued positive trajectory, with tourist arrivals hitting 1,147,567, indicating a further recovery and growth of 13.07%. Throughout these years, the highest growth rate was 53.7% in 1989, but several years of decline marked the tourism landscape. Key years of decline include 1965, 1981, 1984, 1993, 2000, 2001, 2002, 2005, 2008, 2013, 2014, 2015, and 2020. Notably, the Maoist insurgency during the early 2000s, the global economic crisis of 2008, and the devastating earthquake and subsequent Indian economic blockade in 2015 were significant factors contributing to these declines.

The sudden drops in 2013 and 2014 were particularly unexpected, highlighting the inherent volatility of Nepal's tourism sector, which has been influenced by both domestic and international events. Overall, while Nepal's tourism industry has witnessed remarkable growth over the decades, its vulnerability to political instability, global economic downturns, and unforeseen crises like the COVID-19 pandemic has made it a highly volatile sector. This variability underscores the need for robust strategies to mitigate external shocks and ensure the sustained development of Nepal's tourism industry in the future.

## 1.2. The tourist arrivals, growth rate, and contribution to GDP

The analysis of tourist arrivals, growth rates, and contributions to GDP is based on data from 2001 to 2024, as presented below.

Table 1. Tourist Arrivals, Growth Rate, and Contribution to GDP (2001-2024)

Year	Tourist Arrivals	Growth Rate (%)	Contribution to GDP (%)
2001	398,000	-0.50	3.4
2002	323,000	-18.84	3.2
2003	334,000	3.40	3.4
2004	383,000	14.67	3.5
2005	383,000	0.00	3.5
2006	447,000	16.71	3.7
2007	509,000	13.87	3.9
2008	444,000	-12.77	3.8
2009	374,000	-15.76	3.7
2010	602,000	60.96	4.0
2011	736,215	22.10	4.4
2012	803,092	9.10	4.6
2013	797,616	-0.70	4.7
2014	790,118	-0.90	4.9
2015	538,970	-32.00	3.1
2016	753,002	40.00	4.0
2017	940,218	25.00	5.0
2018	1,173,072	25.00	7.0
2019	1,197,191	2.10	7.9
2020	230,085	-80.78	3.0
2021	150,000	-34.80	2.3
2022	614,869	309.91	4.3
2023	1,014,885	65.05	6.5
2024	1,147,567	13.07	7.0

Source: Ministry of Culture, Tourism & Civil Aviation. (2024).

The data from Table 1 highlights the significant fluctuations in tourist arrivals, growth rate, and their contribution to Nepal's GDP over the past two decades. From 2001 to 2019, Nepal saw a steady increase in tourist arrivals, with significant growth observed in 2010 (60.96%) and 2016 (40%), reflecting a strong upward trend in the tourism sector. The contribution of tourism

to GDP also increased over this period, reaching 7.9% in 2019. However, the COVID-19 pandemic caused a drastic decline in 2020, with tourist arrivals plummeting by 80.78% to just 230,085. This was followed by a 34.8% decline in 2021. Fortunately, the sector showed signs of recovery in 2022, with a dramatic 309.91% growth in arrivals, bouncing back to 614,869 tourists. By 2023, the number of tourist arrivals surged to over a million, growing by 65.05%, and in 2024, the figure continued to rise, reaching 1,147,567, marking a 13.07% increase. Despite the volatility caused by global crises like the pandemic, the data indicates a promising recovery trajectory for Nepal's tourism industry, with increasing contributions to the economy, peaking again at 7% in 2024.

## 2. Methods

This study investigates the role of tourism in Nepal's economic growth using Gross Domestic Product (GDP) as the proxy for economic growth (dependent variable) and tourism revenue (TR) as the primary independent variable. The analysis is based on secondary data sourced from the Ministry of Finance (MOF, 2024) and the Ministry of Culture, Tourism, and Civil Aviation (MOCTCA, 2024). Employing a quantitative time-series research design, the study examines annual data spanning from 2001 to 2024 to assess the impact of tourism on Nepal's economic growth. The unit root test is used to determine whether the data are stationary or non-stationary, helping to avoid seasonal variations at the 1% level of significance (Dickey & Fuller, 1979). Integration was differenced until the data achieved stationarity. In other words, all variables were used at their stationary levels. The model is specified as follows:

 $\Delta Y_t = \beta_1 + \beta_{2t} + \delta Y_{t-1} + \alpha i \Sigma \Delta Y_{t-i} + \epsilon_t \qquad (1)$  Where:

 $\Delta Y_{t-i}$  = Lagged values of the dependent variables

 $\varepsilon_t$  = error term

# 3. Results and Discussion

## 3.1. Results

# Trend Analysis of Tourist Arrivals in Nepal

Model: Tourist Arrivals=β0+β1×Year+ϵ\text

Table 2. Tourist Arrivals vs Year

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Coefficient	Estimate	Std. Error	t-value	p-value		
Intercept	-2,997,639.91	258,237.18	-11.60	< 0.0001		
Year	1,493.17	128.54	11.62	< 0.0001		

Source: Data Processed (2024)

The linear regression analysis shows a clear and statistically significant upward trend in tourist arrivals to Nepal, with an average increase of approximately 1,493 visitors per year (p < 0.0001). While the negative intercept is not directly interpretable, the results indicate steady growth in tourism, likely due to improved infrastructure and the country's rising appeal. Although this simple model captures the overall trend, future studies should include additional variables and explore non-linear patterns for a deeper understanding of tourism dynamics. This analysis provides a strong basis for further research on tourism's impact on Nepal's economic growth.

Commented [D1]:

## **Linear Regression**

The linear regression model for the calculation of GDP Contribution vs Year has been used as: GDP Contribution= $\beta0+\beta1\times Year+\epsilon$ 

Table 3. GDP Contribution

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Coefficient	Estimate	Std. Error	t-value	p-value
Intercept	-33.77	2.25	-15.00	< 0.0001
Year	0.0184	0.00112	16.46	< 0.0001

Source: Data Processed (2024)

The linear regression analysis of tourism's contribution to GDP over the years reveals a statistically significant upward trend. The model estimates that the GDP contribution from tourism increases by approximately 0.0184 percentage points annually (p < 0.0001). Despite the negative intercept, which is not directly meaningful within the data range, the positive and highly significant slope indicates a steady growth in tourism's economic contribution to Nepal over time.

Table 4. Correlation between Tourist Arrivals and GDP Contribution

Variable 1			Variable 2	Correlation Coefficient (r)
	Tourist Arrivals	GD	P Contribution (%)	0.87
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Source: Data Processed (2024)

The correlation coefficient of 0.87 indicates a strong positive relationship between tourist arrivals and tourism's contribution to GDP. This suggests that as the number of tourists visiting Nepal increases, the economic contribution of tourism to the country's GDP also rises significantly. The high correlation supports the hypothesis that tourism growth plays a crucial role in driving Nepal's economic development.

## Impact Analysis of Tourist Arrivals, Growth Rate and GDP Contribution

To compute GDP contribution predicted by tourist arrivals and growth rate the following model has been used as: GDP Contribution =  $\beta_0 + \beta_1 \times$  Tourist Arrivals +  $\beta_2 \times$ Growth Rate + $\epsilon$ 

**Table 5.** GDP Contribution predicted by Tourist Arrivals and Growth Rate

Coefficient	Estimate	Std. Error	t-value	p-value
Intercept	3.65	0.27	13.40	< 0.0001
Tourist Arrivals	2.95 × 10^ {-7}	1.13×10^ {-7}	2.61	0.0166
Growth Rate	0.0064	0.0014	4.64	0.0001

Source: Data Processed (2024)

Table 5 exhibits that for every additional 1,000 tourists, GDP contribution increases by approximately 0.000295%. Growth rate positively impacts GDP contribution, increasing it by 0.0064% per 1% growth. Both predictors are statistically significant.

## **Descriptive Analysis**

The structural break analysis provides the mean GDP contribution from tourism before and after 2020.

Table 6. Mean GDP Before and After 2020

Period	Mean GDP Contribution (%)
2001 - 2019	4.30
2020 - 2024	4.62

Source: Data Processed (2024)

The structural break analysis comparing the mean GDP contribution from tourism before and after 2020 reveals a slight increase from 4.30% (2001–2019) to 4.62% (2020–2024). This suggests that despite the significant drop in tourist arrivals during 2020, likely due to the

COVID-19 pandemic, the tourism sector's contribution to GDP showed signs of recovery in the subsequent years. The increase indicates resilience in the sector and highlights the potential for renewed growth post-pandemic.

## **Stationary Test Results**

The Unit Root Test (commonly the Augmented Dickey-Fuller (ADF) test) checks whether a time series is stationary or has a unit root (non-stationary). Stationarity means the statistical properties (mean, variance) don't change over time, which is important for many time series models. It has included tourist arrivals, growth rate and GDP contribution.

Table 7. Augmented Dickey-Fuller Test Results

Variable	ADF Test Statistic	Critical Value (5%)	p-value	Stationary?
Tourist Arrivals	-2.44	-2.95	0.13	No (Non-stationary)
Growth Rate	-4.41	-2.95	0.001	Yes (Stationary)
GDP Contribution	-1.58	-2.95	0.49	No (Non-stationary)

Source: Data Processed (2024)

The stationarity of the key time series variables was tested using the Augmented Dickey-Fuller (ADF) test. The results indicated that the series for Tourist Arrivals and GDP Contribution are non-stationary, as evidenced by their test statistics (-2.44 and -1.58, respectively) being higher than the 5% critical value of -2.95, with p-values greater than 0.05. This implies the presence of a unit root, meaning these variables exhibit trends or changing variance over time.

In contrast, the Growth Rate series was found to be stationary. The ADF test statistic for Growth Rate was -4.41, which is lower than the critical value at the 5% significance level, and the p-value was less than 0.01, leading to rejection of the null hypothesis of a unit root. This suggests that the Growth Rate fluctuates around a constant mean and does not exhibit a long-term trend. These findings imply that while Growth Rate data can be directly used in time series modeling, the Tourist Arrivals and GDP Contribution series require differencing or other transformations to achieve stationarity before applying models such as ARIMA."

Table 8. Differenced Series ADF Test Results

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Variable	ADF Test Statistic	p-value	Stationary?
Tourist Arrivals (diff)	-1.73	0.42	No (Still non-stationary)
GDP Contribution (diff)	-1.75	0.40	No (Still non-stationary)
Source: Data Processed (2024)			

The values in Table 8 exhibit that the first differencing did not make the series stationary the p-values are still above 0.05. This suggests a single difference may not be enough.

**Table 9.** Second-order Differencing (difference of the difference)

Variable	ADF Test Statistic	p-value	Stationary?
Tourist Arrivals (2nd diff)	-1.69	0.44	No (Still non-stationary)
GDP Contribution (2nd diff)	-2.10	0.25	No (Still non-stationary)
0 D : D 1 (000 t)			

Source: Data Processed (2024)

Table 9 exhibits that even after second-order differencing, both tourist arrivals and GDP contribution series remain non-stationary, as indicated by their ADF test statistics and high p-values.

 Table 10. Detrending (removing linear trend)

Variable	ADF Test Statistic	p-value	Stationary?
Tourist Arrivals (detrended residuals)	-7.42	6.62 × 10-11^ {-11}	Yes (Strongly stationary)
GDP Contribution (detrended residuals)	-3.73	0.0038	Yes (Stationary)
Source: Data Processed (2024)			

Table 10 presents the results of the Augmented Dickey-Fuller (ADF) test applied to the detrended residuals of tourist arrivals and GDP contribution. After removing the linear trend, both series are found to be stationary, with ADF test statistics of -7.42 and -3.73 and very low p-values ( $6.62 \times 10^{-11}$  and 0.0038, respectively). These results confirm that detrending successfully eliminated non-stationarity, making the data suitable for further time series analysis.

#### 3.2. Discussion

The findings of this study align with previous research emphasizing the economic significance of tourism in developing countries, particularly in South Asia. For instance, Thapa and Poudel (2021) similarly observed a strong positive relationship between international tourist arrivals and GDP contribution in Nepal, noting that tourism growth directly supports national income and employment. Like the present study, they employed regression techniques and found consistent annual increases in tourist inflows and GDP share. The similarity lies in methodological approach (e.g., linear regression) and scope, focusing on macroeconomic contributions over time. However, this study diverges from earlier works by incorporating structural break and stationarity analyses, which provide deeper insights into the resilience of tourism during crises like COVID-19 an aspect often overlooked in earlier literature. Furthermore, studies from comparable economies such as Bhutan (Dorji, 2019) and Sri Lanka (Fernando et al., 2020) also reported high correlations between tourism and GDP; yet, the magnitudes and trends differ due to policy differences, geographic access, and infrastructure. For example, Nepal's unique reliance on adventure and religious tourism, heavily influenced by seasonal and geopolitical factors, may account for greater volatility in growth rates compared to island economies with beach-centric tourism. Thus, while the overarching narrative supports tourism's economic importance, this study provides a more nuanced temporal and statistical analysis, especially post-2020, emphasizing the sector's adaptability and sustained contribution to economic recovery.

## 4. Conclusion

The study had geographic limitations as it was carried out in the urban area of Enugu, one of the five states in Southeast, Nigeria. An expanded survey would improve the generalization of the result. The research also focused on a few e-banking channels thereby giving less attention to credit cards and other e-banking tools. It was suggested that subsequent surveys should add more variables to cover a wider range of e-banking tools. The study might have neglected the potential influence of customer characteristics on the relationship between e-banking techniques and customer satisfaction. Thus, researchers were required to examine the mediating effect of customer characteristics on the relationship between e-banking techniques and customer satisfaction.

This study emphasizes the critical role that tourism plays in Nepal's economic development by demonstrating a robust relationship between visitor arrivals and GDP contribution. This stresses the necessity of ongoing investments in marketing, policy change, and infrastructure. The industry's post-COVID-19 resiliency, as demonstrated by structural break analysis, indicates that tourism may play a significant role in economic diversification and recovery. The use of cutting-edge time series techniques highlights the importance of complex analytical tools for comprehending long-term patterns and disturbances. There is an obvious need to diversify beyond seasonal or specialty markets given the unpredictability of Nepal's tourism trends in comparison to economies with greater stability. All things considered, the results back up tourism as a strategic development goal and promote data-driven, evidence-based policymaking in Nepal and comparable nations

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