

A Decadal Empirical Overview on Contributions of India's Tourism Towards Employment and Gross Domestic Product

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Abstract

The economy evolves around a vital macro-economic indicator the gross domestic product, which gives us vivid picture of the state of evolvement of the economy in producing the final value of goods and services. The related activities associated with tourism like art, recreation and entertainment have been pioneer to establishing employment even to the vulnerable sections of the society. These on and off employment sources have to churn to be long term sources of income for a long standing direct and indirect contribution to gross domestic product.

Key Words: gross domestic product (GDP), tourism, employment, income, economy

Introduction

India's tourism industry has the potential to expand and contribute to the gross domestic product (GDP) of the nation by creating jobs. With a comparatively high number of unskilled workers holding particular employment options, the tourism industry still has to be restructured to allow for greater exploitation, which might potentially increase real economic output. Furthermore, knowing tourism management and the pertinent practices related to it is crucial for reviving the economy's potential blueprint towards development involvement in sustainable measures, especially when a resource-based economy shares shared vulnerabilities. For example, the Kingdom of Saudi Arabia's tourism earnings is growing steadily yet its gross domestic product (GDP) contribution is decreasing accordingly. The tendency of rising expenses relative to revenues is reducing the gross domestic product (GDP) contribution of tourism offering services to both domestic and foreign visitors in order to increase gross domestic product (GDP) contribution.

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Literature Review

Tourism enhances the local economy and encompasses a number of areas that determine its potential by fostering social, economic, and environmental development and raising people's standard of living thereby fostering the growth of small and medium-sized businesses and jobs. Additional structural alterations have a social influence that is evident in various economic sectors and, consequently, in the growth of the local and regional economies. In order to increase the social, economic, and cultural well-being of the region's inhabitants, these factors must be taken into account while making decisions and creating plans to boost tourism (Zavaleta Chavez Arroyo et al, 2024).

Tourism has a multiplicative impact on GDP, employment, and overall economic growth (Khan et al, 2024). Thereby supporting tourism and promoting economic growth are two ways to boost the economy (Montvydaitė & Labanauskaite, 2024). The tourism industry creates jobs, generates favourable economies of scale, and supports other industries through direct, indirect, and induced impacts. Investments in the tourism industry can also have a favourable effect on foreign visitor arrivals, international tourism receipts, and travel and tourism GDP, among other tourism performance metrics (Uula et al, 2024). The tourism sector in India can achieve its goal before the targeted time, which will help the dream of millions of oppressed and impoverished people to come true - that India will become a developed nation by promptly resolving all the issues with proper planning and execution. The sector's current and future potential can propel India's dreams of becoming a nation with an 8.5 trillion-dollar GDP by 2030 (Sivaprasad, 2024).

During early pandemic outbreaks, it was also discovered that employment adjustments differed by tourism subsector, which lessened the negative impact of its contribution to GDP and employment (Choden, Pholphirul, 2024). Further, the tourism and hospitality industry's employment results have not been as disastrous as the public's image of the COVID-19 pandemic (Fieger et al, 2024). Thereby a significant decline in tourism industry revenue and its contribution to GDP has a direct consequence of the pandemic (Fu, 2024).

Further investing in tourism can be an effective way of promoting economic growth, efforts should also be made to diversify both the tourism sector and the wider economy to reduce exposure to downside risks (Garrod et al, 2024). However, challenges such as insufficient infrastructure and natural calamities like floods hinder the tourism sector suggests that addressing these challenges through a strategic and sustainable approach, can contribute to the state's growth and development; given its significant role in generating direct and indirect employment (Sarkar et al., 2024). Moreover, the development of cultural tourism and its effects on rural economic stability (Ahmadi, 2018). With domestic and international income red tourism has a significant promoting effect on economic growth (Gong, 2024).

Of current times tourism should meet the criteria for sustainable tourism in destinations (Ait Nacer et al., 2024) as gross domestic product (GDP) of the state depends on the tourism sector (Sarkar et al., 2024). In short the support from the availability of existing infrastructure, as an attraction that encourages tourists to visit, then supports the development and progress of tourism, which encourages increasing regional income around tourist attractions and contributing greatly to the national economy (Apriyanti et al., 2024).

Research Objective: To analyse the effect of tourism on country's gross domestic product through generation of employment

Methodology

The research paper investigates decadal correlation between contribution of India's tourism towards Gross domestic product and contribution of India's tourism towards employment in the country based on the secondary data – the Annual Report of Ministry of Tourism, Government of India. The spearman's rho of non-parametric correlation coefficient test is used which doesn't assume normality and popularly adopts ordinal or ranked data with monotonic relationship

The following table indicates the decadal overview of tourism towards employment and GDP:

Table 1.

Year	Contribution of tourism towards GDP of Country (%)			Contribution of Tourism towards Employment in the country (%)		
	Direct	Indirect	Total – share in GDP (%)	Direct	Indirect	Total – share in employment (%)
2009 – 2010	3.68	3.09	6.77	4.37	5.80	10.17
2010 – 2011	3.67	3.09	6.76	4.63	6.15	10.78
2011 – 2012	3.67	3.09	6.76	4.94	6.55	11.49
2012 – 2013	3.74	3.14	6.88	5.31	7.05	12.36
2013 – 2014	3.06	2.62	5.68	4.96	6.41	11.37
2014 – 2015	3.14	2.67	5.81	5.34	6.91	12.25
2015 – 2016	2.65	2.45	5.10	5.41	6.98	12.38
2016 – 2017	2.63	2.43	5.06	5.32	6.88	12.21
2017 -2018	2.61	2.41	5.02	6.44	8.34	14.78
2018 – 2019	2.61	2.41	5.02	6.48	8.39	14.87
2019 – 2020	2.70	2.49	5.19	5.89	7.61	13.50
2020 – 2021	0.55	0.51	1.06	5.63	7.28	12.91

Source: Annual Report, Ministry of Tourism, Government of India.

Descriptive Statistics

The data is derived from secondary data sources from the annual reports of ministry of tourism, government of India. A marginal analysis is conducted to observe the movements upward (+) and downward (-) in terms of contribution of direct tourism, indirect tourism towards gross domestic product and employment in the country.

From the above data, we observe that during the time period of 2009 to 2010 the direct contribution of tourism towards GDP of the country has a marginal decline by - 0.01 % from 3.68 % in 2009 to 3.67 % in 2010. Further from 2010 to 2011 and 2011 to 2012 we witness a constancy of 3.67 % direct contribution of tourism towards GDP of the country. Later there is a marginal rise in direct contribution of tourism towards GDP from 2012 to 2013 by 3.67% to 3.74 % of + 0.07%. We also observe a decline in direct contribution of tourism towards GDP from 2013 to 2014 by 3.74 % to 3.06 % of - 0.68 %. However, there is a rise in direct contribution of tourism towards GDP from 2014 to 2015 by 3.06 % to 3.14 % of + 0.08%. Extended noticeably is a decline in direct contribution of tourism towards GDP from 2015 to 2016 by 3.14 % to 2.65 % of

- 0.49 %. This is extended by a decline in direct contribution of tourism towards GDP from 2016 to 2017 by 2.65 % to 2.63 % of - 0.02 %. We further do not find an inclination towards GDP by tourism as there is a decline in direct contribution of tourism towards GDP from 2017 to 2018 by 2.63 % to 2.61 % of - 0.02 %. Noticeably there is a period of constancy observed in direct contribution of tourism towards GDP from 2018 to 2019 by 2.61%. However, this constancy period did not last long as it was taken over by rise in direct contribution of tourism towards GDP from 2019 to 2020 by 2.61% to 2.70 % of +0.09 %. Lastly a great dip in direct contribution of tourism towards GDP from 2020 to 2021 by 2.70 % to 0.55 % of - 2.15 due to Covid 19 pandemic in the country.

Similarly, from the above data in terms of indirect contribution of tourism towards GDP, we observe that from 2009 to 2012 there was constancy with 3.09%, which marginally rose to 3.14 % that is by + 0.05 % in the year 2012 to 2013. However, we find a decline in indirect contribution of tourism towards GDP from 2013 to 2014 by 3.14% to 2.62 % of - 0.52%. Further we notice a marginal rise in indirect contribution of tourism towards GDP from 2014 to 2015 by 2.62 % to 2.67% of +0.05%. It is also noticeable to find a decline in indirect contribution of tourism towards GDP from 2015 to 2016 by 2.67% to 2.45% of - 0.22%. Moreover from 2016 to 2017 we observe a decline in indirect contribution of tourism towards GDP by 2.45% to 2.43% of -0.02%. we also see a decline indirect contribution of tourism towards GDP from 2017 to 2018 by 2.43% to 2.41% of -0.02%. Thereby from 2016 to 2018, over two years we find an equal decline in indirect contribution of tourism towards GDP of -0.02%. From 2018 to 2019 we see constancy with 2.41% in indirect contribution of tourism towards GDP, which lately rose to 2.49% indicating a rise of +0.08% by the year 2019 to 2020. Lastly, we see a dip in indirect contribution of tourism towards GDP from 2020 to 2021 by 2.49 % to 0.51% of -1.98% due to covid 19 pandemic in the country.

In the total share of GDP, we find that on an average there has been a continuous decline by collective contribution of direct and indirect tourism to the total share in the GDP over the years, where we find contribution of direct and indirect tourism to the total share in the GDP for the year 2009 to be 6.77% and 2010 to be 6.76%, thereby a marginal negative decline of -0.01% contribution of direct and indirect tourism to the total share in the GDP. Further from 2010 to 2011 and 2011 to 2012 we observe a constancy of 6.76% contribution of direct and indirect tourism to the total share in the GDP, which increases mildly to 6.88% from 2012 to 2013 indicating rise of +0.12%. We further observe a decline from 2013 to 2014 by 6.88% to 5.68% of - 1.2%/. It is also seen that from 2014 to 2015, we find a rise from 5.68% to 5.81% in terms of contribution of direct and indirect tourism to the total share in the GDP of +0.13%. Moreover, noticeably from 2015 to 2016 we find a further decline by 5.81% to 5.10 % of -0.71% in contribution of direct and indirect tourism to the total share in the GDP. The decline is extended from 2016 to 2017 by 5.10 % to 5.06 % of -0.04% in contribution of direct and indirect tourism to the total share in the GDP. Further from 2017 to 2018, we see a decline by 5.06% to 5.02% of - 0.04%, which remains constant from 2018 to 2019 at 5.02% in contribution of direct and indirect tourism to the total share in the GDP. However noticeably we see a rise in contribution of direct and indirect tourism to the total share in the GDP from 2019 to 2020 by 5.02% to 5.19% of +0.17%. Lastly, we observe a significant downfall in the total share in the GDP from 2020 to 2021 by 5.19% to 1.06% of -4.13% due to covid 19 pandemic in the country.

From the above data in terms of direct contribution of tourism towards employment in the country from 2009 to 2010 was 4.37% which rose to 4.63% in 2010 to 2011, thereby witnessing +0.26% increase in direct contribution of tourism towards employment in the country. Further from 2011 to 2012 we observe a rise from 4.63% to 4.94% in direct contribution of tourism to-

wards employment, indicating +0.31% hike in direct contribution of tourism towards employment in the country. In an extended perspective from 2012 to 2013, we see a rise from 4.94% to 5.31% indicating +0.37% upheaval in direct contribution of tourism towards employment in the country. Moreover from 2013 to 2014, we confront a decline from 5.31% to 4.96%, a blow of -0.35% in direct contribution of tourism towards employment of the country. From 2014 to 2015, we find a rise from 4.96% to 5.34%, a lead of +0.38% in direct contribution of tourism towards employment in the country. Later from 2015 to 2016, we see a marginal rise by 5.34% to 5.41%, a rise of +0.07% in direct contribution of tourism towards employment in the country. However, from 2016 to 2017, we observe a decline by 5.41% to 5.32%, a downfall of -0.09% in the in direct contribution of tourism towards employment in the country. In 2017 to 2018, we find a level up by 5.32% to 6.44%, a increase of +1.12% in the in direct contribution of tourism towards employment in the country. Of lately, we see a uptrend from 2018 to 2019 by 6.44% to 6.48%, a hike of 0.04% in the in direct contribution of tourism towards employment in the country. Further from 2019 to 2020, we see a pitfall by 6.48% to 5.89%, a ditch of - 0.59% in direct contribution of tourism towards employment in the country. Lastly from 2020 to 2012, we further notice a decline from 5.89% to 5.63%, a fall of -0.26% due to covid 19 pandemic in direct contribution of tourism towards employment in the country.

The above data on indirect contribution of tourism towards employment in the country from 2009 to 2010 was 5.80% which increased to 6.15% in 2010 to 2011, indicating a rise of +0.35% in indirect contribution of tourism towards employment in the country. Further from 2011 to 2012 we find a minute rise by 6.15% to 6.55%, a rise of +0.4% minutely in indirect contribution of tourism towards employment in the country. In extended point of view from 2012 to 2013 we notice a positive upward movement from 6.55% to 7.05%, a rise of +0.5% in indirect contribution of tourism towards employment in the country. We notice further that from 2013 to 2014, we tend to see a decline from 7.35% to 6.41%, a downfall of -0.64% in indirect contribution of tourism towards employment in the country. Moreover from 2014 to 2015, we find a positive rise by 6.41% to 6.91%, a prudent rise by +0.5% in indirect contribution of tourism towards employment in the country. However, from 2015 to 2016, we observe a marginal positive upheaval by 6.91% to 6.98%, a surplus value of +0.07% in indirect contribution of tourism towards employment in the country. Thereafter from 2016 to 2017, we notice a minute pitfall by 6.98% to 6.88%, a fall of -0.1% in indirect contribution of tourism towards employment in the country. To see a step further, we see from 2017 to 2018, a much positive march from 6.88% to 8.34%, a hike of +1.46 is observed in indirect contribution of tourism towards employment in the country. Nevertheless, from 2018 to 2019 we find a rise from 8.34% to 8.39%, a hike of +0.05 in indirect contribution of tourism towards employment in the country. In the year 2019 to 2020, we observe a decline by 8.39 % % to 7.61%, a diminishing mark of -0.78% in indirect contribution of tourism towards employment in the country. Lastly, from 2020 to 2021, we figure out that there is a decline from 7.61% to 7.28 % , a fall of -0.33% in indirect contribution of tourism towards employment in the country.

Lastly from the total contribution of tourism towards share of employment in the country, we find that contribution of direct and indirect tourism to the total share in the employment for the year 2009 to 2010 to be 10.17% which increases to 10.78% in the year 2010 to 2011 indicating a rise of +0.61%. Further from 2011 to 2012 we see a further rise from 11.49% to 12.36 % in the year 2012 to 2013 indicating a hike of +0.87% contribution of direct and indirect tourism to the total share in the employment, which decreases mildly from the year 2013 to 2014 to 11.37% indicating a decline of -0.99% in contribution of direct and indirect tourism to the total share in the employment. Moreover from 2014 to 2015 we see a rise from 11.37% to 12.25%

indicating a upheaval of +0.88% contribution of direct and indirect tourism to the total share in the employment. However, from the year 2015 to 2016, we notice a rise from 12.25% to 12.38% indicating a hike of +0.13% contribution of direct and indirect tourism to the total share in the employment. We also observe from 2016 to 2017, a downfall from 12.38% to 12.21% which is a movement downward by -0.17% contribution of direct and indirect tourism to the total share in the employment. Further we identify from 2017 to 2018, a increase from 12.21% to 14.78%, a rise of +2.57% contribution of direct and indirect tourism to the total share in the employment. We also observe from 2018 to 2019, an marginal rise from 14.78% to 14.87%, witnessing a rise of +0.09% contribution of direct and indirect tourism to the total share in the employment. Later from 2019 to 2020, we see a movement downwards from 14.87% to 13.50%, a decline of – 1.37% contribution of direct and indirect tourism to the total share in the employment. Lastly from 2020 to 2021, we find a further decline from 13.50 % to 12.91 %, a pitfall of -0.59% contribution of direct and indirect tourism to the total share in the employment.

Hypothesis:

H_0 : There is no positive correlation between employment in tourism and contribution of tourism to gross domestic product

H_1 : There is a positive correlation between employment in tourism and contribution of tourism to gross domestic product

Results and Discussion

From table 2 and 3 of the inferential statistics and correlation data of direct employment, we find that $M = 5.3933$, of direct employment was relatively higher than $M = 2.8925$ of direct gross domestic product, meanwhile $SD = .64791$ of direct employment which was relatively lower than $SD = .87638$ of direct gross domestic product with $N = 12$. The significance level of 0.001 indicate that direct employment in tourism has a positive relationship with direct gross domestic product.

Table 2.

Inferential Statistics			
Measured Items	Mean (M)	Std. Deviation (SD)	N
Direct Employment	5.3933	.64791	12
Direct Gross Domestic Product	2.8925	.87638	12

Source: - SPSS 25 Software

Table 3.

Correlations				
Measured Items			Direct Employment	Direct GDP
Spearman's rho	Direct Employment	Correlation Coefficient	1.000	-.800**
		Sig. (1-tailed)	.	.001
		N	12	12
	Direct GDP	Correlation Coefficient	-.800**	1.000
		Sig. (1-tailed)	.001	.
		N	12	12

** . Correlation is significant at the 0.01 level (1-tailed).

Source: - SPSS 25 Software

Table 4.

Descriptive Statistics			
Measured Items	Mean	Std. Deviation	N
Indirect Employment	7.0292	.79238	12
Indirect Gross Domestic Product	2.5333	.70503	12

Source: - SPSS 25 Software

Table 5.

Correlations				
Measured Items			Indirect Employment	Indirect GDP
Spearman's rho	Indirect Employment	Correlation Coefficient	1.000	-.638*
		Sig. (1-tailed)	.	.013
		N	12	12
	Indirect GDP	Correlation Coefficient	-.638*	1.000
		Sig. (1-tailed)	.013	.
		N	12	12

*. Correlation is significant at the 0.01 level (1-tailed).

Source: - SPSS 25 Software

From table 4 and 5 of the inferential statistics and correlation data of indirect employment, we find that $M = 7.0292$, of indirect employment was relatively higher than $M = 2.5333$ of indirect gross domestic product, meanwhile $SD = .79238$ of indirect employment was also relatively higher than indirect gross domestic product in $SD = .70503$ with $N = 12$. The significance level of 0.013 indicate that indirect employment in tourism has an positive relationship with direct gross domestic product.

Table 6.

Descriptive Statistics			
Measured Items	Mean	Std. Deviation	N
Total share in Employment	12.4225	1.43895	12
Total share in Gross Domestic Product	5.4258	1.57766	12

Source: - SPSS 25 Software

Table 7.

Correlations				
Measured Items			Total share in Employment	Total share in GDP
Spearman's rho	Total Share in Employment	Correlation Coefficient	1.000	-.698**
		Sig. (1-tailed)	.	.006
		N	12	12
	Total share in GDP	Correlation Coefficient	-.698**	1.000
		Sig. (1-tailed)	.006	.
		N	12	12
**. Correlation is significant at the 0.01 level (1-tailed).				

Source: - SPSS 25 Software

From the table 6 and 7 of inferential statistics and correlation data of total share in employment, we find that $M = 12.4225$, of total share in employment was relatively higher than $M = 5.4258$ of total gross domestic product, meanwhile $SD = 1.43895$ of total share of employment was relatively lower than total gross domestic product in $SD = 1.57766$ with $N = 12$. The significance level of 0.006 indicate that total employment in tourism has a positive relationship with total gross domestic product.

Thus, its verified that the alternate hypothesis that there is a positive correlation between employment in tourism and contribution of tourism to gross domestic product holds true.

Conclusion

Tourism has been an essential aspect of development perspectives in a country. The theoretical and practical implications will enable us to see the trends in growth of gross domestic product for more than a decade and enable future estimation. The limitations of the research indicate it is based completely on secondary data or annual report published by government of India on tourism and not on primary data. The future recommendations could be other macro-economic parameters associated with tourism that could be possible influence gross domestic product on tourism. The improvement of total share in gross domestic product has directly and indirectly contributed to the need for enhancement of multi-faceted ventures of employment in tourism sector especially in future days to come.

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