

# Sustainability Analysis of Tourism in India: Data Envelopment Analysis Approach

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## ABSTRACT

In the recent past, understanding and practice of sustainability in tourism are becoming increasingly important to both academicians and tourism planners. In the last two decades, the attainment of sustainable development and the protection of touristic assets have been at the forefront of central policy issues in global tourism development. In addition to social and economic impact of tourism, overuse of natural resources and climate change are leading to the importance of drive for sustainable tourism development. Consequently, there is a growing research interest in investigating the performance of countries, especially in terms of environmental efficiency. In this article, the authors have empirically explored socio-economic efficiency of the top ten performing countries and India. Their basic content is summarised, along with the major findings. In this way, both measurement of countries' performance and the nonparametric approach of DEA have been given deserved attention. Tourism benchmarking and the assessment of tourism management performances are a crucial and challenging task in the direction of evaluating tourism sustainability and reshaping tourism activities. The proposed efficiency assessment procedure is based on data envelopment analysis (DEA). DEA is a methodology for evaluating the relative efficiency when facing multiple input and output. Although the methodology is extremely versatile, for the sake of exemplification, in this article it is applied to the evaluation and comparison of sustainable tourism management of India.

## KEYWORDS

Data Envelopment Analysis, Economic, Efficiency, Environment, Social, Sustainable Tourism

## INTRODUCTION

Tourism has emerged as a key sector of the world economy and has become a major workforce in global trade. It has been making a revolutionary and significant impact on the world economic scenario. Tourism has been identified as the major export industry in the world (Gosh Viswanath, 1998). The multifaceted nature of this industry makes it a catalyst to economic development and helps balanced regional development. It is a low capital, labour intensive industry with economic multiplier and offers and opportunity to earn foreign exchange at low social cost. Tourism industry acts as a powerful agent of both economic and social change. It stimulates employment and investment, modifies economic structure and makes positive contributions towards balance of payments. The money spent by the

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foreign tourists in a country is turned over several times. In the process, the total income earned from tourism is a number of times more than the actual spending. The multiplier effect of tourism receipts is completely recognized as spreading to secondary and tertiary spheres of the economic activities of a nation. It encompasses economic, social cultural, educational and political significance. Marketing and promotion are of vital importance in tourism because of the competitive nature of the industry both within and between the generating countries. Tourism creates direct, indirect and induced employment. With its faster growth, new horizons of employment open up for the unemployed and underemployed youth of the developing countries.

## **ECONOMIC, SOCIAL, ENVIRONMENTAL GROWTH AND TOURISM**

Tourism has been a major social phenomenon of the societies all along. It is motivated by the natural urge of every human being for new experience, adventure, education and entertainment. The motivations for tourism also include social, religious and business interests. The increase of education has fostered a desire to know more about different parts of the globe. Tourism's importance, as an instrument for economic development and employment generation, particularly in remote and backward areas, has been well recognized the world over. It is the largest service industry globally in terms of gross revenue as well as foreign exchange earnings. Tourism can play an important and effective role in achieving the growth with equity objectives which India has set for itself. Tourism is one economic sector in India that has the potential to grow at a high rate and can make sure consequential development of the infrastructure of the destinations. It has the capacity to capitalize on the country's success in the services sector and provide sustainable models of growth. The consumption demand, emanating from tourist expenditure, also induces more employment and generates a multiplier effect on the economy. As a result, additional income and employment opportunities are generated through such linkages. Thus, the growth of the tourism sector can lead to large scale employment generation and poverty alleviation. The labour/capital ratio is very favorable in tourism sector compared to many other industries with 47.5 jobs for a million rupee investment as has been seen in the survey conducted by the Ministry of Tourism (MoT), government of India (Kanjilal, 2006). The economic benefits that flow into the economy through growth of tourism in shape of increased national and State revenues, business receipts, employment, wages and salary income, buoyancy in Central, State and local tax receipts can contribute towards overall socio-economic improvement and accelerated growth in the economy. Tourism is overwhelmingly an industry of Private sector service providers, although the public sector has a significant role to play in infrastructure areas either directly or through public-private partnerships (PPPs) approach. It is a multi-sectoral activity characterized by multiple services provided by a range of suppliers. It is quite similar to manufacturing industry, where the supply chain is as important as the end product. The related sectors include airlines, surface transport, hotels, basic infrastructure and facilitation systems, etc. Thus, the growth of tourism cannot be attained unless the issues related to all the sectors are addressed simultaneously. Another important feature of the tourism industry, which is of particular significance to India, is its contribution to national integration and preservation of natural as well as cultural environments and enrichment of the social and cultural lives of people. Tourism also encourages preservation of monuments and heritage properties and helps the survival of arts forms, crafts and culture. It is also important to note that tourism has become an instrument for sustainable human development including: Poverty alleviation, Environmental regeneration Job creation and advancement of disadvantaged groups.

The travel and tourism industry continues to make a real difference to the lives of millions of people by driving growth, creating jobs, reducing poverty and fostering development and tolerance. For the sixth consecutive year, industry growth outperforms that of the global economy, showcasing the industry's resilience in the face of global geopolitical uncertainty and economic volatility. The industry contributed US\$7.6 trillion to the global economy (10.2% of global GDP) and generated 292 million jobs (1 in 10 jobs on the planet) in 2016. International arrivals followed suit, reaching

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