



TURIZAM

INTERNATIONAL SCIENTIFIC JOURNAL

Volume 29, Issue 3, 2025 | ISSN 1821-1127 (Online) | UDC: 338.48



UNIVERSITY OF NOVI SAD | FACULTY OF SCIENCES | DEPARTMENT OF GEOGRAPHY, TOURISM & HOTEL MANAGEMENT

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INTERNATIONAL SCIENTIFIC JOURNAL

VOLUME 29, ISSUE 3, 2025

ISSN 1821-1127 (Online) | UDC: 338.48

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Content

<i>Dr. Vijayalakshmi N.S</i> A Decadal Empirical Overview on Contributions of India's Tourism Towards Employment and Gross Domestic Product	112
DOI:	
<i>Supriyanka Govekar, M. S. Dayanand, Edgar Dsouza</i> Advancing Beach Tourism: The Role of Smart Technology in Enhancing Attractiveness	121
DOI:	
<i>Nora Mustać</i> The role of tourism in the new growth perspectives in Southeast Europe (SEE)	140
DOI:	
<i>Almir Peštek, Amra Banda, Muniba Osmanović, Belma Durmišević</i> Tasting Tourism: Evaluating Gastro Offerings in Sarajevo and Mostar via TripAdvisor Reviews	156
DOI:	

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

Dr. Vijayalakshmi N.S^{A*}

Received: April 2024 | Accepted: April 2025

DOI:10.5937/turizam29-50368

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 GPD 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 GPD 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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Advancing Beach Tourism: The Role of Smart Technology in Enhancing Attractiveness

Supriyanka Govekar^A, M. S. Dayanand^B, Edgar Dsouza^C

Received: September 2024 | Accepted: July 2025

DOI:10.5937/turizam29-53644

Abstract

This study explores the implementation of Smart Beach Parameters in Goa's tourism industry to enhance the beach experience and support effective management and planning. As tourism evolves globally, the integration of information and communication technologies (ICT) is crucial for sustaining competitiveness and promoting sustainable development. The research aims to develop a tailored Smart Tourism Destination Scale for Goa, focusing on five key factors—Amenities, Accessibility, Activities, Available Packages, and Ancillary Services—and their impact on the Attractiveness of beach destinations. A mixed-method approach, including a primary field survey, semi-structured interviews, participatory observation, and data analysis through SPSS, was employed to assess the significance of these factors. Findings indicate that Amenities, Accessibility, and Activities are pivotal in enhancing beach attractiveness, while Available Packages and Ancillary Services contribute to overall tourist satisfaction. The results provide practical insights for improving beach tourism management in Goa, offering a framework for integrating smart solutions that can attract both domestic and international tourists. The implications emphasize the need for dynamic technological platforms to improve beach management and tourist experiences. Future research is recommended to validate the developed scale using Confirmatory Factor Analysis (CFA) and explore the integration of emerging technologies like AI, AR, and VR. This study contributes to the theoretical understanding of smart tourism and provides actionable recommendations for enhancing the sustainability and competitiveness of beach destinations.

Keywords: Smart Beaches, Tourism Management, Goa, Smart Tourism Destination Scale, Real-Time Data, Sustainable Development

Introduction

Tourism in Goa, India, has seen remarkable growth, establishing itself as a significant economic sector in the state. The region's natural coastal beauty, rich history, and the warmth of its people have positioned Goa as an attractive domestic and international tourist destination. The rapid development of accommodation venues, transport systems, shopping centers, restaurants, and recreational facilities reflects the state's response to the influx of global tourists

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(Dessai, 2023). Among the diverse offerings, beaches have emerged as key attractions, renowned for leisure and a variety of exciting activities (Alam et al., 2017). Despite their appeal, these beaches face challenges related to connectivity and information dissemination.

Issues such as limited real-time information about beach population density, access to nearby amenities, parking space availability, public transportation, weather forecasts, and medical emergency facilities hinder the overall beach experience. North and South Goa beaches, known for their attractiveness and recreational opportunities, are particularly affected by these connectivity challenges. The rapid growth of beach tourism has brought about both development and problems, including traffic congestion, illegal coastal construction, pollution, and inadequate public infrastructure (Achrekar, 2022). Rajan et al. (2013) emphasize that effective beach management is crucial for sustaining tourist attraction, highlighting the importance of addressing planning and management issues through a sustainable development approach.

Beach tourism, with its promise of unique experiences, attracts tourists seeking novel opportunities (Sahoo, 2014). Chen and Teng (2016) argue that providing comprehensive beach-related information—through signage, maps, brochures, websites, or apps—is essential for keeping potential tourists well-informed. Sahoo (2014) further stresses the need to evaluate beach tourism attributes such as connectivity and hotel occupancy. Effective development strategies are crucial as tourism service providers face challenges related to advancements in ICT, transportation technology, and changes in travel dynamics (Dwyer, 2017).

The challenge of developing beach tourism without overburdening existing infrastructure is significant. Common issues include limited resources, dependency on external development assistance, poor infrastructure, urbanization, vulnerability to natural disasters, and the impacts of climate change (Dwyer, 2017). Addressing these challenges while enhancing the beach experience requires innovative solutions that integrate smart tourism concepts and real-time information systems.

This study focuses on developing a Smart Tourism Destination Scale for Goa's beaches, aiming to improve the overall beach experience by providing real-time, actionable information. By addressing the identified gaps in connectivity and information dissemination, this research intends to enhance the attractiveness and sustainability of Goa's beach destinations. The integration of smart tourism concepts into beach management can contribute to more informed decision-making, better resource allocation, and an overall improved tourist experience.

Literature review

The growth and popularity of beach tourism have led to the increased need for practical and sustainable practices to address issues such as overcrowding, sand loss, habitat destruction, water pollution, and littering resulting from the booming beach activities (Chen & Teng, 2016). Yang et al. (2021) and Hailuddin et al. (2022) highlighted that beaches make a valuable economic contribution to tourist destinations, being key resources in tourism. To mitigate the detrimental effects of rising beach tourism on ecological status and recreational experiences, it is crucial to adopt sustainable and smart practices to preserve the significant values generated from beach tourism (Gomis-López et al., 2020).

Beaches are inherently multidimensional environments, each with its unique characteristics and challenges arising from varying levels of human use (Bombana et al., 2021). This multidimensional nature necessitates focused attention on the parameters that influence beach tourism experiences, requiring smart interventions and specific management strategies.

Effective management is vital for high-demand and high-use beaches to balance visitor numbers with the quality of the beach experience (Chen & Teng, 2016). Evidence suggests that domestic and international tourists perceive destination images differently due to variations in travel motivations, destination choice, activity selection, trip expectations, and satisfaction levels (Rutty & Scott, 2016). Despite the documented issues of overcrowding, littering, and environmental degradation, research has shown limited focus on the impacts of beach recreation, even though it generates substantial economic benefits (Yang et al., 2021; Suman & Kumar, 2023). Given the critical role of beaches in the tourism market, proactive measures are needed to consider tourists' needs, perceptions, and preferences regarding beach quality to develop better-informed and smart management processes.

With the increasing use of beach areas, changes in natural resources and visitor experiences are inevitable, necessitating the provision of pertinent and measurable information indicators (Chen & Teng, 2016). More comprehensive approaches that incorporate various stakeholders' perspectives are lacking, and tourists' views are often underrepresented (da Costa Liberato et al., 2018). While smart destination policies aim to enhance tourist experiences and improve destination management processes, the real effects of these policies remain largely unknown (Buhalis & Amaranggana, 2013). The concept of an interconnected future, where information is collected, measured, processed, and analyzed to enhance resource efficiency and service quality, is key to informed decision-making (Sigalat-Signes et al., 2020). Smart destinations are increasingly recognized as a viable management approach based on ICT-driven interactions, contributing to enhanced tourist experiences (Buhalis & Amaranggana, 2013).

6 A's Framework for the Analysis of the Tourism Destination

According to Buhalis and Amaranggana (2013), to become a successful destination and maintain high competitiveness, it is crucial for a destination to effectively manage the 6 A's of tourism: Attractions, Accessibility, Amenities, Activities, Available Packages, and Ancillary Services.

Attraction

Botero et al. (2018) highlighted that an attraction consists of both artificial and natural features that geographically draw people to provide them with a recreational experience. Matthews et al. (2018) noted that destination choices are influenced by the spatial distribution of sites and attractions, and that these choices collectively determine the demand for beach recreation. To sustain destination attractiveness, pre-planning for tourism development is essential given the demand for various destinations (Öztüren et al., 2021). Pascoe (2019) emphasized that recreational activities such as swimming, fishing, surfing, walking, or simply enjoying the seaside are popular among beach visitors.

Tourist activities are often climate-dependent, particularly in warm destinations. Data on favorable weather conditions can significantly influence the decision to visit a beach. There is a strong relationship between weather conditions and tourism, with weather often acting as a push factor for specific destinations (Rosselló & Waqas, 2016). Assessing the effects of weather on tourism destinations is crucial for tourism organizations to provide strategic information to tourists (Rutty & Scott, 2014). Hansen et al. (2010) argued for the need to enhance the resilience of systems to climate change and to develop climate-smart conservation frameworks.

Beach tourism activities such as sunbathing and swimming are more strongly linked to specific weather conditions compared to other tourism activities (Perch-Nielsen, 2010).

Amenities

Historically, beach management focused primarily on coastal defense and often overlooked the full amenity value of beaches, including their multifaceted roles in enhancing recreation and aesthetic experiences. Frampton (2010) defined amenity as a perception of beach users that provides positive and enjoyable benefits. Understanding the perceived amenities of a beach through surveys is essential for effective beach management. Coastal amenities are significant attractions for tourism activities (Boto-García & Leoni, 2023). Real-time information on amenities is valuable for authorities responsible for beach area maintenance and management. Girau et al. (2018) proposed a system architecture for monitoring beaches to address critical issues such as human surveillance for safety purposes and crowd management. Live crowd management can improve tourists' beach experiences by enhancing security.

Safety, a major concern for tourists, often lacks adequate attention regarding safe access to and the creation of secure beach spaces (Chen & Teng, 2016). Alam et al. (2017) observed that recent tourism growth has spurred efforts to introduce intelligence for solving essential problems like surveillance for safety. They noted that tracking and storing the number of beach visitors in a database could provide insights into tourist density across different beach areas, thereby enhancing beach safety.

Accessibility

Accessibility issues often include traffic jams, lack of parking space, and inadequate traffic signage. Additionally, facilities such as parking and restrooms are sometimes occupied by local entrepreneurs and shop owners, leaving tourists frustrated (Polnyotee & Thadaniti, 2015). Real-time information on parking availability can significantly reduce the time tourists spend searching for parking, thus alleviating traffic congestion at beach areas (Alam et al., 2017). Girau et al. (2018) emphasized the need for systems to monitor and manage traffic congestion to improve beach accessibility.

Kammler and Schernewski (2004) suggested that webcam monitoring provides an efficient method for permanent observation of beach visitor density and behavior. Alam et al. (2017) focused on enabling cooperative sensing within the Internet of Things (IoT) for smart beaches and intelligent transportation systems, using big data for safety, traffic, and congestion management. They proposed implementing smart parking systems with sensors to provide real-time information about available and occupied parking spaces. Lack of territorial cohesion in regional transport often leads to private vehicles becoming the primary mode of transport, exacerbating traffic congestion and pollution, particularly during peak seasons, which significantly affects beach destinations (Sigalat-Signes et al., 2020). Alam et al. (2017) demonstrated that adopting smart beach practices, such as disseminating real-time warnings about wrong-way driving, traffic jams, accidents, roadwork, and alternate routes, can mitigate these issues. Mayordomo-Martínez et al. (2019, June) highlighted the importance of accessibility and inclusivity of tourism resources to improve enjoyment and well-being for individuals with motor disabilities, particularly at beaches, which are major tourist attractions. Their subsequent re-

search emphasized the need for integrating people with disabilities into accessibility planning to prevent exclusion from public services (Mayordomo-Martínez et al., 2019, July).

Activities

Needham and Szuster (2011) stressed the importance of providing open spaces and opportunities for increasing coastal tourism and recreational activities. Tourists often engage in various activities, including shopping, dining out, and participating in outdoor recreational pursuits (D'Souza, 2024; Camilleri & Camilleri, 2018). To effectively manage recreation ecosystem services, it is crucial to consider how these services are perceived by visitors. As beach recreation intensifies, the quality of the beach experience and enjoyment for users may diminish (Rajan et al., 2013). Recreational carrying capacity is the maximum level of development and activity a body of water can handle before degradation occurs (Aliyeva et al., 2020). Thus, adopting a smart approach to redefine beach tourism development on a sustainable basis is necessary. The technological revolution and growth of ICT in the tourism sector highlight the importance of investing in technological applications to enhance tourism services (Sigalat-Signes et al., 2020).

Available Packages

Pröll et al. (1999) described the complexity of tourism products and emphasized that holiday packages should be supported by a tourism information system, ranging from basic information to consumer-defined packages. However, they noted a lack of seamless integration of packages into destination information and a direct search facility for available packages. Destination marketers should focus on creating effective tourism packages that address tourists' expectations, needs, and concerns (Irigüler & Güler, 2016). Available packages often include guiding services, organized tours, and special interest tours, which can attract visitors' attention. Arif et al. (2020) noted that the available packages component involves a combination of various services in a single tour package to offer to visitors.

Cardoso and Lange (2007) stated that packages help customers select tourism products and that dynamic packaging can be used as a competitive advantage, customized according to tourists' requirements. Bruinsma et al. (2011) found that successful integration of tourism packages with various services enhances tourist satisfaction. Pantiyasa et al. (2020) examined tourist satisfaction with tour packages, defining them as services comprising trips and focusing on tourists' satisfaction with these packages. Kumar et al. (2020) highlighted the necessity of special stimulus packages from government tourism departments to sustain and revive the travel and tourism industry post-pandemic. Liao and Chuang (2020) focused on the development of tour packages, concluding that effective package creation, which combines various elements of travel experiences, is crucial for attracting tourists.

Ancillary Services

Ancillary services are described as the availability of public facilities that support the implementation of tourism activities, including banks, ATMs, hospitals, and other amenities used by tourists. Öztüren et al., (2021) stated that for tourism activities to flourish, essential infra-

structure and facilities such as hotels, restaurants, bars, shops, parks, and marinas are required. Tourists often seek amusement, entertainment, and active experiences during their visits, necessitating access to information about ancillary services at their destinations (Camilleri & Camilleri, 2018). Liew et al. (2021) revealed that ancillary services are crucial attributes for tourism industry practitioners to consider in order to enhance tourist satisfaction and develop a competitive advantage over other destinations. Specifically, safety of tourism attractions and emergency medical services were identified as highly significant by respondents in their study. Camilleri and Camilleri (2018) noted that tourists on vacation generally seek to be amused, entertained, and active, making information about ancillary services vital. Tukamushaba et al. (2016) found that ancillary services, as a component of the tourism product, positively impact memorable travel experiences. They emphasized that providing excellent ancillary services, such as security and internet access, contributes to a more comfortable stay for tourists. Salam et al. (2018) highlighted that improving tourism destination management and meeting service standards require the provision of services such as police stations, hospitals, and well-maintained public facilities, including those for safety, security, and health standards. Muthuraman et al. (2019) further asserted that ancillary services, while often considered daily use amenities rather than tourist-specific services, are critical for enhancing destination competitiveness and adding value to the tourist experience.

Despite the considerable literature on the 6A's framework in tourism (Buhalis & Amaranggana, 2013), there is a lack of studies focusing specifically on beach destinations and how tourists prioritize these factors. Previous research has extensively discussed individual aspects of beach management, such as safety (Chen & Teng, 2016), accessibility (Polnyotee & Thadaniti, 2015), and amenities (Frampton, 2010), but there has been limited focus on an integrated approach that considers the combined effect of *Amenities, Accessibility, Activities, Available Packages, and Ancillary Services* on a destination's overall *Attractiveness*. Moreover, most studies either emphasize infrastructural improvements (Alam et al., 2017) or the role of tourism packages (Arif et al., 2019), but they do not provide a comprehensive analysis of how tourists rank these factors in their decision-making process. This study aims to fill these research gaps by analyzing the relative importance of each factor using the 6A's framework and determining how they collectively influence beach *Attractiveness*.

The primary objectives of this study are twofold. First, it aims to develop a Smart Tourism Destination Scale tailored to Goa's tourism industry. This new scale is designed to equip Goa's tourism sector with tools to enhance the overall beach experience for tourists, making it a more efficient, safe, and enjoyable destination. By integrating smart tourism concepts, the research intends to contribute to the sustainable development and long-term attractiveness of Goa's beach destinations.

Secondly, the study aims to assess the relationship between the five key factors—*Amenities, Accessibility, Activities, Available Packages, and Ancillary Services*—and their contribution to the *Attractiveness* of beach destinations. Specifically, the study seeks to identify the factors that tourists prioritize the most when visiting beach destinations, providing actionable insights for policymakers and tourism managers to optimize services and facilities. Furthermore, this study investigates whether there is a significant difference in the prioritization of the six factors—*Amenities, Activities, Attractions, Accessibility, Available Packages, and Ancillary Services*—by tourists, highlighting potential variations in their preferences and offering a deeper understanding of what drives beach tourism competitiveness.

Building upon the objectives and research gaps identified, this study formulates the following hypotheses to guide the analysis of how tourists prioritize the six factors (*Amenities, Activi-*

ties, Attractions, Accessibility, Available Packages, and Ancillary Services) and their impact on the attractiveness of beach destinations, particularly in Goa:

H₁: There is a significant difference in the priorities of the six factors (Amenities, Activities, Attractions, Accessibility, Available Packages, and Ancillary Services) by tourists at beach destinations.

H₂: *Amenities* have a significant effect on the overall *Attractiveness* of beach destinations.

H₃: *Activities* play a significant role in enhancing the *Attractiveness* of beach destinations.

H₄: *Accessibility* significantly impacts the *Attractiveness* of beach destinations, particularly in relation to traffic management and real-time access to facilities.

H₅: *Available Packages* contribute significantly to the overall appeal of a beach destination by offering tailored tourism experiences.

H₆: *Ancillary Services* (such as safety, medical facilities, and security) have a significant positive influence on tourist satisfaction and beach *Attractiveness*.

These hypotheses will be tested through data collection and analysis, aiming to provide deeper insights into tourists' preferences and the key drivers of beach attractiveness. The findings will not only validate the 6A's framework but also offer actionable recommendations for the development of smart beach strategies that align with tourists' expectations and enhance Goa's tourism appeal.

Methodology

This research focuses on the beach tourism sector in Goa, India, with an emphasis on integrating smart beach concepts for real-time information dissemination. The study employs a combination of field-level assessments and theoretical-conceptual approaches to understand and enhance beach tourism experiences.

An exploratory research design was adopted, involving a comprehensive field survey to identify significant characteristics of the beaches in Goa. The study included an onsite field visit to both North Goa and South Goa beaches to assess their current state and gather relevant data. A primary data collection instrument was developed in the form of a questionnaire, which included semi-structured and multiple-choice questions rated on a five-point Likert scale. The questionnaire was designed based on the six parameters of Smart Tourism Destinations proposed by Dimitrios Buhalis. The questions were crafted to capture tourists' perspectives on various aspects of beach tourism amenable to real-time information dissemination and their impact on the overall beach experience. To ensure the content validity of the scale, expert evaluations were conducted. Subject matter experts reviewed the questionnaire to confirm that it accurately measured the intended constructs related to smart tourism and beach management. To ensure the clarity and effectiveness of the questionnaire, a pilot study was conducted with tourists from different regions of India. This preliminary phase allowed for testing the questionnaire's comprehensibility and making necessary revisions to simplify it for broader understanding.

The final questionnaire comprised two sections: the first section collected data on visitor/tourist profiles, while the second section focused on their responses regarding the beach tourism experience. In addition to the survey, in-depth interviews were conducted with restaurateurs, industry experts, locals, and tourists to gain qualitative insights. Participatory observation was also employed to supplement the survey data.

The sample consisted of 103 tourists who visited popular beaches in Goa. Convenience and snowball sampling methods were utilized to gather responses. The collected data was organized, tabulated, and analyzed using SPSS software.

Data Analysis / Results

Demographic variables (gender, age, travelling with, mode of transportation and travelling through) of the study are given in Table 1.

Table 1. Demographic variables of the study

Demographic Variables		Frequency	Percentage%
Gender	Male	51	49.5
	Female	52	50.5
Age	15-25	19	18.4
	26-35	43	41.7
	36-45	23	22.3
	46 and above	18	17.5
Travelling With	Solo	12	11.7
	With Friends	33	32.0
	With Family	54	52.4
	Others	4	3.9
	Total	103	100.0
Mode of Transportation	Air	44	42.7
	Rail	11	10.7
	Road-Bus	6	5.8
	Road-Own Vehicle	41	39.8
	Road-Hired vehicle	1	1.0
	Total	103	100.0
Travelling Through	Pre-designed Tour & Travel Package	2	1.9
	Customized or Tailor-Made Package	9	8.7
	Own Travel Itinerary	79	76.7
	Other	13	12.6
	Total	103	100.0

Source: Own study

An Exploratory factor analysis of all the items was conducted in order to reduce the number of items and to check the factor loadings. A varimax rotated principal component analysis was used on 45 items for a sample of 103 tourists. Kaiser-Meyer-Olkin statistics of 0.800 and Bartlett's test of Sphericity statistics of 5998.186 indicated that the data was suitable for conducting factor analysis (Norusis/SPSS Inc., 1988). Three of items did not load as their values were below .500. A six-factor solution was obtained on the basis of minimum eigen value of one and the interpretability of the solution. These factors cumulatively explained 79 % of the variance in the original data set. Table 2 shows Rotated Component Matrix and factor loadings.

Table 2. Factor loadings and Cronbach's Alpha

Items	Factors					
	1	2	3	4	5	6
The beach is pleasant	0.845					
There is an adequate public washroom at the beach	0.944					
There are adequate number of garbage disposal bins at the beach	0.842					
There is adequate internet connectivity at the beach						
There is provision for adequate safe drinking water at the beach	0.807					
There is provision for adequate outdoor showers at the beach	0.746					
Adequate shower facility is available in the washroom at the beach area	0.704					
Adequate changing rooms for men & women are available at the beach	0.854					
Adequate restaurants & eateries are available at the beach	0.668					
There is an adequate play area for kids at the beach area	0.929					
I feel safe at the beach	0.846					
Lifeguards are adequately staffed at the beach	0.797					
The roads at the beach are well maintained				0.839		
There is adequate public transportation to & from the beach				0.731		
There are sidewalks near the beach area for the pedestrians/ tourists to walk comfortably				0.579		
There is adequate parking at the beach				0.875		
The parking at the beach is safe				0.655		
There is special washroom facility for differently abled citizens				0.785		
There is ramp facility for differently abled citizens				0.867		
There are adequate signages & boards for proper navigation to the beach				0.605		
The beach is easily accessible given my physical condition(Eg. Senior citizen, any medical condition)						
There is adequate space at the beach to do all kinds of beach activities		0.791				
The overall appearance of the beach is attractive		0.782				
Adequate information on the beach weather condition is available		0.731				
The beach water is clean for recreational activities		0.880				
The beach water is safe for recreational activities		0.798				
The beach is well maintained for cleanliness		0.765				

The design of the beach is visually attractive		0.871				
There is adequate crowd management at the beach						
The Beach water is adequately clean to swim			0.651			
Adequate information on safety of beach water is available for swimming purpose (Eg.quality/current/temperature/presence of harmful sea species in the water)			0.818			
Adequate information on how to use the safety/protection gears/equipments are available for boating activity			0.727			
Adequate information along with clear instructions on other beach adventure activities are provided			0.826			
Water activities are well organized			0.846			
Adequate information for booking the beach activities/water sports activities in advance is available			0.812			
All beach related activities are adequately monitored & supervised			0.872			
Multiple modes of payment such as online payment through Netbanking, Google Pay, Phonepay, Paytm etc., are available at the beach for all the beach activities			0.683			
Adequate information on Goa's beach destination packages are available					0.740	
Adequate information on packages inclusive of all water sports/ beach activities is available					0.887	
Available packages are inclusive of adequate information on hotels/accommodations & restaurants					0.795	
Visiting a beach destination without the travel package is more convenient					0.715	
Available packages provide adequate choices					0.801	
Available packages help in making a more informed decision					0.880	
Adequate emergency medical facility is available at the beach						0.929
I'm aware of fire station at the beach area						0.919
I'm aware of police station at the beach area						0.849
Adequate shopping options are available at the beach area						0.697
Adequate number of beach shacks are available						0.782
Cronbach's Alpha	.958	.955	.952	.932	.931	.946

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The results of the Principal Component Analysis (PCA) with Varimax rotation revealed six distinct factors representing key dimensions of beach tourism: Amenities, Attractions, Activities, Accessibility, Available Packages, and Ancillary Services. Each factor displayed high internal consistency, as indicated by Cronbach's Alpha values ranging from 0.931 to 0.958. Amenities emerged as the most significant factor, capturing various aspects such as the availability of

public washrooms, garbage disposal bins, safety measures, and restaurants. Attractions focused on the natural and artificial features that draw tourists, including cleanliness, visual appeal, and crowd management. Activities centered around recreational opportunities and their organization, safety, and accessibility. Accessibility highlighted the importance of transportation infrastructure, facilities for differently-abled tourists, and well-maintained roads. Available Packages included elements related to the variety and comprehensiveness of beach tourism packages, aiding tourists in making informed decisions. Ancillary Services covered supporting facilities such as emergency medical services, fire stations, and shopping options. Together, these six factors provide a comprehensive framework for understanding the components that significantly influence tourist experiences and satisfaction in beach tourism destinations. It is worth noting that three items did not load onto any factor as their factor loadings were below 0.5, indicating they do not strongly associate with any of the identified dimensions.

Friedman's Test is a non-parametric statistical test used to detect differences in the rankings of several related groups. It is particularly useful when the assumption of normality is not met for repeated measures data (Conover, 1999). In this study, Friedman's Test was conducted to assess which factors—Amenities, Activities, Attractions, Accessibility, Available Packages, and Ancillary Services—are prioritized more by tourists at beach destinations.

The results of Friedman's Test are summarized in the table provided. The mean ranks for each factor are seen in table 3. The test statistic, Chi-Square (χ^2) = 78.230 with degrees of freedom (df) = 5, and the Asymptotic Significance (p-value) = 0.000. Since the p-value is less than 0.05, it indicates that there is a statistically significant difference in the prioritization of the six factors (Amenities, Activities, Attractions, Accessibility, Available Packages, and Ancillary Services) by tourists when selecting a beach destination.

Table 3. Friedman's Test

Factors	Mean Rank
Amenities	4.42
Activity	3.93
Attraction	3.56
Accessibility	3.55
Available Package	3.12
Ancillary Service	2.42
Test Statistics^a	
N	103
Chi-Square	78.230
df	5
Asymp. Sig.	0.000
a. Friedman Test	

The results suggest that Amenities is the most prioritized factor by tourists when selecting a beach destination, with the highest mean rank of 4.42, followed by Activities (3.93) and Attractions (3.56). Ancillary Services was the least prioritized factor, with the lowest mean rank of 2.42.

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.649a	.421	.391	.75383
a. Predictors: (Constant), AncillaryServiceC, AmentiesC, AvPackageC, AccessibiityC, ActivityC				

The regression model as seen in Table 4, demonstrates a moderate explanatory power, with around 42.1% of the variance in beach destination attractiveness explained by the predictors. While the model accounts for a significant portion of the variability, there is still 57.9% of the variance that is not explained by the current set of predictors, suggesting that other factors may also influence the Attractiveness of beach destinations.

Table 5. Anova Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.047	5	8.009	14.095	.000 ^b
	Residual	55.122	97	.568		
	Total	95.169	102			
a. Dependent Variable: Attraction						
b. Predictors: (Constant), Ancillary Service, Amenities, Available Package, Accessibility, Activity						

The ANOVA results as seen in Table show that the regression model is statistically significant ($p < 0.001$), suggesting that the independent variables collectively provide a significant explanation of the variability in beach destination attractiveness. The F-statistic of 14.095 further supports the significance of the model, indicating that the model is a good fit for the data.

Table 5. Coefficients Table

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.098	0.387		0.254	.004
Amenities	0.276	0.094	0.249	2.933	.001
Activity	0.221	0.106	0.226	2.089	.025
Accessibility	0.241	0.106	0.231	2.271	.000
Available Package	0.195	0.100	0.183	1.942	.055
Ancillary Service	0.346	0.084	0.349	4.127	.000
a. Dependent Variable: Attraction					

The coefficients table provides a detailed analysis of the relationship between various predictors and the attractiveness of beach destinations (Attraction). Here's a breakdown of the results:

Amenities ($B = 0.276$, $Beta = 0.249$, $t = 2.933$, $Sig. = 0.001$): Amenities have a statistically significant positive effect on the attractiveness of beach destinations. The coefficient indicates that for every unit increase in amenities, the attractiveness of the beach increases by 0.276 units. This finding supports Hypothesis 2, which posits that amenities significantly affect beach attractiveness. The low p-value (0.001) confirms that this relationship is statistically significant.

Activity ($B = 0.221$, $Beta = 0.226$, $t = 2.089$, $Sig. = 0.025$): Activities also significantly impact the attractiveness of beach destinations. The coefficient suggests that each unit increase in activities contributes to an increase of 0.221 units in beach attractiveness. This supports Hypothesis 3, which states that activities play a significant role in enhancing beach attractiveness. The p-value of 0.025 shows the effect is statistically significant.

Accessibility ($B = 0.241$, $Beta = 0.231$, $t = 2.271$, $Sig. = 0.000$): Accessibility has a significant positive effect on the attractiveness of beach destinations. The coefficient indicates that an improvement in accessibility increases attractiveness by 0.241 units per unit change. This supports Hypothesis 4, which argues that accessibility significantly impacts beach attractiveness. The p-value (0.000) strongly supports the significance of this effect.

Available Package ($B = 0.195$, $Beta = 0.183$, $t = 1.942$, $Sig. = 0.055$): The effect of available packages on beach attractiveness is positive but not statistically significant at the conventional 0.05 level. The coefficient suggests that for each unit increase in available packages, attractiveness increases by 0.195 units. Although the p-value is slightly above 0.05 (0.055), which means it is approaching significance, this result suggests that while available packages may contribute to beach attractiveness, the effect is not as strong or clear as with other factors. Thus, Hypothesis 5 is partially supported but does not achieve statistical significance.

Ancillary Service ($B = 0.346$, $Beta = 0.349$, $t = 4.127$, $Sig. = 0.000$): Ancillary services, such as safety, medical facilities, and security, have a highly significant positive effect on the attractiveness of beach destinations. The coefficient indicates that each unit increase in ancillary services results in a 0.346-unit increase in attractiveness. This strongly supports Hypothesis 6, which states that ancillary services significantly positively influence tourist satisfaction and beach attractiveness. The p-value of 0.000 underscores the robust significance of this effect.

Amenities, activities, accessibility, and ancillary services are shown to significantly enhance the attractiveness of beach destinations, while the effect of available packages is close to significance but not statistically significant at the 0.05 level. These findings validate most of the proposed hypotheses and highlight key areas for improving the overall appeal of beach destinations.

Discussion

This study aimed to enhance Goa's beach tourism by identifying and validating key Smart Beach Parameters that contribute to the attractiveness of beach destinations. The results not only provide valuable insights into the factors influencing beach tourism but also contribute to theoretical understanding and practical management strategies. The analysis highlights the importance of Attractions as the primary dependent variable, followed by other significant factors.

The study's findings underscore the pivotal role of Attractions in determining beach attractiveness. This aligns with previous research that emphasizes the importance of both natural and man-made features in attracting and retaining tourists (Tian et al., 2013). High factor loadings associated with aspects such as beach cleanliness, visual appeal, and crowd management indicate that these elements are crucial in shaping the overall tourist experience. This supports the findings of Girau et al. (2018), who stressed that addressing issues like overcrowding and maintaining visual appeal are essential for enhancing the beach experience.

The high significance of Attractions in this study also reflects the broader theoretical framework of Smart Tourism Destinations, as proposed by Buhalis (2003). This framework highlights the multifaceted nature of tourism experiences and the necessity for integrated management approaches. The focus on Attractions complements the framework by emphasizing that the appeal of beach destinations is strongly influenced by their aesthetic and functional attributes.

Amenities, though crucial, did not emerge as the strongest predictor of beach attractiveness in this study. However, they remain an important aspect, consistent with Chen and Teng's (2016) findings. The presence of essential infrastructure, such as public washrooms, garbage disposal, and safety measures, is fundamental to ensuring a pleasant beach experience. Sigalat-Signes et al. (2020) also support this view, emphasizing that real-time information systems are necessary for maintaining and improving these amenities.

The significance of Activities in enhancing beach attractiveness aligns with Alam et al.'s (2017) and D'Souza's (2024) research, which underscores the role of well-organized recreational opportunities in tourist satisfaction. Although Activities were a significant factor, their impact was less pronounced compared to Attractions. This finding suggests that while activities are important, their effectiveness is often enhanced when integrated with other elements, such as attractive amenities and well-maintained attractions.

Accessibility was identified as a significant factor affecting beach attractiveness. This supports Rajan et al. (2013), who highlighted the importance of transportation infrastructure and facilities for differently-abled tourists. The study's results suggest that improving transportation options, parking availability, and overall accessibility are crucial for enhancing the beach experience. This finding is consistent with the broader trend towards inclusivity in tourism planning. The impact of Available Packages on beach attractiveness was positive but not statistically significant. This indicates that while well-designed tourism packages can enhance the beach experience, they may not be as impactful as other factors. This finding aligns with Ghosh and Datta's (2017) observation that unplanned growth and lack of strategic development can limit the effectiveness of tourism packages.

Ancillary Services showed a strong positive impact on beach attractiveness. This supports Ghosh (2011), who emphasized the need for comprehensive frameworks that address various aspects of beach tourism, including safety and emergency preparedness. The significance of ancillary services highlights their critical role in ensuring a safe and enjoyable beach experience.

Limitations and Scope for Future Research

This study has several limitations. Firstly, the sample size of 103 respondents, while useful for preliminary insights, may not fully represent the diverse tourist population at Goa's beaches. This limitation affects the generalizability of the findings. Future research should aim for a larger, more diverse sample to enhance the robustness of the results. Additionally, the use of

convenience and snowball sampling methods may introduce biases, potentially over-representing certain tourist groups while under-representing others. Employing more randomized sampling techniques could address this issue.

Another limitation is the reliance on self-reported data, which can be affected by social desirability and recall bias. To address this, future studies should include observational data and secondary sources to complement self-reports. Moreover, the focus on Goa's beaches limits the applicability of the findings to other contexts. Comparative studies across different geographical and cultural settings would help test the generalizability of the results and explore how contextual factors influence tourist preferences.

Future research could address these limitations by expanding the sample size and employing more randomized sampling methods to improve the generalizability of the findings. Incorporating Confirmatory Factor Analysis (CFA) with a larger sample could validate and strengthen the Smart Beach Parameters framework developed through Exploratory Factor Analysis (EFA), ensuring its robustness across various contexts.

To mitigate sampling biases, researchers should consider mixed-methods approaches that combine quantitative surveys with qualitative interviews and observational data. This would offer a more comprehensive understanding of tourist experiences. Additionally, exploring different beach destinations, both within and beyond India, could provide insights into the framework's applicability in various settings.

Longitudinal studies could examine the long-term impact of smart tourism initiatives on tourist satisfaction and beach management, providing insights into the sustainability and effectiveness of these interventions. Research could also investigate the integration of emerging technologies, such as AI, AR, and VR, into the Smart Beach Parameters framework to enhance tourist experiences.

Lastly, future studies should explore the relationship between smart tourism initiatives and sustainable tourism practices. Understanding how smart technologies contribute to sustainability goals, such as reducing environmental impact and promoting responsible tourism, will offer valuable insights for developing effective beach tourism strategies. Addressing these aspects will advance the field of smart beach management and improve tourist experiences and destination attractiveness.

Conclusion

Tourism has been one of the first sectors to undergo digital transformation on a global scale, driven by the widespread adoption of information and communication technologies (ICT). This evolution emphasizes the importance of competitiveness, growth, and sustainable development within the industry. The introduction of the Smart Beach concept is a forward-thinking initiative that promises to enhance tourist experiences by providing high-tech services and integrating environmentally sustainable features.

As the tourism sector continues to evolve, the implementation of Smart Beaches in Goa could serve as a pioneering model, offering an innovative blend of technology and sustainability. This initiative would position Goa as a leader in smart tourism, appealing to both domestic and international markets. The concept aligns with the work of Buhalis and Amaranggana (2013), who emphasize the need for dynamically interconnected platforms that allow for the instantaneous exchange of tourism-related information. Such a system, accessible via multiple devices, would not only enhance the tourism experience but also optimize resource management, improving safety, sustainability, and competitiveness over time.

Given the significant decline in foreign tourist arrivals (FTA) post-COVID-19, Goa's adoption of Smart Beaches is both timely and strategic. It offers a path to revitalizing tourism, attracting a diverse range of visitors, and ensuring resilience against future disruptions. By leveraging real-time information systems, mobile applications, and smart infrastructure, Goa's beaches could address pressing issues such as safety, environmental concerns, and overcrowding—critical factors for maintaining long-term success. Studies by Sigalat-Signes et al. (2020) and Girau et al. (2018) highlight the value of using smart technologies for crowd management and information dissemination to enhance the tourist experience.

Moreover, the Smart Beach concept promises far-reaching benefits for Goa's tourism industry. By integrating cutting-edge technology into beach tourism, the region can offer a more engaging and secure experience, improving both tourist satisfaction and beach management. The initiative would mark Goa's debut in smart tourism, setting a precedent for other destinations to follow.

Smart Beaches present a holistic approach to tourism management, addressing both current challenges and future needs. Goa's beaches, which form an iconic part of its cultural and tourism landscape, stand to gain immensely from this transformation. By embracing smart technologies, Goa can ensure that its beach destinations remain competitive, sustainable, and attractive to tourists year-round, driving growth and long-term prosperity in the tourism sector.

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The role of tourism in the new growth perspectives in Southeast Europe (SEE)

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Received: May 2024 | Accepted: September 2025

DOI:10.5937/turizam29-51155

Abstract

Tourism is an increasingly important source of income and development driver in South-Eastern European (SEE) countries^B. Besides positive effects on economic growth, tourism greatly affects the environment. Therefore, new growth perspectives include tourism as important industry with its economic, social, and environmental impacts. Consequently, economic growth is nowadays discussed more in the context of environmental concerns than decades before. The focus of this review paper is put on the new economic growth theories and the role of tourism in it, together with challenges the new theories face. The starting point of the research is the abandonment of existing, neoliberal assumption and paradigm of neoliberal capitalism which includes constant growth and thereby worsens the impact on the environment. Disadvantages, as well as negative impact on the environment leads to the emergence of new perspective on growth – from growth-optimist and green-growth through a-growth to the theory of de-growth. The main premise is that unlimited growth is not possible on a planet with limited resources. Hence, new growth theories emphasise the importance of redefine tourism with focus on the rights of local communities and rebuild the social capacities of tourism. This paper questions advantages and disadvantages, as well as the potential consequences of the establishment of new growth policies. Considering that the Mediterranean countries of Southeastern Europe largely base their economic growth on the tourism sector, the analysis of the position of tourism in new growth perspective as well as adaptation to new policies is an important topic for research.

Keywords: *Economic Growth, Green Growth, Degrowth, Sustainable Tourism, SEE*

Introduction

Tourism has experienced significant growth over time. Between 2009 and 2019—a decade of uninterrupted expansion—international tourist arrivals increased by an average of 5% per year, resulting in a total rise of 64%. During this period, global tourist arrivals surged from nearly 900 million in 2009 to 1.5 billion in 2019 (UNWTO, 2023). Europe, the most visited region in the world, recovered strongly after the pandemic, reaching 94% of pre-pandemic visitor levels in 2023. In terms of economic impact, tourism contributed approximately 3% to global gross domestic product (Tourism Direct GDP) in the same year (UNWTO, 2024a). In 2023, Europe

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hosted 54% of all international tourist arrivals worldwide. Southern and Mediterranean Europe alone welcomed 307.4 million international tourists—a 15.7% increase compared to 2022 and a 1.1% increase over pre-pandemic levels in 2019. Notably, this growth was concentrated in the second and third quarters of the year, suggesting that climate change may be extending the pre-season without yet significantly disrupting the peak summer season (UNWTO, 2024b). These trends underline the significance of tourism as a key economic sector in South-Eastern European (SEE) countries. Given its growing role, it is essential to analyze tourism within the framework of emerging economic growth theories that address environmental and social sustainability. New growth perspectives dominantly include green transition and environmental protection. European Green Deal promotes new growth models, climate-neutral policies, and legislative initiatives, while Greener European tourism is included in mentioned policies and initiatives (European Commission, 2021). Sustainable tourism is one of the prominent roles of United Nations World Tourism Organization (UNWTO) as well as Global Sustainable Tourism Centre (GSTC) in gaining United Nations 2030 agenda for sustainable development. Tourism countries possess rich cultural heritage, natural landscapes, and historical sites which attracts tourists from around the world. Tourism is not only economic phenomenon, but also a social and environmental. Therefore, it requires interdisciplinary research. Tourism fosters new growth perspectives by driving economic growth and development, job creation, and promoting cultural exchange. In order to produce tourism and leisure services, country need to produce capital goods like public and construction infrastructure. Tourism countries invest in infrastructure and facilities like airports, roads, ports, communication infrastructure, hospitals, and restaurants. However, the development of tourism is based mostly upon free national natural resources or attractions, but the costs are protection and management (Andriotis, 2018). Climate change has revived the debate between economic growth and environmental protection or climate policies. Meanwhile, the climate policies may affect economic growth differently. Economic growth is the topic which became interdisciplinary, and the consequences of economic growth are researched by natural and social scientists. The debate may intensify in coming years due to temperature rise that surpasses all predictions. Furthermore, this debate intensifies the interest in growth theories, from those who advocate the reduction of growth as a way of protecting environment for quality life, to those who see progress in population standards only in economic growth. More precisely, growth theories range from *anti-* to *pro-* growth highly connected with political or socio-political support. New growth theories are characterized by the advocacy of abandoning GDP as an indicator of progress. According to it, the GDP is a measure of market activity, but not a measure of social well-being. Recently, numerous indicators have been developed that show the level of well-being (D'Alisa *et al.*, 2016). In the terms of macroeconomics, tourism is one of the most important sources of foreign exchange earnings as well as driving wheel of economic growth primarily through employment. However, systematic and complete tourism macro-statistics for the national economies is very scarce and incomplete, the methodology is not unique and unified disabling the adequate comparisons between countries (Salee *et al.*, 2022). Tourism plays an important role in SEE economies and its regional and sustainable development policies. To conclude, tourism has economic and employment potential, but social and environmental implications. This paper tends to give overview of the application of growth theories and connection with sustainable tourism development. Social justice, equity and human flourishing are main determinants of new growth theories which advocated for a redistributive and democratically organized reduction of energy and resources. *Degrowth* stands out as the most radical anti-capitalist theory, while other *green-growth* and *growth-optimist*

theories advocated the reduction and decoupling with the focus on amount of material and energy metabolized not on GDP reduction. Therefore, *degrowth* have negative connotations in public due growth sacrifice for environment. Also, *degrowth* scares as it sometimes connects with communism. It is a theory that met with condemnation and disapproval in the public for its radical shift towards sustainability at the expense of economic growth. Through literature (Androit, 2018; Sharpley and Telfer, 2023; D'Alisa et al, 2016; Murray et al, 2023; Van den Bergh, 2023) it seems utopian and still has no strong scientific basis. More exhaustive and comprehensive research is needed to bring this theory closer to the masses. Apart from the theories of growth, policies and initiatives that include new growth theories are also mentioned - the *Green New Deal* - an important development plan.

Literature review

According to Sharpley and Telfer (2023) tourism is the mass movement of people which entails environmental, social and economic costs. However, tourism is an effective contributor to development of destination but with negative environmental impacts. The balance between development and environment led to policies and initiatives of sustainable tourism development. The authors concluded the hypothesis that tourism is also part of global production and consumption system which produces more than necessary with negative environmental impacts. Development theories in tourism, according to Androit (2018) are chronologically divided to: Modernisation/Diffusion (1950s -1960s); Dependency (1960s – early 1980s); Neo-liberalism (Mid 1970s - 1980s); Sustainable development (Late 1980s – 1990s); and Towards a new paradigm (2000s). Similar structure or the evolution of development theory is presented by Telfer and Sharpley in their book *Tourism and Development in the Developing World* (2016). The last period “Towards a new paradigm”(Androit, 2018) or “Global development” (Telfer and Sharpley, 2016) is characterized by increasing concerns related to tourism and climate change, endogenous anti-capitalistic model of development, environmentally-friendly growth, respecting limits to growth, rejection of Western travel amenities and commoditised tourism products, and downscaled tourism infrastructure.

Kallis *et al* (2018) research the different themes of degrowth – history, economics, anthropology and social sciences, technology studies, political science and ecological economics and provides that growth is an ideological construction and ecologically unsustainable. Social transformation is indispensable prerequisite in economic stabilisation and degrowth application. A similar subject of research is presented by environmental political scientists and economists which studied climate change, planetary boundaries and socio-economic inequalities in proceedings from the scientific conference *Degrowth: A Vocabulary for a New Era* edited by Giacomo D'Alisa, Federico Demaria and Giorgos Kallis (2016). It discusses about economic theory and practice in the field of de-growth economics. However, *degrowth* theory is presented as a subversive and controversial topic in contemporary societies. The *Degrowth* advocates do not have a clear and scientifically based plan, making this theory subject to numerous criticisms. Some of the interesting conclusions are that institutional action, as well as institutions very creation and development, is a consequence of human action, hence institutional shortcomings are the result of human action for which responsibility should be taken. Although it is often stated that degrowth theory is primarily a critique of growth, this theory is very radical and insufficiently researched.

– The perspectives of new growth theories in tourism

The tourism sector, with its huge socio-environmental costs, plays an increasingly powerful role in the process of environmental degradation on a global scale. In economic growth context tourism can be related with green growth or sustainable tourism development, *post-development* tourism and *degrowth* tourism. Also, a critical problematization of touristification can be dealt from a *degrowth* perspective – a political agenda from transforming tourism for reproduction on life rather than capital (Murray *et al*, 2023). Although aimed at reducing inequality and poverty, *degrowth* policies in middle-income countries may have different impacts than in high-income countries. Geographical location, as well as economic and institutional capacities play main role related to the adaptation and implementation of economic policy measures that are in line with climate change (Van den Bergh, 2023). Therefore, the expansion of tourism has resulted in exploitation and inequalities. The *degrowth* theory offers the solution for overtourism and proposes that tourism should be rethought within this framework, offering a possible pathway to a post-growth world (Sharpley and Telfer, 2023).

Tourism development research was introduced relatively recent, after the 1970s and there is lack of development theories in the context of tourism (Andriotis, 2018). However, European Union includes sustainable tourism in many initiatives, policies, and strategies of economic development. Recent policies in the domain of tourism put a lot of effort on tourism impacts on economic growth as well as on environment. Furthermore, European Tourism Indicator System (ETIS) created by European Commission monitors and measures sustainable tourism performance of tourism destinations. Along with destination management, social and culture impact, two of four categories are economic value and environmental impact (ETIS, 2016).

In response to the challenges of policies to avoid extreme climate change, three groups of solutions are most often formed in the public discourse: *growth-optimists*, *anti-* or *de-growth* and *a-growth*. *A-growth* presents the theory in between two ends of spectrum, on the one side are *anti-growth*, *degrowth* or *post-development* theories and on the other, *growth-optimist* theories. *Growth-optimists* advocate *green growth* based on innovations, encouraging purchase and being commercially attractive (Van der Bergh, 2023). On the contrary, according to Kallis (2017) economic growth cannot be ecologically sustainable regardless of type of growth – either socialist or capitalist. Sustainability, according to Kallis, is only possible without growth.

– The impacts of tourism growth

The connection between economic growth and environment and the role of tourism in it led to a *degrowth* as the end point of environment-development continuum. Climate change, global warming and carbon emissions pressing the need to reduce levels of consumption and exploitation of natural resources. The environmental consequences of consumptions are equally distributed around the globe while the level of consumption is unequal distributed. Responsibility for reducing climate change impacts should be taken by wealthier countries who need to subsidize the cost in underdeveloped parts of the world (Sharpley and Telfer, 2023).

Economic growth has a positive correlation with tourism receipts, tourism expenditures and number of arrivals in many countries. Also, the growth-led tourism hypothesis is supported in case of Croatia, Bulgaria, Greece, Spain, Italy, Tunisia, and Cyprus (Aslan, 2013). Furthermore, the hypothesis of tourism-led economic growth in case of Serbia is confirmed by Hristov Stančić *et al* (2022), while authors imply that tourism industry is trigger of Serbian economic growth. The most comprehensive assessment was made by De Vita and Kyaw (2016) who made a panel analysis on sample of 129 countries in the period 1995-2011 using a system generalized methods-of-moments (SYS-GMM) estimation methodology to the tourism-growth relation-

ship. Their results suggest that role of the level of economic development is not negligible in explaining the tourism-growth relationship. Also, their specification includes the level of financial development while the positive effect of tourism is only significant for middle and high-income countries. At low levels of economic development, tourism does not contribute to GDP growth.

Economic growth theories based on neoliberal economics measure progress by increases in GDP. Although the world GDP is increasing, the world is becoming richer and global poverty had been halved, inequalities rise. Despite increase in average per capita GDP on global level, income inequality continues to grow even in the developed world (Sharpley and Telfer, 2023). Adopting policies based on the wrong indicators can have disastrous consequences for society. Policies based on wrong indicators mean that governments make inadequate policy choices, with long-lasting consequences. Hence, the GDP proved to be an unreliable indicator, and the need for new indicators that would more clearly represent well-being resulted in the emergence of “beyond GDP” frameworks. This framework includes the environmental impacts of economic growth. Furthermore, “beyond GDP” framework includes more powerful indicators which present is economic growth environmentally sustainable and who is benefiting from growth (Stiglitz *et al*, 2018).

– Environment vs. Development

Nowadays societies face a great challenge: need to resist economic growth that endangers the ecosystem and negatively affects climate change, while at the same time economic growth is indispensable. Economic growth, but more the economic development is the main driving force and goal of any economic policy of social arrangement and an opportunity to improve living standards. Hence, resisting growth brings the danger of economic and social collapse. Regarding the new growth perspectives, green economies or *green growth*, *a-growth* and *de-growth* appear as solutions. Solutions vary from radical: an immediate ban on fossil fuels use, to more gradual: transition to net zero carbon emissions. The common to all solution is that global warming entirely depend on appropriate human action (Sharpley and Telfer, 2023). Most important, the basis of the green growth theories is the reduction of economic activity that contributes to pollution and the strengthening of economic activities with a low share of carbon emissions (D’Alisa *et al*, 2016).

The optimal relationship between tourism and ecology is achieved through development that will not degrade the environment. Neoliberal theory is slowly disappearing and losing its significance in front of sustainable theories of economic growth that include care and protection of the environment. But if we compare the new theories of economic growth and development with the neoliberal ones on the one side of environment-development policy spectrum is de-growth theory, and on the other is neoliberal growth policy measured by GDP. In between of these two extremes of spectrum are *steady state economy* and *green growth*. *Stady state* is consistent with new growth perspectives which include *a-growth* perspective.

Balancing development with sustainability represents modest solution. Environmental economics suggest targeting and constraining the industries which contribute to emissions rather than enforcing less consumption overall. In that way, constraining the physical size of the economy is less environmentally and economically effective than targeting the specific ones. Regulations and establishing standards are more effective. Linked with the EU Green Deal, *the European Commission Transition Pathway for Tourism* includes a focus on the transition to greener business models, including through sustainable mobility and integrated circularity for

tourism services (European Commission, 2022). Economic indicators like DTGDP for tourism, or GDP for overall economic performance of destination is not the appropriate measure of tourism contribution, or economic growth in general. Tourism statistics like statistics in general need robust data to ensure that tourism as well as overall economic action on the ground really contributes to the improvement of living standard in sustainable way (Stiglitz *et al*, 2018).

New growth theories like a-growth and *de-growth* denies GDP as main indicator of societal welfare and progress. It is stated that the GDP is not robust indicator of welfare and progress (Van der Bergh, 2011). *Beyond GDP* framework includes alternative to traditional measures for economic indicators such as GDP. Some of the indicators that are characteristic of the new theories of growth and include a broader picture of progress are the EU Social Progress Index (SPI) and Human Development Index (HDI). The SPI measure social and environmental progress at NUTS2 level to better reflect social development helping policymakers and stakeholders in decision making. The SPI is based on a large number of social and environmental indicators from Eurostat in the area of health, education, water, waste, access to information and communication technologies, energy efficiency, education and skills, and pollution (European Commission). Besides SPI, example of “beyond GDP” indicator is the Statistical Framework for Measuring the Sustainability of Tourism (MST). MST is an internationally agreed reference framework for measuring the economic, social and environmental aspects of tourism. However, there is a need to revise the role of tourism in economics growth.

Green Growth

Global issues like climate change and resource scarcity encourage government, regulators, financial institutions, media, and education systems to seek solutions to combat these global issues (Jackson, 2009). *Green growth* is the most widely accepted and moderate theory related to the adaptation of economic growth to climate change. *Green growth* is found across the political spectrum, but it is not guarantee for solving environmental issues (D`Alisa *et al*, 2016; Salee, 2022). Balancing development with sustainability makes *green growth* as politically popular relying on decoupling production from resource exploitation. In that way, *green growth* offers sustainable but still continuing economic growth (Sharpley and Telfer, 2023).

The green growth become a dominant policy response to climate change and environmental degradation. According to green growth theory continued economic expansion is compatible with environmental protection due to technological change and decoupling GDP growth from resource use and carbon emissions. On the contrary, empirical evidence on resource use and carbon footprint emissions implies opposite results to theory premises (Hickel and Kallis, 2020; Jacobs, 2012). Jacobs (2012) imply the importance of green growth definition due to different variations of green growth. Also, timeframe plays an important role. The need of economic theory change is highlighted in Fabozzi *et al* (2022) paper where they claim the concept of growth need to be changed, accepting qualitative growth as true growth.

A-growth

According to van der Bergh (2023) policy support is indispensable for climate and environmental policies while growth is no longer decisive factor. Author constructed the term a-growth which includes public policies for climate change resilience supported by theoretical and empirical evidence which weaken public and political resistance.

Balancing between climate and economy is not in focus in a-growth as in green growth theories. A-growth means “agnostic” about growth and this position allows to be critical about growth without strict anti-growth position. A-growth takes indifferent position about growth and focus on well-being, distribution, and environment - it assumes that growth could be result of social, economic, and environmental policy change (van der Bergh, 2023).

De-growth

Degrowth as a term was coined in 1972 by social philosopher André Gorz while increasing natural disasters caused by climate change put this theory nowadays in the focus of economic debates. Human exploitation and environmental destruction encourage social changes and an orientation towards sufficiency.

The socio-ecological transition includes reduction of energy and material use. Economic de-growth which includes the emission reduction needs to deal with unemployment as the result of production reduction. Hence, de-growth theory in practice requires a reform of social and financial institutions (Martinez Alier, 2009). World Economic Forum (2022) mark the de-growth theory as radical and subversive. The high-income countries could implement de-growth policies by measures like universal basic income, shorter working week and job guarantees. More focus needs to be given on public transportation and renewable resources instead of automobile industry. Low-income countries should grow in more sustainable way to gain the development level of most developed countries.

De-growth can be related to post-growth period. The post-growth is conceived as a period in which growth is not the central principle and meaning of social life. It is associated with post-capitalism, de-growth and post-growth. Such theories are mostly associated with the most developed societies at a high level of development, with a developed system of healthcare, education and public administration, although these theories are lacking scientific approval even there (D`Alisa *et al*, 2016).

Neoliberal statistics stress the GDP as main indicator of progress, while de-growth imply the value of unpaid domestic and voluntary work measuring the welfare and happiness of the population (Martinez Alier, 2009). Economic activity measured by GDP is reflection of rising income not rising prosperity (Jackson, . Furthermore, indicators like Social progress index (SPI) are crucial in measuring the economic progress. Economic progress is best seen through several indicators. Thus, together GDP and SPI are more detailed indicator in representing inclusive growth.

Tourism in SEE

Analysing how tourism affects economic growth can be concluded that tourism contributes to economic growth through revenue generation, job creation, infrastructure development, multiplier effect, diversification of the economy, foreign exchange earnings, trade and cultural exchange. In many regions, tourism serves as a catalyst for economic diversification by fostering entrepreneurship and creating new business opportunities (Hall *et al*, 2020). However, new growth theories in domain of tourism are integrated in measures like universal basic income and public services, policies to oppose privatization and commodification, reductions in working hours and public financing which would support reforms (Kallis *et al*, 2020). Sustainable tourism is one of the main roles of United Nations World Tourism Organisation which requires continuous monitoring of impacts to prevent or correct measures to achieve sustainable

growth. It includes environmental, economic and socio-cultural aspects of tourism development. In next decade tourism will record continued growth. Growth in tourism sector will be followed by investment processes, social progress and environmental sustainability but with one big precondition - tourism need to be a priority in national policy decisions (Petković and Pindžo, 2012).

Southeast European countries are considered as small open economies with progress in liberalising investments and business conditions but with the significant gap to European Union level (OECD, 2023). Tourism plays an important role in the economy of SEE. However, there is lack of macro-statistics data to analyse and make comparative analysis on national level. More precisely, countries have a well-established system of statistics to track tourism demand in terms of micro-statistics, like domestic and outbound trips, tourist accommodation and tourist expenditure, but macroeconomic statistics such as employment, the impact on economic growth and contribution to the overall economy of the country are missing (Eurostat, 2023).

Tourism is source of foreign revenues and export industry in SEE countries. Consequently, tourism has been adopted as a development strategy in main policy initiatives due to economic benefits it brings to destinations. According to *International Tourism Highlights* (UNWTO, 2021) Southern Mediterranean destinations shown remarkable tourism performance measured by arrivals (+5%) and earnings (+7%) in 2019. SE Mediterranean destinations led growth due to intraregional demand in Europe, though the economic performance among all Europe was weaker and uneven but the overseas market held up well.

Number of European summer holiday tourists increased significantly since 2010, especially in Albania, Montenegro, Croatia, and Greece. Eurozone countries are primary source for Croatia, Bulgaria and Greece, while Russia for Montenegro. Major shortcomings in tourism development are low quality of infrastructure and underdeveloped air transport network, while all SEE countries are less competitive tourism destinations in comparison with Spain, France, Italy and Portugal (EBRD, 2016). Recommendations of EU and UNWTO in the field of sustainability should lead lowering seasonality, decreasing energy use and increasing the use of renewable energy resources, protecting natural and cultural resources, improving the quality of jobs and developing tourism capacities and programmes (Petković and Pindžo, 2012). The UN Tourism International Network of Sustainable Tourism Observatories (INSTO) created by the EU also works in this direction, but only Croatia and Greece as EU members are part of this program. Environmental policies are key tourism assets. Furthermore, the SEE economies need to control and manage negative impacts of tourism by establishing environmental and tourism policy frameworks.

All SEE countries have tourism frameworks and institutions in place while qualitative assessment found that tourism prioritisation and promotion together with qualified workforce is strongest area for economic improvement. Hence, value-added effects of tourism measured by tourism satellite accounts as well as robust and comprehensive statistics are still lacking in SEE countries (OECD, 2018). According to World Tourism Barometer (UNWTO, 2024) the number of international tourist arrivals on global level had not reached the 2019 level. On the contrary, Albania is one of the destinations which in 2023 above pre-pandemic levels with growth of 56% in international arrivals compared to 2019. In the same period, Serbia reported 15% growth in number of international arrivals and 79% in international tourism receipts. Romania is also one of the several destinations which reported 45% growth in international tourism receipts compared to 2019 but with 22,55% decrease of arrivals (*Figure 1*). In 2024, UNWTO forecast tourism rise in Romania and Bulgaria regarding joining to the Schengen area.

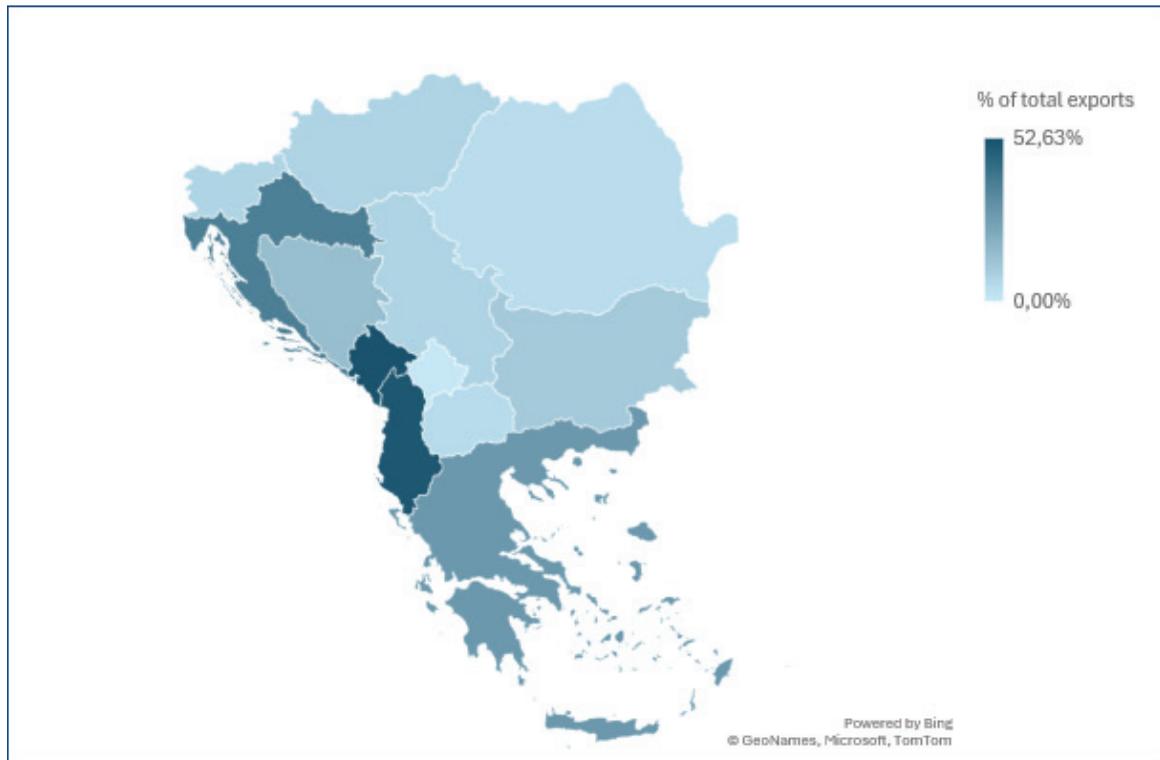
Figure 1. International Tourist Arrivals, change (%) 2019 - 2023



Source: UNWTO World Tourism Barometer 2024

SEE has potential based on diverse and rich regional heritage to capture higher growth in tourism. However, stronger growth demands comprehensive tourism policies while more competitive tourism industry contributes to international export earnings (OECD, 2018). Export earnings from international tourism reached USD 1.7 trillion in 2019 making the world's third largest export category after fuels and chemicals. International travel and passenger transport is important source of foreign revenues which develop local economies by encourage entrepreneurship and creating jobs. Export revenues from tourism can reduce trade deficits and improve the balance of payments (UNWTO, 2021). In 2019 international tourism receipts measured as present of total export dominated in Albania and Montenegro followed by Croatia and Greece (*Figure 2*). On the one hand, international export earnings proved source of finance to foster economic growth and boost job creation, but on the other, makes the country dependent on tourism. Although international tourism can improve balance of payments, the share of income from international tourism in the total exports of a country shows its vulnerability to shocks in tourism demand. This mainly refers to natural disasters, wars and pandemics, but also geopolitical threats that also affect tourism.

Figure 2. International tourism receipts (percent of total export), 2019



(Source: Created by Author, based on World Bank^C data (World Development Indicators

SEE countries could be divided into five groups according to impact of international tourism receipts measured by percent of total export (*Figure 2*):

Very high international tourism dependence: Montenegro (53%), Albania (51%)

High international tourism dependence: Croatia (38%), Grece (29%)

Medium international tourism dependence: Bosnia and Herzegovina (15%), Bulgaria (11%),

Low international tourism dependence: Hungary (8%), Serbia (8%), Slovenia (7%)

Very low international tourism dependence: North Macedonia (5%), Romania (4%)

Consequently, tourism is important contributor to growth and export in SEE economies, but it varies from more than 50% in Montenegro and Albania to less than 5% in North Macedonia and Romania. Despite strong growth of tourism sector, SEE economies need to improve competitiveness and support sustainable and inclusive tourism growth. Policy makers have to improve and manage development strategies to direct it to sustainable tourism development.

Discussion: The Challenges of New Growth Theories

The environmental justice movements stress the importance of the physical and biological aspects of the economy while conventional economic accounting ignores it (Martinez Alier, 2009). Furthermore, pro-growth theories or conventional economic theories regarded as emis-

^C No Data for Kosovo

sion producers while anti-growth theories are considered as environmental conscious but with negative economic growth impact (Van der Bergh, 2023). The latter are increasingly entering the scene and their influence is growing stronger. When stating the challenges that new economic theories of growth bring, it should be kept in mind that the role of economic development level is crucial in socio-environmental transition and anti-growth theories. Namely, economies on higher level of economic development could face with new growth theories while those on lower level have insufficiently developed institutions for growth transition.

The challenges of the new growth theories are first how to reconcile economic progress while preserving resources and protecting the planet. Those moderate growth theories, such as *green growth*, put the environmental limitations of growth in the foreground - decoupling of GDP and negative environmental impacts. Despite the potential of tourism's development on economic growth, the extent to which economic and social progress is linked to the growth of tourism sector is subject of debate (Telfer and Sharpley, 2016). Tourism is the part of global consumption system and in that way, it strengthens unsustainable production on global ecosystem. Sustainable tourism initiatives are increasingly becoming central to new growth perspectives (Sharpley and Telfer, 2023). In SEE countries sustainable tourism growth and competitiveness are still below the EU level. More effective institutions and mechanisms together with stronger horizontal and vertical coordination of government bodies will foster sustainable tourism growth (OECD, 2018).

Green growth theory is dominant policy response to climate change, but empirical evidence doesn't support theory. According to Hackel and Kallis (2020) there is no empirical evidence that continued economic growth is possible due to impossibility of absolute decoupling from resource use as well as absolute decoupling from carbon emissions. Authors suggest alternative strategies for policymakers with the aim of gaining targeted environmental protection objectives like preventing global warming over 1.5°C or 2°C.

The area of the Balkans, or officially Southeastern Europe, in the Western European discourse is often seen as a periphery that represents backwardness, violence and resistance to modernization. The officially available statistical data and numerous economic and social surveys data partially confirm this statement. Therefore, one of the main challenges in implementing new development theories is resistance to change, corruption and nepotism (D'Alisa et al, 2016). Practical degrowth actions refer to buying less stuff, growing your own food, and using empty houses instead of building new ones (World Economic Forum, 2022). Following to that, the SEE or the area of the Balkan is a source of valuable practices that are part of the degrowth program. This primarily refers to the widespread practice of growing food for one's own needs. In this way, health and ecological sustainability are affected, but cohesion and resilience are also promoted (D'Alisa et al, 2016).

Tourism become one of the fastest growing industries in the world. Since the Second World War tourism has been experiencing continued expansion driven by strong global economy, affordable travel, technological advances and new business models (UNWTO, 2021). However, despite its contribution to economic growth, tourism also entails the issue of sustainability. Numerous organizations in tourism are aware of the importance of caring for the environment, and in their guidelines strive to contribute to sustainable tourism.

To conclude, the appearance of new theories of economic growth gives hope that all is not lost and that an optimistic future is possible, however, there is still a great lack of their applicability based on scientific research. Researching the connection between tourism and development is relatively unexplored topic. Critical analysis of tourism impacts on development include environmental impacts as tourism significant contribution to environmental costs. Sustainable

tourism development in the context of degrowth is radical new approach. Degrowth address negative impacts and overconsumption of tourism which resulted in exploitation and inequality (Sharpley and Telfer, 2023). Hence, there is lack of data and statistics to support the theory with numbers, especially in SEE countries. One of the main challenges is to develop tourism data and statistics in line with international standards and good practices. Without more robust and comprehensive data there is no strategic planning and decision making. For comprehensive and comparative analyses, the implementation monitoring needs to be supported by quality evidence base (OECD, 2018). Furthermore, the *degrowth* theories as well as degrowth policies lack sufficient voter and political support due to lack of empirical evidence. Furthermore, move away from capitalism is giant leap for all government and political support is crucial. In that way, social-political support is indispensable (Van der Bergh, 2023).

Conclusion

This review paper has examined the role of tourism within the framework of new growth theories, with a particular emphasis on the theoretical implications and policy propositions these models offer. The findings underscore that strategic investment in tourism infrastructure, along with destination branding and marketing, plays a crucial role in attracting visitors. In turn, increased tourist arrivals contribute to revenue generation, job creation, and the growth of related industries such as hospitality, transportation, and retail. More broadly, tourism can serve as a catalyst for economic diversification, reducing dependency on traditional sectors and improving the standard of living for local populations. Importantly, the paper highlights the significance of sustainable tourism policies that seek to minimize negative environmental and social externalities while maximizing long-term economic and community benefits. In this context, tourism contributes meaningfully to the principles of new growth perspectives by promoting innovation, sustainability, and inclusive development. Embracing these principles can unlock tourism's full potential as a driver of long-term and balanced economic growth.

Tourism holds particular importance in the economic development of South-East European (SEE) countries. These economies can be categorized into five groups based on the relative impact of international tourism receipts, measured as a percentage of total exports. The influence of tourism ranges from countries like Montenegro and Albania, where tourism accounts for more than 50% of total exports, to others like North Macedonia and Romania, where this figure is below 5%. Despite the tourism sector's considerable growth, many SEE countries still face challenges related to competitiveness and the sustainability of tourism development. It remains critical for these countries to adopt policies that support inclusive and environmentally responsible tourism growth. However, it is essential to recognize that tourism, while offering significant economic benefits, also carries potential downsides, including environmental degradation, cultural commodification, and rising socioeconomic inequalities. To mitigate these risks, sustainable tourism practices must be embedded in development strategies from the outset.

The paper also critically examines the position of degrowth theories within the broader discourse of economic transformation. While these theories promote environmentally conscious and socially equitable alternatives to growth, they currently lack strong political backing and are often perceived as unrealistic or overly radical. Furthermore, degrowth models tend to suffer from a lack of empirical evidence and actionable policy frameworks, particularly when it comes to reducing emissions effectively. As such, there is a legitimate concern about the po-

tentially adverse consequences of implementing degrowth policies without sufficient preparation or evidence.

In light of these challenges, a more pragmatic approach may involve adapting traditional pro-growth models with sustainability-oriented regulations and pricing mechanisms. Rather than embracing radical shifts, initial steps should focus on incremental change grounded in empirical research and proven policy tools. There is a pressing need to establish robust comparative analyses between pro-growth and degrowth strategies using empirical economic models. Such studies are essential to inform sound policymaking and ensure that theoretical frameworks translate into practical, context-sensitive outcomes.

– Theoretical and practical implications

This study contributes to the theoretical understanding of tourism's role in new growth models by illustrating how tourism drives not only economic expansion but also fosters structural transformation, innovation, and environmental sustainability. It emphasizes the relevance of non-traditional growth factors such as human capital, knowledge transfer, and infrastructure in shaping modern economic development trajectories. The critique of degrowth theories further enriches this discourse, highlighting the need for evidence-based, balanced strategies that integrate sustainability without undermining economic and social stability.

From a practical standpoint, the findings suggest that well-targeted investments in tourism—particularly in infrastructure, branding, and marketing—can yield substantial benefits. The varying impact of tourism across SEE countries indicates the need for differentiated national strategies. In countries where tourism constitutes a significant portion of exports, such as Montenegro and Albania, there is an urgent need to adopt sustainable policies to avoid overdependence and mitigate associated risks. Meanwhile, countries with less developed tourism sectors, like North Macedonia and Romania, should explore how tourism can be leveraged as a supplementary driver of growth. Sustainable tourism development not only enhances competitiveness but also promotes social inclusion by generating employment and improving local livelihoods.

– Limitations and future research

A major constraint lies in the lack of empirical data to substantiate many of the theoretical claims made about tourism's role in economic growth or the feasibility of degrowth alternatives. While the paper provides a broad regional overview, it risks oversimplifying the diverse political, economic, and cultural realities of SEE countries. Moreover, although it briefly acknowledges the potential negative consequences of tourism—such as environmental degradation, cultural commodification, and inequality—these challenges are not deeply explored or integrated into a coherent policy framework.

Given these limitations, future research should prioritize empirical analysis that rigorously compares the impacts of pro-growth and degrowth strategies, particularly in economies heavily reliant on tourism. Country-specific case studies within the SEE region would provide valuable insights into how local conditions influence the success of tourism-driven development models. Further studies should also aim to quantify the social and environmental outcomes of tourism policies to better evaluate their sustainability. Research into innovative policy instruments—such as environmental taxation, green certification systems, and public-private partnerships—could offer more nuanced solutions to balance growth with environmental and cul-

tural preservation. Longitudinal research tracking the long-term effects of tourism investments on economic resilience, especially in the face of global challenges such as pandemics or climate change, would also be valuable. Finally, integrating climate metrics into economic models of tourism development could help assess the sector's alignment with broader environmental goals and commitments.

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Tasting Tourism: Evaluating Gastro Offerings in Sarajevo and Mostar via TripAdvisor Reviews

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Received: June 2025 | Accepted: September 2025

DOI:10.5937/turizam29-59452

Abstract

Sarajevo and Mostar, the most visited destinations in Bosnia and Herzegovina (BiH), are well known for their gastronomic offerings. Influenced by diverse traditions and cultures, their culinary scenes reflect a notable influence of the Ottoman Empire. Both destinations boast numerous restaurants serving delicious dishes from both local and international cuisines. As online review platforms are a leading source of information in hospitality and tourism, this paper analyses TripAdvisor reviews of 56 restaurants in Sarajevo and 21 restaurants in Mostar that specialize in offering local cuisine. Given that traditional dishes have become a key factor in destination selection and tourist attraction, the aim of this study is to assess tourist satisfaction and highlight similarities and differences in perceptions of the local gastronomic offer in Sarajevo and Mostar. The research findings indicate that the most influential factor in tourist satisfaction is the balance between food quality and price. Interestingly, in both destinations, tourists perceive the local cuisine as Bosnian cuisine. The results of this analysis may serve as a valuable tool for policymakers and businesses to develop and effectively promote local gastronomic offerings.

Keywords: Sarajevo, Mostar, TripAdvisor, local cuisine, content analysis, reviews

Introduction

Gastronomy is often defined as a unique food-based experience (Di-Clemente et al., 2019), a food consumption experience (Soltani et al., 2020), or part of the overall restaurant experience (Huang, 2017). It has become an important part of the tourism offer (Ruiz, Guzman-Parra, 2023), and many destinations integrate local cuisine into the tourism product as a mean of attracting more tourists (Robinson, Getz, 2014; Gupta, 2018; Vrasida et al., 2020). Maryam et al. (2019) point out that tourist satisfaction and their intention to visit the destination again are linked to a positive experience of local cuisine. Consuming local food significantly influences tourists' future visit intentions and the overall destination image (Rousta, Jamshidi, 2020). Bertan (2020) states that local gastronomy represents a significant strategic advantage and reflects the cultural identity of a destination. This is confirmed by Kumar et al. (2023) who point-

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ed out that local cuisine is a key reflection of regional identity, i.e. the culture and traditions of the people who live there. Visiting local restaurants also affects the perception of the destination, as well as the lasting memories and experiences that tourists take with them (Nowacki et al., 2023), so it is additionally important to analyze the level of satisfaction of tourists with the local gastronomic offer.

The rich culture and tradition, as well as the geographical context of Bosnia and Herzegovina, represent an important potential for the development of food tourism. Its cuisine, which was influenced by Byzantine, Ottoman and Western Europe, is similar to the cuisine of Turkey, Greece, and Central Europe. Although, traditional Bosnian cuisine reflects a strong influence of Turkish cuisine, some dishes and customs share similarities with the countries of the region. Research conducted on gastronomy in BiH is largely based on survey research on tourists' perceptions of local cuisine. In this way, key factors that influence tourist satisfaction have been defined, highlighting the uniqueness of taste, quality and price, emotional perception and cultural significance (Peštek, Činjarević, 2014). Recently, Banda et al. (2023) analyzed tourist satisfaction with local cuisine in Sarajevo based on collected TripAdvisor reviews.

In addition to the recommendations from family and friends, online platforms are becoming an increasingly important source of information when choosing a restaurant (Živadinović, 2021). The importance of online reviews is emphasized by Kim et al. (2016), stating that a greater number of positive reviews has a positive impact on restaurant business, especially among young people. One of the most popular platforms for leaving reviews is TripAdvisor, which provides information about destinations, attractions, restaurants, hotels, etc.

This research analyzes tourists' perceptions of local cuisine authenticity, quality of food and beverages, as well as overall satisfaction with restaurant service in Sarajevo and Mostar, one of the leading tourist destinations in Bosnia and Herzegovina. Sarajevo has stood out as the most visited tourist destination in BiH for a number of years, leading in terms of the total number of arrivals (41.3% of total arrivals in BiH in 2023) and overnight stays (39.3% of total overnight stays in BiH in 2023). In 2023, Mostar accounted for 5.2% of total tourist arrivals in BiH and 3.6% of total overnight stays. It is important to note that these statistical data should be interpreted with caution due to unregistered visitors and the significant share of the grey economy in this sector. Also, segment of one-day visits is particularly pronounced in Mostar. Estimates and reports indicate that more than a million tourists visited Mostar in 2024, with a significant increase in group arrivals. Both cities have continuously registered an increase in accommodation and hospitality capacities, which confirms their status as leading urban tourist centers in the country.

Given the growing gastronomic appeal, this research focuses on similarities and differences in perceptions of local cuisine in Sarajevo ("Bosnian city") and Mostar ("Herzegovinian city") by analyzing online tourist reviews. Special attention is paid to positive impressions, establishing the connection between tourist satisfaction and the authenticity of local gastronomy.

Methods and data

The criteria for selecting restaurants in Sarajevo and Mostar were defined based on the research conducted by López-Guzmán and Sánchez-Cañizares (2012). The restaurant selection criteria were based on the representation of traditional local cuisine in the gastronomic offer. Based on the aforementioned criteria, 56 restaurants in Sarajevo and 21 in Mostar were selected, which were rated on TripAdvisor, served traditional food, and were located in the most tourist-friendly parts of the city (in this case, Baščaršija in Sarajevo and the Old Town in Mo-

star). For practical reasons, only reviews in English were analyzed, as this is the most common language on the platforms and reduces the risk of misinterpretation that might arise from translating reviews in other languages. Reviews for Sarajevo were collected manually, as part of the research conducted by Banda et al. (2023), and reviews for Mostar using Outscraper software.

A total of 12,463 reviews (foreign and domestic tourists) were collected, of which 7,239 for Sarajevo and 5,224 for Mostar submitted until the end of November 2023. Restaurant reviews were further categorized based on the assigned ratings from 1 (terrible) to 5 (excellent).

The content analysis of the reviews was preceded by a standard filter sorting procedure proposed by Vijayarani et al. (2015). This procedure involves excluding punctuation marks, eliminating capital letters (for words that are not proper nouns), emoticons and other characters. Also, a list of stop words was defined that was adapted to the specifics of the analyzed reviews to ensure the relevance of the results. Adverbs, conjunctions, prepositions, pronouns and other contextually unnecessary words and phrases were omitted from the analysis. Also, stemming (Higuchi, 2016) was used at this stage, in order to reduce the words to their basic form (e.g., removing plural and pronoun forms), which facilitated further analysis.

In the next phase of the research, Text2data in Excel was used for word frequency analysis, while co-occurrence and thematic analysis were carried out with the help of KH-Coder. The conducted word frequency analysis enabled the identification of the most frequently mentioned words in the reviews. The co-occurrence analysis was conducted based on similar research conducted by Bigne et al. (2023) and García-León and Teichert (2023), and enabled the analysis of the connections between words within the reviews, describing the dining experience in Sarajevo and Mostar, and their graphical representation. It was designed using the Jaccard coefficient, which shows how often individual words in a review appear together, compared to appearing alone. Using thematic analysis, the main themes for Sarajevo and Mostar were defined, and frequent words repeated in the reviews were grouped in accordance with co-occurrence analysis.

Results

Word frequency analysis

The most frequently used terms in reviews reveal interesting similarities and differences in perceptions of food, service, and atmosphere in restaurants in these cities. “Food” takes first place, appearing 4,960 times in reviews for Sarajevo and 3,443 times in reviews for Mostar, which is expected, given that this is an analysis of restaurants and cuisine. Key adjectives such as “good”, “great”, “nice”, and “delicious” are used to describe the quality of food, service, and overall experience in both cities. At the same time, the terms “local” and “traditional” further emphasize the authenticity of local cuisine that attracts tourists.

The term “price” is often associated with the accessibility of food and drinks in Sarajevo and Mostar, and the excellent price-quality ratio is also highlighted in the reviews. “Bosnian”, the term of primary importance for this study, appears 1,534 times in reviews for Sarajevo restaurants, which ranks it in eighth place, and is also mentioned in reviews for Mostar restaurants (555 times). The authors expected that reviews of Mostar restaurants would highlight the names of traditional Herzegovinian dishes, as a key element of the region’s gastronomic identity. However, tourists do not mention “Herzegovinian cuisine” in their reviews, and instead of

focusing on traditional specialties, reviews are more concerned with situational factors, such as ambiance, service, or the overall experience of visiting restaurants. Also, the focus is on specific attractions such as the Old Bridge and views of the Neretva River. In Sarajevo, reviews emphasize the wide culinary offer and focus on food and atmosphere, but terms such as “meat” and “cevapi” for which Sarajevo is famous are at the bottom of the table (Table 1).

Table 1. Frequency of top keywords

No	SARAJEVO		MOSTAR	
	Word	Frequency	Word	Frequency
1	food	4,960	food	3,480
2	place	3,339	restaurant	1,979
3	restaurant	3,156	good	1,856
4	good	3,118	great	1,480
5	Sarajevo	2,541	place	1,460
6	great	2,259	Mostar	1,450
7	service	1,700	service	1,425
8	Bosnian	1,534	view	1,252
9	eat	1,526	nice	1,041
10	nice	1,514	bridge	990
11	recommend	1,452	recommend	933
12	best	1,435	price	884
13	try	1,341	friendly	882
14	delicious	1,103	staff	841
15	local	1,074	local	828
16	come	1,060	meat	813
17	traditional	944	delicious	804
18	visit	853	eat	786
19	tasty	827	best	699
20	atmosphere	805	excellent	650
21	price	777	dish	598
22	bread	760	meal	581
23	wine	748	traditional	570
24	meat	728	portion	568
25	cevapi	713	Bosnian	555

Source: Banda et al. (2023); Primary data

Co-occurrence and thematic analysis

Out of a total of 14 clusters for Sarajevo and 15 for Mostar, only the first four were analyzed, as they are the most thematically relevant and include the largest number of reviews (Figure 1).

There are three key elements of the cluster: colors indicate thematic clusters formed based on semantic and frequency connections between concepts; the size of the circle is proportional to the frequency of occurrence of a particular word, while the thickness of the lines between the circles reflects the intensity of their mutual connections.

Cluster 1 for Sarajevo indicates highly positive impressions of restaurant staff, who contribute to creating a unique tourist experience. On the other hand, Cluster 1 related to Mostar suggests that restaurant choices are closely tied to their location, particularly the Neretva River and the Old Bridge. In both cases, Cluster 2 is related to the gastronomic offerings of the restaurants, reflecting the connection between quality, ambiance, and the rich offering of local dishes, emphasizing the variety of ingredients.

Cluster 3 in the context of Sarajevo include key term, Bosnian cuisine, but emphasizing also different menu options (vegan and vegetarian, gluten-free meals etc.). In contrast, Cluster 3 for Mostar shifts focus to hygiene and staff, especially indicating cleanliness and the quality of the food preparation.

Cluster 4 in Sarajevo highlights visitor experiences and their recommendations with the terms “recommend,” “place,” “best,” and “visit” reflecting the significance of gastronomic and cultural experiences for generating positive recommendations and repeat visits. Conversely, Cluster 4 for Mostar emphasizes the balance between price and quality, by suggesting generous portions offered at affordable prices. The remaining clusters related to Sarajevo highlight the key role of local cuisine, while in the case of Mostar, the greatest emphasis is placed on food quality and expertise of the staff.

Thematic analysis of restaurant reviews in Sarajevo pointed to similarities with Mostar. In both cities, four common themes dominate, which relate to traditional cuisine, authentic experience and ambiance of the city, prices and quality of food, and service and staff. The first and most significant theme, traditional cuisine is characterized by authentic Bosnian dishes, which is often highlighted in reviews. The second theme, ambiance and authentic experience, refers to the location of the restaurant. In the case of Mostar, the reviews mention the Old Town, and especially the view of the Old Bridge, which is an important element of the gastronomic experience. Reviews for Sarajevo emphasize the ambiance of Baščaršija. The keywords of the third theme (“reasonable”, “value”, “worth”, “cheap” etc.) indicate tourist satisfaction with prices and food quality. The fourth theme, which relates to service and staff, recognizes the slowness of staff during the tourist season in both cities as an important challenge for both destinations. On the other hand, a positively rated aspect of this theme is the friendliness of the staff. The fifth theme in the case of Mostar is wine and local drinks, especially the Herzegovinian wines Žilavka and Blatina, which play an important role in the gastronomic offer of this city. On the other hand, fifth theme, Bosnian coffee and baklava are often mentioned and positively evaluated parts of the gastronomic offer of Sarajevo restaurants.

Clusters also reflect a broader dimension of the cultural identity of the destination, where traditional cuisine, experience, hospitality and local people are key elements in shaping the image of Sarajevo and Mostar. That means that food is an integral part of the overall branding strategy and destination competitiveness. Food-related attributes of the offer should be part of the storytelling associated with the destination’s brand identity and promise.

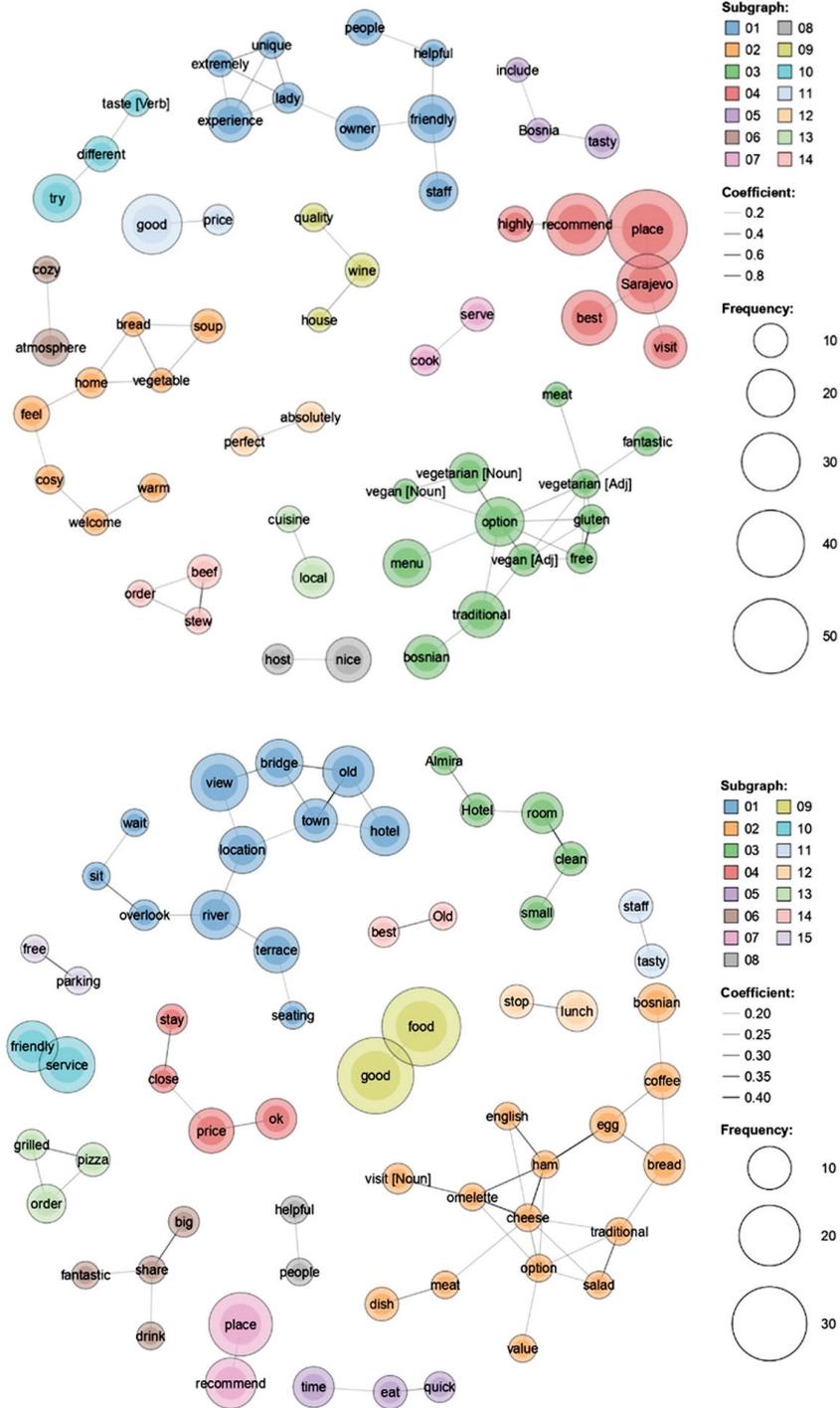


Figure 1. Co-occurrence network results (first Sarajevo; second Mostar)
 Source: Primary data

Discussion

Although Sarajevo and Mostar are recognized as destinations offering unique culinary experiences, this research has also revealed certain differences that point to distinct aspects of the gastronomic experience that tourists particularly pay attention to.

The themes in reviews of Sarajevo's restaurants highlight Bosnian cuisine, but also the presence of various international cuisines. Positive impressions, associated with authentic food, are as pointed out by Hoang and Tučkova (2021) linked to loyalty and repeat visits. Surprisingly, in Mostar's reviews, Bosnian cuisine is once again mentioned rather than Herzegovinian. The mention of local wines, Žilavka and Blatina, further distinguishes Mostar from Sarajevo, where tourists often point out the lack of alcoholic beverages in restaurant offerings. The fact that Herzegovinian cuisine is not mentioned in reviews indicates the absence of a clearly differentiated brand for Herzegovina. Integrating traditional Herzegovinian cuisine into the tourism offer would contribute to a better perception of Herzegovina as an authentic and recognizable destination.

An important finding of this research is that tourists perceive the local cuisine as good and of high quality, which aligns with the results of Peštek and Činjarević (2014) and is consistent with other studies emphasizing the role of food quality in shaping tourist satisfaction, e.g., Muskat et al. (2019); Zrnić et al. (2021); Hernandez-Rojas et al. (2021). Many studies confirm that the food image and quality at a destination influence tourists' intention and willingness to revisit and to recommend the destination to others (Wondirad et al., 2021; Yazicioğlu et al., 2023; Wachyuni et al., 2024). Key finding of this research is that tourists are generally satisfied with prices and positively evaluate portion sizes, especially in the case of Mostar. The importance of food quality and pricing for tourists has also been confirmed more recent studies on restaurant re-patronage (Abdullah et al., 2018) and food tourism revisits (Rousta, Jamshidi, 2020).

This research also contributes to the literature in the context of tourists' perceptions of local cuisine in tourist destinations. While the literature often focuses on national or regional cuisine as a single, unified category (Jovičić Vuković, Terzić, 2020), this study highlights the existence of distinct local cuisine contexts within the same country, which influence tourist expectations and shape diverse culinary experiences.

Conclusion

This research contributes to the field of culinary tourism and helps to better understand how tourists perceive the local gastronomic offer in Sarajevo and Mostar, two of the most visited tourist destinations in BiH. The results highlight both similarities and differences in the perceived gastronomic experience, emphasizing the role of local cuisine and the spatial identity of cities in shaping the overall tourist experience.

Understanding how tourists perceive local cuisine, restaurants, and the overall service can assist destination management organizations and local providers in adapting their offers to meet visitor preferences. The results of the research provide a foundation for planning tourism development and designing new tourist products based on authentic local cuisine, tradition, and atmosphere.

This research can also serve as a basis for developing a strategy for branding Herzegovinian cuisine, primarily through cooperation with local agricultural producers, tourism businesses, promotional activities, and training of hospitality staff. By creating a gastronomic identity for

Herzegovina—which tourists currently do not perceive strongly—this region could clearly distinguish itself from the rest of the culinary scene in BiH, enabling the development of tourism with a focus on gastronomic experiences.

Emphasizing local food is crucial for creating a unique tourism brand (Peštek et al., 2020; Tagmanov, Ulema, 2023). Lower representation of Herzegovinian cuisine in clusters indicates a lack of systemic and effective communication of this element of the offer connected to Herzegovina's brand identity. This is one of the imperatives for destination management and brand strategy development. Herzegovina has all the preconditions for successful positioning on the tourist market as a unique foodie destination, which would significantly improve the overall effects of tourism.

In order to further develop gastronomic tourism in BiH, future research should include more cities (e.g., Banja Luka) or traditional regions (e.g., Krajina), with the aim of conducting a comparative analysis of existing gastronomic offerings and exploring how tourists perceive different local cuisines. Also, it is recommended to conduct both quantitative and qualitative research with respondents from different tourist segments and geographical regions.

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