

BALANCING ACT: GASTROTOURISM AS A CATALYST FOR URBANIZATION AND THE IMPERATIVE FOR GREEN INVESTMENTS IN THE REPUBLIC OF SERBIA

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Abstract

This research analyzes gastrotourism's impact on Serbia's urban development, emphasizing economic growth, cultural heritage, community involvement, and environmental sustainability. It identifies community engagement as vital for balanced urban development, backed by advanced statistical models. Additionally, the study underscores the roles of environmental sustainability, cultural preservation, and economic revitalization in urban growth. Methodologically, it contributes to urban planning literature by employing bootstrapping, highlighting the significance of community and sustainability in urbanization.

Key Words: *urbanization, tourism, green investments, Republic of Serbia.*
JEL classification: *Z11, R32, Q01*

Introduction

Gastrotourism, blending culinary heritage with tourism, significantly impacts global travel and local economies, notably in emerging markets such as Serbia (Bugarčić et al., 2023), but raises sustainability concerns (Bessière et al., 1998). This study explores the balance between gastrotourism's urbanization drive in Serbia and the need for green investments, aiming for sustainable economic growth without compromising ecology. It addresses gastrotourism's dual nature in Serbia, aiming to turn challenges into

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opportunities through eco-friendly infrastructure and conservation. Unlike previous studies, it emphasizes the role of gastrotourism in promoting sustainable urbanization and environmental conservation. Drawing from urban planning, sustainable development, and gastronomy, it provides insights into how culinary tourism shapes urban growth and environmental strategies, benefitting both the economy and the ecosystem. This research fills a gap in Serbian literature and offers practical implications for catering establishments to achieve both profit and environmental sustainability.

Literature review

Gastrotourism, a growing travel trend, focuses on culinary exploration to explore diverse cultures (Watts et al., 2005) through activities like food festivals and market visits (Kim, 2012; Kesimoğlu, 2015). It fosters cultural connections and sustainability, driven by interest in culinary diversity and amplified by social media (Birch & Memery, 2020; Henderson, 2009; Llach et al., 2013). Despite supporting local economies and promoting sustainable food practices (Wiskerke, 2009), gastrotourism also faces challenges like over-tourism and commodification (Munn et al., 2018; Trafialek et al., 2019). Sustainable practices can mitigate these issues, benefiting communities and the environment (Yilmaz et al., 2020; Outili et al., 2020). Gastrotourism's relationship with urban growth is complex. It stimulates economic activity, job creation, and cultural revitalization but also presents environmental and social challenges (Dixit, 2019; Fernandez & Richards, 2021). Sustainable tourism development balances economic benefits, environmental protection, and social equity (Akgol, 2012). In Serbia, gastrotourism impacts urbanization and local economies, requiring green investments for balanced development (Dixit, 2020; Pratt et al., 2020). This growth emphasizes the importance of environmentally sustainable urban planning, positioning Serbia as a leader in integrating culinary tourism with green priorities (Vukolić et al., 2023; Gajić et al., 2023; Bugarčić et al., 2023).

Hypothesis H1: Community engagement has a positive effect on balanced urban development.

Hypothesis H2: Preservation of cultural heritage has a positive effect on balanced urban development.

Hypothesis H3: Economic revitalization has a positive effect on balanced urban development.

Hypothesis H4: Environmental sustainability has a positive effect on balanced urban development.

Methodology

This study examines gastrotourism's impact on Serbia's economy, cultural heritage, environmental sustainability, community engagement, and urban development. Between December 2023 and January 2024, 110 hotel sector managers across Serbia's cities and tourist destinations participated in face-to-face surveys. The questionnaire aimed to assess gastrotourism's contributions to economic growth, cultural preservation, environmental practices, community participation, and balanced urban planning. The primary areas of focus include Economic Revitalization, Cultural Heritage Preservation, Environmental Sustainability, Community Engagement, and Balanced Urban Development.

Data analysis

The study assessed gastrotourism's impact using descriptive statistics, confirming high reliability with Cronbach's alpha values above 0.7 (Hair et al., 2022; Lohmöller, 1989). Confirmatory factor analysis validated the questionnaire's structure, and SEM examined relationships among constructs (Garson, 2016; Hair et al., 2022). Fit indices such as SRMR, NFI, and chi-square confirmed an excellent model fit. Low VIF scores ruled out multicollinearity (Hair et al., 2022). High R-squared values indicated substantial explanatory power, while bootstrapped confidence intervals highlighted the crucial role of community engagement in shaping urban development via gastrotourism in Serbia.

Results and discussion

Table 1 presents a comprehensive overview of the impact of gastrotourism on various aspects such as economic revitalization, cultural heritage preservation, environmental sustainability, community engagement and balanced urban development in Serbia.

Table 1: *Descriptive values for factors and items*

Factors (α - 0.845)	Items	m	sd	α
Economic Revitalization	Gastrotourism accelerates job creation, enriching Serbia's urban economies.	2.15	1.321	0.800
	It triggers infrastructure enhancements, improving transportation and hospitality sectors.	2.53	1.478	0.829
	Culinary investments, like festivals and schools, boost urban economic diversification.	3.72	1.350	0.842
Cultural Heritage	Gastrotourism protects Serbian culinary heritage, promoting traditional cuisines.	2.73	1.377	0.866

Preservation	It strengthens urban cultural identity through global culinary events.	2.99	1.384	0.834
	Cultural exchanges are fostered by initiatives like cooking classes and local food tours	3.55	1.397	.835
Environmental Sustainability	Gastrotourism encourages sustainable food sourcing and waste management.	4.59	1.705	0.828
	It leads to green investments, integrating eco-friendly practices in urban planning.	2.49	1.366	0.817
	Sustainable gastronomy initiatives enhance urban green spaces and reduce carbon footprints	2.55	1.533	0.892
Community Engagement	Community involvement in gastrotourism projects ensures alignment with local needs.	3.87	2.894	0.843
	It catalyzes sustainable urban development, maintaining a balance between growth and green spaces.	3.98	2.090	0.862
	Engaged communities drive the protection and enhancement of urban green areas	3.78	2.111	0.842
Balanced Urban Development	Gastrotourism influences urban planning to include green spaces amidst development.	2.56	1.901	0.830
	It promotes a symbiotic relationship between urbanization and environmental preservation.	3.41	2.077	0.820
	Strategies for green space conservation are vital in maintaining urban livability and attractiveness	3.44	2.264	0.818

Source: *Authors*

Economic Revitalization serves as a catalyst for job creation and infrastructure improvement, with positive effects noted despite varied agreement levels ($\alpha = 0.800$ to 0.842). Cultural Heritage Preservation benefits from gastrotourism's efforts to safeguard traditional cuisines and enhance cultural identity, showing high reliability ($\alpha = 0.834$ to 0.866). Environmental Sustainability is supported for promoting sustainable practices, particularly in food sourcing, reflected in the highest mean value (4.59) and strong reliability ($\alpha = 0.817$ to 0.892). Community Engagement is emphasized as essential for aligning projects with local needs, shown by high mean values and reliability ($\alpha = 0.842$ to 0.862). Balanced Urban Development integrates green spaces into urban planning, with positive impacts supported by mean scores and reliability ($\alpha = 0.818$ to 0.830). Table 2 shows the extraction of all 15 items into factors, in this case by promax rotation, we obtained a total of five factors that are given in the table.

Table 2: *Extracting items into factors*

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
ER	5.819	38.793	38.793	5.819	38.793	38.793
CHP	1.996	13.307	52.100	1.996	13.307	52.100
ES	1.196	7.975	60.075	1.196	7.975	60.075

CE	1.056	7.038	67.113	1.056	7.038	67.113
BUD	1.865	5.763	72.876	.865	5.763	72.876

Source: *Authors; Note - Economic Revitalization (ER); Cultural Heritage Preservation (CHP); Environmental Sustainability (ES); Community Engagement (CE); Balanced Urban Development (BUD).*

The „Total Variance Explained“ analysis shows that Economic Revitalization (ER) accounts for 38.793% of the variance, emphasizing its significant influence, while Cultural Heritage Preservation (CHP) contributes 13.307%. Environmental Sustainability (ES), Community Engagement (CE), and Balanced Urban Development (BUD) together account for the remaining variance. Table 3 confirms the reliability of the constructs, highlighting ER and CHP as key factors driving gastrotourism's economic and urban development benefits.

Table 3: *Construct Reliability and Validity ($R^2 = 0.680$; R^2 adjusted – 0.673)*

Factors	Cronbach's Alpha (>0.6)	rho_A (>0.7)	CR (>0.7)	AVE (>0.5)
Economic Revitalization	0.855	0.860	0.912	0.775
Cultural Heritage Preservation	0.763	0.849	0.705	0.582
Environmental Sustainability	0.864	0.761	0.816	0.598
Community Engagement	0.741	0.776	0.803	0.578
Balanced Urban Development	0.678	0.865	0.724	0.785

Source: *Authors*

Table 4 assesses discriminant validity for gastrotourism impact constructs using the Heterotrait-Monotrait Ratio (HTMT), with ratios below 0.85 confirming differentiation. While distinct differences are noted among the impact factors, overlaps between Economic Revitalization and Balanced Urban Development, as well as Community Engagement, and between Environmental Sustainability and Community Engagement, suggest areas for improvement in future gastrotourism research.

Table 4: *Discriminant Validity - Heterotrait-Monotrait Ratio (HTMT <0.85)*

	Balanced Urban Development	Community Engagement	Cultural Heritage Preservation	Economic Revitalization	Environmental Sustainability
Balanced Urban Development					
Community Engagement	0.028				
Cultural Heritage Preservation	0.277	0.603			

Economic Revitalization	0.637	0.514	0.112		
Environmental Sustainability	0.557	0.790	0.017	0.495	

Source: *Authors*

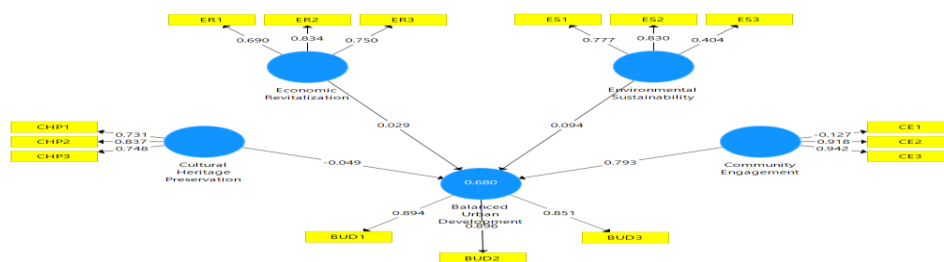
The study's model fit indices demonstrate excellent alignment between the theoretical and estimated models. The SRMR of 0.043, d_ULS of 0.029, and d_G of 0.038 indicate a strong fit, while a high NFI of 0.974 confirms the model's robustness. These values affirm the reliability and validity of the research model in capturing gastrotourism's impact on balanced urban development. Table 5 and Figure 1 show path coefficients, means, standard deviations, t-values, and p-values, illustrating how different gastrotourism factors affect Balanced Urban Development.

Table 5: *Path coefficients*

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
Community Engagement -> Balanced Urban Development	0.793	0.793	0.042	19.024	0.000
Cultural Heritage Preservation -> Balanced Urban Development	-0.049	-0.045	0.065	0.750	0.043
Economic Revitalization -> Balanced Urban Development	0.029	0.031	0.072	0.410	0.032
Environmental Sustainability -> Balanced Urban Development	0.094	0.095	0.059	1.606	0.009

Source: *Authors*

Figure 1: *Path analysis coefficients*



Source: *Authors*

The structural model shows that Community Engagement significantly influences Balanced Urban Development, strongly supporting its hypothesis. Cultural Heritage Preservation's slightly negative impact warrants reassessment, while Economic Revitalization has a minor positive effect. Environmental Sustainability also positively influences urban development. These findings underscore the importance of community and environmental considerations in urban planning.

Conclusion

The study examines gastrotourism's impact on urban development in Serbia, focusing on its economic, cultural, and environmental effects, along with community engagement. Using SEM and bootstrapping, it confirms that community involvement plays a crucial role in balanced urban growth. Economic revitalization and environmental sustainability positively affect urban development, while cultural heritage preservation has a slightly negative impact, indicating a complex relationship. The study calls for a multi-dimensional urban planning approach that integrates community, environmental, and economic strategies while considering cultural heritage, promoting sustainable development amid Serbia's gastrotourism rise. The study expands the urban development framework by incorporating gastrotourism and green investments, challenging traditional models that separate economic growth and environmental sustainability. It shows that community engagement significantly impacts balanced urban development through gastrotourism, aligning cultural and economic initiatives with sustainability goals. Practically, the study provides insights for urban planners and stakeholders in Serbia and similar settings. It emphasizes community engagement and green infrastructure investment as key components of urban development. Properly utilized, gastrotourism can create sustainable, resilient urban environments. Stakeholders should prioritize green investments in urban planning to achieve sustainability amid rapid urbanization. However, the study's focus on Serbia may limit its generalizability to other contexts with differing economic, cultural, and environmental conditions. Statistical analyses may not fully capture the dynamic relationship between gastrotourism, urban development, and green investments. Future studies could broaden the scope with qualitative methods or case studies across different regions.

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