Article

Pathways to Prosperity: Unveiling the Determinants of Agro-Tourism Growth in the Republic of Serbia

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Abstract: Agro-tourism in the Republic of Serbia represents an increasingly significant sector of rural development, blending agriculture and tourism into an appealing whole. The aim of this study is to identify and quantify the factors significantly contributing to the development of agro-tourism, taking into account the role of community and government support, economic benefits, environmental and social impacts, as well as infrastructure and safety. The results indicate that community and government support crucially influence agro-tourism development, while economic benefits and environmental and social impacts have a smaller but positive influence. Infrastructure and safety show the least impact. This study is significant as it provides empirical evidence on factors contributing to agro-tourism development, enabling decision-makers, practitioners, and communities to strategically enhance and support the growth of this sector. The innovation of the study lies in its comprehensive approach, integrating multidimensional analysis of the impacts of various factors on agro-tourism development, which has not been extensively explored before, thus offering new insights and guidelines for more effective policies and practices in this field.

Keywords: Agrotourism; agro development; rural development; Republic of Serbia.

1. Introduction

Agro-tourism in Serbia represents a unique way to improve rural life and support sustainable development [1]. Using its rich agricultural tradition and diverse resources, Serbia can offer authentic rural experiences that connect visitors with the country's heritage and natural beauty. This integration of tourism and agriculture not only promises economic benefits for rural communities but also plays a key role in preserving the cultural identity and ecological integrity of the region [2].

This research aims to examine the multifaceted factors influencing agro-tourism development, particularly focusing on community support, economic variables, and environmental considerations. Motivated by the need for empirical evidence in guiding policymaking and industry practices, this study addresses the existing gap in understanding the strong drivers of agro-tourism growth. With previous research often lacking a comprehensive approach, this study fills the gap by conducting a multidimensional analysis, considering various factors influencing agro-tourism development simultaneously. The innovative aspect lies in integrating community dynamics, economic factors, and environmental impacts within a single framework, providing a nuanced understanding of agro-tourism's complexities. This research holds significance for policymakers, industry stakeholders, and local communities by identifying key determinants of agro-tourism development. By offering insights into sustainable policies and strategies, it aims to foster continued agro-tourism expansion while preserving rural socio-cultural and environmental integrity.

The development of agro-tourism is a main strategy for fostering economic revitalization in rural areas, offering an alternative to the conventional reliance on agriculture as a primary source of income [3]. As traditional agricultural practices face diminishing returns and rural populations migrate towards urban centers, agro-tourism emerges as a sustainable pathway to diversify rural economies and counteract these trends [4]. This form of tourism, driven by a growing demand for authentic and unique rural experiences, aligns with the shift in consumer preferences towards "living experiences" and a deeper understanding of cultural and natural heritage, moving away from the material consumption that characterized economic development in the past [5].

Integrating agricultural activities with tourism, agro-tourism capitalizes on the unique assets of rural areas—ranging from natural beauty and biodiversity to local traditions, cuisine, crafts, and festivals [6-8]. Such integration not only enhances the income opportunities for farmers but also enriches the cultural and environmental fabric of the countryside. Infrastructure improvements, such as upgraded transportation networks and better accommodation and communication facilities, alongside targeted marketing and promotional efforts, are essential to make rural destinations more accessible and appealing to tourists [9-11]. The role of supportive policy frameworks cannot be overstated, with initiatives like grants, subsidies, and training programs vital for encouraging agro-tourism development [12]. Furthermore, regulatory reforms that streamline the amalgamation of agricultural and tourism activities are crucial for the establishment of new ventures in this sector.

The Republic of Serbia, with its rich agricultural legacy and diverse environment, stands to gain significantly from the expansion of agro-tourism [13]. The country's rural regions, characterized by picturesque farms, vineyards, and forests, provide an ideal setting for agro-tourism initiatives. Such development not only promises to elevate the economic status of rural communities but also ensures the preservation of Serbia's rural heritage and mitigates the risk of depopulation. By prioritizing sustainable tourism practices, Serbia can safeguard its environmental and cultural assets while offering visitors meaningful and memorable experiences [14,15]. Thus, investing in agro-tourism serves as a catalyst for comprehensive rural development, embracing economic diversification, cultural preservation, and environmental sustainability. The advancement of agro-tourism in Serbia illustrates the sector's potential to stimulate socio-economic growth, positioning it as a model for rural revitalization that could inspire similar initiatives globally [2].

Understanding the factors that drive its growth is crucial for maximizing its potential benefits [16-20]. This thematic exploration delves into four key dimensions hypothesized to influence the development of agro-tourism: community and government support, economic benefits, environmental and social impacts, and infrastructure and safety measures [21-26]. Previous research emphasizes the importance of community and government support in encouraging the growth of agro-tourism. Some authors emphasize the key role of local self-government initiatives and community engagement programs in promoting agro-tourism ventures [26-28]. Joint efforts between government agencies and local communities can lead to improved infrastructure development and marketing strategies, which consequently encourage agro-tourism activities in rural areas [29].

H1: Community and government support for agro-tourism positively influences the development of agro-tourism.

The economic sustainability of agro-tourism has received considerable attention in academic circles. Studies underscore the significant economic advantages associated with agro-tourism, such as heightened farm revenues, job opportunities, and the promotion of local economic expansion [30,31]. Additionally, research emphasizes agro-tourism's role in broadening rural economies and fostering entrepreneurial endeavors, thereby bolstering overall regional advancement.

H2: The economic benefits derived from agro-tourism activities contribute positively to the development of agro-tourism.

Environmental and social sustainability factors significantly influence the evolution of agro-tourism. Studies stress the importance of mitigating environmental degradation and advocating for cultural conservation in agro-tourism sites [32,33]. Some research highlights the favorable social outcomes of agro-tourism, such as community empowerment, cultural exchange, and the preservation of traditional customs.

H3: Environmental and social impacts associated with agro-tourism have a positive effect on the development of agro-tourism.

Ensuring proper infrastructure and safety measures is crucial for improving the appeal and accessibility of agro-tourism sites. Studies stress the significance of maintaining transportation networks, accommodations, and recreational facilities to enhance visitor satisfaction and encourage repeat visits [34-36]. Many authors underscore the importance of safety protocols and risk management strategies in safeguarding tourists' well-being and instilling confidence in agro-tourism experiences [37].

H4: Infrastructure and safety measures in agro-tourism areas positively impact the development of agro-tourism.

In the review of relevant literature on the development of agro-tourism and its impact on rural areas, it is important to note that studies are presenting opposing viewpoints. While the majority of research emphasizes the positive aspects of agro-tourism, such as economic development, preservation of local culture, and protection of the natural environment, certain works point to potential negative consequences [38]. These studies focus on the possibility that agritourism leads to the commercialization of rural areas, loss of authenticity, and potential harm to the local environment due to increased pressure on resources. The issue of over-dependence on tourism is also highlighted, which can jeopardize the diversification of the rural economy and leave the community vulnerable to fluctuations in tourism trends [39]. Furthermore, some authors argue that agro-tourism can lead to social tensions within communities, especially when the benefits from tourism are not evenly distributed or when traditional ways of life are disrupted due to the demands of the tourism industry. Some literature calls for a more detailed consideration of the balance between the development of agro-tourism and sustainable management of resources and local community needs [40,41].

2. Materials and Methods

Sample collection

The sample was collected through stratification of owners of agro-tourism households across the Republic of Serbia in the period from August to December 2023. To guarantee the representativeness of the sample, the sampling approach was meticulously designed based on geographical regions and property size. This method ensured a comprehensive inclusion of various types of agro-tourism properties, resulting in the participation of 136 owners in the study.

Questionnaire design

The questionnaire was designed by the authors to adequately address the research topic. Given the lack of previous research and the use of other questionnaires in this field, the authors developed the questionnaire based on a comprehensive review of the literature. The questionnaire consisted of items covering four key dimensions: community and government support, economic benefits, environmental and social impacts, infrastructure, and safety. Each dimension included a set of items that were then subjected to factor analysis to identify latent factors. Subsequently, measures of reliability (through Cronbach's alpha coefficient) and construct validity were assessed to ensure the questionnaire's metric properties.

Data analysis

Descriptive statistics were computed using the Statistical Package for the Social Sciences (SPSS) program to summarize the characteristics of the sample and the variables under investigation. Measures such as mean, standard deviation, and frequency distributions were utilized to provide a comprehensive overview of the data [42]. Factor analysis was conducted to explore the underlying structure of the questionnaire items and identify latent factors representing different constructs [43]. This analysis helped reduce the dimensionality of the data and extract meaningful factors that capture the key dimensions of agro-tourism development. Reliability measures, including Cronbach's Alpha, rho_A, composite reliability (CR), and average variance extracted (AVE), were computed to assess the internal consistency and reliability of the factors derived from factor analysis [44]. These measures indicate the extent to which the items within each factor consistently measure the same underlying construct [45]. Construct validity was assessed using measures such as heterotrait-monotrait ratio (HTMT) and collinearity statistics (variance inflation factor—VIF) [46]. These measures examine the extent to which the questionnaire items are measuring distinct constructs and the presence of multicollinearity among the variables [47].

Structural Equation Modeling (SEM) was employed using the SmartPLS program to analyze the relationships between the latent factors identified through factor analysis. SEM allows for the simultaneous examination of multiple dependent and independent variables, providing insights into the complex interrelationships among them. Bootstrapping was utilized to validate the results obtained from SEM and assess the significance of the path coefficients [42]. This resampling technique helps estimate the standard errors and confidence intervals of the path coefficients, thereby confirming the robustness and reliability of the obtained data [48]. Various model fit indices, such as the Standardized Root Mean Square Residual (SRMR), d_ULS, d_G, Chi-Square, Normed Fit Index (NFI), and R-squared (R2), were used to evaluate the goodness-of-fit of the structural equation model [45].

4. Results and Discussion

Table 1 provides descriptive statistics for the various items related to agro-tourism perspectives, Items are evaluated based on mean (m) scores, standard deviation (sd), and Cronbach's alpha (α) for reliability.

Table 1. Descriptive values of items (N = 136).

Factors (α - 0.708)	Items	m	sd	α
Community and Government Support for Agro-tourism	Society needs to be more involved in the development of agro-tourism.	2.73	0.854	0.721
	The government should provide more support for the development of agro-tourism.	3.62	0.980	0.748
	We are actively involved in the planning and development of agro-tourism initiatives.	2.51	0.707	0.658
Economic Benefits of Agrotourism	Agro-tourism initiatives create new job opportunities in the agricultural sector.	2.78	0.816	0.779
	Agro-tourism attracts new investments into local communities and agriculture.	2.98	0.804	0.753
	Agro-tourism contributes to raising the standard of living in agricultural regions.	3.97	0.666	0.784
Environmental and Social Impacts of Agro-tourism	Impact on Local Population: The development of agro-tourism sometimes results in consequences for the local population that need to be addressed.	3.71	0.927	0.674
	Agro-tourism activities must manage their impact on local noise levels and pollution to minimize negative effects.	3.63	0.748	0.744
	The growth of agro-tourism can affect the cost of living in rural areas, requiring careful management.	2.26	0.732	0.772
Infrastructure and Safety in Agro-tourism	Agro-tourism promotes the construction of new infrastructure in agricultural areas.	3.93	0.847	0.770
	Long-term planning is essential to minimize the negative impacts of agro-tourism development.	3.97	0.820	0.785
	Effective measures are required to ensure that agro-tourism does not lead to an increase in crime rates.	2.96	0.508	0.775
Development of Agro-tourism	Agro-tourism should be more prominently featured in the development strategies of municipalities.	2.15	0.787	0.708
	Supporting agro-tourism development is vital for the sustainable evolution of agricultural communities.	2.42	0.752	0.791
	Implementing innovative practices in agro-tourism is key to overcoming challenges and maximizing benefits.	2.94	0.817	0.759

Our study elucidates a discernible discourse surrounding the imperative for increased community engagement and government support, manifested in statistically significant mean scores ranging between 2.51 and 3.62, with corresponding Cronbach's α values ranging from 0.658 to 0.748. This underscores the collective awareness of agritourism's potential to catalyze economic growth, as evidenced by mean scores ranging from 2.78 to 3.97, along with strong internal consistency indices ranging between 0.753 and 0.784. In contrast, environmental and social problems manifest themselves tangibly, as indicated by mean scores ranging from 2.26 to 3.71, with α values between 0.674 and

0.772, highlighting the need for nuanced mitigation strategies. Furthermore, the study highlights the key role of infrastructure development and security measures in fostering a favorable environment for agritourism, with mean scores varying between 2.96 and 3.97, with α values ranging from 0.770 to 0.785. Finally, a strategic imperative to integrate agritourism into municipal development strategies emerges, with mean scores ranging from 2.15 to 2.94 and α values between 0.708 and 0.791, requiring adaptive approaches to ensure sustainable progress.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value of 0.628 indicates a moderate level of sampling adequacy, suggesting that the data may be suitable for conducting factor analysis. Additionally, Bartlett's Test of Sphericity, with an approximate chi-square value of 2.954 and a significant p-value of 0.000, signifies that the correlation matrix is significantly different from an identity matrix, supporting the suitability of the data for factor analysis (Table 2).

Table 2. Results of factor analysis with promax rotation.

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	Variance %	Cumulative %	Total	Variance %	Cumulative %	Total
Community and Government Support for Agro-tourism	3.936	26.239	26.239	3.936	26.239	26.239	3.259
Economic Benefits of Agro-tourism	2.039	13.593	39.832	2.039	13.593	39.832	2.384
Environmental and Social Impacts of Agro-tourism	1.709	11.392	51.224	1.709	11.392	51.224	2.474
Infrastructure and Safety in Agro-tourism	1.293	8.618	59.842	1.293	8.618	59.842	2.359
Development of Agro-tourism	1.240	8.267	68.109	1.240	8.267	68.109	1.649

In the conducted factor analysis, promax rotation was utilized. A total of five factors were extracted. The factor with the highest saturation is Community and Government Support for Agro-tourism, with 26.239% saturation, while the Development of Agro-tourism factor has the lowest saturation at 8.267%. The factor Community and Government Support for Agro-tourism explains the highest percentage of variance at 26.239%, whereas the Development of Agro-tourism factor explains the lowest percentage of variance at 8.267%. Overall, the factor analysis accounts for 68.109% of the

variance in the data. Table 3 presents the construct reliability and validity measures for the identified factors in the study.

Table 3. Construct reliability and validity.

Factors	Cronbach's Alpha (>0.6)	rho_A (>0.7)	CR (>0.7)	AVE (>0.5)
Community and Government Support for Agro-tourism	0.720	0.817	0.724	0.749
Development of Agro-tourism	0.856	0.806	0.775	0.691
Economic Benefits of Agro-tourism	0.737	0.711	0.794	0.664
Environmental and Social Impacts of Agro-tourism	0.745	0.748	0.855	0.781
Infrastructure and Safety in Agro-tourism	0.829	0.791	0.804	0.756

Factor Community and Government Support for Agro-tourism exhibits satisfactory reliability, with a Cronbach's Alpha coefficient of 0.720, exceeding the recommended threshold of 0.6. Additionally, it demonstrates good internal consistency, as indicated by a rho_A coefficient of 0.817 and a composite reliability (CR) of 0.724, both surpassing the threshold of 0.7. The average variance extracted (AVE) is also acceptable at 0.749, exceeding the recommended threshold of 0.5, suggesting convergent validity. Factor Development of Agro-tourism shows excellent reliability, with a Cronbach's Alpha coefficient of 0.856, well above the threshold of 0.6. Moreover, it demonstrates strong internal consistency, with a rho_A coefficient of 0.806 and a composite reliability (CR) of 0.775, both exceeding the threshold of 0.7. However, the average variance extracted (AVE) is slightly below the recommended threshold at 0.691, indicating moderate convergent validity. Then, the Economic Benefits of Agro-tourism exhibit satisfactory reliability, with a Cronbach's Alpha coefficient of 0.737, meeting the threshold of 0.6. It demonstrates adequate internal consistency, with a rho_A coefficient of 0.711 and a composite reliability (CR) of 0.794, both exceeding the threshold of 0.7. The average variance extracted (AVE) is acceptable at 0.664, indicating convergent validity. Environmental and Social Impacts of Agro-tourism factor demonstrate satisfactory reliability, with a Cronbach's Alpha coefficient of 0.745, exceeding the threshold of 0.6. It exhibits strong internal consistency, with a rho_A coefficient of 0.748 and a composite reliability (CR) of 0.855, both surpassing the threshold of 0.7. The average variance extracted (AVE) is high at 0.781, indicating convergent validity. The "Infrastructure and Safety in Agro-tourism" factor exhibits outstanding reliability, evidenced by a Cronbach's Alpha coefficient of 0.829, significantly surpassing the 0.6 benchmark. This factor showcases robust internal consistency, as indicated by a rho_A coefficient of 0.791 and a composite reliability (CR) value of 0.804, both exceeding the 0.7 standard. Furthermore, with an average variance extracted (AVE) of 0.756, it indicates satisfactory convergent validity.

Table 4 presents the Heterotrait Monotrait Ratio (HTMT) values between pairs of constructs, indicating the extent of discriminant validity. Lower values suggest stronger evidence of discriminant validity.

Table 4. Heterotrait Monotrait Ratio (HTMT).

	Community and Government Support for Agro-tourism	Development of Agro-tourism	Economic Benefits of Agro-tourism	Environmental and Social Impacts of Agro-tourism	Infrastructure and Safety in Agro-tourism
Community and Government Support for Agro-tourism					
Development of Agro-tourism	0.563				
Economic Benefits of Agro-tourism	0.641	0.076			
Environmental and Social Impacts of Agro-tourism	0.308	0.102	0.017		
Infrastructure and Safety in Agro-tourism	0.508	0.526	0.250	0.364	

Table 5. Collinearity statistics (variance inflation factor—VIF).

Factors	Items	Variance Inflation Factor—VIF (VIF < 3.3)
Community and Government Support for Agro-tourism	CGSA1	1.122
	CGSA2	1.122
	CGSA3	1.028
Development of Agro-tourism	DA1	1.023
	DA2	1.032
	DA3	1.054
Economic Benefits of Agro-tourism	EBA1	1.193
	EBA2	1.566
	EBA3	1.344
Environmental and Social Impacts of Agro-tourism	ESIA1	1.066
	ESIA2	1.094
	ESIA3	1.088
Infrastructure and Safety in Agro-tourism	ISA1	1.027
	ISA2	1.047
	ISA3	1.042

The HTMT values in the table suggest varying degrees of discriminant validity between pairs of constructs. Higher values, such as 0.641 between Community and Government Support for Agro-tourism and Economic Benefits of Agro-tourism, indicate potential overlap in underlying concepts. Conversely, lower values, like 0.017 between the Economic Benefits of Agro-tourism and

Environmental and Social Impacts of Agro-tourism, imply clearer differentiation between these constructs, supporting their distinct measurement. Table 5 provides collinearity statistics, specifically the Variance Inflation Factor (VIF), which assesses multicollinearity between items within each factor. VIF values below 3.3 indicate acceptable levels of multicollinearity.

The analysis indicates that there are minimal issues with multicollinearity across all factors. The Variance Inflation Factor (VIF) values are comfortably below the threshold typically associated with multicollinearity concerns, suggesting robustness in the relationships between the variables examined. Table 6 presents fit summary indices for both the Saturated Model and the Estimated Model.

Table 6. Fit summary indices.

	Saturated Model	Estimated Model
SRMR	0.077	0.077
d_ULS	0.022	0.022
d_G	0.075	0.075
Chi-Square	1.286	1.286
NFI	0.924	0.924
R² = 0.497	**R² adjusted = 0.481**	

Summary fit indices provide valuable insight into the adequacy of both the saturated model and the estimated model. Both models show a standardized root mean square residual (SRMR) of 0.077, signaling a favorable alignment between the observed and estimated covariance matrices. Furthermore, d_ULS (unweighted least squares) and d_G (geodesic) values for both models are 0.022 and 0.075, respectively, indicating minimal deviations between observed and estimated matrices and thus confirming robust model fit. The chi-square values for both models are consistent at 1.286, implying a lack of significant difference between the observed and estimated covariance matrices. The normalized fit index (NFI) further reinforces the adequacy of the estimated model, with an NFI value of 0.924, indicating a strong fit relative to the saturated model. The value of R-square (R^2) for the estimated model is noteworthy, indicating that approximately 49.7% of the variance of the dependent variable is accounted for by the independent variables. The adjusted R-squared value of 0.481 adjusts for the number of predictors in the model, providing a more conservative estimate of explained variance.
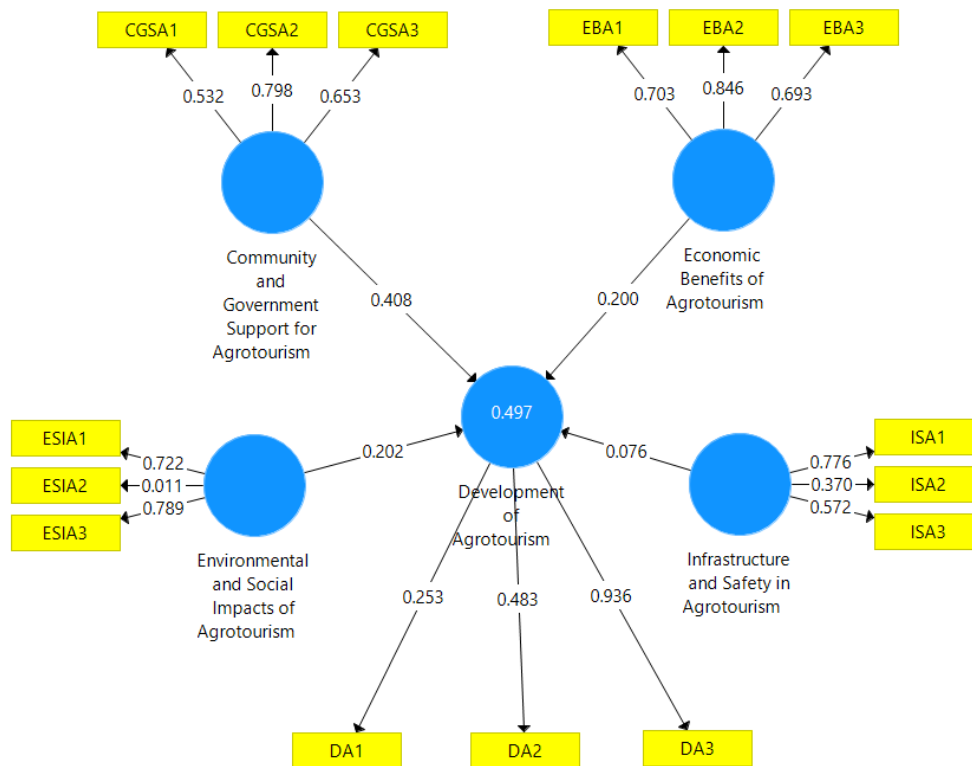
Figure 1. Path coefficients.

The obtained results from Table 7 and Figure 1 provide insights into the path coefficients between different factors, particularly focusing on their impact on the Development of Agro-tourism.

Table 7. Path coefficients.

	E	M	sd	t	p
Community and Government Support for Agro-tourism -> Development of Agro-tourism	0.408	0.385	0.095	4.286	0.000
Economic Benefits of Agro-tourism -> Development of Agro-tourism	0.200	0.205	0.075	2.659	0.008
Environmental and Social Impacts of Agro-tourism -> Development of Agro-tourism	0.202	0.191	0.094	2.146	0.032
Infrastructure and Safety in Agro-tourism -> Development of Agro-tourism	0.076	0.116	0.109	0.703	0.022

Note: E – estimate; M – sample mean; sd – standard deviation; t – t statistics; p – significance.

Community and government support significantly influences agro-tourism development, with an estimate of 0.408 and a highly significant p-value of 0.000, indicating a strong and statistically significant relationship. Economic benefits of agro-tourism also positively impact its development, shown by an estimate of 0.200 and a p-value of 0.008, suggesting a moderate, yet statistically significant effect. Similarly, the environmental and social impacts of agro-tourism contribute positively, with an estimate of 0.202 and a p-value of 0.032, indicating a significant but relatively

modest influence. However, infrastructure and safety in agro-tourism appear to have a minimal and statistically less significant impact, with an estimate of 0.076 and a p-value of 0.022. This analysis highlights the critical roles of community support, economic benefits, and environmental and social considerations in promoting agro-tourism development while suggesting that infrastructure and safety, though important, may play a lesser role.

Based on the given path coefficients and the level of statistical significance (p-value), all assumed hypotheses were confirmed. Hypothesis H1 is strongly confirmed, with a path coefficient of 0.408 and a highly significant p-value of 0.000, indicating a strong positive impact of community and government support on agro-tourism development. The second hypothesis was also confirmed, as evidenced by a path coefficient of 0.200 and a p-value of 0.008, indicating a positive and statistically significant impact of economic benefits on the development of agro-tourism. Also, the positive effect of environmental and social influences on the development of agro-tourism was confirmed, with a path coefficient of 0.202 and a p-value of 0.032, which indicates a significant positive relationship. While the path coefficient of 0.076 is lower compared to other factors, hypothesis H4 that infrastructure and security positively influence agro-tourism development is confirmed, as indicated by a p-value of 0.022, suggesting a statistically significant, albeit weaker relationship.
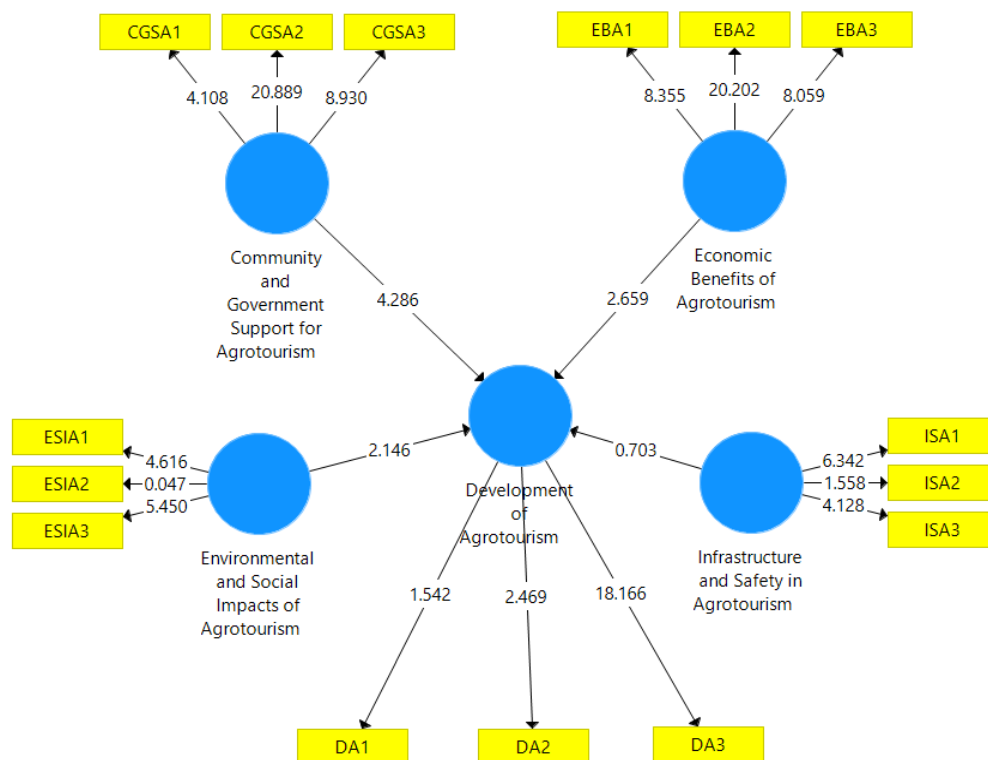

Figure 2. Bootstrapping model.

Using the bootstrap method in the second model, we further confirmed the significant influence of community and government support on the development of agro-tourism, as well as the impact of economic benefits. Additionally, it was shown that environmental and social effects, along with infrastructure and safety, contribute to this development, thereby reinforcing the findings of the initial analysis.

5. Conclusions

Agro-tourism represents an innovative convergence of agricultural practices and tourism, facilitating an immersive educational experience for visitors within the rural milieu. It serves as a sustainable mechanism for economic development in rural communities, by enabling direct engagement with agricultural activities, local traditions, and ecological practices. This form of tourism supports the preservation of cultural heritage and promotes environmental stewardship through experiential learning and participatory activities. Moreover, agro-tourism contributes to the diversification of rural economies, offering an alternative revenue stream for farmers and fostering a deeper connection between consumers and agricultural production processes.

The primary objective of this research was to clarify the factors that contribute to the development of agro-tourism, with a particular focus on the roles of community and government support, economic benefits, environmental and social impacts, as well as infrastructure and safety. The applied methodology used a quantitative approach, using statistical analysis to assess the relationship between these factors and the growth of agro-tourism. The data were analyzed through structural modeling regression analysis, providing a comprehensive understanding of the predictors of agro-tourism development. The confirmation of community and government support as a pivotal element for the advancement of agro-tourism highlights the critical role of policy frameworks, financial incentives, and promotional activities in nurturing this sector. This support is instrumental in creating an enabling environment that facilitates investment, enhances accessibility, and promotes the unique offerings of rural areas to potential tourists. The finding underscores the necessity for integrated efforts between local communities, government bodies, and tourism stakeholders to harness the full potential of agro-tourism.

The economic benefits associated with agro-tourism, such as job creation and income diversification for rural communities, also emerged as a significant driver of its development. This supports the notion that agro-tourism not only serves as a tool for rural development but also contributes to the broader economic resilience of rural areas. The emphasis on economic benefits indicates that stakeholders perceive agro-tourism as a viable economic activity with tangible returns, reinforcing its adoption and expansion. This study identified the environmental and social impacts of agrotourism as influential factors. This reflects a growing awareness and appreciation of sustainable tourism practices that contribute positively to the conservation of natural resources and the well-being of local communities. It suggests that agro-tourism is increasingly seen as a means to promote environmental stewardship and social cohesion, aligning with global trends towards more responsible and sustainable tourism models. However, the impact of infrastructure and safety on the development of agro-tourism was found to be less pronounced than other factors. While still relevant, this suggests that the success of agro-tourism initiatives may depend more heavily on the strength of community involvement, policy support, and the perceived economic and socio-environmental benefits. It could also indicate that infrastructure and safety, while essential, are viewed as foundational elements that need to be addressed in the initial stages of developing agro-tourism rather than as ongoing drivers of growth.

This research contributes to the theoretical understanding of agro-tourism development by highlighting the multiple impacts of community and government support, economic benefits, environmental and social impacts, as well as infrastructure and security. It emphasizes the complexity of agro-tourism as a socio-economic phenomenon that integrates aspects of rural development, tourism, and sustainability. The findings suggest an interdisciplinary approach to the study of agro-tourism, integrating theories from economics, environmental science, sociology, and tourism studies. This enriches the theoretical framework by showing how different factors combine to influence the development of agro-tourism, suggesting the need for models that can accommodate such multidimensionality.

The confirmation of certain factors as crucial for agro-tourism development has direct implications for policy-makers and tourism planners. It suggests that effective strategies should focus on enhancing community and government support, leveraging economic benefits, mitigating environmental and social impacts, and improving infrastructure and safety. The research highlights

the importance of engaging local communities in agro-tourism initiatives and providing education on sustainable practices. This could involve developing community-based tourism programs that empower local stakeholders and promote environmental stewardship. The findings indicate the need for targeted marketing strategies that highlight the unique attributes of agro-tourism destinations, including their economic, environmental, and social benefits. Promotional efforts should aim to attract tourists interested in sustainable and immersive rural experiences.

The specific context of the study focused on agro-tourism development may limit the generalizability of the findings to other forms of tourism or geographic regions. Different cultural, economic, and environmental conditions could influence the applicability of the results. The rapidly changing nature of tourism trends and consumer preferences may affect the longevity and relevance of the findings. What drives agro-tourism development today might evolve, requiring ongoing research to adapt strategies accordingly. Implementing the recommended policies and strategies may be constrained by limited resources, particularly in developing or economically disadvantaged areas. The effectiveness of interventions could be moderated by available financial, human, and technological resources.

This research underscores the complexity of agro-tourism development and provides a foundation for further investigation into sustainable rural tourism practices. However, the implementation of its insights must be adapted to specific contexts and be responsive to evolving trends and constraints.

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