H. M. Kamrul Hassan / Tareq Mahbub / Md Ali Arshad Chowdhury Agritourism, Community Attachment, and Their Contributions to Tourism and Community: An Empirical Study

Abstract

The tourism industry has encountered various sustainable development functionalities, and nations seek to develop tourism while conserving nature and its resources. Agritourism strengthens a region's competitive, cultural, and transformational resources while helping the rural community, economy, and society thrive sustainably. However, few studies have evaluated community attention toward agritourism in developing countries. This study bridges this gap using community attachment through agritourism-based resident perceptions of the economic, social, cultural, and environmental impacts of tourism support and its contributions to resident communities. A partial least squares method under structural equation modelling (SEM) was employed using SmartPLS 3.0. Results reveal that community attachment is significantly correlated with economic, social, cultural, and environmental impacts, *which are* also significantly associated with tourism support. These impacts were mainly related to *contributions* to the community, thus confirming all hypotheses except for *the* cultural implications, which were found to be insignificant. This study will help marketers, professionals, and decision-makers understand and predict the economic, social, cultural, and environmental impacts of agritourism and formulate policies to contribute to its development.

Keywords: agritourism, social impact, environmental impact, community attachment, community contribution

1. Introduction

Agritourism has become a popular term for tourism services provided by agricultural entrepreneurs on their farms, enabling tourists to actively or passively engage in agricultural activities (Ammirato et al., 2020). "Agritourism" has been widely used interchangeably with "agrotourism," "farm tourism," "farm-based tourism," and "rural tourism" (Tew & Barbieri, 2012; Santeramo & Barbieri, 2017). It aims to combine the diverse environmental concerns and socioeconomic development of different stakeholders in the agricultural sector to enhance the long-term viability of tourism businesses. Though agritourism is conducted primarily for agricultural objectives, it can also increase the recreational and experience-seeking tourism industry by drawing visitors to agricultural lands, particularly in rural locations, where they can relax emotionally and physically (Meutia et al., 2022). This study considered agritourism in farm-based tourism activities, necessitating immediate contact between tourists and farmers.

As shown in Table 1, multiple studies on various aspects of agritourism have been conducted. A common research focus is the different aspects of agritourism, which include the impact of corporate social responsibility (CSR) initiatives on community development (Magno & Cassia, 2021), determining visitor satisfaction levels (Indrayanti et al., 2019), examining the role of microbusiness resources in agritourism ventures (Campbell &

Md Ali Arshad Chowdhury, PhD, Full Professor, Faculty of Department of Accounting, University of Chittagong, Bangladesh; e-mail: arshad@cu.ac.bd



H. M. Kamrul Hassan, PhD, Associate Professor, Faculty of Department of Marketing, University of Chittagong, Bangladesh; ORCID: https://orcid.org/0000-0002-0546-9719; e-mail: kamrul@cu.ad.bd

Tareq Mahbub, PhD, Corresponding Author, Associate Professor, Faculty Graduate Business Department, Kwantlen Polytechnic University, Surrey, BC, Canada; e-mail: tareq.mahbub@kpu.ca

Kubickova, 2020), investigating attitudes toward agritourism among residents and stakeholders (Nguyen et al., 2018), and exploring innovative practices among farmers involved in agrotourism (Dickes et al., 2020). These studies were conducted worldwide to determine how these factors affect success within the agritourism field. However, agrotourism's economic, sociocultural, and environmental impacts have rarely been considered (Little & Blau, 2020). Studies that comprehensively addressed the attributes (i.e., economic, sociocultural, and environmental impacts) that drive tourists to agritourism in the context of emerging countries, particularly Bangladesh, remain scant.

Community attachment refers to the extent of a person's socialization, active involvement, and emotions toward their community (McCool & Martin, 1994). Tourism studies have considered community attachment a significant influencing factor of support for tourism development, and it has been used repeatedly in tourism demand models to investigate its effects on communities' views of tourism's impacts and attitudes toward the tourism industry (Adongo et al., 2017; Eslami et al., 2019). Despite evidence indicating that community attachment seems to be a critical component of community advancement, few studies have examined community attachment in the tourism context (Moghavvemi et al., 2021). Interestingly, the impact of community attachment in the agritourism field remains unexplored. Thus, the role of community attachment in contributing to agritourism warrants investigation.

Bangladesh is characterized by diverse natural landscapes comprising ancient archaeological sites, lush tropical rainforests with evergreen hills, and a vibrant cultural history characterized by ethnic diversity (Mondal, 2017). However, the inadequate maintenance of tourist destinations, limited facilities, insufficient funding, the absence of local government participation in tourism development, and inappropriate marketing objectives have rendered the industry untenable and ineffective (Mondal, 2017). According to Bhatta and Ohe (2020), the agritourism growth rate in developing nations, particularly in South Asia, lags behind that of advanced economies. Thus, the relationship between tourism, the environment, and agriculture must be strengthened to increase their effect on the national economy (Knowd, 2006; Torres & Momsen, 2011). Therefore, this study investigates the role of community attachment through agritourism-based residents' perceptions of the economic, social, cultural, and environmental impacts of tourism support and its contributions to resident communities.

Table 1

Source	Year	Country of study	Research gap	Research focus
(Nguyen et al., 2018)	2018	Vietnam	Research on agrotourism that aims to determine how locals feel about its effects on the local economy, society, and the environment remains limited	Examining the inhabitants' participation in agrotourism development by assessing their perspectives on the economic, sociocultural, and environmental effects of agrotourism
(Canovi, 2019)	2019	Italy	Tourism researchers have neglected farmers' identities and how they influence tourism diversification	Evaluating why winery owners prevent agritourism diversification and/or limit their participation
			Tourism studies have focused on national, ethnic, regional, local, and place identities.	
			Farmers' social identities are rarely discussed	
(Candelo et al., 2019)	2019	Costa Rica	The topic of agritourism in emerging nations is becoming increasingly prevalent and remains unexplored	Contributing to the ongoing discussion about the possibilities and advantages of expanding the coffee tourism industry
(Irwan et al., 2019)	2019	Indonesia	Several sociocultural and environmental issues still threaten the tourism industry's economic benefits, and many of Indonesia's natural resources have not been developed to their fullest potential. As a result, the country's natural resource potential is rarely utilised in an efficient or sustainable manner	Establishing a strategy for incorporating educational experiences within the larger agritourism framework

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Examples of multi-country studies on the different aspects of agritourism and identification of	research gaps



Table 1 (continued)

(Indrayanti et al., 2019)	of the visitor's satisfaction level toward community-based Salak Agrotourism in		of the visitor's satisfaction level toward community-based Salak Agrotourism in the Special Province of Yogyakarta and the specific features that must be improved to maximize consumer pleasure at this site	Determining consumer satisfaction with community-based Salak Agrotourism in Yogyakarta's Special Province and how to improve it
(Little & Blau, 2020)	2020	Costa Rica	While several studies have documented the rise of ecotourism in Costa Rica, very few have explored the numerous opportunities presented by the country's burgeoning agrotourism industry	How and when agrotourism can help rural communities to adapt to the long-term effects of climate change by providing a new source of income and environmental benefits from agriculture
(Dickes et al., 2020)	2020	United States	Although agritourism operators view their job through a creative and entrepreneurial lens, how agritourism fits into conventional business models remains limitedly understood	Examining the motivations behind farmers' explorations into agritourism's cutting-edge practises via the theoretical lens of entrepreneurship and testing an existing model, specifically in the agritourism context
(Yudhari et al., 2020)	2020	Indonesia	Untapped potential for coffee agrotourism in agricultural tourist hotspots	Evaluating the economic, social, cultural, environmental, and institutional aspects of agrotourism to identify driving forces for the growth of Arabica coffee's agrotourism industry
(Magno & Cassia, 2021)	2021	Italy	Strategies implemented by tourism businesses to mitigate the negative effects of the COVID-19 pandemic remain remarkably limited	Determining whether the connections between strategy and performance are moderated by the five aspects of corporate social responsibility (CSR) (community, workers, environment, heritage, and goods) and the co-creation experience
(Andéhn & L'Espoir Decosta, 2021)	2021	Greece	An in-depth understanding of what is needed for agritourism success and how to present experiential authenticity sustainably while resolving the diverse requirements of stakeholders is crucial	Exploring how agritourism in Messenia, Greece, produces and retains multiple meanings that appeal to tourists
(Pehin Dato Musa & Chin, 2022)	2022	Brunei	More research on agritourism's benefits to local economies, cultures, environments, and food and drink authenticity is warranted.	Evaluating the function of farm-to-table (FTT) activities in agritourism toward sustainable development of agritourism farms
(Saepudin et al., 2022)	2022	Indonesia	No other study has compared the challenges of constructing a tourist village area with the potential of community- based agritourism activities, considering the three current operational, structural, and cultural constraints	Examining the perception of the community engaged in agritourism activities
(Nematpour & Khodadadi, 2021)	2021	Iran	Despite Iran's favourable geographical and climatic circumstances, stunning landscape, and significant agricultural activity, policymakers and residents are still unaware of agritourism's benefits.	Exploring the aspects that might affect the agritourism growth in Iran's rural areas and the locations where it would be most effective
(Yilmaz & Dixit,2023)	2023	Turkey & India	Inadequate research has been done on tea tourism, especially in two primarily tea- producing destination countries, namely, Turkey and India	Focuses on destination tea tourism products and experiences and how they are used during tours organized by travel agencies in Turkey and India

2. Literature review

2.1. Agritourism and community attachment

Agritourism is a business that includes multiple incidental services offered to attract farm visitors, such as recreation, accommodation, and food services. These activities encompass various pursuits, from agricultural production (e.g., harvesting berries and milking cows) through the indirect enjoyment of farm activities (e.g., enjoying meals onsite and attending farmers' markets) to recreational activities for which the farm serves as an apt setting (e.g., following a vineyard wedding). Additionally, it is an outlet for community development



where visitors interact with consumers (hosting farmers) and the local community, facilitating tourism development (Nematpour & Khodadadi, 2021). The development of farm tourism in local communities helps foster greater local participation in the decision-making process. It increases community involvement in planning for the development of local tourism sites (Olya et al., 2014). Moreover, it is a means of reconnecting with nature, rural lifestyles, local farmers, and communities, thus reinforcing community involvement (Chantell & Barbieri, 2014; Prasad et al., 2023).

Agritourism is farm-based tourism that enables farmers to diversify their income base and search for alternative economic growth sources (Naidoo & Sharpley, 2016; McGhee et al., 2007). This has been particularly relevant for smaller farms in marginal rural areas where agritourism has helped generate additional income and employment opportunities through cross-marketing (e.g., branding and promotion) and farm product sales to tourists, especially during crises. It promotes entrepreneurship as it is considered a low-cost investment strategy, particularly for smaller farms that can use their existing resources for income diversification (Gomes et al., 2019; Liu et al., 2018). Researchers have identified the educational utility of agritourism as a motivating element for educating communities and tourists about farming and farming resources, including sustainable agricultural practices that conserve farm heritage, natural habitats, and rural landscapes. It is a form of farm-based tourism that helps preserve the indigenous heritage and provides potential economic benefits through increased farm revenue, stable cash flow, employment opportunities, and strong local economic development (Tew & Barbieri, 2012). It can also help build strong local economies by reducing youth migration to urban employment centres, creating job opportunities, supporting local services, and carrying out conservation projects to revitalize local economies (Barbieri, 2009).

Agritourism also produces various sociocultural and environmental benefits, including preserving rural lifestyles, indigenous rural knowledge about farming practices, increased awareness and preservation of local customs and crafts, and natural and heritage conservation (Barbieri et al., 2019; Tew & Barbieri, 2012). Furthermore, sustainable farming techniques that positively affect environmental elements, such as biodiversity, landscape management, and natural resources (including organic farming and conservation), attract visitors to agritourism.

2.2. Theoretical framework

2.2.1. Community attachment and perceived impact on tourism

Community attachment refers to an individual's social involvement and inclusion, indicating an emotional relationship between a person and a particular community (Wang & Luan, 2021). Community attachment is strongly associated with the positive impacts of tourism, and locals' perceptions toward tourism development tend to be favourable when they actively participate in their communities through increased investment (Chen & Chen, 2010). Economic factors are significant for residents (Adongo et al., 2017; Kim et al., 2021). Residents' perceptions of economic impacts influence their sense of community attachment (Gursoy & Rutherford, 2004). Locals in host communities value social impacts more than economic considerations (Gursoy et al., 2011). According to Faulkner and Tideswell (1997), perceived social impacts can be measured in two ways: at the macro level, by examining the community's cultural and environmental conditions (Kim & Petrick, 2005); and at the micro level, by paying close attention to individuals' psychological and emotional outcomes (Waitt, 2003). This study considers the macro level. Community attachment significantly and positively affects perceived social impacts, indicating that the stronger the attachment, the more social benefits community residents will obtain (Kusumawati et al., 2022). Environmental impacts significantly and indirectly affect tourism support through community attachment (Lee et al., 2020). According to Lindén et al. (2015), individuals in rural areas may have a stronger emotional attachment to their homes and communities than those in metropolitan areas, leading to more significant efforts to preserve their natural resources. This indicates a relationship between the environmental impact and community attachment. Scholars from different cultural contexts have widely discussed cultural consequences and community attachment (Song



& Lim, 2021). Community culture includes languages, traditions, values, beliefs, and customs that influence how people behave and others view them (Makhmudov, 2020). Therefore, the following relationships between community attachment and economic, social, environmental, and cultural impacts are proposed.

H1: Community attachment directly and positively affects economic impacts.

H2: Community attachment directly and positively affects social impacts.

H3: Community attachment directly and positively affects environmental impacts.

H4: Community attachment directly and positively affects cultural impacts.

2.2.2. Economic impacts and their effects on tourism support and contributions to the community

Tourism's economic impacts may be analysed where tourism activities occur because they contribute directly to these places through total household earnings, government revenue, employment, and industry turnover (Dedeoğlu et al., 2021). Furthermore, the revenue generated by tourism has an economic impact not only on the nation in general but also on specific communities and their residents through more significant employment potential, higher income ranges, and more developed public facilities (Sinclair-Maragh & Gursoy, 2016; Khan et al., 2021). Therefore, the following hypotheses are proposed:

H5: Economic impacts directly and positively affect tourism support.

H6: Economic impacts directly and positively affect contributions to the community.

2.2.3. Social impacts and their effects on tourism support and contributions to the community

The social impact of tourism pertains to changes in the quality of life of tourist destination residents, which can be favourable or unfavourable (Fredline, 2005). In addition to the tourism experience, the social impact on local communities and their involvement has become crucial in tourism (De Bernardi & Arenas, 2022). The social implications of residents within a community may be managed deliberately to expand the community and obtain tourism support as a whole (Scholtz, 2019). Therefore, how social impact influences tourism support and contributes to the community remains widely debated. To analyze these relationships, the following two hypotheses are proposed:

H7: Social impacts directly and positively affect tourism support.

H8: Social impacts directly and positively affect contributions to the community.

2.2.4. Environmental impacts and their effects on tourism support and contributions to the community

Environmental impact refers to residents' commitment to maintaining the serenity of their surroundings, preserving natural landscapes and historical landmarks, and ensuring the cleanliness and attractiveness of the environment, all of which affect human health and socioeconomic conditions (Rasoolimanesh et al., 2015; Chen, 2020). Scholars, organizations, policymakers, and others have prioritized investigating the impacts of the environment on tourism, which may contribute to developing a sustainable tourism paradigm (Herrero et al., 2022). Accordingly, the following hypotheses are proposed:

H9: Environmental impacts directly and positively affect tourism support.

H10: Environmental impacts directly and positively affect contributions to the community.

2.2.5. Cultural impacts and their effects on tourism support and contributions to the community

Cultural and tourism growth are interconnected, as all types of travel, including travel to monuments, natural landscapes, festivals, and artists' performances, significantly influence the socio-economic development of host communities (Amalu & Eja, 2017). Therefore, tourism may contribute to developing cultural behaviour,

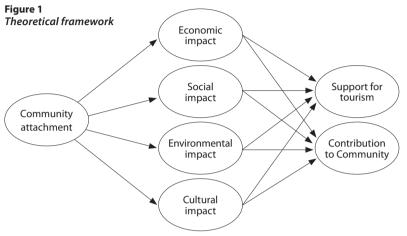


cultural identity, and the revival of arts, crafts, and local culture. Local community members can present their cultural identities to tourists, strengthening the sense of a community's importance (Khan et al., 2021). The following hypotheses are suggested for further study of this relationship:

H11: Cultural impacts directly and positively affect tourism support.

H12: Cultural impacts directly and positively affect contributions to the community.

Figure 1 illustrates the theoretical framework of this study considering the preceding analysis.



3. Methodology

3.1. Sample and data collection

In this study, the respondents were residents of tourist destinations in Bangladesh, particularly Chittagong, Cox's Bazar, Rangamati, and Bandarban,ⁱ whose interest in agritourism may have had an impact. The respondents were selected based on their demographic profiles, including age, sex, marital status, and education. Convenience sampling was used to capture the presence of a specific behaviour within a given sample and identify the associations between various phenomena (Etikan, 2016). A total of 349 questionnaires were received, of which 63 were invalid and discarded. The percentage of responses was 83.2%, resulting in a final sample size of 286, which seemed adequate for the current study.

3.2. Questionnaire design

A questionnaire-based survey was employed in this study. All items were rated on a five-point Likert-type scale ranging from "strongly disagree" (1) to "strongly agree" (5). A pre-test was conducted with three academic experts acquainted with agritourism to identify ambiguous terms, simplify the wording of the scales, and modify the length of the instrument (Sekaran & Bougie, 2011). After the pre-test, a pilot test was performed to validate the final questionnaire by identifying its flaws and gauging its effectiveness by evaluating the reliability of all items. Finally, a survey was conducted online. For onsite data collection, residents of cities interested in tourism or those who had visited existing tourist spots were considered. Online data were collected using Google Forms.

The instrument for analysing the seven research variables was derived by thoroughly evaluating prior studies, and the questionnaire was administered in Bengali^ü. The questionnaire was divided into three components. The

ⁱⁱ Bengali is the official language of Bangladesh.



ⁱChittagong, Cox's Bazar, Rangamati, and Bandarban are located in the South-Eastern part of Bangladesh. These are great tourist attractions for locals and foreigners. Cox's Bazar itself attracts more than a million visitors (locals and foreigners) annually.

first segment asked about the residents' demographic profiles. The second part measured community attachment as an independent variable, using items adapted from Gursoy and Rutherford (2004). Subsequently, the economic, social, cultural, and environmental impacts of tourism were considered, using items adapted from Ma et al. (2011), Liang et al. (2016), Kim et al. (2013), and the European Commission (2016). Finally, items from Lankford and Howard (1994) and Wang and Pfister (2008) were adopted to evaluate the variables, support for tourism development, and contributions to the community. All items were evaluated for reliability and validity, with Cronbach's alpha \geq 0.70 indicating an acceptable reliability coefficient (Butts & Michels, 2006).

3.3. Data analysis

The research used the partial least squares method under structural equation modelling (SEM), for which SmartPLS 3.0 was used. SEM has been successfully applied in earlier empirical studies (Barber et al., 2010; Yadav & Pathak, 2016). This well-developed scientific approach emphasises statistical tools to establish causalities between independent and dependent constructs used to measure the study by logically and analytically developing predetermined critical hypotheses (Bagozzi & Yi, 2012).

4. Results and analysis

This study is reflective in demonstrating the causal relationship between constructs and indicators. In this study, the SEM method was used and evaluated sequentially in two stages: (1) analysing the measurement model by assessing the reliability and validity of items and (2) evaluating the structural model, where the relationships among various factors (i.e., path coefficients) and hypotheses were tested. The results of the psychological characteristics of the measurement model and the structural model parameter estimation are presented below.

4.1. Descriptive analysis

Of the 462 participants, 33.73% were female, and 66.27% were male. Regarding age, 54 (11.69%) respondents were younger than 20, 122 (26.41%) were 20–29, 113 (24.46%) were 30–39, 83 (17.97%) were 40–49, 71 (15.37%) were 50–59, and 19 (4.11%) were older than 60. Regarding the participants' educational level, 7.14% attended or had completed high school or college, 51.30% had a bachelor's degree, 38.74% had a master's degree, and 2.81% had a doctoral degree. Regarding marital status, 136 respondents were single, and the remaining 326 were married (Table 2).

Variables	Items	Frequency	Percentage
Gender	Male	307	66.27%
	Female	155	33.73%
Age	<20 years	54	11.69%
	20–29 years	122	26.41%
	30–39 years	113	24.46%
	40–49 years	83	17.97%
	50–59 years	71	15.37%
	>60 years	19	4.11%
Marital status	Single	136	29.44%
	Married	326	70.56%
	High school/Diploma/College	33	7.14%
Education	Bachelor's degree	237	51.30%
	Master's degree	179	38.74%
	Doctoral degree	13	2.81%

 Table 2

 Demographic variables



4.2. Construct reliability and validity

The convergent and discriminant validity, construct reliability, Cronbach's alpha, and composite reliability (CR) were calculated to assess the measurement model's validity. Table 3 shows that all item loadings were >0.7, indicating strong indicator reliability. Furthermore, Cronbach's alpha values were higher than the required threshold of 0.6, falling between 0.633 and 0.803. Table 3 exhibits that the CR values were higher than the suggested value of 0.7, falling in the interval of 0.780-0.876. All average variance extracted (AVE) values were higher than the recommended threshold of 0.50, demonstrating the solid convergent validity of the items to the corresponding constructs.

Constructs		Outer loadings	Cronbach's alpha (α)	CR	AVE	VIF
Community attachment (CA)	CA1	0.726	0.639	0.876	0.813	0.81
	CA2	0.842				
	CA3	0.835				
	CA4	0.79				
Economic impact (ECI)	ECI1	0.78	0.593	0.813	0.678	0.655
	ECI3	0.844				
	ECI4	0.678				
Social impact (SI)	SI1	0.82	0.654	0.85	0.755	0.737
	SI2	0.753				
	SI3	0.85				
Environmental impact (ENI)	ENI1	0.628	0.577	0.801	0.668	0.633
	ENI2	0.807				
	ENI3	0.828				
Cultural impact (CI)	CI1	0.79	0.628	0.871	0.806	0.803
	CI2	0.811				
	CI3	0.792				
	CI4	0.776				
Support for tourism (ST)	ST1	0.787	0.662	0.855	0.752	0.745
	ST2	0.849				
	ST3	0.804				
Contribution to community (CC)	CC1	0.801	0.551	0.785	0.614	0.595
	CC2	0.764				
	CC3	0.655				

Table 3 Construct reliability and validity

Three metrics were used to assess the discriminant validity. Initially, the cross-loadings were examined, and it was determined that the construct loadings were greater than those of the other constructs. Second, the prescribed heterotrait-monotrait (HTMT) values were computed, with all values <0.90. Social impact was associated with the highest HTMT scores (0.794). Third, Fornell and Larcker's criterium (Fornell & Larcker, 1981) suggest that discriminant validity was attained because the square root of the AVE of each item was higher than its correlation with the other constructs (Table 4). Finally, all the variance inflation factor values remained >1.000 and 5.000, indicating that multicollinearity generated no significant risks (Table 4).

Table 4	
Fornell–Larcker discriminant validity criteria	

	CA	EI	SI	EI	CI	ST	CC
CA	0.799						
EI	0.397	0.770					
SI	0.327	0.556	0.809				
EI	0.425	0.405	0.312	0.759			
CI	0.319	0.457	0.359	0.405	0.792		
ST	0.438	0.541	0.437	0.498	0.506	0.814	
CC	0.543	0.426	0.377	0.439	0.340	0.450	0.742



	,, _,, _						
	CA	ECI	SI	ENI	CI	ST	CC
CA							
ECI	0.534						
SI	0.422	0.794					
ENI	0.565	0.641	0.451				
CI	0.392	0.639	0.457	0.572			
ST	0.566	0.764	0.574	0.734	0.642		
CC	0.783	0.676	0.555	0.673	0.506	0.675	

Table 5 HTMT discriminant validity criteria

Table 6

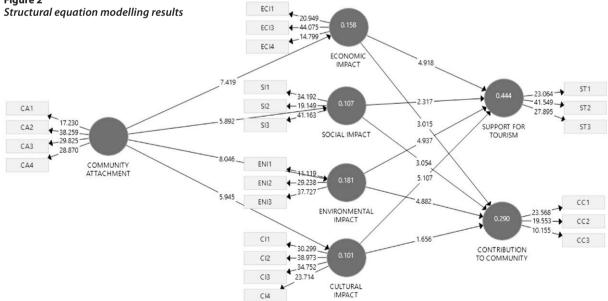
Collinearity statistics

	CC	ST
ECI	1.698	1.698
SI	1.486	1.486
ENI	1.299	1.299
CI	1.383	1.383

4.3. Measurement model analysis

Multiple tests, including evaluating path coefficients and their significance through bootstrapping, were incorporated into the structural model using 5,000 subsamples (see Figure 2). Community attachment was significantly related to ECI (β =0.400, p=0.000, t-value=7.419), SCI (β =0.330, p=0.000, t-value=5.892), ENI (β =0.429, p=0.004, t-value=8.046), and CI (β =0.322, p=0.002, t-value=5.945; Table 5). Consequently, H1, H2, H3, and H4 are confirmed. Again, ECI (β =0.256, p=0.000, t-value=4.918), SCI (β =0.127, p=0.021, t-value=2.317), ENI (β =0.261, p=0.004, t-value=4.937), and CI (β =0.238, p = 0.002, t-value=5.107) were significantly related to tourism support, thereby supporting H5, H7, H9, and H11. Furthermore, ECI (β =0.189, p=0.003, t-value=3.015), SCV (β =0.155, p=0.002, t-value=3.015), and ENI (β =0.28, p=0.000, t-value=4.882) were significantly related to community contributions, thus supporting H6, H8, and H10. However, H12 is rejected because CI (β =0.086, p=0.098, t-value=1.656) was not significantly related to community (Table 7). Figure 2 illustrates the SEM results.







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Hypotheses	Hypothesised paths	Mean (M)	Standard deviation	T-statistics	P-values	Remarks
H1	CA -> ECI	0.400	0.054	7.419	0.000	Supported
H2	CA -> SI	0.330	0.055	5.892	0.000	Supported
H3	CA -> ENI	0.429	0.053	8.046	0.000	Supported
H4	CA -> CI	0.322	0.054	5.945	0.000	Supported
H5	ECI -> ST	0.256	0.052	4.918	0.000	Supported
H6	ECI -> CC	0.189	0.062	3.015	0.003	Supported
H7	SI -> ST	0.127	0.055	2.317	0.021	Supported
H8	SI -> CC	0.155	0.051	3.054	0.002	Supported
H9	ENI-> ST	0.261	0.052	4.937	0.000	Supported
H10	ENI-> CC	0.280	0.057	4.882	0.000	Supported
H11	CI-> ST	0.238	0.047	5.107	0.000	Supported
H12	CI -> CC	0.086	0.052	1.656	0.098	Not Supported

Table 7Path coefficient hypothesis relationship: Direct effect

5. Discussion

This study investigates whether community attachment through agritourism in rural areas affects residents' perceptions of economic, social, cultural, and environmental impacts, positively influencing tourism and community advancement. The economic impact of agritourism, due to community attachment, significantly impacts tourism support and contributions to the community. The positive relationship between economic impact and community attachment indicated that residents would likely be satisfied with their residences. Additionally, the positive correlation between environmental impacts and community attachment through agritourism suggests that residents with a strong sense of belonging to their neighborhood are inclined to care about the environment and take pride in community events and natural attractions (Gursoy & Rutherford, 2004; Murphy, 2013). Therefore, agritourism should be managed so that residents can experience economic development. Agritourism provides a means to maintain and restore critical environmental, geological, and tourist attractions, thereby safeguarding rich natural, geological, and environmental resources.

This study also investigated the direct relationship between community attachment and social impact and demonstrated positive and statistically significant results. Positive social effects on local communities strengthen community attachment and residents' relationships with the community (Kusumawati et al., 2022). Moreover, agritourism-based community attachment is positively associated with the cultural impact of tourism. Although a significant relationship existed between cultural impact and tourism support, the relationship between cultural implications and contributions to the community was insignificant, indicating that the cultural impact of agritourism was minimal. Cultural activities still predominantly exist in urban regions, which may explain the negligible association between the cultural implications of agritourism and its contributions (Sadowski & Wojcieszak, 2019). Counterintuitively, no significant association exists between cultural sites in urban settings and those with agricultural characteristics. Therefore, agritourism stakeholders should provide visitors and locals with authentic cultural experiences of the local heritage (e.g., historic barns and various physical and cultural artefacts). Stakeholders must address and continuously monitor residents' perceptions of agritourism development. Its economic, social, cultural, and environmental impacts on local communities must be emphasized to obtain agritourism support.



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6. Conclusion

This study employed an organized approach to assessing community attachment in evaluating the economic, social, cultural, and environmental impacts of agritourism support and community contributions. This is the first study to focus on an agriculturally oriented nation, such as Bangladesh; hence, several new findings are brought to this field of study. First, Bangladesh is appropriate for testing the proposed research questions as an agribusiness-based developing nation. Second, this study highlights the significance of community involvement and tourism support in terms of agritourism's economic, social, and environmental impacts. In contrast, previous studies evaluated these indicators thematically and treated agritourism in isolation from these factors. Finally, the *most significant contribution* of this study is the knowledge that forming community attachment through agritourism, and its social, economic, cultural, and environmental impacts significantly affects the community and tourism industry in general.

This study did not consider factors that might influence the structural model, such as individuals' socioeconomic status, occupation, or direct association with the tourism industry, which can impact residents' perceptions of the effects of tourism, community attachment, and tourism growth support. Therefore, future research should evaluate structural models using multigroup analyses to assess the mediating effects of these factors.

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