

Article

Feasibility Assessment of Stakeholder Benefits in Community-Based Agritourism through University Social Responsibility Practices

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Abstract: This study selected the TaiAn rural community in Taiwan as the study site. TaiAn collaborated with local universities to implement the University Social Responsibility (USR) practice through community-based agritourism (CBA). The social exchange theory (SET) was adopted as a theoretical framework to weigh the costs and benefits perceived among different stakeholders (residents, tourists, students, and lecturers) regarding CBA development. The research purpose was to explore the determinants of support for sustainable CBA using a mixed quantitative and qualitative approach based on the SET. The empirical results from 117 completed surveys indicated that Agricultural Experiential Benefits, Perceived Environmental Impacts, and Mental Health Benefits positively influenced tourists' support for CBA. The qualitative interview results also supported the notion that agriculture students, faculty, and community members could derive various benefits from participating in USR practices within local communities. Theoretical and managerial implications were proposed for marketers and policymakers to gain a deep understanding of CBA practices.

Keywords: university social responsibility; social exchange theory; rural tourism; multi-stakeholder partnerships



Citation: Chassang, L.; Hsieh, C.-J.; Li, T.-N.; Hsieh, C.-M. Feasibility Assessment of Stakeholder Benefits in Community-Based Agritourism through University Social Responsibility Practices. *Agriculture* **2024**, *14*, 602. <https://doi.org/10.3390/agriculture14040602>

Academic Editor: Sofia Karampela

Received: 2 March 2024

Revised: 3 April 2024

Accepted: 8 April 2024

Published: 10 April 2024



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1. Introduction

Taiwan's economy had relied heavily on agriculture or agriculture-based business, and less so on the manufacturing and service industries in past decades [1]. After decades, traditional farming, with limited arable land, became less economically viable due to the opening of the World Trade Organization, generating competition from cheaper imports. To alleviate the growing pressure on agriculture and seek alternative sources of income among farmers, adding value to agricultural services or products is one potential approach, such as selling processed crops and fruits or offering picking activities on farms. Gradually, the Taiwanese government recognized the potential of agritourism, providing experiential activities and practices (e.g., farming, harvesting, dining, lodging) on village farms as a way to revitalize rural areas and promote sustainable agricultural development, generating a second income source and retaining the young generation. The transition from traditional agriculture to agritourism development in Taiwan is a multifaceted process. Namely, Taiwan's economy evolved from primarily agricultural production to manufacturing and then to a tertiary or service-oriented economy nowadays. Agritourism is also called the sixth industry, proposed by the Japanese scholar Imamura Naraomi in the 1990s for its multiplier effects ($1 \times 2 \times 3 = 6$).

Agritourism development has become a national policy of Taiwan's government [2] to assist rural communities undergoing agricultural transformation and rural development. Specifically, agricultural policies have focused on agritourism to help farmers differentiate and diversify their farms based on their own agricultural resources, including agriculture, fishery, forestry, and animal husbandry. In the past, various initiatives in rural villages have been launched to promote and encourage farmers to diversify their agricultural income by offering agritourism-related products or services on their farms during slack farming seasons or while maintaining full-time jobs after transitioning to the agritourism industry. Moreover, the original purpose of agritourism development also included the preservation of agricultural heritage, cultural traditions, authentic local lifestyles, and traditional farming practices. Agritourism development has the potential to attract additional investment in farming infrastructure, labor, and equipment in rural villages. This provides opportunities for improved community livelihood, environment, and local employment, thereby diversifying the local economy [3–5]. A growing shift to sustainable agritourism could lead to significant environmental, economic, and social impacts in local communities. Therefore, agritourism can be viewed as a sustainable development approach covering the social–cultural, economic, and environmental impacts in one rural community.

Besides the potential economic development for the hosting farms and rural communities, CBA can be adopted and contribute to community development in Taiwan in several ways. First, community development through agritourism can sustain rural livelihoods, reduce unemployment rates, and mitigate urban migration, thereby keeping communities intact. Infrastructure investment or improvement in local communities for residents can be expected. Furthermore, agritourism fosters community cohesion by encouraging collaboration among residents. Community members may work together to organize events, develop community tour packages, or share resources. This sense of solidarity strengthens social bonds and creates a supportive network within the community. Agritourism also encourages the preservation of local customs, traditions, culture, and heritage. By showcasing eco-friendly farming methods and natural landscapes, communities can promote environmental consciousness among the public, such as reforestation or wildlife protection. Community-based agritourism (CBA) is commonly observed in rural areas, often recognized as a pathway toward economic improvement or revitalization. Specifically, previous studies [3,4] have claimed that community-based development has the potential to offer solutions to the social, cultural, economic, and environmental challenges faced by these communities, particularly in developing countries with underdeveloped economies. Considering this argument, the growth of agritourism in rural areas could significantly enhance “value creation” and “value addition” in the local community [6], bringing a positive influence to local residents and the community as a whole. Lee [5] indicates that CBA has been commonly acknowledged for its ability to help in local community development and improve the livelihoods of local people. Additionally, Ruiz-Ballesteros [7] argued that community-based tourism offers opportunities for citizens to value and respect local culture, thereby enhancing the sustainability of socio-ecosystems. CBA farms in Taiwan have implemented the sixth industry of agritourism, in which local residents also offer hands-on learning experiences through “food and agricultural education” for visitors. According to Mastronardi et al. [8], agritourism farms are more likely to develop a sustainable approach that positively affects natural resources and community biodiversity.

In Taiwan, the Ministry of Education (MOE) supports universities in cultivating talents, connecting with local communities, and promoting culture. Universities seek not only to enhance academic research but also to serve society and promote national development through university assistance and the Rural Up Program, which provides knowledge and assistance to rural communities. Esfijani et al. [9] argued that University Social Responsibility (USR) is defined as university partnership and engagement with the community through transferring knowledge (education), research, and service provision. The function of the university is not only to enhance academic research but also to cultivate talents, promote culture, serve society, and improve rural development. USR aims to address economic, social, and environmental challenges in communities. According to Vallaeyts [10], USR represents an ethical policy in which the university community (students, lecturers, faculty) and administrative employees, by responsibly managing educational and cognitive labor, as well as the environmental impacts of the university, engage in collaborative efforts with society to enhance sustainable development. Esfijani et al. [9] and Vallaeyts [10] suggested that USR could contribute to the development and revitalization of rural communities, creating local value by investing in human resources and practical training courses from universities.

Homans [11] claimed that social exchange theory (SET) understands the social behavior of humans in economic undertakings. This indicates that social exchange developed from the intersection of economics, psychology, and sociology. SET can serve as a theoretical framework to explain the positive and negative perceptions of host communities and tourists [12], and to describe the exchange process occurring between residents and tourists. Kaya [13] also noted that personal benefits and perceived impacts will influence support for community development in terms of the concept of SET. In this study, tourists and residents are involved in an exchange relationship because the expected benefits and costs can be exchanged among the different stakeholders.

In summary, community-based agritourism is an important issue because it promotes cultural revitalization, re-establishes community, and creates local value. However, very few studies have investigated CBA or USR, not to mention the integration of CBA and USR among different stakeholders. This study is the first to aim to analyze the opinions and perceived benefits of four stakeholders (visitors, community members, students, and lecturers) through USR practice. Therefore, this study proposed a theoretical framework of stakeholder benefits through USR practice from the perspective of CBA (Figure 1). Through USR practices in CBA between universities and local communities, this study intended to assess the effects or benefits perceived by different stakeholders in support of the sustainable development of TaiAn community-based agritourism. Specifically, this study selected the TaiAn rural community in Taiwan as the study site. TaiAn collaborated with local universities to implement the University Social Responsibility (USR) practice through community-based agritourism (CBA). The social exchange theory (SET) was adopted as a theoretical framework to weigh the costs and benefits perceived among different stakeholders (residents, tourists, students, and lecturers) regarding CBA development. Based on the above discussion, the primary purposes of this study were to develop and test a synthesized model of USR practice by integrating social exchange theory with mixed quantitative and qualitative methods; to examine and identify the multiple benefits of different stakeholders participating in USR through CBA for establishing partnerships; and to provide applicable insights for USR collaboration, thus reducing the gap in the literature.

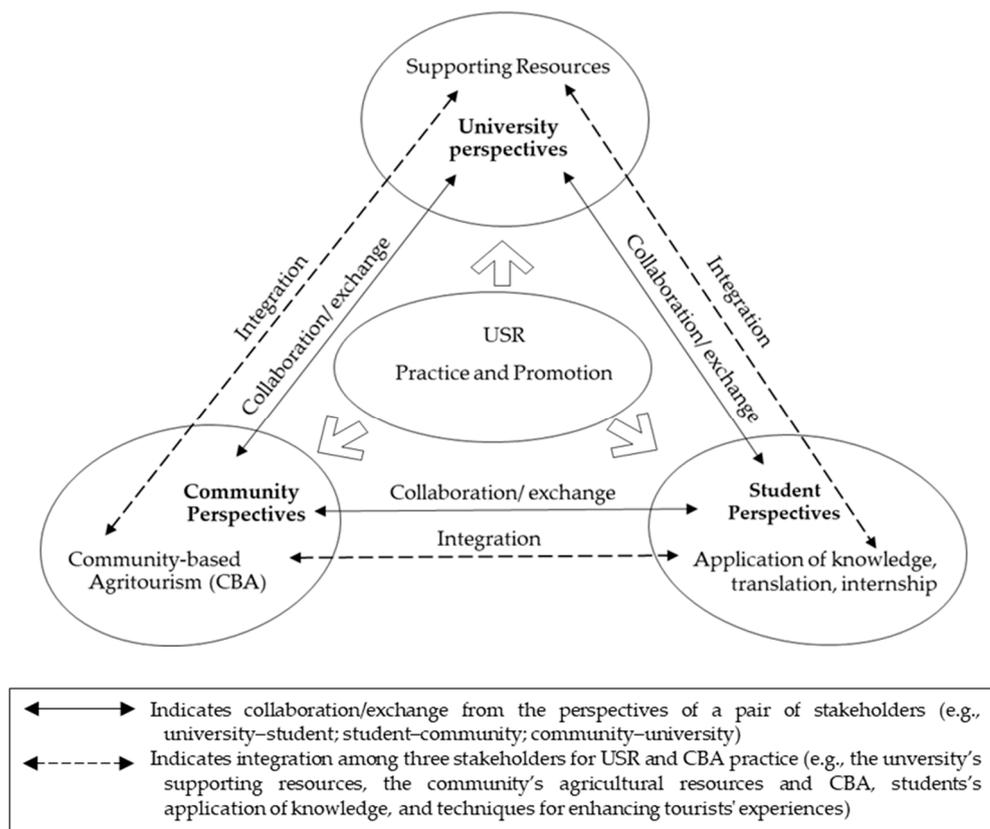


Figure 1. Theoretical framework of stakeholder benefits through USR practice with community-based agritourism.

2. Materials and Methods

2.1. Study Site

This study was conducted at one of the agritourism sites in central Taiwan, the TaiAn community, which can be categorized as a form of community-based agritourism. TaiAn community-based agritourism is operated on working farms, providing opportunities for visitors to engage in agricultural activities and allowing them to interact directly with various aspects of farming on an actual farm [14]. Specifically, TaiAn community-based agritourism can be recognized as a working farm that offers authentic interactions, agritourism activities, and food and agriculture education, including environmental, educational, and fun activities in a welcoming atmosphere for visitors. Meanwhile, the TaiAn community has offered internships for both local and international university students.

2.2. Research Methods

This study was conducted between 15 July and 15 December 2019. This study combined both qualitative and quantitative research designs (a “mixed method”), in which semi-structured interviews and questionnaires were used. Specifically, we proposed the three research questions which were developed to facilitate the study’s qualitative approach. The first question is, “Do stakeholders benefit from the practice of USR through community-based agritourism?” This is followed by the second question, “What benefits do agriculture students, faculty, and farmers receive from being a part of USR practice in local communities?” Lastly, the third question is, “What benefits do tourists perceive from community-based agritourism?” Regarding the quantitative approach, prior empirical studies have indicated that agritourism could enhance farmers’ and residents’ quality of life and increase market accessibility [15]. It could positively impact mental health and physical well-being [16] or provide Physical and Mental Health Benefits through tourism opportunities and experiences [17]. Additionally, Pyke et al. [18] argued that tourism

provides opportunities for individuals to experience hedonic or eudaimonic health benefits (well-being). Agritourism, with proper destination images (e.g., rural community lifestyle), can assist in providing suitable tour products that can improve tourists' loyalty, such as support for future development [19]. Based on the above discussion, this study applied a framework integrating the SET and USR in community-based agritourism with mixed methods (qualitative and quantitative) as seen in Figure 1. Figure 2 presents a proposed hypothetical model using a quantitative approach (questionnaire) to assess four hypotheses among tourists based on prior studies [15–19]. As mentioned earlier, a qualitative approach was used to explore the connections between benefits and support among community members, faculty, students, and tourists. This was achieved through conducting semi-structured interviews among four groups for the above three research questions.

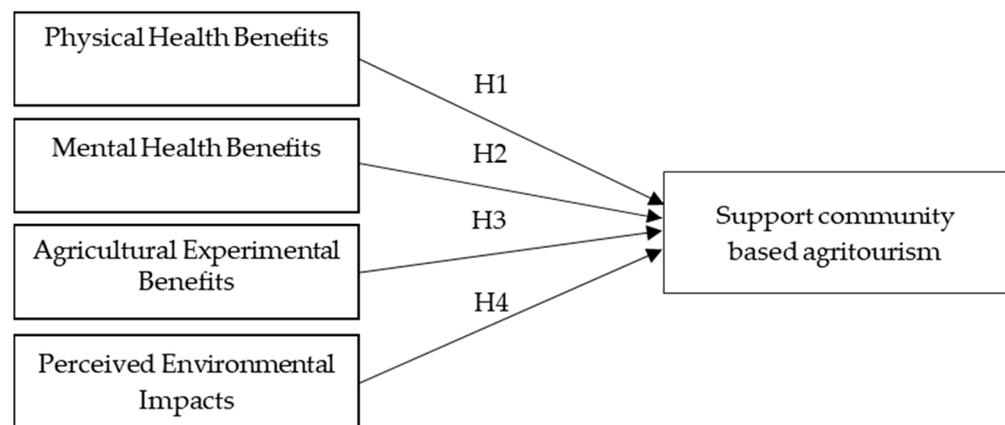


Figure 2. The proposed hypothetical model (quantitative approach).

Hypothesis (H1). *Physical Health Benefits positively influence tourists' support for community-based agritourism.*

Hypothesis (H2). *Mental Health Benefits positively influence tourists' support for community-based agritourism.*

Hypothesis (H3). *Agricultural experimental benefits positively influence tourists' support for community-based agritourism.*

Hypothesis (H4). *Perceived Environmental Impact positively influences tourists' support for community-based agritourism.*

2.3. Data Collection and Analysis

This research targeted stakeholders in USR practice (community members, faculty, students, tourists) of CBA based on SET in Taichung, Taiwan. Saunder et al. [20] indicated the existence of two methods that could be utilized to gather data: quantitative and qualitative methods. A combination of qualitative (semi-structured interviews) and supporting quantitative (visitor questionnaires) methods was utilized for this study. First, we conducted a focus group with a total of seven different stakeholders, including three community-based agritourism businesses (one horticultural business, one community tour association, and one dining and souvenir company), one resident, two farmers, and one tourist with extensive CBA experience and prior engagement with USR. Several questions were posed to prompt discussion, such as “What are the primary benefits of practicing USR through community-based agritourism?” By gathering insights from participants representing various sectors, this study aimed to comprehensively understand and uncover the advantages or benefits associated with CBA operations under USR practices, in order to assess the impacts of identified socio-economic and environmental benefits on the sus-

tainability of agritourism in the TaiAn rural community. Subsequently, these insights will inform the development of aspects and items for the quantitative questionnaire, serving as a valuable reference source.

Regarding the qualitative interview component, this study aimed to investigate the various perspectives and experiences of primary stakeholders engaged in CBA in the TaiAn community. We conducted semi-structured or in-depth interviews after selecting a total of eight stakeholders, including one resident, one faculty member, and six students, primarily based on their level of involvement or experiences in CBA in Taiwan. The data obtained through a qualitative approach were subject to interpretation, with the researcher's goal being to identify valuable patterns to understand specific questions and singularities [20]. Three interview questions were asked, as indicated earlier, based on different stakeholders' positions, such as "What benefits does the university provide to the community and students?"; "What benefits does the community provide to universities and students?"; "What benefits do the students provide to the university and community?" The interviews were recorded for quality assurance purposes. To enhance content validity and reliability, audio recordings of interviews were transcribed verbatim using a systematic thematic analysis of interview transcripts [21].

Next, a supporting quantitative method (tourist questionnaires) was utilized for the data collection stage. The measurement scale of the tourist questionnaire was established based on prior empirical studies and the results of the focus group conducted in the study. We further distributed a structured questionnaire to agritourists who had ever participated in CBA in TaiAn through USA practice, which emphasized educative agritourism. This practice assists in educating both those who are preparing for work in agriculture and those searching for the serenity of rural regions, as well as traditional rural art and culture [22]. This study employed both descriptive and inferential statistical analyses using SPSS (Statistical Package for the Social Sciences), version 22. The characteristics and sample structure of respondents, including demographic characteristics and social backgrounds, were analyzed. An independent t-test was used to investigate significant differences in the experiential benefits of attending a CBA farm in dichotomous variables such as gender (male and female). One-way analysis of variance (ANOVA) with post hoc tests (e.g., Scheffe) was adopted to investigate significant differences in means among multiple groups regarding variables, including different experiential benefits. Lastly, regression analysis was employed to examine the aforementioned four hypothetical relationships (H1–H4).

3. Results and Discussion

3.1. Profile of the Participants

The demographic characteristics of the respondents included participation frequency, gender, current grade, country of residence, and current age (see Table 1). All respondents ($n = 117$) participated once (85.5%), while 14.5% participated two times or more. The respondents comprised more males (54.7%) than females (45.3%). The majority held a senior high school degree (88.9%), with the remaining holding a college degree or higher (11.1%). In terms of age, the majority fell between 21 and 25 years old (91.5%). Additionally, the majority of respondents resided in Asia (97.4%), with a minority residing in the Americas (2.6%).

Table 1. Demographic characteristics of participants ($n = 117$).

Variable	Frequency	Percent (%)
Participating frequency		
1 time	100	85.5
2 times	8	6.8
3 times or more	9	7.7

Table 1. Cont.

Variable		Frequency	Percent (%)
Gender	Male	64	54.7
	Female	53	45.3
Education	Completed senior high school	104	88.9
	Completed college	8	6.8
	Completed graduate school or more	5	4.3
Current age	15 to 20	3	2.5
	21 to 25	107	91.5
	26 to 30	3	2.6
	31 to 35	2	1.7
	36 and over	2	1.7
Country of residence	Asia	114	97.4
	Americas	3	2.6

3.2. ANOVA Testing

ANOVA test results showed that only participation frequency has a significant difference with the construct of Agricultural Experiential Benefits, with $F_{(2, 114)} = 3.187$, $p = 0.045$, among the five constructs, as seen in Table 2. Specifically, the participation frequency was divided into three sub-groups: one time, two times, and three times or more among all participants. The first-time participants recorded the highest mean score (4.16) in the Agricultural Experiential Benefits, followed by the second time (4.04), and three times or more (3.89). The first-time group had a significant difference from the group three times or more at the 0.1 significance level ($p < 0.1$), as presented in Table 3.

Table 2. One-way ANOVA results of participation frequency with experiential benefit constructs among USR respondents.

Constructs	Sum of Squares	df	Mean Square	F-Value	Sig. (p)
Physical Health Benefits	0.083	2	0.041	0.764	0.468
	6.164	114	0.054		
	6.247	116			
Mental Health Benefits	0.138	2	0.069	0.637	0.531
	12.359	114	0.108		
	12.498	116			
Agricultural Experiential Benefits	0.695	2	0.347	3.187	0.045 *
	12.429	114	0.109		
	13.124	116			
Perceived Environmental Impacts	0.338	2	0.169	1.712	0.185
	11.252	114	0.099		
	11.590	116			
Support for community-based agritourism	0.131	2	0.065	0.624	0.537
	11.928	114	0.105		
	12.059	116			

* $p < 0.05$.

Table 3. Difference of one-way ANOVA between participation frequency and experiential benefit constructs among USR respondents.

Constructs	(I) 1. How Many Times Have You Participated in Any Community-Based Agritourism in Taiwan or Other Countries:	(J) 1. How Many Times Have You Participated in Any Community-Based Agritourism in Taiwan or Other Countries:	Mean Difference (I–J)	SD	Sig.	Scheffe Post Hoc Multiple Comparison
Agricultural Experiential Benefits	1 time (u = 4.16)	2 times	0.122	0.121	0.606	1 > 3
		3 times or more	0.274	0.115	0.062 *	
	2 times (u = 4.04)	1 time	−0.122	0.121	0.606	
		3 times or more	0.153	0.160	0.637	
	3 times or more (u = 3.89)	1 time	−0.274	0.115	0.062 *	
		2 times	−0.153	0.160	0.637	

* $p < 0.1$.

3.3. Research Hypothesis Testing with Multiple Regressions

This study adopted multiple regression to test the four hypothesized relationships (H1–H4) among all tourists. The testing results indicated that three out of four paths are significant among USR tourists, except for the path coefficient of the link between Physical Health Benefits and support for community-based agritourism. The testing results of the four proposed research hypotheses, along with the path coefficients, are discussed below.

Hypothesis 1. *Physical Health Benefits positively influence tourists’ support for community-based agritourism. The result of the multiple regression analysis indicated that the path coefficient from Physical Health Benefits to support for community-based agritourism was not statistically significant at the 0.05 level ($\beta = 0.142, t = 1.882, p < 0.05$), as presented in Table 4.*

Table 4. Results of multiple regression analysis among USR tourists.

Constructs	B	Std. Error	Standardized Coefficients β	t-Value	Sig. (p)	VIF	R ²	Adjusted R ²
Constant	0.444	0.449	—	0.989	0.325	—		
Physical Health Benefits	0.197	0.105	0.142	1.882	0.062	1.236		
Mental Health Benefits	0.300	0.077	0.305	3.909	0.000 ***	1.322	0.696	0.484
Agricultural Experiential Benefits	0.320	0.076	0.334	4.213	0.000 ***	1.366		
Perceived Environmental Impacts	0.184	0.089	0.181	2.073	0.000 ***	1.652		

*** $p < 0.001$.

Hypothesis 2. *Mental Health Benefits positively influence tourists’ support for community-based agritourism. The analysis result indicated that the path coefficient from Mental Health Benefits to support for community-based agritourism was statistically significant at the 0.05 level ($\beta = 0.305, t = 3.909, p < 0.001$).*

Hypothesis 3. *Agricultural Experiential Benefits positively influence tourists’ support for community-based agritourism. The result of the multiple regression analysis indicated that the path coefficient from Agricultural Experiential Benefits to support for community-based agritourism was statistically significant at the 0.05 level ($\beta = 0.334, t = 4.213, p < 0.001$).*

Hypothesis 4. *Perceived Environmental Impacts positively influence tourists’ support for community-based agritourism. The analysis results indicated that the path coefficient from Perceived Environmental Impacts to support for community-based agritourism was also statistically significant at the 0.05 level ($\beta = 0.181, t = 2.073, p < 0.001$).*

Moreover, the results indicate that the model’s R^2 is 0.696 (69.6%), and the adjusted R^2 is 0.548 (54.8%). $R^2 = 0.696$ could be expressed as the proportion of the explained variance

of the model’s predictions (four constructs) to the total variance or outcome variable. Namely, three constructs, including Agricultural Experiential Benefits, Mental Health Benefits, and Perceived Environmental Impacts, were the main determinants predicting tourists’ support for community-based agritourism. Lastly, the results of collinearity diagnostics show that all coefficients of the Variance Inflation Factor (VIF), ranging from 1.236 to 1.652 (Table 4), are less than five, indicating an acceptable level of multicollinearity between all four constructs [23]. A summary of the testing results with four hypotheses is presented in Table 5. Overall, all cause–effect hypotheses were supported positively, except that the relationship between Physical Health Benefits and support for community-based agritourism is insignificant ($\beta = 0.142, p > 0.5$).

Table 5. Summary of the tested Hypotheses H1–H4.

Research Hypothesis	Hypothesized Path	Expected Sign	Path Coefficient	t-Value	Results
H1	Physical Health Benefits → Support for community-based agritourism	+	0.142	1.882	Not Supported
H2	Experiential Benefits → Support for community-based agritourism	+	0.305	3.909 ***	Supported
H3	Agricultural Experiential Benefits → Support for community-based agritourism	+	0.334	4.213 ***	Supported
H4	Perceived Environmental Impacts → Support for community-based agritourism	+	0.181	2.073 ***	Supported

*** $p < 0.001$.

3.4. Results of Qualitative Analysis

The analysis results of three stakeholders’ benefits from the practice of USR through community-based agritourism are provided in this section. A number of respondents interviewed confirmed that the practice of USR through CBA has been beneficial to them; for example, one respondent said, “Yes, most stakeholders benefit from the practice of USR in CBA”. First, the agriculture students received benefits from being a part of USR practice in CBA, such as serving as interpreters or English tour guides to cater to the tourists. For example, one interviewee (an agriculture student) indicated, “I was able to develop and better my skills in interacting, communication, and interpretation skills”. Another respondent (an agriculture student) indicated, “I learned how to do the interpretation. I also had this self-realization that doing this makes me feel good”. One interviewee (an agriculture student) indicated, “USR is a good project for students to participate in, through which we learn, improve our skills, knowledge, and experiences in agriculture-related aspects better than in a classroom setting”. Respondents’ reflections indicated that agriculture students benefit from being a part of USR practice in CBA. One student interviewed also indicated, “I think it is fun and meaningful. So, if my friends want to do USR, I would encourage them”. Generally, the students were able to improve their skills and knowledge while influencing the community in terms of economic, social, environmental, and cultural issues. It also improved the students’ experiences in agriculture-related aspects and community building. USR could develop and revitalize rural communities through academic training, research, knowledge production, and social participation [9,10]. USR involving agriculture students includes internships, application of knowledge, research, and translation. These promote economic, environmental, social, and national development. Consistent with prior studies [24], the overall perception of USR generates a greater quality of service and student satisfaction, indicating that a positive perception of a student’s experience results in students’ satisfaction, which in turn leads to recommending USR

to other students. This is supported by Kayat's [13] study on the SET, which indicates that personal benefits and perceived impacts would influence support for community development. Three stakeholders' benefits from the practice of USR through CBA are discussed below.

A. Community members' (farmers') benefits received from being a part of USR practice in CBA

USR is perceived as benefiting various stakeholders and is intended to assist society in enhancing economic development, environmental protection, and social equity [25]. According to Doh et al. [26], agritourism businesses have the potential to improve local economies through revenue generation and by prompting consumer activities associated with various tourism attractions in the local areas. When asked how they think the community benefited from their participation in USR, one respondent explained, "I believe that if the tourists just go there and do the sightseeing, they will not have a deep impression, but if they have us doing the interpretation, they will have a better impression; they will recommend that their friends come again. Through USR practice, the CBA community can build a better bridge between tourists and the community". According to Vallaeys [10], USR could develop and revitalize rural communities and create local value by investing in human resources and practical training courses from universities. Thus, USR provides employment to community members. An interviewee (community member) indicated, "We need the young generation, students, to help us reorganize or help us promote our community. Young students have new concepts to design some new advertising, paper, and others. They can use social media (Facebook) to advertise the community". Another interviewee (agriculture student) added, "The community can get more people to help them do some projects or something. Because the community doesn't have many young people living there, the university puts students there, and they can help do something which they want to do". Communities are currently experiencing economic and social crises, which have inspired several organizations to adjust their roles. An interviewee (faculty) also explained, "University could provide some manpower to help with their agritourism services (interpretation or experiential activities) in a creative way when the host community plans their agritour, event, or festival". Furthermore, one respondent illustrated that "the major benefits for the community could be multiple aspects, including economic impact (employment and income), social impact (increase in part-time employment and increase in hometown/place attachment), rural and cultural impact (promotion of village tours and valuing agricultural resources and traditions), and environmental impact (ecological tour/interpretation for enhancing local people's environmental responsibility and awareness). Most importantly, we have tried to establish a long-term collaborative relationship and partnership between NCHU (university) and the local community".

B. Faculty (university) benefits received from being a part of USR practice in CBA

Universities exist to serve the community and educate students to become an important aspect of economic and social development. Through the university, USR educates students to recognize opportunities and be proactive in the community, thus enabling them to make a difference. Universities listen to the community and are conscious of their influence on decision-making processes regarding economic, environmental, social, and cultural issues. Consequently, universities benefit by achieving their goals of strengthening the relationship between the community and the university, providing research and development opportunities beneficial to both parties. Therefore, universities are considered an essential pillar of society. USR promotes true interdisciplinary work among faculties, students, and the community based on ethical learning, teaching, training, and management principles. Furthermore, USR fosters participative dialogue with the community, pursuing sustainability. Consequently, the university benefits by fulfilling its mission, goals, objectives, and lines of action. Vazquez et al. [24] suggested that USR improves university reputation, thus enhancing the university and faculty's brand image. Furthermore, USR practices in community-based agritourism (CBA) help establish long-term collaborative relationships and partnerships between the university and the local community. One

interviewee emphasized the importance of establishing such relationships, stating, “Most importantly, we have tried to establish a long-term collaborative relationship and partnership between NCHU (the university) and the local community”. Participating in USR can enable universities to receive incentives and grants from the government or projects. According to one respondent, “They get monetary benefits from the government”. Additionally, Chen et al. [27] suggest that through USR, universities can improve their public image and reputation, thereby fostering the development of highly valued workforce skills and practical knowledge within the community. This, in turn, attracts additional funding sources and enhances institutional identity. Moreover, USR can increase university research productivity and opportunities through new partnerships, widening, diversifying, and facilitating collaborative learning beyond the classroom and into the community.

C. Benefits tourists perceive from Community-based Agritourism

When asked, “Do you think that the tourist benefited from the practice of USR?” one respondent indicated, “Yes, because the tourist knows more about the community and its value”. Andreck et al. [28] illustrated that individuals who perceive benefits from an activity greater than the costs are likely to view it positively. USR engagement with the community through transferring knowledge (education), research, and providing a service and teaching has increased the knowledge of tourists. Through CBA, tourists can receive rich agricultural, cultural, and environmental knowledge. Another respondent indicated, “The tourist could have more interactions with the local people with agricultural experiential activities during the whole trip and process. Especially, farmers or residents could share rural village’s cultures and traditions with tourists/outside with sincere treatment or reception”. Tourists can gain a rich experience and increase their agricultural knowledge or resources. USR, through educating tourists about agriculture and enhancing their knowledge, provides personal benefits to visitors, as well as an array of health, mental, physical, environmental, and socio-cultural benefits. One respondent indicated, “Tourists from urban areas could hence have new experiences about countrified simplicity, rural life and natural views, and show more trust and respect to the host community or agriculture itself. In general, tourists could benefit from the participating activities arranged by USR in terms of physical, mental, and educational benefits such as learning biodiversity conservation (e.g., varieties of butterflies, fireflies, birds, and plants)”. Lastly, a summary of the content analysis with experiential benefits among different stakeholders is provided in Table 6. Also, Figure 3 presents the overall results of both quantitative and qualitative analyses and summarizes the support for community-based agritourism among different stakeholders.

Table 6. Summary of the content analysis with experiential benefits among different stakeholders.

	Agriculture Student	Community Member	Faculty (University)	Tourist
Physical Health Benefits	Experiences and feeling of different activities (DIY)	Establish more friendships	N/A	N/A
Mental Health Benefits	Sense of belonging by providing a service to the community	Being more open minded. Establish more friendships. Increase knowledge.	N/A	Create good memories. Enjoy the activities and social interaction. Enrich their life and experience joy
Agricultural Experiential Benefits	Tour guiding, translating and providing knowledge to tourists. Improve skills and knowledge	Learn more knowledge from different fields such as horticulture, soil and preservation, food product development and processing, agribusiness, etc.	Rural and cultural impact (promotion of village tours and value of agricultural resources and traditions)	Increase knowledge, skills, and experiences about agricultural activities and rural livelihood
Perceived Environmental Impacts	Increase knowledge of ecological aspects and biodiversity	Preserve agricultural traditions and activities	Environmental impact (ecological tour/interpretation for enhancing local people’s environmental responsibility and awareness)	Educational benefits such as learning biodiversity conservation (e.g., varieties of butterflies, fireflies, birds, and plants)

Table 6. Cont.

	Agriculture Student	Community Member	Faculty (University)	Tourist
Support for community-based agritourism	Fun and meaningful. Increase knowledge and expertise. Willing to participate again	Grant from government for supporting community-based agritourism	Establish a long-term collaborative relationship and partnership between NCHU (university) and the local community	Willing to support and recommend experiential activities and community-based agritourism
Other benefits (economic or labor supply or youth supply, etc.)	Enrich creativeness. Build a bridge between community and tourists	Can improve local economy and standard of living	University could provide some manpower to help their agritourism services (interpretation or experiential activities) in creative ways when the host community plans their agritour, event, or festival	N/A

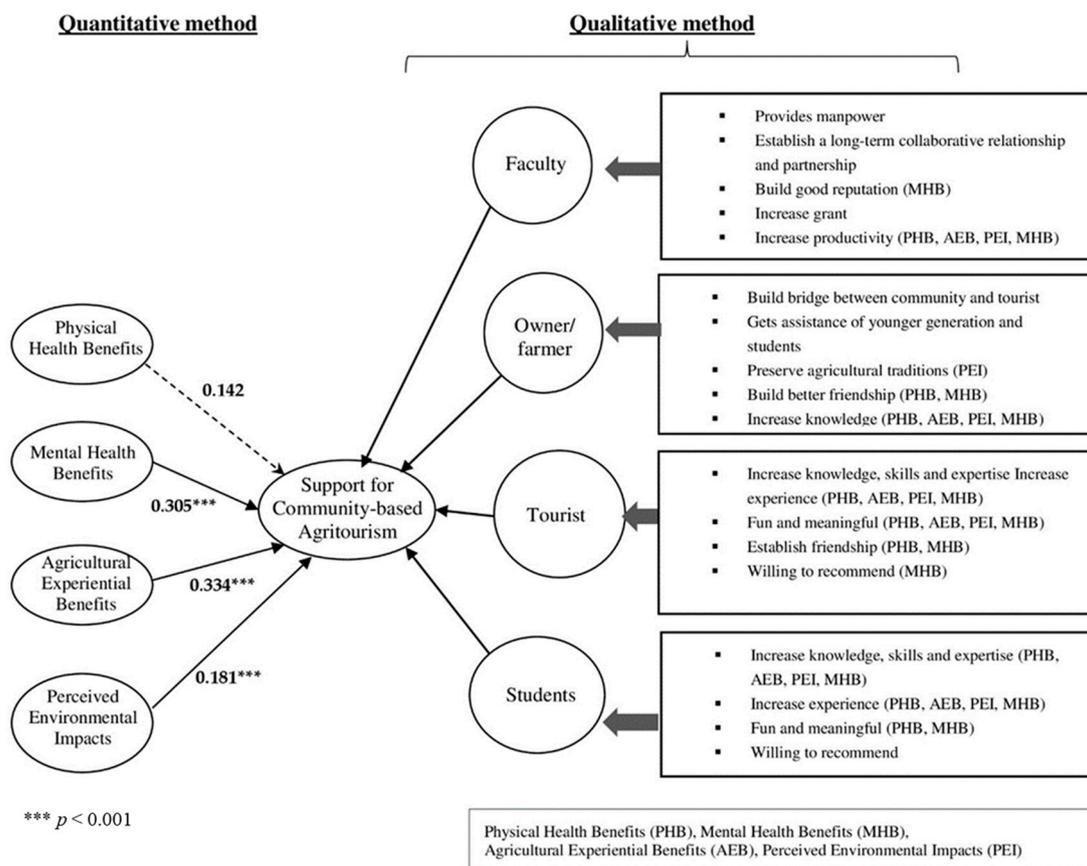


Figure 3. Summary of the support for community-based agritourism among different stakeholders.

4. Conclusions and Suggestions

4.1. Conclusions

This study developed and tested a synthesized model of USR practice through the integration of social exchange theory (SET) with mixed methods. CBA potentially influenced the lives of different stakeholders for the better through a range of economic, social, and environmental perspectives, namely community members, faculty, students, and tourists. They support USR practices in CBA, which improves the economy, society, environment, and community. A growing shift to CBA can lead to multiple sustainable impacts in local rural communities, consistent with previous studies [29–31]. On the other hand, through USR practice, agriculture students were able to improve their skills and knowledge. Consistent with previous studies [12,13], they supported that personal benefits and perceived impacts promote community development, in which stakeholders benefit from the practice of USR through CBA.

Furthermore, the university was able to widen, diversify, and facilitate a collaborative relationship with the community to improve the university's reputation and public image. Consistent with Vallaeys [10], the research supported that USR universities promote ethical behavior, support collaboration, and develop student social responsibility. The results also indicated that Agricultural Experiential Benefits, Perceived Environmental Impacts, and Mental Health Benefits positively influence tourists' support for community-based agritourism. This finding supported the importance of the relationship between the nature of the costs and benefits in the context of one rural community implemented by USR. Namely, the positive perception of USR in communities must be greater than the cost [32,33].

4.2. Theoretical and Managerial Implications

This study provides a comprehensive theoretical framework of stakeholder benefits through University Sustainability Reporting (USR) practices from CBA perspective. The findings support the validation of SET with both positive and negative impacts among four stakeholders within the real USR practice, particularly within the context of CBA. Previous studies [32,34] have supported the idea that SET (considering both costs and benefits) can effectively identify residents' support and perceptions of tourism across three dimensions: environmental, social, and economic effects. Other studies [34] have indicated that SET can be applied in tourism studies to investigate tourist–host relations, demonstrating that if a tourist or resident perceives the benefits to outweigh the costs, they are likely to perceive a greater overall effect. This study represents the first attempt to incorporate both SET and USR within the context of CBA, thereby revealing the various benefits accrued by different stakeholders through the adoption of USR in CBA. The potential value of this study lies in its ability to address the research gap present in the current literature regarding the stakeholder benefits of USR practices within CBA, thereby providing a clearer and more in-depth understanding of stakeholder support for CBA.

Agricultural Experiential Benefits, Mental Health Benefits, and Perceived Environmental Impacts (Hypotheses 2–4) were the main determinants predicting tourist support for community-based agritourism. Consistent with previous studies [27,28,33], the above three perceived benefits were among the main determinants predicting tourists' support for tourism. This study is in line with Gilbert and Abdullah [16], who indicated that tourism provides a sense of well-being with Mental Health Benefits. Therefore, individuals have great experiences that create overall positive effects, benefits, and wellness through CBA. However, in this study, we found no significant relationship between Physical Health Benefits and tourist support for CBA. This could be because CBA, compared to general tourism, operates on a smaller scale. According to Lee [5], CBA maximizes local benefits by managing tourism growth and achieving community objectives related to maintaining economic, social, and environmental development.

As for the managerial implications, the feasibility analysis of USR practice in CBA revealed distinctive economic, social, and environmental impacts on the rural community. This study provided new insight into the implications of USR practice and the benefits provided by its practice in CBA businesses in Taiwan. The USR practice in CBA is considered a tool for the development and enhancement of local communities and universities, re-establishing community and creating local values. However, we failed to find any significant relationship between Physical Health Benefits for tourists and their support for CBA. This can be addressed by having a half-day tour or fewer activities so tourists are less exhausted. Furthermore, the community needs to apply the four Ps (product, price, promotion, and place) of marketing. CBA offers good prices, products, and places because the tourists are satisfied and willing to recommend. Moreover, CBA requires some promotional tools or communication tools, including advertising, public relations, publicity, and the support of students through USR to promote them better. Furthermore, USR practice tends to develop more sustainable techniques that have positive benefits or impacts on the different stakeholders involved. This, in turn, provides educational opportunities for different stakeholders. These results also have major managerial impli-

cations for NCHU and other universities with memorandum of understanding (MOU) partnerships with communities providing CBA. The university and facilities can establish long-term collaborative relationships with communities. Such relationships can improve communities' rural, cultural, economic, and environmental impacts. Therefore, this study is capable of providing university managers with appropriate practical recommendations drawn from the findings as guidance for understanding the different stakeholder benefits through USR practice in CBA. In addition, the universities could provide more support to students participating in USR, which would benefit their future career involvement and, at the same time, benefit other stakeholders. Furthermore, the students who participated in the USR practice gained experience in CSR and were provided with training and social interaction. This is relevant for future references when they enter the job market.

To conclude, this study has made potential contributions to several fields regarding the safeguarding of CBA. Taiwan's CBA is linked to both sustainable development and the conservation of the environment. CBA can remain one of the vital parts of the rural economy in communities. The findings provided supply applicable insights for CBA policy, serving as a reference for managing relevant policies in Taiwan in connection with USR practices in CBA.

4.3. Limitations and Future Suggestions

This study had some limitations in three aspects. Firstly, the sample size of respondents and sampling method for the quantitative aspect could be improved. For example, primary data collection was challenging due to the main cropping season in the studied community, resulting in only 117 respondents being included using a convenience sample. Second, although the results could reflect true differences among respondents participating in the CBA practicing USR, they may not be representative of the targeted population of agricultural educational tourists in Taiwan. It is recommended that future studies expand the sample size and period to include different seasons and encompass a wider scope of participants from various agricultural activities and services, aside from the USR program within the context of CBA. The final limitation is that the dataset is somewhat outdated, as it is not recent and was collected in 2019. This is mainly because when the COVID-19 epidemic broke out at the end of 2019, most CBA practices in Taiwan were suspended. It was not until recently, in 2023–2024, that the CBA began to gradually recover. However, today, most CBA conditions continue to be similar to those before the outbreak. Nonetheless, more tourists now pay closer attention to spatial place and social distance, and CBA also conforms to this trend. It is recommended that future researchers can collect data on the perceived benefits of CBA practice after the epidemic, and compare it with the results of this research implemented before the epidemic.

Author Contributions: Four co-authors collaborated on the completion of this article. L.C. served as the first author, contributing to conceptualizing the research framework, conducting data analysis, interpreting the results, and drawing conclusions. C.-J.H. primarily contributed to the conclusion, reviewing, and editing the draft. T.-N.L. served as the corresponding author for the results, conclusions, review, and editing. Additionally, C.-M.H. acted as a corresponding author on behalf of the team throughout the data analysis, review, editing, and submission process. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by [Taiwan National Science and Technology Council] grant number [MOST 109-2410-H-005-039-].

Institutional Review Board Statement: Not applicable.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to containing information that could compromise the privacy of research participants.

Conflicts of Interest: The authors declare no conflicts of interest.

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