

Agritourism-A Sustainable Approach to the Development of Rural Settlements in Jordan: Al-Baquara Village as a Case Study



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ABSTRACT

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Agritourism is gaining growing recognition in both developed and developing countries. In developing countries, it is considered as an instrument, not only for sustainable rural development but also for local community poverty alleviation. Al-Baquara is an important agricultural village in the north of Jordan. In 2019, Jordan retrieved control over it after 25 years of leasing to external investors. Thereupon, the Jordanian government should encourage investments in this area and improve its agricultural production in terms of quality and quantity. The objectives of this study were to explore the perspectives of local farmers on the launch of agritourism in this village and to identify the variables that affect farmers' motives for engagement in agritourism activities in their locality. In addition, the study aimed at determining the agritourism-associated difficulties faced by the residents who seek to boost their livelihoods through tourism. The study followed the quantitative research approach and used a questionnaire as the data collection tool in a survey of 163 residents of Al-Baquara village. The results of the analysis uncovered a high potential for economic, environmental, and socio-cultural benefits of agritourism in this village. In particular, it will empower the women to improve their social status in society, provide the rural population with increased revenue and new job opportunities, and improve the quality of the environment. However, for agritourism development in this area, the government should support the local families and help them in establishing and operating tourism enterprises.

1. INTRODUCTION

Whereas agricultural production is the principal economic activity in rural areas, tourism is considered a vehicle for promoting rural development. Integrating tourism with agriculture has substantial economic benefits for developing countries, where the agricultural sector is a major contributor to the local economy [1]. The establishment of tourism activities in rural areas has led to the emergence of agricultural tourism, also known shortly as agritourism, as a new type of rural tourism [2, 3].

Agritourism is a sustainable activity that is developed within the setting of the families who participate in the tourism market to optimize the use of their available resources [4, 5]. People who love nature and want to get away from the hustle and bustle of busy city life are the target of agritourism, which provides them with invaluable opportunities to experience and enjoy the rural environment, traditions, and lifestyle. Through agritourism, the visitors will be able to practice daily rural chores and enjoy the recreational spaces and connection with nature.

Agritourism consists of agricultural and non-agricultural activities. Bassi and De Poi [6] broadly classified those activities into three categories: (i) productive activities like farm production, processing, and selling; (ii) social activities such as social interaction with farmers and the associated hospitality services; and (iii) environmental activities,

including environment protection, landscaping, recycling, and so on. Other appealing activities include practicing organic agriculture, growing medicinal plants, horseback riding, and farm and farmhouse tours [7].

In economic terms, agritourism helps in creating job opportunities, increasing revenues from tourist accommodation and other services, and improving the profits derived from selling local products to tourists [8]. Socio-economically, agritourism strengthens the local identity, empowers the farmers, and helps the women improve their social status in society [9, 10]. From the environmental viewpoint, agritourism has a broad range of advantages that include conservation of biodiversity, reduction of the use of agrochemicals, and conservation of natural resources through the adoption of sustainable farming methods [11].

The COVID-19 pandemic had a substantial impact on public health and the economy. As a result of the lockdowns since late March 2020, the economies of many countries started experiencing a recession, with concomitant increased unemployment and high levels of uncertainty prevailing in the financial markets [12]. Of the sectors affected by the economic devastation caused by the pandemic, the tourism sector has suffered the most [13, 14]. However, tourists in some countries have become more interested in agritourism farms, which offer a wide range of recreational activities. Evidence (e.g., [15]) shows that rural trips are beneficial in achieving desired recreational results. In the near future, weekend tourism in

agricultural farms will grow. Thus, the development of agritourism plays a multi-functional and sustainable role in the development of rural areas.

Agritourism proved to be a successful type of tourism in many regions. It is regarded as an essential step in the promotion of sustainable development and is, consequently, quite often studied [15]. However, in developing countries such as Jordan, it is still in its beginning. Despite its importance, farmers' willingness to establish visitors' attraction projects has not yet been investigated in Jordan. In the light of this, the objectives of this study were to explore the perspectives of Jordanian farmers on the establishment of agritourism in Al-Baqura village and to identify the variables that affect farmers' motives for agritourism in their locality. In addition, the study aimed at exploring the agritourism-associated difficulties faced by the residents who seek to boost their livelihoods through tourism. The results of this study will advance our understanding of farmers' willingness to participate in agritourism projects and of the factors that affect their willingness the most. The researchers assumed that farmers have an interest in this sort of tourism because of the potential for an increased benefit at the economic, social, and environmental levels.

1.1 Agritourism practices in Jordan

Jordan is one of the few countries in the Middle East that offers tourism opportunities of all kinds; cultural, therapeutic, environmental, and agricultural tourism. Formal consideration of developing tourism and preserving and protecting natural resources in Jordan started in 1966 with the establishment of the Ministry of Tourism (MoT) and the Royal Society for the Conservation of Nature (RSCN), which carries the responsibilities of managing natural resources in Jordan under a mandate from the Jordanian government [16]. Since their establishment, several ministries and associations have been keenly working on the creation of a network of protected areas in Jordan that can, in addition to conserving nature, serve as a source of economic returns and national income. Tourism in Jordan is based on environmental protection and community participation. Thus, it contributes to the minimization of negative environmental and social impacts of the tourist activities and maximizes their benefits to the local community and to their environment.



Figure 1. Countryside tourism activities in Jordan

In Jordan, several rural houses and farms are offered to visitors to use as tourist lodging. This service is one element of the rural tourism market, which is very tempting to tourist families desiring an environmentally-friendly experience. In effect, this initiative constitutes a source of income for the

rural people and helps in the protection of the landscape and buildings in the rural areas from unnatural destruction and in the management of them [17]. Rural tourism (Figure 1) is prevalent in some parts of Jordan, especially in the mountain areas. This tourism type is based on sustainable activities that have positive effects on the tourist's health, natural resources, and climate [18]. In this respect, the agritourism activities include events focusing on agritourism products and services through edu-entertainment, which corresponds to *in situ* teaching of tourists and locals [19].

1.2 Government proposals for improving the agricultural sector in Jordan

Agriculture is of economic importance in Jordan despite its small contribution to the national gross domestic product (GDP). For instance, in 2020, its contribution to the national GDP was 5.20%. However, it is a source of food and income to a high proportion of the population and a major source of foreign currency through exports [20]. One hundred and twenty-four thousand people work in this sector, which is a figure that corresponds to 2.1% of the total population and 7.7% of the total working force in Jordan. However, as statistics show (Figure 2), the percentage of employment in the agricultural sector dropped noticeably over time [21].

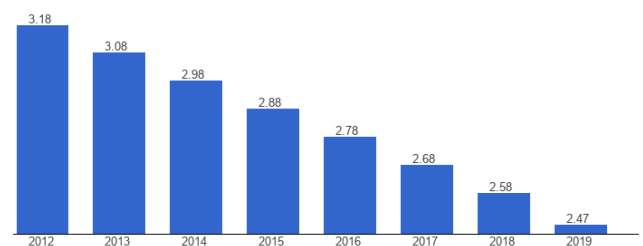


Figure 2. Percentage contribution of the agricultural sector in the total working force in Jordan over the period 2012-2019 (Source: Department of Statistics [21])

Farming is practiced more in the northern and western highlands in Jordan than in other parts of the country. The most productive lands lie in Jordan Valley (JV), where Al-Baqura village is located. The most important agricultural products of the valley are fruits and vegetables, which include cucumber, tomatoes, eggplant, melon, banana, and citrus crops. It is worth noting that there are vast rural areas in the JV and that about 55% of the population is classified as poor. Many families are unable to make a living from farming [22], mainly because agriculture is practiced there in small farms, ranging in areas from 1.2 dunams to 2.5 dunams. Even though agriculture is the principal source of income for most households in the villages in JV, the farm income is generally low. A study [22] found that the average income of farm families was less than US\$700 per month, which is nearly US\$440 below the national poverty line of US\$1,142 [22]. Because of poverty, farmers are steadily leaving work in agriculture. Statistics indicate that 20.2% of farmers in rural areas participate in non-farm, income-generating activities [23]. These statistics are alarming. However, there is growing awareness that small-scale agriculture offers valuable opportunities for rural growth through its role in poverty alleviation, besides its role in contributing to food and nutrition security. According to reports [24, 25], in countries where small-scale agriculture is prevalent, agricultural growth

has an extremely positive influence on rural development. Rural development, however, does not suggest that farmers can change their conditions by merely modifying a particular action or practice. Indeed, there are no magic strategies for achieving rural growth [24-26]. Furthermore, the pathways for growth are context-dependent and are influenced by a multitude of variables. To encourage more successful intervention methods for rural development, recognizing the interrelationships among small farm families, farm management, and contextual variables is crucial.

The Jordanian National Agricultural Growth Strategy focuses on supporting sustainable agricultural production and improving the economic status of farmers' families by providing the necessary infrastructure for the rural communities, increasing their access to technology, and finding solutions for the agricultural produce marketing problems [27]. One of the suggested solutions is to promote agritourism. In view of this, we performed an investigation of farmers' perceptions of agritourism and of its potential for providing a solution to the low income of farmers in rural areas. We conducted this study in one of the agricultural villages in JV, namely, Al-Baqura village.

1.3 Al-Baqura: The study site

Al-Baqura is a village that is located east of Jordan River, within the Northern Jordan Valley part of Irbid Governorate. It lies at the point of convergence of Jordan and Yarmouk rivers and has an elevation of 11m above sea level at the latitude of 32° 38' 31" N and longitude of 35° 35' 26" E. It has an area of around 6,000 dunams. The topography of Al-Baqura is characterized by low plains, and the major land use in it is agriculture. The climate of this village is usually several degrees warmer than that of the surrounding areas, with a mild winter and a scorching summer.

The village of Al-Baqura is one of the most fertile parts of Jordan. It includes agricultural lands of considerable area and good soil quality in addition to various sources of good-quality irrigation water like wells and springs. Its land is suitable for growing a wide variety of vegetables, fruits (mainly including

citrus fruits and date trees), as well as wheat, barley, and medicinal plants. Furthermore, its warm climate makes it an ideal place for growing bananas. In fact, it is already densely covered with banana plantations.

Al-Baqura village is also considered a place of historical and tourist national heritage. The most prominent ancient landmarks in this village are Majma Bridge, the Rothenberg Project, and the Hijaz railroad (Figure 3). Al-Majma Bridge is a complex of three bridges. The first (oldest) of which was constructed by the Romans. The second bridge was built adjacent to it by the Ottomans for passage of the Hijaz railway to Palestine. The third bridge, however, was constructed by the British authorities during the Mandate days. They intertwined it with the Roman bridge [28]. The Rothenberg project narrates part of the history of Al-Baqura. The British authorities gave the Rothenberg Company, which was founded by Pinchas Rotenberg, the permission to invest the water of Jordan and Yarmouk rivers at their convergence point to generate and distribute electric power for the period of 70 years. This project, whose implementation began in 1921, was intended to provide the governorate of Ajloun and the north of Palestine, especially the city of Haifa, with electricity [28].

Before the 1967 war, the population of Al-Baqura village was about 7,000 per capita, but this number decreased greatly during the war and after it. During the war, most of the families migrated from this village to neighboring villages. Its population today is about 564. Most of them depend on agriculture for their livelihood. However, the infrastructure in this village is poor; the agricultural market is distant; paved roads are limited; and access to technologies, funds, and human capital is weak [29]. Additionally, the village has a large number of farmers who produce the same agricultural products, which makes it really hard to find a buyer. Under these circumstances, the main challenge is to attract buyers to buy agricultural commodities from rural villages. So, the village farmers have no alternative but to attract visitors to their village so that they can sell some goods and, hence, improve their income. On that ground, it is anticipated that agritourism can provide a solution to the problem of selling village goods, thus reducing poverty.



Figure 3. Location of Al-Baqura village in Jordan Valley and images from the site

A review of the literature disclosed a lack of previous studies that examined the desire and willingness of farmers to be part of an agritourism system in this area, which is a knowledge gap in this domain of scientific research. In consequence, we decided to conduct this study to bridge this knowledge gap. The study aimed at exploring the factors that determine farmers' willingness to be part of an agritourism system in Al-Baqura village and farmers' anticipations of the effects of agritourism on their economies, society, culture, and environment. As such, this study represents a breakthrough in the process of developing tourism in rural areas in Jordan since it provides a solid foundation for further understanding of the perceptions and expectations of the local population.

2. MATERIALS AND METHODS

A survey-based research approach was adopted in this study. To collect the data, we surveyed farmers in Al-Baqura village using an online survey. Before that, we contacted representatives of the farmers in the village and asked them to invite the rural farmers to participate in the study. Prior to the collection of the data, we made a presentation on the advantages and drawbacks of agritourism using the Zoom platform because of the governmental restrictions on mobility and gathering associated with Corona disease. This presentation lasted for 30 min. After the presentation, the farmers were asked to fill out the questionnaire forms.

The questionnaire was developed based on prior research and designed to cover various aspects of agritourism impacts: economic, socio-cultural, and environmental impacts. The indicators of the economic effect which this study took into account were the creation of employment opportunities, agricultural job development, increased income, diversification of tributaries or activities, of the local economy, cost of living, and demand for locally-produced agricultural goods. On the other hand, the assessment of the social and cultural consequences of agritourism was based on measures such as preservation of local people's way of life, respect for farmer's privacy, chances for cultural exchange, host-tourist conflicts, crime rates (e.g., the rates of theft, violence, and vandalism), and women's empowerment in society. Meanwhile, the measures of the environmental impacts of agritourism which this study took into consideration were knowledge of environmental issues among the local population and government, enhancement of the image of the area, conservation of the natural environment, cleanliness of the agritourism sites and adjacent areas, congestion, and noise. Additionally, the questionnaire included questions related to basic demographic characteristics of the respondents and questions about respondents' willingness to (i) support, and get engaged in, agritourism, (ii) host visitors, and (iii) support the government initiatives that promote agritourism in the village. The questionnaire was constructed in the form of close-ended questions. The respondents were due to express their levels of agreement on each questionnaire item using a three-point Likert scale, where the codes 1, 2, and 3 were indicative of disagreement, neutrality, and agreement, respectively. The questionnaire was initially constructed in the English language and, later, translated into the Arabic language.

2.1 Data analysis

Data analysis was performed using version 25.0 of the

Statistical Package for Social Sciences (SPSS). The demographic information of the respondents and their views on the effects of agritourism were analyzed using descriptive statistics. Spearman's Rank Correlation Analysis was conducted to examine the relations among the study variables in terms of significance, direction, and strength. In addition, regression analysis was conducted to determine significant predictors of farmers' willingness to support agritourism in their village. The values of Spearman's correlation coefficient (p_s) were interpreted following the rules of Evan's [30], where $|p_s| = 0.00-0.19$ implies very weak relationship; $|p_s| = 0.20-0.39$ indicates weak association; $|p_s| = 0.40-0.59$ points to moderate association; $|p_s| = 0.60-0.79$ suggests strong relation; and $|p_s| = 0.80-1.0$ indicates very strong association.

3. RESEARCH FINDINGS

3.1 Research sample

Random sampling was used to obtain a sample of 163 respondents from the 173 families living in Al-Baqura village. According to Table 1, almost 20.6% of the respondents were women, and 79.4% were men. The much higher representation of men than women in the study sample can be explained by the fact that the majority of the agricultural workers, who are the population of this study, are men. The age group with the highest representation (60.4%) in the sample was those ranging in age from 29 years to 50 years. In addition, the majority of the respondents (63.5%) hold a college degree. As regards the monthly salary or income, nearly 46.0% of the sample families earn more than 500 Jordanian Dinars monthly. Moreover, most of the families have at least one person who works in agriculture or agriculture-related occupation. Specifically, almost 42.9% of the sample members work in agriculture, while 44.4% work in non-agricultural occupations. Only 28.6% of the respondents own a farm, and 38.1% of the respondents reported not owning one. Slightly less than two-thirds of the respondents (60.3%) who are engaged in agricultural production cultivate their lands using conventional agricultural methods. Few of the respondents use contemporary agricultural methods like greenhouses or vertical farming. In addition, it was found that 46.0% of the respondents think that farming provides the farmer with sufficient income to support her/his family.

3.2 Descriptive analysis

Descriptive statistics analysis was performed to determine the mean (M) and standard deviation (SD) of respondents' feedback on each questionnaire item. The analysis revealed that most of the respondents were enthusiastic about agritourism. As their responses disclose, they are willing to support agritourism if it is proposed ($M = 1.25$, $SD = 0.595$). Moreover, many respondents think that the community should be involved in the planning and development of agritourism ($M = 1.17$, $SD = 0.493$). They also believe that the government should formulate policies and stimulate strategies to develop and promote agritourism in the country ($M = 1.06$, $SD = 0.248$). As their answers suggest, the participants in this study are open to the idea of tourists visiting their villages and interacting with them. Indeed, they would like to see more agritourism activities in their area.

With respect to the economic impacts of agritourism, the

analysis results indicate that the respondents believe that agritourism has a number of favorable economic features. From the viewpoint of the survey participants, integration of tourism with agriculture will increase the farmer's income and improve her/his living conditions ($M = 1.33$, $SD = 0.648$). Furthermore, the sample members believe that the integration of tourism with agriculture will create new employment opportunities, both for the farmers and for local people with other occupations ($M = 1.40$, $SD = 0.708$). On this account, they support that this will result in an increase in the financial returns of local people and in the number of people who choose to work in agriculture ($M = 1.35$, $SD = 0.626$). The study results also uncover that the respondents believe that the integration of tourism with agriculture will increase demand for local products ($M = 1.21$, $SD = 0.544$). In addition, the sample members believe that the local authorities should provide financial support for infrastructure improvements to facilitate the development of agritourism ($M = 1.06$, $SD = 0.246$).

As regards the social effects of agritourism, the results of the analysis bring to notice that there is consensus among the sample members that agritourism creates opportunities for cultural and experience exchange ($M = 1.22$, $SD = 0.522$). The results also pinpoint that the majority of the respondents believe that agritourism will have no adverse social impacts on them, such as provoking conflict between visitors and the local people ($M = 2.56$, $SD = 0.667$) and impairing their way of life ($M = 2.38$, $SD = 0.831$). Moreover, the respondents are of the opinion that agritourism will have no adverse effect on farmers' privacy. In other respects, there is agreement among the sample members that the integration of tourism with agriculture will support women and lead to their

empowerment in society by providing them with unique work opportunities ($M = 1.40$, $SD = 0.685$).

Regarding respondents' perceptions of the environmental impacts of agritourism, the results of this study unveil that the respondents believe that agritourism will improve the image of the village and the country as a whole ($M = 1.21$, $SD = 0.481$). Aside from that, agritourism will help in preserving the natural environment of the village ($M = 1.32$, $SD = 0.563$), will positively affect the environmental awareness of the local people ($M = 1.40$, $SD = 0.685$), and will have no detrimental impact on the farms and on the cleanliness of their surrounding ($M = 2.44$, $SD = 0.690$).

3.3 Spearman's rank correlation analysis

Spearman's Rank Correlation Analysis was conducted in the researchers' effort to examine potential associations among the research variables in terms of significance, direction, and magnitude (Table 1). This analysis disclosed a statistically-significant, strong, positive correlation between the dependent variable (willingness to support agritourism (V1)) and each of the independent variables: empowerment of women in the society ($p_s = 0.620$, $p < 0.001$) and enhancement of the image of the village ($p_s = 0.604$, $p < 0.001$). Further, correlation analysis indicated a moderate, positive relationship between farmers' willingness to support agritourism and each of six study variables (Table 1): preservation of the natural environment, increased opportunities for cultural exchange, improved financial returns for farms and farmers' families, encouragement of people to practice agriculture, increased job opportunities, and heightened demand for local products.

Table 1. Descriptive statistics for the questionnaire items

1. Dependent Variables						
Code	Variables	M	SD	p_s (V1)	Sig.	
V1	Willingness to support the agritourism project if proposed.	1.25	0.595	1		
V2	The belief that the community should be engaged in planning for agritourism in its locality.	1.17	0.493	.781**	0.000	
V3	The government should formulate policies and launch initiatives to encourage agritourism.	1.06	0.248	.660**	0.000	
V4	Desire to have further agritourism activities in the area.	1.16	0.545	.869**	0.000	
V5	Openness to the concept of tourists visiting the area and interacting with local people.	1.25	0.595	.590**	0.000	
2. Independent Variables						
V6	Integration of tourism with agriculture will increase the farmer's income and improve her/his living conditions.	1.33	0.648	.321*	0.010	
V7	Integration of tourism with agriculture will create new employment opportunities for farmers and local people with other occupations.	1.40	0.708	.446**	0.000	
V8	Agritourism will raise the financial returns of local people and increase the number of individuals who choose to work in agriculture.	1.35	0.626	.451**	0.000	
V9	Integrating tourism with agriculture will increase demand for local products.	1.21	0.544	.434**	0.000	
V10	The government should fund infrastructure upgrades to support agritourism.	1.06	0.246	.660**	0.000	
V11	Agritourism creates opportunities for cultural and experience exchange.	1.22	0.522	.491**	0.000	
V12	Agritourism will result in improvement of the local people's way of life.	2.38	0.831	-.297*	0.018	
V13	Agritourism will not violate farmers' privacy.	2.22	0.832	-.409**	0.001	
V14	The presence of tourists in the area will raise the rates of crimes such as theft, violence, and property damage.	2.49	0.693	-0.230	0.070	
V15	Agritourism will not negatively affect the area by causing visitor-local conflict.	2.56	0.667	-.362**	0.004	
V16	Agritourism will lead to empowerment of women by providing unique work opportunities for them.	1.40	0.685	.620**	0.000	
V17	Agritourism will improve the image of the village and the country.	1.21	0.481	.604**	0.000	
V18	Agritourism will help in preservation of the local natural ecosystem.	1.32	0.563	.574**	0.000	
V19	Agritourism raises the environmental awareness of the local people.	1.40	0.685	0.105	0.413	
V20	Agritourism will not harm the farms or affect cleanliness of the surrounding areas.	2.44	0.690	-0.122	0.340	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Three-point Likert Scale: (1) Agree, (2) Neutral, (3) Disagree

M: Mean; SD: Standard Deviation; p_s : Spearman's Rank Correlation Coefficient; Sig.: Significance of the test statistic, that is, the probability (p) value.

Moreover, correlation analysis pinpointed a statistically-significant negative relationship between the dependent variable (willingness to support the concept of agritourism) and each of two independent variables: causing conflict between tourists and local residents and impairment of the way of life of the indigenous people. Since both independent variables are negative, then the foregoing two negative relationships have positive implications. On the other hand, the outputs of correlation analysis underline non-significant, weak correlations among the dependent variable and some independent variables: environmental awareness of the local population and authorities, impact on farms and cleanliness of their surroundings, and effect of the presence of tourists on crime rates (e.g., rates of theft, violence, and vandalism). This finding suggests that there are no statistically-significant correlations amongst these variables.

3.4 Regression analysis

This part of the study aimed at investigating the effects of a number of study variables on farmers' willingness to support agritourism and participate in it. To this end, stepwise regression analysis was run to construct a regression model that allows for the prediction of farmers' willingness to support agritourism from significant predictors. Table 2 shows that the three statistically-significant predictors of farmers' willingness to support agritourism and participate in it are (i) empowerment of women in the society, (ii) enhancement of the image of the village, and (iii) increasing farmer's income and improving her/his living conditions. Table 2 presents a summary of the three feasible regression models that have been created based on the strength of effects of predictors on farmers' willingness to support agritourism and participate in it. In stepwise regression modeling, the strongest predictor is used to construct the first model, and the second strongest predictor is added to it to build the second (two-predictor) model, and so on.

Table 2. Regression model summary

Model	R	R Square	Adjusted R Square	F	Sig. p-value
1	0.620 ^a	0.384	0.374	38.024	0.000 ^b
2	0.711 ^b	0.505	0.489	30.613	0.000 ^c
3	0.735 ^c	0.540	0.516	23.056	0.000 ^d

a. Predictors: (Constant), WE

b. Predictors: (Constant), WE, VI,

c. Predictors: (Constant), WE, VI, LC

d. Dependent Variable: Farmers' willingness to support agritourism

- WE: Woment Empowerment
- VI: Enhancement of the village image
- LC: Improving living conditions

It is seen in Table 2 that all three models are statistically significant ($p < 0.05$). Regarding the predictive powers of these models, the analysis outcomes point out that the first model has reasonably good power for the prediction of the dependent variable because the value of its coefficient of determination (R^2) is 0.384. This value means that the first predictor alone (empowerment of women in the society) has the ability to predict 38.4% of the variations among the respondents in their willingness scores. Based on the R^2 values, the researchers reach the conclusion that the three-predictor

model, that is, the third model, has the highest power for prediction of farmers' willingness to support agritourism and participate in it since it has the highest R^2 value (0.540). This implies that the three predictors combined can together explain 54.0% of the differences amongst the sample members in their willingness scores. So, empowerment of women in the society has a higher effect on farmers' willingness to support agritourism than enhancement of the image of the village, which has a higher effect on willingness than increasing farmer's income and improving her/his living conditions.

4. CONCLUSIONS

In this study, the researchers investigated agritourism with the aim of making an original contribution to the debate on the sustainable development of rural communities. In particular, the study investigated local people's opinions on the idea of agritourism in Al-Baqura village, Jordan, and examined how agritourism can support sustainable development in this rural area. The study found that locals' motivation to promote agritourism in their village and engage in it is motivated by the economic, social, and environmental benefits of agritourism. Women empowerment in society, enhancement of the image of the village, increased farmer's income, and improvement of her/his living conditions have been found to be the most significant determinants of farmers' willingness to support agritourism in Al-Baqura village and to participate in it.

In the Jordanian communities, the woman is the family's foundation. As well, the family's income is often much influenced by the woman's employment in addition to her husband's aid in agricultural work, food production, or craft production. Therefore, to develop agritourism in agricultural villages, the role of women must be taken into careful consideration and reinforced. Additionally, feedback of various respondents indicated that agritourism has the potential to enhance the overall image of the local community and the infrastructure of the village, including roads, sanitation, and other public facilities, while contributing to further cleanness of the living environment, which is an issue that has been supported by earlier research [7, 15, 31].

The findings indicate that the locals support agritourism in their locality since it has the potential to provide work opportunities and revenue for their community. From the perspective of the village people, agritourism has the potential to inspire varied forms of local economic activities such as the construction of a showroom and specialized shops for them to display their products, in showcases, for example, and sell agricultural goods, including fresh and dried fruits and vegetables, that meet the visitor's demand. With reference to the comment of the local people in Al-Baqura village on the low wages associated with the agricultural work, it is worth highlighting that most of the supplementary revenue of these people comes from direct selling of agricultural and non-agricultural products and goods to tourists.

This study found evidence that people's general knowledge of agritourism influenced their opinions about its effects and their willingness to participate in it. The positive impacts of agritourism may motivate support of the population for the development of tourism activities. Meanwhile, the negative impacts of agritourism may prevent the population from participating in tourism activities [5, 31]. An in-depth understanding of attitudes of village people towards agritourism can lead to finding ways that warrant effective

improvement of their participation in rural development, which, in turn, plays an important role in supporting sustainable tourism development and participation of the local people in it [5, 15, 31].

In light of its findings, this study concludes that the sample members do, in general, have a good understanding of the concept and practice of agritourism. The study also concludes that they are open-minded, friendly, and hospitable. In addition, it is concluded that the people in Al-Baqura village are in bad need of opportunities for improved income. Within this context, the study concludes that providing those people with financial aid in the form of donations and/or debts can, to a high degree, help them overcome the financial obstacles to effective participation in agritourism. As well, this study reached the conclusion that agritourism is much promising economically, socially, and environmentally and that Al-Baqura village and its people are well prepared for agritourism and associated activities and opportunities. However, it is additionally concluded that the infrastructure of Al-Baqura village is not yet well prepared for agritourism. Further investments in the infrastructure of this village are required and recommended.

This study found that empowerment of women in the society, enhancement of the image of the village, and increasing farmer's income and improving her/his living conditions are three statistically-significant, strong predictors of farmers' willingness to support agritourism and participate in it. Individually, empowerment of women has the highest effect on willingness, whereas increasing the farmer's income and improving her/his living conditions has the relatively lowest effect. On account of the regression analysis outputs, this study concludes that the three predictors combined have a higher effect on farmers' willingness than the effect of any individual predictor. This finding suggests that all three variables are highly critical to the success of agritourism in Al-Baqura village and to whichever related initiatives, projects, and activities. In other respects, this finding leads to the conclusion that the local people in Al-Baqura village pay more attention and assign a higher weight to the socio-cultural aspects of agritourism than to the economic aspects; they are more concerned about women empowerment and image of their locality than about income. In other respects, the finding that the aforementioned three predictors can together explain 54.0% of the differences amongst the sample members in their willingness scores leads to the conclusion that there are other determinants of the dependent variable which this study did not address, and which are not much less influential than the variables considered in the present study. This should trigger related future studies to research these determinants.

Currently, Al-Baqura village lacks an agritourism initiative, in spite of the keen willingness of its farmers to embrace the idea. The policymakers should pay particular attention to the aforementioned determinants of agritourism in order to develop it in this village. The various economic, social, and environmental determinants of agritourism must be taken into account in planning and implementation of agritourism in this village and in similar villages. The Jordanian government and Jordan Tourism Board should collaborate further to promote tourism in the village via public awareness programs and infrastructure improvement projects. Additionally, the government should provide financial and technical assistance to the local community of the village. This will help the farmers in overcoming financial obstacles to effective involvement in successful agritourism in their village.

REFERENCES

- [1] Sanches-Pereira, A., Onguglo, B., Pacini, H., Gómez, M.F., Coelho, S.T., and Muwanga, M.K. (2017). Fostering local sustainable development in Tanzania by enhancing linkages between tourism and small-scale agriculture. *Journal of Cleaner Production*, 162: 1567-1581. <https://doi.org/10.1016/j.jclepro.2017.06.164>
- [2] Fagioli, F.F., Diotallevi, F., Ciani, A. (2014). Strengthening the sustainability of rural areas: The role of rural tourism and agritourism. *Italian Review of Agricultural Economics*, 69(2-3): 155-169. <https://doi.org/10.13128/REA-16920>
- [3] Apaza-Panca, C.M., Arévalo, J.E.S.C., Apaza-Apaza, S. (2020). Agritourism: Alternative for sustainable rural development. *Dominio de las Ciencias*, 6: 207-227. <https://doi.org/10.23857/dc.v6i5.1596>
- [4] Adamov, T., Ciolac, R., Iancu, T., Brad, I., Peț, E., Popescu, G., Șmuleac, L. (2020). Sustainability of agritourism activity. Initiatives and challenges in Romanian mountain rural regions. *Sustainability*, 12(6): 2502. <https://doi.org/10.3390/su12062502>
- [5] Ciolac, R., Adamov, T., Iancu, T., Popescu, G., Lile, R., Rujescu, C., Marin, D. (2019). Agritourism-A Sustainable development factor for improving the 'health' of rural settlements. Case study Apuseni mountains area. *Sustainability*, 11(5): 1467. <https://doi.org/10.3390/su11051467>
- [6] Bassi, I., De Poi, P. (2010). Measuring multifunctional (agritouristic) characterization of the territory. *Agribusiness Agricultural and Food Policy Community/Rural/Urban Development Food Consumption/Nutrition/Food Safety Labor and Human Capital*. <https://doi.org/10.22004/ag.econ.94927>
- [7] Bhatta, K., Ohe, Y. (2019). Farmers' willingness to establish community-based agritourism: Evidence from Phikuri village, Nepal. *International Journal of Tourism Sciences*, 19(2): 128-144. <https://doi.org/10.1080/15980634.2019.1621536>
- [8] Schilling, B.J., Sullivan, K.P., Komar, S.J. (2012). Examining the economic benefits of agritourism: The case of New Jersey. *Journal of Agriculture, Food Systems, and Community Development*, 3(1): 199-214. <https://doi.org/10.5304/jafscd.2012.031.011>
- [9] Wright, W., Annes, A. (2014). Farm women and agritourism: Representing a new rurality. *Sociologia Ruralis*, 54(4): 477-499. <https://doi.org/10.1111/soru.12051>
- [10] Gil Arroyo, C., Barbieri, C., Sotomayor, S., Knollenberg, W. (2019). Cultivating women's empowerment through agritourism: Evidence from Andean communities. *Sustainability*, 11(11): 3058. <https://doi.org/10.3390/su11113058>
- [11] Mastronardi, L., Giaccio, V., Giannelli, A., Scardera, A. (2015). Is agritourism eco-friendly? A comparison between agritourisms and other farms in Italy using farm accountancy data network dataset. *SpringerPlus*, 4: 1-12. <https://doi.org/10.1186/s40064-015-1353-4>
- [12] Wojcieszak-Zbierska, M.M., Jęczmyk, A., Zawadka, J., Uglis, J. (2020). Agritourism in the era of the coronavirus (COVID-19): A rapid assessment from Poland. *Agriculture*, 10: 397. <https://doi.org/10.3390/agriculture10090397>
- [13] Chin, W.L., and Pehin Dato Musa, S.F. (2021).

- Agritourism resilience against Covid-19: Impacts and management strategies. *Cogent Social Sciences*, 7(1): 1950290. <https://doi.org/10.1080/23311886.2021.1950290>
- [14] Uglis, J., Jęczynek, A., Zawadka, J., Wojcieszak-Zbierska, M.M., Pszczoła, M. (2021). Impact of the COVID-19 pandemic on tourist plans: A case study from Poland. *Current Issues in Tourism*, 25(3): 405-420. <https://doi.org/10.1080/13683500.2021.1960803>
- [15] Ammirato, S., Felicetti, A.M., Raso, C., Pansera, B.A., Violi, A. (2020). Agritourism and Sustainability: what we can learn from a systematic literature review. *Sustainability*, 12(22): 9575. <https://doi.org/10.3390/su12229575>
- [16] RSCN, T.R.S.f.t.C.o.N. (2017). Overview. <https://www.rscn.org.jo/overview>, accessed on Dec. 12, 2021.
- [17] Zamil, A. (2011). The role of Jordanian local community in marketing tourism. *Journal of Business Studies Quarterly*, 2: 42.
- [18] El-Harami, J. (2014). The diversity of ecology and nature reserves as an ecotourism attraction in Jordan. In *SHS Web of Conferences*, 12: 01056. <https://doi.org/10.1051/shsconf/20141201056>
- [19] Abuamoud, I.N., Libbin, J., Green, J., and ALRousan, R. (2014). Factors affecting the willingness of tourists to visit cultural heritage sites in Jordan. *Journal of Heritage Tourism*, 9(2): 148-165. <https://doi.org/10.1080/1743873X.2013.874429>
- [20] Figueroa, J.L., Mahmoud, M., and Breisinger, C. (2018). The role of agriculture and agro-processing for development in Jordan. Project Paper. <https://doi.org/10.2499/1024320700>
- [21] DOS, D.o.S. (2020). Agriculture. <http://dosweb.dos.gov.jo/agriculture/>, accessed on Dec. 12, 2021.
- [22] Al-Kheder, S., Haddad, N., Jaber, M.A., Al-Shawabkeh, Y., Fakhoury, L. (2010). Socio-spatial planning problems within Jordan Valley, Jordan: Obstacles to sustainable tourism development. *Tourism and Hospitality Planning & Development*, 7(4): 353-378. <https://doi.org/10.1080/1479053X.2010.520464>
- [23] Tarawneh, M., Al Husban, A.H. (2011). Rural poverty in Jordan: Assessment and characterisation. *Anthropology of the Middle East*, 6(2): 94-107. <https://doi.org/10.3167/ame.2011.060208>
- [24] Van den Broeck, G., Maertens, M. (2017). Moving up or moving out? Insights into rural development and poverty reduction in Senegal. *World Development*, 99: 95-109. <https://doi.org/10.1016/j.worlddev.2017.07.009>
- [25] Briones, R.M. (2013). Agriculture, rural employment, and inclusive growth. <http://hdl.handle.net/10419/126960>, accessed on Dec. 12, 2021.
- [26] Vos, R. (2019). Agriculture, the rural sector, and development. *Asian Transformations*, 160-185. <https://library.oapen.org/bitstream/handle/20.500.12657/39366/9780198844938.pdf?sequence=1#page=,> accessed on Dec. 12, 2021.
- [27] FAO, F.a.A.O.o.t.U.N. (2019). National Strategy for Agricultural Development 2016-2025. <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC166604/>, accessed on Dec. 12, 2021.
- [28] 7iber (2018). Jisr Al-Majameh in Baqoura, a Jordanian land with unknown owners. <https://www.7iber.com/politics-economics/jisr-al-majameh-in-baqoura-a-jordanian-land-with-unknown-owners/>, accessed on Dec. 12, 2021.
- [29] Addustour (2016). Jordanian Baqoura. Volume 2021. <https://www.addustour.com/articles/2736-%D8%A7%D9%84%D8%A8%D9%80%D8%A7%D9%82%D9%80%D9%88%D8%B1%>, accessed on Dec. 12, 2021.
- [30] Evans, J.D. (1996). Straightforward statistics for the behavioral sciences, (Thomson Brooks/Cole Publishing Co). https://scholar.google.com/scholar_lookup?title=Straihtforward+Statistics+for+the+Behavioral+Sciences&author=J.D.+Evans&publication_year=1996&, accessed on Dec. 12, 2021.
- [31] Nguyen, N.T.H., Suwanno, S., Thongma, W., Visuthismajarn, P. (2018). The attitudes of residents towards agro-tourism impacts and its effects on participation in agro-tourism development: The case study of Vietnam. *African Journal of Hospitality, Tourism and Leisure*, 7: 1-18.