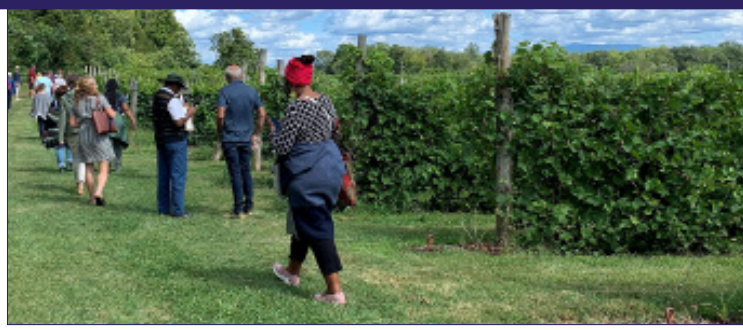
International Workshop on Agritourism

2022 Conference Proceedings

Edited by Lisa Chase, Chadley Hollas, Xinyi Qian, and Claire Whitehouse





About This Publication

This volume was edited by:

- Lisa Chase, University of Vermont Extension
- Chadley Hollas, Cultivating Tourism
- Xinyi Qian, University of Minnesota Tourism Center
- Claire Whitehouse, University of Vermont Center for Rural Studies

This volume was produced in collaboration with the Northeast Regional Center for Rural Development, which provided staff support as follows:

- Kim Boonie provided project management and administrative support.
- Kristen Devlin provided copy-editing and publication design.

Each submission went through a peer-review process prior to publication. We thank the reviewers for their service.

Citations for this publication may be made using the following:
Chase, L., Hollas, C., Qian, X., & Whitehouse, C. (Eds.). (2023). *International Workshop on Agritourism 2022 Conference Proceedings*. https://extensiontourism.net/wp-content/uploads/2022-iwa-proceedings.pdf

Image credits:

- Cover: Dennis Curran, courtesy of the Vermont Department of Tourism and Marketing.
- Above from left to right: Green Mountain Girls Farm, photo provided; Shelburne Farms, Bear Cieri, Courtesy of Hello Burlington; Snow Farm Vinyard, Bear Cieri, Courtesy of Hello Burlington.

Funding was provided by the Agricultural Marketing Resource Center (AgMRC), located at Iowa State University, www.agmrc.org. AgMRC is a national website dedicated to providing information to producers and service providers on value-added agriculture businesses. This material is based upon work supported by the National Science Foundation (NSF) under Grant No. 2122374. This work also was supported in part by the United States Department of Agriculture, National Institute of Food and Agriculture (NIFA) under project #VTN34985 (Accession Number 1022090). The development of this publication was supported by the Northeast Regional Center for Rural Development (NERCRD), which receives core funding from USDA NIFA and Penn State University. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of AgMRC, NSF, USDA NIFA, NERCRD, University of Vermont, Penn State, or other funders.

GLOBAL AGRITOURISM NETWORK

AgMRC agricultural marketing resource center

Agritourism Platform

NE RCRD

Contents

(continued on next page)

Customer Experience

Education of Agritourism Operators

Case Studies

Project/Program Documentation

Introduction

The first International Workshop on Agritourism (IWA) was hosted by University of Vermont Extension in Burlington, Vermont, USA on August 30 – September 1, 2022. The three-day conference featured keynote speakers, concurrent sessions, a poster session, and field trips to area farms to experience Vermont's agritourism offerings first-hand.

This hybrid conference attracted 504 total attendees (352 in person, 152 virtual). Attendees came from 56 countries (33 in person), and 44 U.S. states/territories (40 in person). Six continents were represented: we had 370 attendees from North America; 50 from Europe; 38 from Africa; 30 from Asia; four from South America; and three from Oceania. Attendees represented a diverse array of professions. The most common was Farmer/Rancher/Producer (142), followed by Researcher (141), Educator (123), Business Owner/Manager (123), Tourism Professional (108), Non-profit (106), Extension/ Service Provider (96), and Government Agency (47). Interestingly, 238 attendees selected more than one profession, demonstrating the diversity and versatility of agritourism professionals.

To expand access to the educational content, all plenary and concurrent sessions were livestreamed, recorded, and posted on International Workshop on Agritourism - YouTube. To further increase access, we have published the conference proceedings as an open-access document online. The proceedings contain 27 submissions from the 2022 International Workshop on Agritourism, which we have grouped into nine categories: literature review, policy, ecosystem, entrepreneurship, success factors, customer experience, education of agritourism operators, case studies, and project/program documentation. Bhatta offered a review of literature on community-based agritourism. Mude, and Sennimalai and Sivakumar analyzed agritourism policies in India. Baciu and colleagues offered two pieces on ecosystem services related to agritourism. Curtis et al. offered commentaries on diversity, equity, access and inclusion (DEAI) in agritourism entrepreneurship, while

Photo by: Bear Cieri, Courtesy of Hello Burlington

Hardesty as well as Morrow and Benson used case studies to document agritourism entrepreneurship. Hollas et al., Paras and Michaud, and Sparber et al. described a variety of factors critical to agritourism success. Jones, Stearns and Rao, and Werlin focused on customer experience, from on-farm guest experience, to GMO experience and consumers' food purchasing behaviors. Baker, Comerford and Fery, and Leeds et al. documented educational programs for agritourism operators to address visitor safety, successfully develop a business, and provide high quality customer service. Six papers offered case studies of agritourism development and operations in six countries on four continents (Csoban et al., Das & Deori, Hansen & Coates, Klitsounova & Pukas, Malkanthi, Vumbunu et al.). Lastly, four papers provided documentation of projects or programs: two international (Gillespie; Lamie et al.) and two in Europe (Nadegger, Rose).

We hope you enjoy the proceedings of the 2022 International Workshop on Agritourism, and we encourage you to share them with others who are interested in supporting farm viability, agricultural literacy, and community vitality through agritourism.

Community-Based Agritourism: A Literature Review

Kumar Bhatta
Kyushu University Institute for Asian and Oceanian Studies (Japan)
kumar2bhatta@gmail.com

Abstract

Developing community-based agritourism (CBAT) can be a countermeasure for farmers' low income and other problems in the rural communities of both developed and developing countries. It is further essential for developing countries' rural development and economic diversification. Different community-based activities, such as community-based cooperatives, have been successfully implemented in developing countries. However, CBAT development has been delayed. Notably, CBAT development can be supported by reviewing the literature and different cases worldwide. Thus, this study aimed to explore CBAT development guidelines by conducting a literature review and discussing the conditions for CBAT development. A total of 25 articles were examined and discussed from the new CBAT development perspectives. The review results are then integrated into two broad topics: agricultural issues and social issues. Most studies in CBAT are from Southeast Asian countries published in recent years. The CBAT literature is not covered in popular journals. These results clarify that the awareness of CBAT is increasing but not satisfactory. Thus, to raise awareness of CBAT's development and expansion in more global contexts, renowned scholars should pay attention to it and publish it in more popular journals.

Keywords: Agritourism, community-based agritourism, development, developing countries, literature review

Introduction

The community-based tourism (CBT) system is commonly understood to be owned and managed by the community. It is generally undertaken on a small scale and involves interactions between visitors and the host community, a system particularly suited to rural and regional areas (Asker et al., 2010). If agriculture-related activities are incorporated into CBT, tourism activities become community-based agrotourism (CBAT). For instance, Fruit Park Niki, Hokkaido, Japan, represents a type of CBAT in which a group of farmers is selected as an operational team and assigned to CBAT work. This team manages everything concerned with agritourism operations, such as field experiences (pick-your-own fruits and vegetables), and sells its products through a direct-selling center. Additionally, CBAT in Bali, Indonesia, offers visitors bed and breakfast accommodation in farmhouses with farming experiences, such as a visit to the Salak plantation to pick fresh fruit, visits to a winery, crispy chip preparation demonstrations, and produce tasting (Budiasa & Ambarawati, 2014).

CBT has various names, such as pro-poor CBT, community-based industrial tourism, community-based homestay, community-based collaborative tourism, community-based ecotourism, rural-based community tourism, community-based rural tourism, community-based forest therapy, wildlife-based community tourism, CBT enterprises, and CBAT (Astuti et al., 2016; Bhatta & Ohe, 2019; Budiasa & Ambarawati, 2014; Chiappa et al., 2018; Deason et al., 2022; Harris, 2009; Kandel, 2011; Ngo et al., 2018; Ohe, 2008; Ohe, 2016). Although all types of CBTs are essential from an economic perspective, CBAT is an emerging concept that is more promising for farmers in developing countries to increase their income, eradicate poverty, and promote rural development. CBAT development in developing countries is necessary because approximately 80% of the world's poor population resides in rural areas of developing countries, and agriculture is the primary source of income (World Bank, 2014). However, because of the similar characteristics of farmers residing in the same territory, they cannot be buyers of each other's agricultural products. They

cannot sell their products in markets located in cities because of poor infrastructure networks (Bhatta et al., 2019). Therefore, the development of CBAT is a countermeasure for different rural problems, especially in developing countries.

In many Western and European countries, individually managed agritourism has been successfully implemented but has been delayed in developing countries (Bhatta & Ohe, 2020; Rauniyar et al., 2020). Community-based activities, such as community-based cooperatives in South and Southeast Asian countries, are becoming popular and successful (Ahmad et al., 2014; Asker et al., 2010; Morales et al., 2018); however, CBAT is still delayed. Thus, CBAT should be expanded to rural areas to promote traditional organic farming methods in both developing and developed countries. Its importance in developing countries further exceeds that of the international agritourism "movement," farmer stakeholders, and surrounding communities. To promote CBAT in different destinations, proper development guidelines should be developed by reviewing successful CBATBased on the author's knowledge, such guidelines do not exist. As the number of CBAT activities is limited, research on CBAT is also limited. In different rural areas of developing countries, where people themselves cannot develop CBAT, they expect external support for its development and promotion in a sustainable way. Thus, this study aims to explore CBAT development guidelines by reviewing the literature and suggesting implications for both developed and developing countries.

Table 1: Number of papers available in the different databases

Keyword	Databases		Publication	
	Scopus	Web of Science	Year	No of papers
"Community-based agritourism"	1	1	~2015	8
"Community-based agrotourism"	5	0	2016-2020	9
"Community-based agro tourism"	3	2	2021~	8

Source: Author's survey (as of October 25, 2022). Note: keyword →Community-based agri tourism→not found

Methods

As this study's main objective was to explore the implications of CBAT development, a literature survey was conducted using different databases. For the literature survey, the author used different keywords (Table 1) in various databases, such as Scopus, Web of Science, ScienceDirect, and PubMed. However, PubMed and ScienceDirect do not contain any papers with these keywords. The exact keywords were then used in Google Scholar, and 25 papers dealing with CBAT were collected. This study only used articles published in English. In addition, no other sorting method was adopted.

The factors for CBAT development can be roughly divided into two broad topics: agricultural and social. Agricultural elements, such as farm activities, are directly related to the number of tourist arrivals. Similarly, community human resources and heritage are regarded as social issues.

Results and Discussions

As shown in Table 1, most papers were published in the last 15 years. More than 50% of these were published within the previous five years, and only limited papers are available in popular academic databases (Appendix I). Most articles were from Indonesia, Thailand, and Malaysia.

Agricultural Issues

Farm activities are a significant attraction for CBAT. Tourist arrivals and available farm activities are positively correlated because tourists can participate in and enjoy farm activities together with farmers (Adams, 2008). As a tourist attraction in CBAT, Thai farmers promoted farm activities, such as

picking fresh farm crops, farm sightseeing, farmer markets, home/farm stays, and organic fertilizer demonstrations (Khamung, 2015). Additionally, CBAT provides opportunities for organic farming experiences in Indonesia with scenic views of the nearby attractions (Budiarti & Listyanti, 2015).

The community organized a group to produce organic products and received certification from the government. After receiving the certificate, the organic group began promoting the community from a tourism perspective. The village offers an organic agricultural garden where visitors can buy fresh organic vegetables (Sittijinda et al., 2015). In Indonesia, farmers' groups have developed salak agritourism, where tourists can participate in farm activities and experience fruit-based processed product-making (Sumantra et al., 2017). Another study conducted in Bali disclosed that the farmers offered visitors a bed and breakfast accommodation in farmhouses with farming experiences, such as a visit to the Salak plantation to pick fresh fruit, visits to a winery, crispy chip preparation demonstrations, and produce tasting (Budiasa & Ambarawati, 2014). From these experiences, we can conclude that the available farm activities in CBAT play a critical role in tourist visits. In developing countries, farmers still practice traditional farming on small farms, which holds great potential; however, on small farms, farmers cannot introduce enough farm activities to tourists. Liang et al. (2012) explored small-sized farms that introduce farm activities, and Bhatta et al. (2019) explored farmers' willingness to merge land with their neighbors for agritourism purposes, and thus, small organic farms in rural areas can be integrated. Subsequently, the community can introduce different farm activities, such as u-pick, agricultural method demonstrations, product processing, tasting, sightseeing, and so on, in the larger shared farms as a community activity.

Social Issues

Social issues can be divided into two main categories: community human resources and community heritage. Social capital, such as networks, entrepreneurship, and community participation, is considered under the community's human resources, whereas natural and cultural heritage is considered community heritage for CBAT.

Community Human Resources

For additional economic opportunities, the role of social networks and entrepreneurship is significant, not only for the success of CBAT but also for sustainable management. In practical implementation, community tourism activities should focus on social participation and collaboration (Okazaki, 2008). For instance, people in rural Indonesia are enthusiastic and supportive of the development of agritourism for economic opportunities and social harmony (Budiarti & Listyanti, 2015). Moreover, a study from Malaysia showed that a moderate number of locals participated in meetings related to developing agritourism, strengthening tourism, and entrepreneurial activities (Fahmi et al., 2013). In addition, a study in Japan showed that community-based organizations operate and manage community-based accommodations (Ohe, 2020). These results suggest that social networks are important in the development and management of CBAT.

Entrepreneurship in CBAT is another crucial component. CBAT involves activities performed by operators to create innovation in products, production processes, and local resource management. Entrepreneurship discovers a new way of combining resources and creating demands (Shinde, 2010), but if these activities are not well organized, it fails to achieve economic benefits (Ohe, 2020). Furthermore, owing to economic opportunities in CBAT through entrepreneurship, local people have started participating in various social activities to promote it.

Awareness and community attachment issues are critical to the success and sustainability of community-based projects (Ahmad et al., 2014; Asker et al., 2010; Morales et al., 2018; Porter et al., 2018). For example, community attachment positively influenced tourism development in the Dominican Republic (Morales et al., 2018). Another study conducted in the Philippines suggested that merely starting a tourism business in a locality may not attract the interest of the local people. Thus, promoters should inform the local people to prepare them to participate in the project (Okazaki, 2008).

From these facts, it can be said that social networking, entrepreneurship, community participation, and collaboration are crucial during CBAT development. Additionally, local participation should be increased through awareness campaigns about the pros and cons of CBAT. Furthermore, as Okazaki (2008) mentions, local people believe more in local leaders, and planned projects should go through local leaders for sustainability and more community collaboration during CBAT development.

Community Heritage

Community heritage (natural and cultural resources) plays a crucial role in attracting tourists, not only in general tourism but also in niche tourism, such as agritourism. Community heritage is a pull factor that attracts many tourists to CBAT (Songkhla & Somboonsuke, 2012). For instance, natural attractions have drawn tourists to participate in landscape-trail exploration and to enjoy watching river wildlife as part of CBAT in Thailand (Khamung, 2015). Visitors to CBAT in Indonesia often take baths and participate in self-purification (Holi bath), natural healing, using natural hot springs and spas, rafting, trekking, and cycling (Budiasa et al., 2015; Wiranatha & Suryawardani, 2018). Nearby locations, beautiful scenery, and fresh air attract a higher number of tourists (Budiarti & Listyanti, 2015). Since existing natural attractions attract more tourists during CBAT development, rural destinations should explore the untapped tourism potential from the CBAT perspective. Budiasa and Ambarawati (2014) mentioned that CBAT visitors were much lower than the target number owing to limited capacity, weak infrastructure such as roads, and limited promotion. Rural areas of developing countries face similar problems. Therefore, policymakers should focus on creating excellent infrastructure networks in rural areas to attract more tourists to CBAT and promote natural resources.

Cultural resources further contribute to spending meaningful time with tourists at CBAT destinations. For example, Thai people present traditional practices while promoting their cultural heritage, such as traditional craft demonstrations, traditional cuisine, farm living, homestay activities, local festival events, and cultural activities to promote CBAT in their community (Khamung, 2015). In Japan, the abolished municipal elementary school was renovated and used as a guesthouse for tourism activities by the local community as a community center (Ohe, 2020). The subak (traditional irrigation) system in Bali, Indonesia, was included as a cultural world heritage site because it is linked to religious philosophy. CBAT helps maintain the subak system and improves social welfare in the community (Budiasa et al., 2015). Wiranatha and Suryawardani (2018) mentioned that traditional farmers' organizations are needed to conserve the subak system and provide economic benefits to the local people without damaging the value of community heritage. This information indicates that cultural heritage attracts tourists and contributes to their preservation. Even in developing countries, traditions and culture greatly interest tourists. However, farmers themselves cannot combine heritage and farm activities as composite products for tourists and are constantly seeking government assistance (Sumantra et al., 2017). In this regard, the collaborative approach between the government and the private sector provides an opportunity to develop CBAT to support the community (Muhlisin et al., 2019). Based on these results, we can state that during CBAT development in developing countries, community heritage should be sustainably preserved and promoted from a tourism perspective. Even in the rural areas of developing countries, where farmer groups and cooperatives are becoming popular (Bhatta et al., 2019), policymakers can use these channels to implement CBAT and save and promote local heritage for tourism.

Conclusion

By reviewing the literature on CBAT, this study found that most papers are from Southeast Asian countries, including Indonesia and Thailand, and have been published in recent years. The data suggest that the awareness of and trends in CBAT development have been increasing. However, only a few papers are available in popular databases, revealing that research on CBAT is limited to unpopular journals with a limited readership and awareness (Appendix I). Therefore, to increase awareness of CBAT for its development and expansion in more global contexts, renowned scholars should focus on this topic and publish their results in more popular journals. Additionally, scholars

may use different terms, such as CBT and community-based rural tourism, instead of CBAT. Since the generally accepted definition of agritourism in the 1st International Conference and International Agritourism Workshop "is operated by the farmers and in the farms," the agricultural activities and farmers' direct involvement can only be ensured in CBAT. Rural and other types of tourism can be operated by other people, which does not guarantee farmers' participation. Thus, CBAT should be promoted in both developed and developing countries.

Regarding agricultural issues in CBAT, farm activities are the primary focus and community heritage is a supplementary attraction. However, economic opportunities in the agricultural sector are low because of weak entrepreneurship in developing countries. Farmers can benefit if they are encouraged to promote CBAT as a compound product of different farm and community heritage activities. With a compound product, tourists can participate in many activities using a single package and spend meaningful time during CBAT visits. However, human resource migration from the agricultural sector to other sectors and farmers' poor tourism knowledge are significant challenges to CBAT implementation in developing countries (Bhatta & Ohe, 2019). CBAT development could be a countermeasure to protect against human resource problems; however, farmers can be trained because many farmers in rural destinations do not meet the standards to work in tourism (Bhatta & Ohe, 2020). If farmers have tourism knowledge as a motivational factor, this may encourage them to engage in agritourism.

Available natural resources near CBAT increase the number of tourists; however, in developing countries, natural resources in most rural areas have not yet been explored. Therefore, policymakers should promote unexplored natural resources from the perspective of CBAT development. Moreover, most rural villages in developing countries, such as Nepal and India, still practice organic farming systems in terrace fields. CBAT is a method used to conserve and promote traditional farming systems. Additionally, CBAT is crucial for promoting traditional and organic farming methods in both developing and developed countries. The potential role and positive impacts of CBAT for developing countries are important for the international agritourism "movement," farmer stakeholders, and surrounding communities.

This study was based on a review of 25 CBAT papers identified using the keywords listed in Table 1. This study selected only the keywords community-based agritourism/agrotourism. The other taxonomy used to define CBT, which might have included agricultural activities such as community-based homestays, community-based collaborative tourism, community-based ecotourism, and rural-based community tourism, were not included in this study. Additionally, during this review, we found that most papers were qualitative; therefore, quantitative studies should be conducted in other developing countries to explore more scientific and robust evidence for CBAT development in the global context.

Author's Note

This study was funded by Grant-in-Aid for the Promotion of Science Kakenhi no. 22K18103 and a partial scholarship provided by the International Agritourism Workshop (2022).

References

Adams, B. B. (2008). The new agritourism: Hosting community and tourists on your farm, New World Publishing, California.

Ahmad, J. A., Abdurahaman, A. Z. A., Ali. J. K., Khedif, L. Y. B. & Bohari, Z. (2014). Social entrepreneurship in ecotourism: An opportunity for fishing village of Sebuyau, Sarawak Borneo. *Tourism, Leisure Global Change 1*, 38-48.

Asker, S., Boronyak, L., Carrard, N. & Paddon, M. (2010). Effective community-based tourism: a best practice manual. Queensland, Australia: Gold Coast Campus, Griffith University. Retrieved from https://goo.gl/r19qKx (accessed January 4, 2018).

Astuti, W., Qomarun, Febela, A., Putri, R. A. & Astuti, D. W. (2016). Identification of specific characteristics of Kampung Jayengan as community-based industrial tourism. *Procedia - Social and Behavioral Sciences, 227,* 485-492.

Bhatta, K. & Ohe Y (2020). A Review of quantitative studies in agritourism: The implications for developing countries. *Tourism and Hospitality, 1(1)*, 23-40.

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.

Bhatta, K., Itagaki, K. & Ohe, Y. (2019). Determinant factors of farmers' willingness to start agritourism in rural Nepal. *Open Agriculture, 4*(1), 431–445.

Budiarti, T. & Listyanti, A. D. (2015). Development of community-based agritourism on integrated farming system towards sustainable village. *Australian Journal of Basic and Applied Sciences, 9*(7), 242-244.

Budiasa, I. W. & Ambarawati, I. G. A. A. (2014). Community-based agro-tourism as an innovative integrated farming system development model towards stainable agriculture and tourism in Bali. *The Journal of ISSAAS, 20(1),* 29-40.

Budiasa, I. W., Setiawan, B. I., Kato, H., Sekino, N. & Kubota, J. (2015). The role of the Subak system and tourism on land use changes within the Saba watershed, Northern Bali, Indonesia. *Journal of the International Society for Southeast Asian Agricultural Sciences, 21(2)*, 31–47.

Chiappa, G. D., Atzeni, M. & Ghasemi, V. (2018). Community-based collaborative tourism planning in islands: a cluster analysis in the context of Costa Smeralda. *Journal of Destination Marketing & Management, 8,* 41-48.

Deason, G., Seekamp, E., & Barbieri, C. (2022). Actor-network theory and organizational resilience to climate change in community-based tourism. *Journal of Outdoor Recreation and Tourism, 38,* 100483.

Fahmi, Z., Hamzah, A., Muhammad, M. & et al. (2013). Involvement in agro-tourism activities among communities in Desa Wawasan Nelayan villages on the East Coast of Malaysia. *Asian Social Science, 9*(2), 203-207.

Harris, R. W. (2009). Tourism in Bario, Sarawak, Malaysia: a case study of pro-poor community-based tourism integrated into community development. *Asia Pacific Journal of Tourism Research, 14(2),* 125-135.

Kandel, T. P. (2011). Tourism and impacts on traditional culture: a case study of Sirubari village, Nepal (Master's thesis). Retrieved from https://goo.gl/NAoD2L (accessed January 10, 2018).

Khamung, R. (2015). Analysis of aptitudes, aspirations, capacities, and resources for a community-based agritourism establishment. *Silpakorn University Journal of Social Sciences, Humanities, and Arts, 15*(2), 25-57.

Liang, C., Su, F. & Dunn, P. (2012). Exploring situations of the community-based multifunctional agriculture in the New England region. Agricultural & Applied Economics Association's 2012 AAEA Annual Meeting, 1-14.

Morales P. C., Aguera, F. O., Lopez-Guzman, T. & Cuadra, S. M. (2018). Community attachment and support for sustainable tourism development through the attitudes of the local population: a case study in Puerto Plata Dominican Republic. *Mediterranean Journal of Social Science, 9(2),* 173–184.

Muhlisin, M., Suharyana, Y. & Rahayininshih, Y. (2019). Collaborative governance approach for community-based agritourism: A case study of Village Ternak Cikerai Cilegon. *Advances in Social Science, Education and Humanities Research*, 410, 247-250.

Ngo, T., Lohmann, G. & Hales, R. (2018). Collaborative marketing for the sustainable development of community-based tourism enterprises: voices from the field. *Journal of Sustainable Tourism.* DOI:10.1080/09669582.2018.1443114

Ohe, Y. (2008). Impact of rural tourism operated by retiree farmers on multifunctionality: evidence from Chiba Japan. *Asia Pacific Journal of Tourism Research, 13(4),* 343-356.

Ohe, Y. (2016). Community-based rural tourism in super ageing Japan: Challengers and evolution. *ABET, 6*(1), 28-41.

Ohe, Y. (2020). Community-based rural tourism and entrepreneurship: A microeconomic approach. Singapore, Springer.

Okazaki, E. (2008). A community-based tourism model: Its conception and use. *Journal of Sustainable Tourism,16(5),* 511-529.

Porter, B. A., Orams, M. B. & Luck, M. (2018). Sustainable entrepreneurship tourism: An alternative development approach for remote coastal communities where awareness of tourism is low. *Tourism Planning and Development 15(2),* 149–165.

Preeyanan, S., Pakkapong, P. & Duanrung, B. (2015). Community participation in agro-tourism development at Klongplu, Khaokichakood, Chanthaburi Province. *Journal of Agricultural Technology, 11(7),* 2071-2080.

Rauniyar, S., Awasthi, M. K., Kapoor, S. & Mishra, A. K. (2020). Agritourism: Structured literature review and bibliometric analysis. *Tourism Recreation Research, 46(1),* 52-70.

Shinde, K. A. (2010). Entrepreneurship and indigenous entrepreneurs in religious tourism in India. *International Journal of Tourism Research 12*, 523–535.

Sittijinda, P., Poungsuk, P. & Benjamas, D. (2015). Community participation in agro-tourism development at Klongplu, Khaokitchakood, Chanthaburi province. *Journal of Agricultural Technology, 11*(8), 2071-2080.

Songkhla, N. T. & Somboonsuke, B. (2012). Impact of agro-tourism on local agricultural occupation: A case study of Chang Klang district, Southern Thailand. *Journal of Agricultural Technology, 8*(4), 1185-1198.

Sumantra, I. K., Yuesti, A. & Sudiana, A. A. K. (2017). Development of agrotourism to support community-based tourism towards sustainable agriculture. *Australian Journal of Basic and Applied Sciences, 11*(13), 93-99.

The World Bank (2014). For Up to 800 million rural poor, a strong World Bank commitment to agriculture. Retrieved from https://goo.gl/URfBvf (accessed July 15, 2018)

Wiranatha, A. S. & Suryawardani, I. G. A. O. (2018). A structural model of community-based Agritourism development at the world heritage site of Jatiluwih rice field terrace in Tabanan, Bali. *Global and Stochastic Analysis, 5(6),* 547–563.

Appendix I: CBAT Studies and Key Findings

Publication	Country	Journal name	Main topic	Specific topic	Method	Key findings
Khamung (2015)	Thailand	Silpakorn University Journal of Social Sciences Humanities and Arts	Community and CBAT	CBAT establishment	Qualitative: descriptive	• Conservation of rural vernacular landscape, cultural landscape, and agricultural tradition has become the theme of CBAT • The good foundation for CBAT are natural resources, unique farm village heritage, self-sufficiency farming, traditional life, diversified farm products, well-integrated farm practices, and farmers' skills
Ohe (2016)	Japan	Rev. Anais Bras. de Est. Tur./ ABET		CBAT evolution	Case study	• The community initially utilized the government subsidy to renovate the abolished school • The community-based organization conducts the operation and management of the school
Fahmi et al. (2013)	Malaysia	Asian Social Science		AT activities in communities	Qualitative: descriptive	• Only a moderate level of people participate in CBAT • Locals participate in meetings related to the development of agritourism activities, strengthening tourism activity and entrepreneurial activities
Preeyanan et al. (2015)	Thailand	Journal of Agricultural Technology	Motivation and CBAT	Community participation in AT	Qualitative	• An organic farming group is successful in organic agricultural product production and development • The community offers a walk rally activity in the agricultural garden and visitors can get fresh vegetables at low price
Bhatta and Ohe (2019)	Nepal	International Journal of Tourism Sciences		Farmers willing to CBAT	Quantitative: logit	• Farmers in rural areas are willing to establish CBAT • People awareness and investment are the most expected supports from the farmers for AT development
Muhslin et al. (2019)	Indonesia	Advances in Social Science, Education, and Humanities Research (Proceedings)	Entrepreneurship and CBAT	Collaborative government and CBAT	Qualitative: a holistic view	The collaborative governance approach provided opportunities for the private sector to develop the concept of AT through community support
Budiasa et al., (2014)	Indonesia	J. ISSAAS		Subak system and CBAT	Qualitative: transect	• A subak-based agrotourism development model is the best way to promote sustainable development of both agriculture and tourism • A CBAT is helpful to maintain the subak system to achieve sustainable agriculture and to improve social welfare
Wiranatha & Suryawardani, (2018)	Indonesia	Global and Stochastic Analysis		CBAT in a World Heritage site	Qualitative: Self-Interaction Matrix	• The traditional farmer's organization is needed to conserve the subak heritage site • The development of tourism is expected to give more benefit to the local community without damaging the value of the heritage site
Songkhla (2012)	Thailand	Journal of Agricultural Technology		Impact of AT on the community	Qualitative: Descriptive	• Operate a wide range of tourism activities such as demonstration of product processing, agricultural study, product distribution, and agri-business guidance. • The number of chemical fertilizers used decreased significantly • Local agricultural occupation improvement with an increase in agricultural resource conservation
Budiarti & Listyanti (2015)	Indonesia	Australian Journal of Basic and Applied Sciences	CBAT and agriculture	Integrated farming system and CBAT development	Qualitative: descriptive	• The people are enthusiastic and support the development of CBAT • People consider agritourism to be positive and want the development to increase income for rural communities
Sumantra et al., (2017)	Indonesia	Australian Journal of Basic and Applied Sciences		CBAT for sustainable agriculture	Qualitative: SWOT	• Farmers developed a range of activities as well as processed products based on Salak fruits • Farmers were interested in developing CBAT, but they seek assistance in planning, development and management
Liang et al. (2012)	New England (USA)	Presented at AAEA Annual Meeting 2012		Community-based multifunctional agriculture	Qualitative: descriptive	• Small farmers are involved in multifunctional activities • Three types of multifunctional farms ➢ Direct sale ➢ Direct sales + off-farm ➢ Direct sales+ off-farm income + value-added activities

Evaluation of Agritourism Policy in India: Qualitative Impact Analysis

Girish Mude
Dr. Vishwanath Karad MIT World Peace University (India)
girishmude@gmail.com

Abstract

The purpose of this qualitative study is to provide an overview of the recently formulated agritourism policy in India. Under tourism sector reforms, in September 2020, the State Government of Maharashtra, India, sanctioned its agritourism policy, which aims to promote rural development through agricultural tourism and encourage agriculturally based enterprises and provide employment possibilities for rural economy. An in-depth interview with 21 agritourism center owners/farmers was conducted as part of the qualitative research. Research notes and audio recordings have been translated as per the topics of the study. This study included purposeful sampling. COREQ (Consolidated criteria for reporting qualitative research) comprehensive checklist is employed for data analysis. In finding, participants voiced their appreciation for the policy and expressed a strong desire to take benefits of it. Respondents preferred the concept of training, guidance, marketing, and promoting their centers through the agritourism department of the government. Respondents from the study were pleased with the holistic approach, but they were also concerned about direct financial assistance, flexible and simplified procedures, and one-window clearances.

Keywords: Agritourism, agritourism regulations, agritourism policy, farmers, farm tourism

Introduction

The significance of agritourism and the ability of the sector to contribute to rural economic expansion and development has received a great deal of attention in the published works of academics (Che et al., 2005; Jęczmyk et al., 2015; McGehee, 2007; Tew & Barbieri, 2012). One approach for assisting rural agricultural economic development efforts is to encourage diversifying of agriculture-related activities (Schilling et al., 2012). Agritourism provides farmers with the opportunity to diversify their income streams and generate additional income through touristic activities that can be conducted on their farms. This can help farmers compensate for the steadily declining income from agricultural operations (Gil Arroyo et al., 2013; Barbieri et al., 2019; McGehee & Kim, 2004; Nickerson et al., 2001). Researchers have seen that a growing number of farmers are relying on agritourism to supplement and diversify their income (Barbieri & Mshenga, 2008; Nickerson et al., 2001; Yang, 2012). An additional benefit of agritourism is the promotion and sale of locally produced farm foods as well as the facilitation of agri-environmental and conservation initiatives (Flanigan et al., 2015).

Although several countries are taking steps to encourage and facilitate agritourism, little is known about their actual policy implementation and support mechanism. Recently, Grillini et al., (2022) discussed comparative analysis agritourism-development support schemes in Italy, the United States, and South Africa. Unfortunately, Southeast Asian nations have not yet systematically implemented the policies that will foster agritourism. Therefore, the purpose of this qualitative study is to provide an overview of the recently formulated agritourism policy in India. Under tourism sector reforms, in September 2020, the State Government of Maharashtra, India, sanctioned its agritourism policy, which aims to promote rural development through agricultural tourism and encourage agriculturally based enterprises and provide employment possibilities for rural economy. For many years, this was a long-awaited decision that would benefit local farmers and rural communities. While several nations

have policies that make it easier for tourists to stay on farms and orchards, Maharashtra in India has been at the forefront of this trend. Thus, we examined the major views and expectations about a recently framed agritourism policy in the Indian state of Maharashtra, as well as farmers' observations of the policy's prospective benefits.

A review of papers reveals that a significant number of agritourism scholars have examined research related to policy in the agritourism industry worldwide (Galluzzo, 2017b; Giaccio et al., 2018; Jin et al., 2021; Kuo & Chiu, 2006; Streifeneder, 2016). Implementing tourism operations on a farm is a kind of diversification of agricultural activities, a trend that has constantly accompanied European agriculture over the past several decades (Galluzzo, 2017b, 2017a). Further, Jin et al., (2021) mentioned a combination of factors, including but not limited to the state government's overarching strategy and leadership, the universities' robust intellectual support, the consistent involvement of industrial associations, and the interplay between these three parties at various stages of agritourism's development.

Methods

An in-depth interview with 21 agritourism center owners/farmers was conducted as part of the qualitative research. Research notes and audio recordings have been translated as per the topics of the study. This study included purposeful sampling (Palinkas et al., 2015). COREQ (Consolidated criteria for reporting qualitative research) comprehensive checklist is employed for data analysis (Tong et al., 2007).

Data Collection

The interviewees were selected from a publicly available list of Agri Tourism Development Corporation India (ATDC). The interviews were conducted by the two researchers in Maharashtra between August and September of 2021. First, a semi-structured interview process was developed in English based on existing literature and the researchers' expertise to ensure uniformity. The questions were then translated into Marathi (regional language) to elicit insightful responses from participants in their own tongue. Interviews took place face-to-face. Thirty to forty-five minutes were devoted to each in-depth interview. This procedure included a series of introductory questions concerning participant demographics and further policy-related knowledge. Researchers manually evaluated and classified data into themes to detect tendencies using the thematic analysis approach.

In conformity with ethical research norms, participants consented voluntarily and actively to participate in the study. Participants were not compensated or incentivized for their participation in the intervention or completion of data collection. The participants' demographic information is shown in Table 1.

Table1: Demographic information

Participant Number	Gender	Age	Education
1.	Male	36	12th
2.	Male	22	Postgraduate
3.	Female	28	10th
4.	Male	42	Postgraduate
5.	Male	39	Graduate
6.	Male	33	8th
7.	Male	36	Graduate
8.	Male	47	10th
9.	Male	29	12th
10.	Male	37	12th
11.	Male	30	Graduate
12.	Female	37	10th
13.	Male	25	Graduate
14.	Male	48	Graduate
15.	Female	28	Graduate
16.	Female	33	Postgraduate
17.	Male	34	12th
18.	Male	43	Graduate
19.	Male	34	Graduate
20.	Female	41	Graduate
21.	Male	34	10th

Findings

In this study, four themes were identified (Table 2) from the data related to policy evaluation. The current study is the first exploratory attempt to understand the implementation of policy and its impact on agritourism development.

Theme 1: Experience and awareness level

The first theme that emerged was experience and awareness level towards agritourism policy. Participants were engaged and familiar with policy. Most participants noted an increase in positive emotions as a significant difference. The educational aspect of agritourism was significant to these owners. This is exemplified in the following comments:

I think this policy has given me a chance to start agritourism centre with more vigour and passion… will definitely avail facility. (Participant 8)

Yes…. this policy has given good amount of recognition to our agritourism activity….people sometime still ask for luxury treatment. (Participant 3)

We always wanted to start fishery animal and poultry farming along with agritourism. (Participant 13)

I am happy that government is issuing registration certificate and bank loan facility is available for setting up agritourism centre. (Participant 16)

Now I can feel confident to start a agritourism facility…. I can help my family and can be less dependent on agriculture activity. (Participant 2)

I was looking for an easy way to start an agriculture centre, and I was glad to see that the cost to register is very low….I am very happy with the policy at least government is thinking about us. (Participant 9)

Theme 2: Effectiveness and Benefits of Policy

Agritourism is becoming progressively more popular as farmers seek to diversify their businesses and increase their profits through agritourism. Finding are consistent with Brandth & Haugen (2011) and Brinkley (2012). Incorporating agriculture and tourism creates new revenue streams for farmers, but it also raises several questions and issues for agritourism businesses. Employment opportunities, tax exemptions, and gas and electricity subsidies are key advantages of the policy. Participants' summaries appear below.

Because of this policy now we can feed our family…. My family member are working here.. we will proud in our village now. (Participant 7)

This agritourism policy has given good guidelines to start agritourism ….This venture is now acting bread and butter for my family. (Participant 13)

Yes …there are more jobs been created… now we have a cook and one assistant at our centre. (Participant 15)

Yes….. jobs are formed.. my two family members are working on this agritourism centre. (Participant 14)

The benefit such as GST electricity charges and other incentives are very much appreciative (Participant 5)

Gas connection and electricity charges at residential rate are appreciating from the government. (Participant 21)

Help from tourism department in promoting our agritourism and keeping our name on website is most deserving thing happened under this policy. (Participant 17)

Theme 3: Impact on Agritourism Development

Participants noticed that agritourism has helped rural areas in more ways than one. It has provided a new source of revenue and employment for self, as well as promoted environmental protection and an understanding and appreciation of rural culture and minority traditions. Those findings are especially significant considering the recent early success of agritourism in India.

I'm happy that this policy is also dedicated to conserve environment as well as society at the large. I think this is most positive things happening towards development of agritourism. (Participant 1)

This policy is giving a good advantage to be sustainable in terms of our farm and providing tourism activity on farm. (Participant 4)

Our standard of living has increased. we got good amount of money now ….. it is a good opportunity for us to exhibit our farm to tourist and explore possible avenues of income(Participant 20)

The policy seems to be very comprehensive… it is not only giving an incentive and exemption in taxes but also promoting our agritourism centres ….Government is doing good things. (Participant 18)

As we don't have any idea about agritourism activity… training and guidance is going to help us to set up this business more professionally. (Participant 11)

Theme 4: Involvement and Suggestions

A fourth theme that emerged was involvement of farmers and suggestions toward policy. Many participants reported that the agritourism policy crafted by the Maharashtra Tourism department should be updated by adding some important points.

I suggest there should be financial aid for establishing the agritourism centres (Participant 15)

There should be seed funding availability for setting up agritourism centre. (Participant 10)

We are poor….I have studied till 8th only….We really expect more investment and financial aid in establishing these centres (Participant 6)

We also want a good marketplace to be created for selling our locally produce good and handicrafts (Participant 1)

Table 2: Themes and questions for participants

Investigated Theme	**Questions**
Experience and awareness level	Do you think this policy has given agritourism sufficient recognition?
Effectiveness and Benefits of Policy	What are the social, environmental, and economic benefits of putting this policy into action? Do you think policy w lead to a sustainable approach to Indian farms?
Impact on agritourism development	How did agritourism policy help in developing your agritourism? Do you think more jobs can be created if this kind of policy is fully implemented? Has the standard of living improved?
Involvement and Suggestions	At what extent you would like to use this policy? Do you suggest any amendment in existing policy?

Result and Discussions

After conducting semi-structured interviews in September 2021, the data were analyzed in October 2021. Farmers interviewed on the concept of agritourism policy had a wide range of views. They voiced their appreciation for the policy and expressed a strong desire to take benefits of it. Farmers preferred the concept of training, guidance, marketing, and promoting their centers through the agritourism department of the government. Respondents from the study were pleased with the holistic approach, but they were also concerned about direct financial assistance, flexible and simplified procedures, and one-window clearances.

According to policy, agritourism centres can be established by individual farmers, agricultural cooperative societies, agricultural research centres, agricultural institutions, or agriculturally focused businesses owned by farmers. Policy guidelines stipulate possessing a plot of land between two and five acres in size, fully equipped with living area and kitchen amenities. Agritourism registration costs Indian Rupees (INR) 2,500 the first time around and INR 1,000 every five years after that (Deshpande, 2020; Environment and Cultural Affairs Department, 2020).

It was decided to make substantial modifications to the agritourism policy. If agricultural land is leased for a minimum of ten years, the lessee may seek for the lessor's permission to operate an agritourism center on that land. In accordance with the agricultural zone's town planning regulations, the occupancy of more than eight rooms will be permitted, although subject to a limitation on the amount of built area. In addition, each registered firm is required to install DoT-approved center boards with the Maharashtra Tourist logo in the Agri tourism center (Adimulam, 2022; Directorate of Tourism, 2022).

Agritourism would provide producers with an extra revenue stream and a platform for direct consumer marketing. The new policy allows individual farmers, cooperatives, and even colleges and universities to build agritourism centers. To implement this policy, agritourism center owners/ farmers are given priorities in various government schemes of farm pond, greenhouse establishment, fruit, and vegetable cultivations, etc. Additionally, farmers could take advantage of tax benefits and government subsidies for utilities like power and gas.

Conclusions

India's rich agricultural and tourist resources, as well as its indigenous cultural legacy, provide the country with the foundation it needs to recognize agritourism as a key activity to assist farmers and achieve sustainable development. This policy is a facilitator not only for owners of agritourism centers and farmers, but also for individuals who are interested in travelling, valuing the nature, spending time on farms, and indulging in eco-friendly tourism, tasting organic and local flavours. India has developed an agritourism policy to support rural economy and agri-based businesses. This study investigated the policy's possible benefits for farmers and other stake holders. Through semi-structured interviews, farmers shared that they welcomed the idea of government-sponsored marketing and publicity. A single-window approval and direct financial assistance were desired by participants.

Several countries worldwide have similar enabling policies to aid tourists with accommodation facilities on farms, but Maharashtra has made significant strides in India in this area. Agritourism offers a unique chance to merge components of the tourism and agriculture industries to benefit visitors, farmers, and communities economically, educationally, and socially. Farmers across the state, as well as rural individuals and communities, have benefited from this new agritourism legislation.

References

Adimulam, S. (2022, January 12). Maharashtra: Agri tourism policy to see new amendments soon. *The Free Press Journal*. https://www.freepressjournal.in/mumbai/maharashtra-agri-tourism-policy-to-see-new-amendments-soon

Barbieri, C., & Mshenga, P. M. (2008). The role of the firm and owner characteristics on the performance of agritourism farms. *Sociologia Ruralis*, *48*(2). https://doi.org/10.1111/j.1467-9523.2008.00450.x

Barbieri, C., Sotomayor, S., & Aguilar, F. X. (2019). Perceived benefits of agricultural lands offering agritourism. *Tourism Planning and Development*, *16*(1), 43–60. https://doi.org/10.1080/21568316.2017.1398780

Brandth, B., & Haugen, M. S. (2011). Farm diversification into tourism - Implications for social identity? *Journal of Rural Studies*, *27*(1). https://doi.org/10.1016/j.jrurstud.2010.09.002

Brinkley, C. (2012). Evaluating the benefits of peri-urban agriculture. *Journal of Planning Literature*, *27*(3). https://doi.org/10.1177/0885412211435172

Che, D., Veeck, A., & Veeck, G. (2005). Sustaining production and strengthening the agritourism product: Linkages among Michigan agritourism destinations. *Agriculture and Human Values*, *22*(2). https://doi.org/10.1007/s10460-004-8282-0

Deshpande, A. (2020, September 7). Maharashtra introduces agro-tourism policy. *The Hindu*. https://www.thehindu.com/news/national/other-states/maharashtra-introduces-agro-tourism-policy/article32538399.ece

Directorate of Tourism, M. (2022). *Agritourism*. https://www.maharashtratourism.gov.in/agro-tourism

Environment and Cultural Affairs Department, (2020). https://www.maharashtratourism.gov.in/documents/38210/1718089/Agri+Tourism+Policy.pdf

Flanigan, S., Blackstock, K., & Hunter, C. (2015). Generating public and private benefits through understanding what drives different types of agritourism. *Journal of Rural Studies*, *41*, 129–141. https://doi.org/10.1016/j.jrurstud.2015.08.002

Galluzzo, N. (2017a). The development of agritourism in Romania and role of financial subsidies allocated under the common agricultural policy. *Geographia Polonica*, *90*(2), 25–39. https://doi.org/10.7163/GPol.0087

Galluzzo, N. (2017b). The impact of the common agricultural policy on the agritourism growth in Italy. *Bulgarian Journal of Agricultural Science*, *23*(5), 698–703.

Giaccio, V., Mastronardi, L., Marino, D., Giannelli, A., & Scardera, A. (2018). Do rural policies impact on tourism development in Italy? A case study of agritourism. *Sustainability (Switzerland)*, *10*(8). https://doi.org/10.3390/su10082938

Gil Arroyo, C., Barbieri, C., & Rich, S. R. (2013). Defining agritourism: A comparative study of stakeholders' perceptions in Missouri and North Carolina. *Tourism Management*, *37*. https://doi.org/10.1016/j.tourman.2012.12.007

Grillini, G., Sacchi, G., Chase, L., Taylor, J., Van Zyl, C. C., Van Der Merwe, P., Streifeneder, T., & Fischer, C. (2022). Qualitative assessment of agritourism development support schemes in Italy, the USA and South Africa. *Sustainability (Switzerland)*, *14*(13), 1–23. https://doi.org/10.3390/su14137903

Jęczmyk, A., Uglis, J., Graja-Zwolińska, S., Maćkowiak, M., Spychała, A., & Sikora, J. (2015). Research note: Economic benefits of agritourism development in Poland -An empirical study. *Tourism Economics*, *21*(5), 1120–1126. https://doi.org/10.5367/te.2014.0391

Jin, X., Wu, H., Zhang, J., & He, G. (2021). Agritourism development in the usa: The strategy of the state of michigan. *Sustainability (Switzerland)*, *13*(20). https://doi.org/10.3390/su132011360

Kuo, N. W., & Chiu, Y. T. (2006). The assessment of agritourism policy based on SEA combination with HIA. *Land Use Policy*, *23*(4), 560–570. https://doi.org/10.1016/j.landusepol.2005.08.001

McGehee, Nancy G, & Kim, K. (2004). Motivation for agri-tourism entrepreneurship. *Journal of Travel Research*, *43*(2). https://doi.org/10.1177/0047287504268245

McGehee, Nancy Gard. (2007). An agritourism systems model: A Weberian perspective. *Journal of Sustainable Tourism*, *15*(2). https://doi.org/10.2167/jost634.0

Nickerson, N. P., Black, R. J., & McCool, S. F. (2001). Agritourism: Motivations behind farm/ranch business diversification. *Journal of Travel Research*, *40*(1). https://doi.org/10.1177/004728750104000104

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Schilling, B., Sullivan, K., & Komar, S. (2012). Examining the economic benefits of aAgritourism: The case of New Jersey. *Journal of Agriculture, Food Systems, and Community Development*, 199–214. https://doi.org/10.5304/jafscd.2012.031.011

Streifeneder, T. (2016). Agriculture first: Assessing European policies and scientific typologies to define authentic agritourism and differentiate it from countryside tourism. *Tourism Management Perspectives*, *20*, 251–264. https://doi.org/10.1016/j.tmp.2016.10.003

Tew, C., & Barbieri, C. (2012). The perceived benefits of agritourism: The provider's perspective. *Tourism Management*, *33*(1), 215–224. https://doi.org/10.1016/j.tourman.2011.02.005

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, *19*(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Yang, L. (2012). Impacts and challenges in agritourism development in Yunnan, China. *Tourism Planning and Development*, *9*(4). https://doi.org/10.1080/21568316.2012.726257

Policies and Model for Developing Agritourism in India

Sarath Sennimalai
Tamil Nadu Agricultural University (India)
saraths1995@gmail.com

S. D. Sivakumar
Tamil Nadu Agricultural University (India)

Abstract

The demand for agritourism is growing due to globalization and increased public interest in farm activities and rural lifestyles. Understanding customer preferences and the expectations of agritourism providers would help stakeholders develop and strengthen the agritourism value chain. The main aim of this study was to investigate customer preferences and agritourism providers' expectations. The study was conducted in farm resorts located in the Coimbatore district of Tamil Nadu, India, as it was prominent in capturing customers' preferences towards agritourism. About 400 customers with diverse backgrounds participated in this study. For capturing agritourism providers' expectations, 20 farm resort managers were interviewed. The results of this study showed that most of the customers were female, and weekends were the preferred occasion for agritourism. The majority of customers selected local and traditional food as their desired cuisine on the farm. They also preferred the farm to offer accommodation and food with active participation in farm tasks, as a working farm. Accordingly, a model was identified and policies were recommended for governments to develop sustainable agritourism.

Keywords: Agritourism, customers, preference, policy

I. Introduction

India's growth is primarily backed by its rich natural and cultural resources. Capitalizing on this, the tourism sector in India has witnessed one of the fastest growth rates worldwide (India Tourism Statistics, 2020). The tourism industry takes place in destinations with a range of natural or man-made features that attract non-local visitors (or tourists) for various activities. Along with defining a destination as a specific geographic area, the classical definition of a tourism destination included the belief that specific criteria must be met for it to be considered a tourism destination. These criteria included the presence of tourist attractions, accommodations, and transportation to, from, and within the destination (Del and Baggio, 2015). Later, tourism evolved into different forms, and among those, agritourism is one form. Agritourism encompasses a wide range of activities and services, including lodging, food and beverage, events, festivals, nature contemplation, U-pick (harvest), educational and recreational trips, hunting, fishing, and the sale of goods (Tew & Barbieri, 2012). It also includes activities that involve individuals directly participating in agricultural activities (picking fruits) as well as indirect participation in farm-based activities such as visiting farmer's markets (Barbieri, 2013), recreational activities or events where the agricultural setting serves as the landscape (weddings), farm accommodation, and food services.

Most agritourism businesses are small and run by farm families who do not know much about the market or how to run a business. To make experiential offerings, an understanding of each customer's needs and behavior is necessary (Hurst & Niehm, 2012). If they want to stay ahead of the competition and run a successful business, they need to know a lot about what customers want from agritourism offerings (Kenebayena, 2014). Venkatraman et al., (2012) agree with this statement and state that reliable information about customer preferences is necessary to figure out how people will make different choices. Hurst et al., (2009) also emphasize the importance of looking into rural tourism

customers' needs. They found a significant difference in how local and tourist customers think about agritourism.

The process of delivering customized tourism services is vital for meeting the needs of people from different backgrounds. This is especially important for an agritourism industry that focuses on experiential services. Shaw et al., (2011) state that customer experience is becoming increasingly important in the tourism industry. They also note that the interaction between tourism service providers and customers is growing, and they are more willing to get involved in the co-creation process.

Moreover, in Europe and North America, agritourism is a policy instrument to regenerate regional economies and protect rural traditions and landscapes because of its vast advantages. However, in developing countries like India, agritourism is still in its nascent stage. There are no well-developed policies or guidelines for promoting agritourism in India and Tamil Nadu.

With this in mind, the study was carried out to determine customer preferences and the challenges and expectations of farm resort managers in running agritourism. Based on this, a model was developed, and policy recommendations were framed for the sustainable development of agritourism.

II. Review of Literature

Agritourism is a type of tourism that occurs within the context of long-term tourist development (Barbieri, 2013). It has evolved primarily due to the decline of agriculture in many rural areas, which has forced residents to seek alternate sources of economic development. Agritourism is seen as a development tool in marginalized regions, generating economic benefits and enhancing the local community's living standards (Cohen et al., 2014).

A common understanding of agritourism is essential for clear communication, consistent and reliable measurement, informed policy, and initiatives that benefit farms and ranches and their communities (Chase et al., 2018). If adequately exploited and integrated through policy interventions, these activities may represent not only a business opportunity for individual agritourism income but also an excellent mechanism to support rural development by promoting new farm-related activities, new professional profiles, and new forms of employment, as proposed by Naidoo and Sharpley (2016). Policies aimed specifically at agritourism are vital, but they are just one side of the coin; the other is made up of regional development policies, which are equally significant. Regional policies are vital for increasing agritourism revenue because they concentrate on improving the exploitation of local resources and endogenous potentialities, a suitable infrastructure network, and the necessary services to tourists in a particular region (Kachniewska, 2015).

Unfortunately, customer preferences are not relatively explored in agritourism research, resulting in a compromise of marketing campaigns to promote agritourism (Addinsall et al., 2017). To reduce this gap, it is necessary to streamline the agritourism service with the customer's preference. This will help to give specific promotional labels to agritourism and enable potential customers to identify the activities and services associated with agritourism (D'Souza et al., 2021). This will help signal the desired image of agritourism.

Finally, sustainable agritourism is the combination of agriculture and tourism with sustainability factors such as social, cultural, economic, and environmental drivers of agritourism in the long run (Addinsall et al., 2017).

III. Methodology

From 2014 to 2018, Tamil Nadu ranked first in India in terms of attracting both local and international visitors (TTDC, 2019). With this in mind, the research is being conducted in farm resorts located in the Coimbatore district, which has the highest number of farm resorts (28), followed by Nilgiris (22) and Theni (20). Coimbatore is a popular location for agritourism and was chosen for its potential to capture customers' interest in this field. Ten farm resorts in the Coimbatore area

were selected for the study based on their maximum customer footfalls. A total of 400 customers, consisting of 40 domestic customers from each of the ten resorts, were randomly selected to provide a diverse range of agritourism preferences. A well-prepared questionnaire was used to collect socio-demographic information and customer preferences for agritourism.

Additionally, this study included farm resort owners to gain insight into their challenges and expectations in agritourism. Farm resorts licensed under bed and breakfast (homestay) were selected for this purpose, and 20 farm resort owners were contacted to understand their challenges, expectations, and suggestions for promoting agritourism in the region.

Descriptive and Garrett ranking techniques were conducted using statistical tools to arrive at the results.

IV. Results and Discussion

The majority of respondents in this study were female (56.5%), indicating that females had a higher interest in agritourism than males. On average, the respondents were young adults (M=33.64), with 45.75% falling between the ages of 26-35, followed by the 36-45 age category (23.25%). More than half of the respondents had a graduate-level education (60.5%), while 30.25 % had a post-graduate degree. In terms of occupation, 52.75% of respondents were employees, followed by housewives (23%), businesspeople (9.50%), and students (14.75%). Overall, the majority of respondents had an annual income between 5-10 lakhs (38.5%), followed by 11-15 lakhs (32.25%) and 16-20 lakhs (18.5%).

4.1 Customer's preferences toward agritourism

This study has shown that customers who have a relative or close friend with a farm connection (44.75%) are more likely to visit agritourism sites than those without any connection (32%). Natural resources, rural scenery, or a combination of both were found to be increasingly appealing to customers and stimulated participation in agritourism. As a result, farm resort owners should focus on incorporating more nature-oriented features to enhance the customer experience.

Most customers reported visiting agritourism sites occasionally (39.5%), followed by rarely (32.75%) and often (11.5%). To increase customer loyalty and repeat visits, farm resort owners should engage in ongoing customer relationship management.

The majority of customers preferred to visit on weekends (44.25%), followed by vacations (30%), and seasonal festivals (13%). Farm resort owners should develop plans and offer packages for weekend visits as this is the most popular occasion for customers. There was no significant difference in customer preferences for locations, except for accessibility from metropolitan cities (15.75%). Customers preferred locations that are easily accessible from towns, remote areas, and famous tourist spots. The preference for remote areas indicated that customers sought a calm and natural environment.

Most customers preferred to have local and traditional food (44.5%), followed by the availability of both western and local food (38.5%). Traditional dishes specific to a particular area were an important motivation for customer travel.

The majority of customers preferred working farms that offered accommodation and food with active participation in farm activities (66%), followed by working farms that offered accommodation and food (25.5%). Most customers preferred to stay on agritourism sites for two to three days (63.5%), followed by four to five days (25.75%) and less than five days (10.75%). Customers preferred cottage accommodations (72%) over dormitories (28%).

Entertainment was ranked as the top activity by customers, with a mean score of 58.06, followed by hospitality services, educational services, and on-farm direct sales. Farm resort owners should focus on providing a variety of entertainment activities to meet customer preferences.

4.2 Policy recommendations

Policy recommendations were framed based on the discussions and interviews conducted with agritourism providers. They are:

- State Government has to form a separate agritourism development committee for formulating guidelines for agritourism. The guidelines may include not serving prohibited materials and having to provide the utmost safety needs to customers.
- The state tourism department has to provide a separate license under agritourism to be eligible for availing of loans and tax benefits. Co-operative societies may be included in providing loan facilities to develop agritourism.
- Local administrations such as village panchayats can help in the coordination and facilitation of agritourism because village panchayats have a strong influence on local communities and their support is important to the success of agritourism.
- The state tourism department has to organize seasonal festivals along with agritourism farms for a wide reach.
- The state government has to facilitate the adoption of digital technologies and platforms for agritourism through some measures like enabling internet infrastructure facilities in rural areas.
- Rural youths can be trained for agritourism by offering diploma/certified courses. It improves their skills and understanding of agritourism.
- Awareness of agritourism has to be increased through online and social media platforms. Greater emphasis needs to be placed on social media and other online portals for popularizing agritourism as a tourism product. Incredible India and Enchanting Tamil Nadu digital platforms can be utilized for promoting agritourism. In addition, digital platforms for listing agritourism farms for booking and finding customers can be utilized. Further, state tourism departments may also highlight agritourism in their campaigns.
- Marketing may be in partnership with the travel trade and online platforms to benefit from their network and marketing expertise.

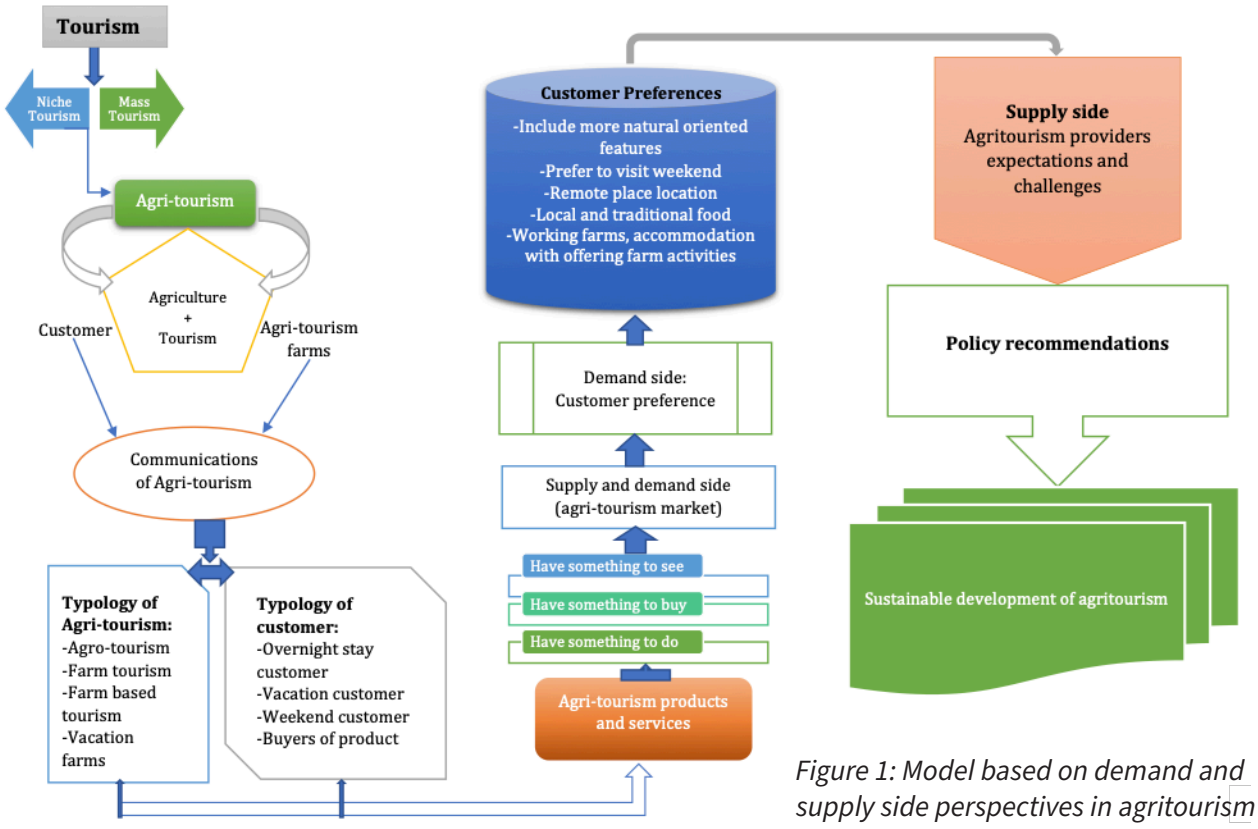


Figure 1: Model based on demand and supply side perspectives in agritourism

Agritourism farms can improve their hospitality services by undergoing professional training which would impact their success in the long run. The state government has to organize training workshops to enrich the hospitality skills of the farm resort owners and local communities of the region to ensure a better experience for the customers.

4.3 Model based on demand and supply side perspectives in agritourism

The model presented in Fig.1 clearly illustrates the principles of agritourism, customer preferences towards agritourism, and supply-side perspectives, such as agritourism providers' expectations and challenges.

V. Conclusion

This study reveals that the majority of customers were female and had a higher participation rate compared to male customers. Customers mainly preferred natural features and weekends as their preferred occasions. They also preferred working farms that offered accommodation and food with active participation in desired farm activities. The overall model also clearly indicates supply and demand side perspectives for agritourism.

The proposed marketing implications of this study are beneficial for developing the relationship between agritourism farms and customers, thereby strengthening the value of tourism products in a particular region. This study also provides managerial insights that agritourism farms can implement to develop or strengthen their offerings by better responding to their customers' needs and increasing their level of satisfaction.

Authors' Note

This study was funded by the Indian Council of Social Science Research (ICSSR), New Delhi under the Doctoral Fellowship Grant 2019-20. Portions of these findings were presented as an oral at the 2022 International Workshop on Agritourism, Burlington, Vermont, USA. We have no conflicts of interest to disclose. Correspondence concerning this article should be addressed to Sarath Sennimalai, Department of Agricultural and Rural Management, Tamil Nadu Agricultural University, Coimbatore-641 003, India. Email: saraths1995@gmail.com

References

Addinsall, C., Scherrer, P., Weiler, B., & Glencross, K. (2017). An ecologically and socially inclusive model of agritourism to support smallholder livelihoods in the South Pacific. *Asia Pacific Journal of Tourism Research*, *22*(3), 301-315.

Barbieri, C. (2013). Assessing the sustainability of agritourism in the US: A comparison between agritourism and other farm entrepreneurial ventures. *Journal of Sustainable Tourism*, *21*(2), 252-270.

Chase, L. C., Stewart, M., Schilling, B., Smith, B., & Walk, M. (2018). Agritourism: Toward a conceptual framework for industry analysis. *Journal of Agriculture, Food Systems, and Community Development*, *8*(1), 13-19.

Cohen, S. A., Prayag, G., & Moital, M. (2014). Consumer behaviour in tourism: Concepts, influences and opportunities. *Current issues in Tourism*, *17*(10), 872-909.

D'Souza, C., Taghian, M., & Brouwer, A. R. (2021). Ecolabels information and consumer self-confidence in decision making: A strategic imperative. *Journal of Strategic Marketing, 29*(2), 141-157.

Del Chiappa, G., & Baggio, R. (2015). Knowledge transfer in smart tourism destinations: Analyzing the effects of a network structure. *Journal of Destination Marketing & Management*, *4*(3), 145-150.

Hurst, J. L., & Niehm, L. S. (2012). Tourism shopping in rural markets: A case study in rural Iowa. *International Journal of Culture, Tourism and Hospitality Research*, *6*(3), 194-208.

Hurst, J. L., Niehm, L. S., & Littrell, M. A. (2009). Retail service dynamics in a rural tourism community: Implications for customer relationship management. *Managing Service Quality: An International Journal*.

India Tourism Statistics. (2020). *Ministry of tourism*, Govt. of India.

Kachniewska, M. A. (2015). Tourism development as a determinant of quality of life in rural areas. *Worldwide Hospitality and Tourism Themes*.

Kenebayeva, A. S. (2014). A study of consumer preferences regarding agritourism in Kazakhstan: A comparative study between urban and rural area consumers. *Worldwide Hospitality and Tourism Themes*.

Naidoo, P., & Sharpley, R. (2016). Local perceptions of the relative contributions of enclave tourism and agritourism to community well-being: The case of Mauritius. *Journal of Destination Marketing & Management*, *5*(1), 16-25.

Shaw, G., Bailey, A., & Williams, A. (2011). Aspects of service-dominant logic and its implications for tourism management: Examples from the hotel industry. *Tourism management*, *32*(2), 207-214.

Tew, C., & Barbieri, C. (2012). The perceived benefits of agritourism: The provider's perspective. *Tourism management*, *33*(1), 215-224.

TTDC Statistical Handbook, Tamil Nadu. (2019). Tamil Nadu Tourism Development Corporation (TTDC), Govt. of Tamil Nadu.

Venkatraman, V., Clithero, J. A., Fitzsimons, G. J., & Huettel, S. A. (2012). New scanner data for brand marketers: How neuroscience can help better understand differences in brand preferences. *Journal of Consumer Psychology*, *22*(1), 143-153.

Aspects Related to Evaluation of Forest Ecosystems Services In a Natural Park

Gabriela Baciu
"Ștefan cel Mare" University (România)
gabrielaelena.baciu@gmail.com

Abstract

Ecosystems are directly linked with natural capital and resources. Throughout history ecosystems offered to human beings support for survival and quality of life. At the beginning, resources were extensively exploited, then intensively, so in time natural reserves were slowly depleted. Nowadays, the human-nature relationship has become more and more complex, with increasingly negative effects, unfortunately, for both parties. Identifying the most appropriate methods and techniques to evaluate ecosystem services, especially non-marketable ones, is a challenging task both for researchers and policy makers. Romania's Natural Parks - natural areas protected and preserved by the government following the recommendations of International Union for Conservation of Nature (IUCN) classification categories- provide a wide range of ecosystems services. The evaluation of the total economic value (TEV) of the ecosystems is gaining increasing importance in the promotion of evidence-based public policies. Increasing awareness by political decision-makers and stakeholders of the total value of ecosystems can support the promotion of better, more balanced and sustainable public policies in the global context. "Mountain product" European quality scheme is an example of public policy aiming to better valorize ecosystem services. This paper proposes a set of methods and techniques for creating a methodology to evaluate TEV of the services provided by one of Romania's Natural Parks, where the Mountain Product quality scheme is utilized.

Keywords: ecosystem services, public policies, total economic value, sustainability, mountain product, agri-tourism

Introduction

Forests holds a multi-dimensional part in humans' and ecosystems' wellbeing (Heal, 2000). Forest ecosystem services (ES) are classified into: provisioning services (food, water, wood, etc.); regulatory services (which regulate climate, floods, disease, carbon and other gas emissions, water quality); cultural services (which provide recreational, aesthetic, cultural, spiritual benefits) and support services (soil formation, photosynthesis, nutrient cycling) (Millennium Ecosystem Assessment, 2005). These provide a range of tangible goods that can be traded on the market (timber and non-timber forest products), as well as a wide range of services that do not actually have a market, but which translate into social, cultural, scientific, health benefits, perceived as free, inexhaustible and, therefore, underestimated by most consumers (Belmontes et al. 1997). The current values of ecosystem services provided by forest have raised the interest of a wide range of researchers who started to investigate these values (Ninan et al., 2014; Jordan et. al., 2014).

The evaluation methods have been improved and developed over the time and evolved from the first models limited to particular locations (Davis and Knetsch, 1966; Oster, 1977; Boxall et al., 1996) to more complex models of environmental landscape change (Brouwer et al., 2010).

TEV methodology developed in 2010 in the TEEB Report (TEEB, 2010) identifies two main components of the VET of ecosystem services: use value and non-use value.

Use value represents actual use value and potential use value while non-use value includes preservation value and intrinsic value. Precisely, use value represents direct services provided by ecosystems: meat, fish, plant products, recreation, well-being, spiritual fulfillment, education, research; or indirect: clean air, purified water, soil fertility, pollination, pest control, and so on.

Non-use value includes philanthropic and altruistic values, namely the desire that the services offered by ecosystems can be preserved for future generations, as well as the desire that the species creating the ecosystem continue to exist. These values are the most difficult to evaluate in financial terms, considering that they refer to moral, aesthetic, religious principles, for which there is no proper trading market.

One of the most deprived areas in terms of valuating the services provided are mountainous areas. These areas face a number of obstacles: low soil fertility, shorter periods of vegetation, and structural disadvantages. These disadvantages include a decrease in the young population, abandonment of economic activities, labor force migration, long distances from the decision making and administrative centers, and isolation from the communication routes and sales markets.

In order to help the EU farmers to protect the names of specific agri-food products to promote their unique characteristics linked to their geographical origin as well as traditional know-how through quality schemes, European Commission has adopted several regulations establishing quality schemes for: PDO – protected designation of origin (food and wine), PGI – protected geographical indication (food and wine), GI – geographical indication (spirit drinks), Mountain product (food) and Product of EU's outermost regions. Operating quality schemes for producers to reward their efforts to produce a diverse range of quality products can benefit the rural economy and create added value for traditional specialties. The quality Mountain product established by EU Regulation 1151/2012 and EU Regulation 665/2014 reflects also non-marketable services such as fresh and non-polluted water, air and land, traditions and gastronomic heritage.

Methods

A systematic review of the literature was conducted by consulting a wide range of scientific peer-reviewed research articles using Google Scholar, ResearchGate, Web of Science and SCOPUS. Most articles analyzed dealt with services provided by forest ecosystems and methods for ecosystem services valuation, especially the non-use value. Upon completion of the literature review, a small group of experts brainstormed and tested a multicriteria analysis with the aim to select a set of methods and techniques for creating a methodology to evaluate TEV of the services provided by a Natural Park in Romania. The Natural Park which was the object of the current study corresponds to the category III – Natural monument or feature combined and IV - Habitat or species management area, of IUCN classification. Category III - Natural monument or feature: Areas set aside to protect a specific natural monument, which can be a landform, sea mount, marine cavern, geological feature such as a cave, or a living feature such as an ancient grove. Category IV - Habitat/species management area: Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category (IUCN Guidelines).

Findings

The aim of this research was to identify the most appropriate methods and techniques developed and tested in order to create a methodology to evaluate TEV of the services provided by eco-systems.

Studied area

Located in the Eastern part of the Romanian Southern Carpathians, Bucegi Natural Park (BNP) is designated by the International Union for the Conservation of Nature (IUCN) as IUCN V – Natural park category and Natura 2000 protected area. The area of BNP is 32.5 ha, out of which more than 60% represents forests. The conservation objective for which the BNP and Natura 2000 site was established was to maintain or restore to a favorable state of conservation 24 habitats of community interest and 27 species of community interest: five species of mammals, two species of amphibians, one species of fish, 12 species of invertebrates and seven species of plants. The traditional activities are the pastoral ones, favored by the pastures and the proximity to the transhumance roads, complemented by the exploitation of wood, the energy potential of the area and the exploitation of

limestone. PNB is one of the most visited natural park in the Carpathians (Dumitraş and Drăgoi, 2005), with one billion tourists yearly.

A wide range of methods and techniques for evaluating the TEV of services offered by ecosystems were identified but our analysis focused on five methods (M): M1. Shadow pricing (Tower et al. 1986; Barton et al., 2017); M2. Production function (Bateman et al., 2002; Freeman, 2014); M.3 Hedonic pricing (Freeman, 2014); M.4 Travel cost (Hotelling, 1949; Freeman, 2014); and M.5 Contingent Valuation Method (Freeman, 2014).

- M1. Shadow pricing is using the market prices which are adjusted for policy distortions, transfer payments and market imperfections. They reflect the opportunity cost to society as a whole, of the goods which are traded on the market (fish, wood, mountain products).
- M2. Production function evaluates the contribution of non-marketed products and services provided by an ecosystem, together with other inputs for goods production which are traded on the market and is used to estimate how the changes in the ecosystems (e.g., deforestation and water pollution) may affect productive activities and production cost (e.g., fishing, farming).
- M3. Hedonic pricing estimates the price that individuals are willing to pay for certain environmental amenities (such a forest view) based on property market prices, assuming that the advantages of that amenity is mirrored in the property price.
- M4.Travel cost is used to evaluate the recreational services. The cost is estimated using revealed-preferences techniques and represents an approximation of the price and time that the visitors are willing to pay to visit a location.
- M5. Contingent Valuation is used to evaluate the ecosystem services based on stated preferences of potential consumers by applying a scenario in relation with a hypothetical market.

The experts who participated in the brainstorming session came up with eight ideas/criteria that the set of methods and techniques analyzed should comply with, in order to be suitable for evaluating the ES provided by a Natural Park: 1) Allows the quantification of the TEV of ES through monetary and non-monetary methods; 2) Is specific to the evaluated ES; 3) To be based on available/existing datasets; 4) Is carried out with the consultation of the stakeholders and to respond to the requirements/needs of the central/local authorities and other interested parties, to provide information for making decisions regarding the proper functioning of the park in the context of climatic changes; 5) Has a high degree of objectivity; 6) Is easy/cheap/simple to apply; 7) Can be replicate for other parks; 8) The development/testing time is reasonable.

The application of the multi-criteria analysis, revealed that the two most important criteria that must be taken into account are: 4) Is carried out with the consultation of the stakeholders, to respond to the requirements/needs of the central/local authorities and other interested parties, to provide information for decision-making regarding the proper functioning of the park in the context of climate change, and 2) Is specific to the evaluated ES. Further processing of the data showed that Method 5, Contingent Valuation Method, is the most appropriate to provide an assessment of forest ES in the studied area.

Mountain products, as defined in the EU Regulation no. 665/2014, is an example of goods provided by ES which can be assigned both provisioning and cultural services. Therefore, their price should also reflect non-marketable services such as living cultural and gastronomic heritage. The Mountain product quality scheme requires that in order to receive certification, livestock, forest fruits, and honey must be raised and processed in mountain areas. With regards to livestock, the certification "Mountain product" may be applied to products obtained from animals reared for at least the last two thirds of their life in mountain areas if the products are processed in those areas. The certification may also be applied to products obtained from transhumance, raised at least one quarter of their life in transhumance and which have grazed pastures in mountain areas. (EU Regulation no. 665/2014).

Recent developments in Romania related to mountain products quality scheme shows that between 2017 and 2022, 3450 products received certification, and most of the participants in the study declared that the products were sold locally along with tourism or agri-tourism packages, or at the market in nearby cities, fairs, events, festivals, or to loyal customers in their own stores (ADER, 2022).

Discussions

Ecosystems provide a range of marketable and non-marketable services and the researchers developed methods and techniques to evaluate the use and non-use value. Evaluating TEV in a comprehensive and relevant manner is challenging due to the fact that natural, historical and cultural resources are not traded like any other goods and services and do not have an explicit monetary value, making them difficult to quantify and put a price on it. Despite the increase in the number of scientific communications presenting the valuation of ES and valuation methods and techniques based on non-monetary methods, it has not been possible to formalize a relatively unified methodology to date.

Extending the research to a larger target group represented by the stakeholders of the studied area as well as replicating the proposed methodology in several Natural Parks is a further step which should bring more information and knowledge on the topic. Quality schemes such "Mountain product" can help the farmers to incorporate in the price both production and cultural services of ES, and capitalize on them in an agri-tourism activity.

Author's Note

The work of Gabriela Baciu was supported by the project "PROINVENT," Contract no. 62487/03.06.2022-POCU/993/6/3 – Code 153299, financed by The Human Capital Operational Programme 2014-2020 (POCU), Romania

References

Barton D. N., Jacobs S., Dunford R.W., Kelemen E. (2017). Integrated assessment and valuation of ecosystem services. Guidelines and experiences, pp: 260-289. https://doi.org/10.13140/RG.2.2.15429.35043

Bateman, I. J., Burgess, D., Hutchinson, W. G., & Matthews, D.I. (2004, April 5-7). *Learning effects in repeated dichotomous choice contingent valuation questions* [Paper Presentation]. Paper No. 59. Royal Economic Society Annual Conference, Swansea, Wales.

Belmontes J. A., López-Pintor A ., Rodríguez M. A., & Gómez-Sal, A. (1997). On the usefulness of ecosystem services evaluations. *Pirineos*, *149-150*, 145-152, JACA.

Boxall, P. C., Adamowicz, W. L., Swait, J., Williams, M., & Louviere, J. (1996). A comparison of stated preference methods for environmental valuation. *Ecological Economics*, *18*(3), 243–253. https://doi.org/10.1016/0921-8009(96)00039-0

Brouwer, R., Martin-Ortega, J., & Berbel, J. (2010). Spatial preference heterogeneity: A choice experiment. *Land Economics*, *86*(3), 552–568. https://doi.org/10.3368/le.86.3.552

Christie, M., Hanley, N., Warren, J., Murphy, K., Wright, R., & Hyde, T. (2006). Valuing the diversity of biodiversity. *Ecological Economics*, *58*(2), 304–317. https://doi.org/10.1016/j.ecolecon.2005.07.034

Davis, R. K., Knetsch, J. (1966). Comparisons of methods for recreation evaluation. In: A. Kneese & S. Smith (Eds.), *Water Research*. Johns Hopkins University Press, Baltimore, MD.

Dumitras, D. E., & Dragoi S. (2006). Estimation of the recreation values of some Romanian parks by travel cost method. *Buletinul Universității de Științe Agricole și Medicină.* Veterinară Cluj-Napoca. Seria Horticultură 6, pp. 177-180.

Freeman III, A. M., Herriges, J. A., & Kling, C. L. (2014). *The Measurement of Environmental and Resource Values* (0 ed.). Routledge. https://doi.org/10.4324/9781315780917

Heal, G. (2000). Valuing Ecosystem Services. *Ecosystems*, *3*(1), 24–30. https://doi.org/10.1007/s100210000006

Hotelling, H. (1949). Letter, In: *An Economic Study of the Monetary Evaluation of Recreation in the National Parks*, Washington, DC: National Park Service.

Jordan, A., & Russel, D. (2014). Embedding the concept of ecosystem services? The Utilisation of ecological knowledge in different policy venues. *Environment and Planning C: Government and Policy*, *32*(2), 192–207. https://doi.org/10.1068/c3202ed

Millennium Ecosystem Assessment (2005). Ecosystems and Human Well-being Synthesis. https://www.millenniumassessment.org/en/index.html.

Ninan, K. N., & Inoue, M. (2013). Valuing forest ecosystem services: Case study of a forest reserve in Japan. *Ecosystem Services*, *5*, 78–87. https://doi.org/10.1016/j.ecoser.2013.02.006

Oster, S. (1977). Survey results on the benefits of water pollution abatement in the Merrimack River Basin. *Water Resources Research*, *13*(6), 882–884. https://doi.org/10.1029/WR013i006p00882

Regulation (EU) No 1151/2012 of the European Parliament and of the Council on quality schemes for agricultural products and foodstuffs. - https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012R1151

Regulation (EU) No 665/2014 (Commission Delegated) supplementing Regulation (EU) No 1151/2012 of the European Parliament and of the Council with regard to conditions of use of the optional quality term 'mountain product' - https://eur-lex.europa.eu/legal-content/en/TXT/?uri=OJ:JOL_2014_179_R_0004

TEEB Report - The Economics of Ecosystems and Biodiversity Report (2010), https://ec.europa.eu/environment/nature/biodiversity/economics/

Tower E., & Pursell G. (1986). On Shadow Pricing. The World Bank, Washington DC, 22-25 p.

ADER https://www.madr.ro/ader-2019-2022/ader-17-2019-2022.html

IUCN - Guidelines for Applying Protected Area Management Categories- https://portals.iucn.org/library/sites/library/files/documents/pag-021.pdf

The Ecomarkers - Indicators of the State of Health of the Ecosystems

Romeo Ilie
Alpina Carpatica Association (Romania)
romeo_ilie2003@yahoo.com

Gabriela Baciu
"Stefan cel Mare" University (Romania)

ABSTRACT

The ecosystem is the basic cell of life on Earth. It was defined and became the subject of studies and research in the last 90 years. These results provided information that was the basis for the definition of their functions and services and that led to several classifications of them.

Although great progress has been made in this field, many of the intimate phenomena that take place at the level of each ecosystem, of the exchange of matter and energy between ecosystems, but especially of the way in which the functions and services provided influences the economic, social, and cultural development of human communities still requires scientific deepening.

Last but not least, research continues on the ways in which these functions and services are correlated with climate change, global warming, and the loss of biodiversity. Less attention was paid to research and solutions for a more efficient management of ecosystems.

Concepts and theories from other sciences can provide, from other scientific perspectives, information for a better knowledge and a better management of the phenomena and processes that take place inside the ecosystems and at the fragile border between them.

Thermodynamics and the biological and medical sciences can be used, by analogy, for the analysis of ecosystems, the theory of automatic control systems can be applied as a modern and efficient approach to the management systems of the biological, economic, social, and cultural processes of ecosystems, and actant models and those of the "environmental learning" theory could be also approached as forms of action for the education of present and future generations in respect to the environment and a better knowledge and understanding at the level of the human community.

Why this? Because all of them are systems.

The paper is based on the presentation done by the same authors in the International Workshop on Agritourism (31.08-02.09.2022, Burlington, VT, USA), titled "Multi- and Interdisciplinary Approaches to Eco-Agritourism Systems Analysis," *and aims to substantiate and detail from a scientific point of view the analogy between ecosystems and medical science, introducing the new concept of ecomarkers.*

The conclusions of our studies show that the paper presented can represent a new starting point for using more intensive the methods of multi- and inter-disciplinary research for study and analysis of ecosystems.

The better we understand ecosystems, the more their management can be improved and, more, the chances increase that climate change, global warming, and the loss of biodiversity can be stopped and their negative evolutionary trends can even be reversed.

Keywords: ecosystems, eco-agritourism, multi- and inter-disciplinary research, biomarkers, ecomarkers

1. Introduction and Background

1.1 Ecosystem Health

Ecosystems health is a concept that has often been applied to the evaluation of ecosystems (Costanza et al., 1992; Cairns et al., 1995; Rapport, 1995; Hernández-Blanco et al., 2022). This has become a subdiscipline in the life sciences, with its own journals and professional organizations, such as the International Society for Ecosystem Health and Medicine (ISEH), founded in 1994, and the Aquatic Ecosystem Health and Management Society, established in 1989, which have promoted integrated, ecosystemic, and holistic initiatives for the protection and conservation of global aquatic resources, and are focusing on the adoption of the ecosystemic health concept and the application of adaptive management and restoration (de Groot, 2011).

Ecosystem health is defined as "the state or condition of an ecosystem in which its dynamic attributes are expressed within the normal ranges of activity relative to its ecological state of development" (van Andel et al., 2012, p. 16), and also within the Encyclopedia of Biodiversity (Scheine, 2013), while ecosystem integrity is, in the vision of the Society for Ecological Restoration (SER) "the state or condition of an ecosystem that displays the biodiversity characteristic of the reference, such as species composition and community structure, and is fully capable of sustaining normal ecosystem functioning" (SER, 2004, p.7).

An ecosystem is healthy if it is active, maintains its organization and autonomy over time, and is resistant to stress.

The health of an ecosystem can be viewed from two perspectives: one related to the health of each component of the biocenosis, i.e. the health of each plant and each animal, and one related to the health of the ecosystem, considered a living, complex organism, through which its functioning states are ascertained by quantity and quality of the ecosystem services it provides to human communities.

Our research focuses more on the second aspect, identifying many similarities with the biological state of fulfilling the functions of the human body and the ecological state of fulfilling the functions of the ecosystems and the services they provide. By analogy with the biomarkers used in medicine, the term ecomarker is introduced with a role similar to that of biomarkers, but in terms of measuring the state of health of ecosystems, with direct reference to the state of fulfillment of its functions, and provision, normal or abnormal, of their services.

1.2 Biomarkers

The term "biomarker" expresses objective indications of medical state observed from outside the patient (signs), which can be measured accurately and reproducibly. Medical signs stand in contrast to medical symptoms, which are limited to those indications of health or illness perceived by patients themselves (Strimbu et al., 2010). We have identified the following most recent definitions for biomarkers:

- A biomarker is "a characteristic that is objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes, or pharmacologic responses to a therapeutic intervention" (National Institutes of Health Biomarkers Definitions Working Group, 1998).
- A biomarker is "any substance, structure, or process that can be measured in the body or its products and influence or predict the incidence of outcome or disease" (World Health Organization International Programme on Chemical Safety [WHO-IPCS], 2001).
- A biomarker is "almost any measurement reflecting an interaction between a biological system and a potential hazard, which may be chemical, physical, or biological. The measured response may be functional and physiological, biochemical at the cellular level, or a molecular interaction" (WHO-IPCS, 1993).

Medical signs have a long history of use in clinical practice—as old as medical practice itself—and biomarkers are merely the most objective, quantifiable medical signs modern laboratory science allows us to measure reproducibly.

The use of biomarkers, and in particular laboratory-measured biomarkers, in clinical research is somewhat newer, and the best approaches to this practice are still being developed and refined. The key issue at hand is determining the relationship between any given measurable biomarker and relevant clinical endpoints (Strimbu et al., 2010).

There are defined seven biomarker categories: risk/susceptibility, diagnostic, monitoring, prognostic, predictive, pharmacodynamic/response, and safety (FDA-NIH Biomarker Working Group, 2016).

2. Methods and Methodologies

The work methodology was based on the "desk research" method, on the basis of which it was identified that analogies between the health of ecosystems and the health of the human body have been made for some time, but that no in-depth research has been carried out regarding these analogies. Our own research has tried to assimilate organs, systems, and other functional components of the human body (circulatory system, liver, pancreas, kidneys, blood, lymph, etc.) with components and structures of ecosystems, focusing on agritourism ecosystems. In the end, we focused on the human cardiovascular system and made some analogies with the analogue components of ecosystems (biotope and biocenosis), also providing some definitions for the specific ecomarkers of its diseases.

3. Findings

3.1. Ecomarkers as ecosystem health indicators

Ecosystem health indicators help us understand where action should be taken to restore ecosystem global health and associated benefits.

Both the human organism and the ecosystem can be considered "alive" and "healthy" as long as they are active, i.e. they consume and process matter, provide energy to each cell/component of the system and implicitly fulfil the functions of each organ/component of the system as well as of the whole system as an unique functional structure.

In this paper, we define and introduce, by analogy with biomarkers, the term of "ecomarker," as an indicator for assessing the state of health of an ecosystems, a term not yet found in the literature.

3.1.1. Ecomarker Alternative Definitions

By analogy with biomarkers, we can consider ecomarkers as follows:

- They refer to a broad subcategory of environmental signs – objective indications of the state of an ecosystem observed from outside it – that can be measured accurately and reproducibly.
- They include any element, component, substance, structure, or process that can be measured within the ecosystem or in the products and services provided by it and that influences or predicts the incidence of the outcome or alteration of ecosystem functions and services.
- There are no "environmental symptoms," as an ecosystem does not have any ability to self-describe its "sufferings."
- A characteristic that is objectively measured and evaluated as an indicator of normal eco-biological processes, of processes of modification of the quality of ecosystem services, or of ecosystem responses to a corrective action of man or self-corrective action of the ecosystem in order to restore biological balances, balances normal energy and mass within the ecosystem and in its relationship with the external environment.

Classes of Ecomarkers

By analogy with biomarkers, we can classify ecomarkers as following:

- ***Observed/imagistic ecomarkers*** - indications with different degrees of objectivity resulting from the simple observation/visualization of the constituent elements of the ecosystem directly by humans or by means of cameras mounted in the field, on drones, or from satellites (examples: the discovery of some degradations/destruction of the flora as a result of the attack of some components of the fauna or the same effects due to atmospheric or soil or water pollutants)
- ***Measured ecomarkers*** - objective values attributed to the state of some components of the ecosystem, obtained from sensors installed by humans ("the attending physician") in places within the ecosystem with greater genetic (history) predilection for depreciations, or have damage-related statistic data. They are not visible to the naked eye; the values can be "read" locally or digitally transmitted to an IT monitoring and control system. Examples: temperature; humidity; level of sunshine; level of precipitation; wind speed and direction; level of atmospheric concentration of O_2, CO_2, nitrogen, or ozone; level of air, water and soil pollution (as particles per million), etc.
- ***Calculated ecomarkers*** – global/specific characterization values of the effects of changes at the level of ecosystem components on the "functions," vital or not, of the ecosystem and/or on the services that the ecosystem offers to its external environment (examples: calculation by various methods, of the Economic Value of ecosystem services, the use of associated, combined, or integrated methods for the calculation of the Total Economic Value of an ecosystem or the calculation of the volume of CO_2 sequestered as C in the trees of mountain, urban, and peri-urban forests)

3.1.3. The Roles of Ecomarkers

By analogy with the roles of biomarkers, it can be appreciated that ecomarkers have the following roles:

- preventing the appearance of cases of damage to the structure/composition of ecosystem elements, maintaining the level of performance of ecosystem functions and the qualitative and quantitative level of ecosystem services provided;
- formulating a diagnosis and recommending an appropriate treatment (public policies);
- ecosystem monitoring (functions, services) and improving health;
- helping for partial or total recovery (bringing back to normal the values of indicators of normal behavior of natural ecosystems); and,
- extending the average life expectancy of ecosystems when signs of disease appear.

3.2. The Analogy Between Ecosystem Health and Human Health

There are many characteristics of the human body and ecosystems that, by analogy, can lead to spectacular results for both scientific disciplines, ecosystem science and medicine. The role of the human body's organs and systems in the good functioning of the human being can be assimilated with the role that various components of ecosystems (structured as organs and systems) contribute and ensure the fulfillment of ecosystem functions and the provision of ecosystem services. Centuries of experience accumulated by medicine and biology can be used for a mirroring approach to ascertaining the state of health of ecosystems, being able to identify, by analogy, the causes that lead to dysfunctions of the components of the biotope and biocenosis, but also to measure the state of health, making diagnoses in case of illnesses and formulating and applying curative treatments for ecosystems.

3.2.1. Circulatory System of Ecosystems

3.2.1.1. The Water and the Air

Water and air are the main resources that support life on earth. They represent the main means of transport for O_2, CO_2, nutrients and minerals, vital for the life of flora, fauna and people, but also for polluting, toxic elements (numerous natural phenomena, including volcanic eruptions, forest fires, and sandstorms release pollutants into the atmosphere) that can act against life, contributing massively to climate change, global warming, and loss of biodiversity. Their normal circulation, with a healthy composition, ensures the good health of people and ecosystems. In the air composition, about 21% of its volume is the oxygen.

3.2.1.2. Systemic Circulation. Groundwater and Aquifers

The systemic circulation is the aquifer and the hydrographic network of surface waters (analogy to the human system: the aortic and capillary system), and the venous return system by air into the aquifer (evaporation, condensation, clouds, precipitation-rain/snow).

Water, through itself (H_2O), but also through the microelements and nutrients it contains and transports, plays the role of plasma (in humans we have blood plasma and lymphatic plasma). The place from where water is supplied to the ecosystem is the aquifer. An aquifer is a water-bearing rock (which contains water) that it can easily transmit to the surface of the land in the form of wells and springs. Following precipitation, water together with the air (oxygen) infiltrates through the porous rocks, straightening it goes to places of greater depth, until it meets a layer of impermeable rock, which retains it forming a water table. This area is saturated with water, while the areas above the water table contain water, but are not saturated with it. Water adheres to the rock pieces due to molecular attraction.

Sometimes, layers of porous rock become tilted into the ground. There could be a limiting layer of less porous rock both above and below the porous layer. This is an example of a closed aquifer. In this case, the rocks surrounding the aquifer limit the pressure in the porous rock and its water. If a well is drilled into this “pressurized” aquifer, the internal pressure might be sufficient to push the water down the well and to the surface without the aid of a pump. This type of well is called artesian. The water pressure in an artesian well can be quite dramatic.

The circulation of water inside the aquifer depends on the porosity and permeability of the rock layers, the pressure difference between different points of the aquifer, the slope of the impermeable layers and, implicitly, the level difference, the water flowing under pressure or by gravity towards the exit. The springs that are formed flow and become rivers with increasingly large water flows.

We can consider the aquifer, with its internal porosity and canaliculi (the equivalent of the coronary arteries) as the equivalent of the heart in the human body.

The water is a means of transporting oxygen, minerals and nutrients, all the physiological functions of a plant or an animal require the presence of water for the absorption of minerals, photosynthesis, the action of enzymes, transpiration, cellular biochemistry, seed germination, etc.

Water is the basic resource of life on earth (plays the role of blood plasma or lymph) in the form of rain, snow, dew, fog, surface waters (flowing water: springs, brooks, rivers including deltas, their beds play the role of arteries and lymphatic vessels, and standing water: natural and artificial lakes, ponds, swamps, etc.), ground waters.

Setting it in motion (the role of the heart) is made from aquifers, due to the pressure / temperature / level differences and the permeability of the rocks. Nutrients and minerals are taken from the soil, oxygen from the atmosphere (before infiltration and after returning to the surface).

Abnormal operating conditions of the systemic circulation can be the collapses of vaults and obstructing underground circulation, floods, torrents, landslides, hail, avalanches, storms, whirlwinds, cyclones, dams (natural, artificial) in the way of water, content of soluble pollutants and viruses etc

3.2.1.3. Pulmonary circulation

Ecosystems' flora, especially forests (the lungs of the planet), algae and cyanobacteria use CO_2 from the air, generated mainly by fauna and human activities, and together with water (H_2O), in the presence of chlorophyll, produce and store glucose and release O_2. Chlorophyll is essential in carrying out the photosynthesis process, through which carbon is sequestered and oxygen is released, based on the reaction:

$$6CO_2 + 6H_2O \rightarrow C_6H_{12}O_6 + 6O_2$$

Most of the O_2 is retained in the atmosphere to support terrestrial life, and some dissolves in surface and standing waters and aquifers to support aquatic fauna. The exchange of CO_2 and O_2 takes place in an open circuit, at the level of ecosystem flora (plants, forests, plankton). The pulmonary circuit also ensures the transport of spores, which ensures the asexual reproduction of plants and some microorganisms, but also viruses that cause diseases in animals and humans. Wind and insects (especially bees) ensure pollination, having a double value for ecosystem services: bees thus produce honey, and pollination ensures the production of fruits and grains. The pulmonary circuit can also provide wind support for the production of wind energy, a service of great importance to humans.

Air is the basic resource of life on earth being:

- means of transporting O_2, generated by the photosynthesis process of plants (flora), vital for living beings. Oxygen dissolves in the waters of the hydrographic system, thus being introduced into the "systemic circulation";
- means of transporting CO_2, the polluting substance resulting from anthropogenic processes or the result of the breathing process of living beings in the ecosystem (fauna), essential for the photosynthesis process of plants;
- a means of facilitating the spread of methane (GHG) originating from manure and gastrointestinal evacuations of animals - constitutes approximately one third of methane emissions caused by humans; and,
- a means of transporting some spores (the reproductive cell of some plants or microorganisms: fungi, mushrooms, mosses, ferns, etc.; carried by the wind, they play also a role in the spread of infections).

Setting the air in motion (the role of the heart and lungs) and its omnidirectional circulation (in an open system) is due to pressure/temperature differences in the form of wind, with higher or lower intensities.

3.2.1.4. Anthropogenic transport systems

It represents the land (road, rail, of tourist interest), river, sea, air transport infrastructure developed by man for economic, social, cultural, sports and recreational purposes. In this way, the circulation of "foreign bodies" in the natural organism of an eco-agrosystem is ensured and allowed, most of the time with negative effects on the natural organism.

3.3 Examples of "diseases" of the circulatory system of eco-agrosystems (signs, causes)

Atherosclerosis[1] in systemic circulation is produced by the creation of obstacles, natural or artificial, through clogging, silt, alluvial deposits, landslides, sand, gravel, pieces of crushed rock, tree branches, fallen trees, avalanches. In this way, the flow path is narrowed and the bottom of the basin is "raised", producing blockages in the flow of water (analogy to the human system: the formation of blood clots), leading to dam breaks, leaks and floods (analogy to the human system: vascular accidents, haemorrhages), blocking the tracks/navigational pathways of the human transport system (human analogy: thrombus formation / congestion).

[1]Atherosclerosis is a common condition that develops when a sticky substance called plaque builds up inside your arteries (What Is Atherosclerosis?). https://www.nhlbi.nih.gov/health/atherosclerosis)

Apoplexy[2] in agro-tourism ecosystems can be defined as a dramatic accident in the systemic or pulmonary circulation, caused by spills, floods, traffic congestion (analogy to the human system: hemorrhages) triggered at the level of a component or an internal structure of the ecosystem or even as a state of extreme anger (disruptive phenomena such as storms, tornadoes, blizzards, earthquakes)

Anemia[3] is caused by the low level of some microelements or even their lack, which support the transport of oxygen, nutrients and minerals to the "final beneficiaries" of the ecosystem: elements of fauna and flora. In the human system, the most common is iron deficiency anemia, which is a type of anemia with a specific cause - low iron levels. As a result of a possible iron deficiency, red blood cells cannot be formed and maintained at an optimal level. Iron is a mineral with an essential role in hemoglobin synthesis. Hemoglobin is a protein in the structure of erythrocytes, essential for the capture of oxygen at the level of these red cells and its release in the tissues. If iron does not have an optimal level in the body, enough hemoglobin molecules cannot be synthesized for this process. Because of this, the tissues are not properly oxygenated.

In a natural ecosystem, chlorosis[4] is the inability of plants to synthesize chlorophyll. This process occurs in plants, algae and some types of bacteria, which capture energy from sunlight to produce oxygen (O_2) and stored chemical energy in the form of glucose. Chlorosis of plants can also occur due to non-compliance with cultivation technologies, as well as as a result of unfavorable climatic or soil conditions. Thus, chlorosis can be triggered by a soil deficiency in iron, magnesium, zinc, sulphur, lime, nitrogen, protein or by the level of soil acidity, where the roots are not able to absorb the minerals that the plants need. Chlorosis can also be caused by poor soil drainage, which causes plant roots to become waterlogged, as well as root damage or exposure to sulfur dioxide.

Ozone[5] reduces the ability of plants to carry out photosynthesis and reduces the absorption of carbon dioxide, leading to the establishment of anemia of ecosystems. The sign of ecosystem anemia (an ecomarker of it) is that everything turns from green (the color of chlorophyll) to yellow (the color of anemic plants, without or with less chlorophyll).

4. Discussions

Multi- and inter-disciplinary research shows how fields of science, which, apparently, have nothing to do with ecosystems, their functions, and services can bring added value and consistency to studies, analyses, and research, having as a subject the ecosystems and their role in the economic, social, and cultural life of the human community.

We consider that the introduction, definition, and characterization of the term of "ecomarker" can represent a beginning for the development of research in this field, so that the ecosystems benefit from a more coherent system of indicators of its "health" and that express appropriate values for all the functions, services, and roles that the "healthy" ecosystems offer to people, for their state of well-being.

Agritourism should be seen as a complex ecosystem, having its own functions to be accomplished and its own specific services to be provided. Any new scientific and methodological approaches to agritourism, from the perspective of its ecosystem functions and services, with benefits for both

[2]Apoplexy is bleeding into an organ or loss of blood flow to an organ. It most often refers to stroke symptoms that occur suddenly. Such symptoms occur due to bleeding into the brain. It can also occur by a blood clot in a brain blood vessel.

[3]Anemia is a condition in which the body does not have enough healthy red blood cells. Red blood cells provide oxygen to body tissues. Different types of anemia include: Anemia due to iron and/or vitamin B12 deficiency. Mayo Clinic (https://www.mayoclinic.org/diseases-conditions/anemia/symptoms-causes/syc-20351360)

[4]Chlorosis is a yellowing of leaf tissue due to a lack of chlorophyll. Possible causes of chlorosis include poor drainage, damaged roots, compacted roots, high alkalinity, and nutrient deficiencies in the plant. (https://www.trenchlesspedia.com/definition/3894/chlorosis)

[5]Ozone (O_3) is a colorless, odorless reactive gas comprised of three oxygen atoms. It is found naturally in the earth's stratosphere, where it absorbs the ultraviolet component of incoming solar radiation that could be harmful to life on earth. The San Joaquin Valley Air Pollution Control (https://ww2.valleyair.org/about/)

locals and visitors, represent steps forward in the development of local, regional, or national public policies for the economic, social, and cultural development of local communities, but especially for the management of current environmental problems (climate change, global warming, loss of biodiversity).

References

Cairns, J., & Pratt, J.R. (1995). The relationship between ecosystem health and delivery of ecosystem services. In: D.J. Rapport, C.L. Gaudet, & P. Calow (Eds), *Evaluating and monitoring the health of large-scale ecosystems*. NATO ASI Series, vol 28. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-79464-3_4.

Costanza R., Norton B. G., & Haskell B. D. (Eds.). (1992). *Ecosystem health*. *New goals for environmental management.* Island Press. ISBN 1-555963-141-4 (cloth). - ISBN 1-55963-140,-6 (paper).

de Groot, R. (2011). Ecological economics of estuaries and coasts. *Treatise on Estuarine and Coastal Science*.

FDA-NIH Biomarker Working Group (2016). Biomarker working group. BEST (Biomarkers, EndpointS, and other Tools) Resource [Internet]. Silver Spring (MD): Food and Drug Administration (US); 2016-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK326791/ . Co-published by National Institutes of Health (US), Bethesda (MD)

GEO BON. Ecosystem function-The group on Earth observations. Biodiversity Observation Network, GEO BON's 2025 Vision Statement and Goals. https://geobon.org/ebvs/working-groups/ecosystem-function/

Hernández-Blanco M., Costanza R., Chen H., de Groot D., Jarvis D., Kubiszewski I., Montoya J., Sangha K., Stoeckl N., Turner K., & van 't Hoff V. (2022). Ecosystem health, ecosystem services, and the well-being of humans and the rest of nature. *Global Change Biology*, Volume 28, Issue 17, Pages 5027-5040, https://doi.org/10.1111/gcb.16281

NIH-BDWG (National Institutes of Health-Biomarkers Definitions Working Group) (1998). Biomarkers and surrogate endpoints: preferred definitions and conceptual framework. PMID: 11240971, https://doi.org/10.1067/mcp.2001.113989

Rapport, D. J. (1995). Ecosystem health: More than a metaphor? *Environmental Values*, Volume 4, Number 4, pp. 287-309(23) DOI: https://doi.org/10.3197/096327195776679439.

Scheine, S.M. (Editor-in-Chief) (2013). *Encyclopedia of biodiversity*, 2nd Edition, Hardcover ISBN: 9780123847195, eBook ISBN: 9780123847201

Society for Ecological Restoration International [SER]. (2004). The SER International Primer on Ecological Restoration, SER Science & Policy Working Group, Version 2.

Strimbu K., & Tavel J. A. (2010). What are biomarkers? Curr Opin HIV AIDS. Nov. 2010, 5(6):463-6. https://doi:10.1097/COH.0b013e32833ed177. PMID: 20978388; PMCID: PMC3078627.

van Andel J., & Aronson J. (Eds.) (2012). *Restoration ecology: The new frontier*, 2nd Edition. Wiley-Blackwell, 400 pp., ISBN: 978-1-444-33635-1.

WHO-IPCS (2001). Biomarkers in risk assessment: Validity and validation. International Programme on Chemical Safety. Retrieved from http://www.inchem.org/documents/ehc/ehc/ehc222.htm

WHO-IPCS (1993). Biomarkers and risk assessment: Concepts and principles. Retrieved from http://www.inchem.org/documents/ehc/ehc/ehc155.htm

Understanding and Enhancing Diversity, Equity, Access, and Inclusion in Agritourism: Innovative Research and Outreach in Entrepreneurship

Kynda R. Curtis
Utah State University (United States)
kynda.curtis@usu.edu

Susan L. Slocum
George Mason University (United States)

Claudia Gil Arroyo
Rutgers Cooperative Extension of Cape May County (United States)

Jason Entsminger
University of Maine (United States)

Keywords: Agritourism, DEAI obstacles, marginalized groups, entrepreneurship

1. Introduction

Socially disadvantaged or underserved groups participating in tourism have been traditionally under researched and supported. As far back as 1994, Philipp recognized both "prejudice" and "discrimination" in tourism policies (p. 486), which are still prevalent today. Additionally, social differences between socially disadvantaged groups and mainstream communities where "external agents have not been able to adequately manage the agritourism implementation processes" (Pérez-Olmos & Aguilar-Rivera, 2021, p. 2) have led to unsuccessful or unpleasant experiences. In recent years, COVID-19 has also disproportionately affected minority- and women-owned enterprises, and social climates are now calling for a more equitable distribution of economic resources to include women and others from socially disadvantaged groups (Baum & Mooney, 2020).

Agritourism entrepreneurship is well situated to support both urban and rural communities (Slocum & Curtis, 2017), where underserved groups participate in local food activities, practice traditional agriculture on indigenous reservations, or maintain traditional food access through local foraging. Tourism, especially agricultural and food tourism, provides opportunities for underserved groups, including income generation, local planning and development, revitalization of local culture and practices, and improved transportation and communication (Ministry of Culture, Sports, and Tourism, 2008). Additionally, tax revenues generated often lead to improved community education and health services. For example, U.S. Native American tribes have begun to offer cultural experiences for tourists in Native American cooking, crafts, games, and music, including Iroquois White Corn cooking classes, the Hopi Art Trail, and 'Cherokee Experiences' (Taylor, 2016). Tourism on Native American reservations is growing: From 2007 until 2015 the number of visitors to U.S. Indian reservations increased by 180%, and overseas visitation increased by 19% from 2014 until 2015 alone (Taylor, 2016).

Despite the potential benefits to agritourism participation, challenges and issues remain, and thus, additional research and outreach is needed to support underserved groups in these endeavors. Both supply- and demand-side challenges exist, as well as institutionalized discrimination that may hinder access to financial, educational, or other resources.

This article describes the discussion and outcomes of an organized session conducted at the 2022 International Workshop on Agritourism (August 2022, Burlington, VT). The session was designed to support and encourage research and outreach to socially disadvantaged and marginalized

groups as entrepreneurs and consumers of agritourism. The overall goal of the session was to encourage innovative research and outreach to enhance diversity, equity, access, and inclusion (DEAI) in agritourism through scholarly networking and the creation of working groups including academic, educator, and practitioner members. Session panel speakers engaged in a roundtable discussion of current challenges and issues facing socially disadvantaged groups seeking to participate in agritourism, either as providers or as consumers. After the discussion, speakers and audience members briefly broke out into working groups, based upon interest and expertise, and focused on addressing identified challenges. These working groups established a plan of action and communication for the group post-conference.

2. Challenges and Issues in Building DEAI in Agritourism

An overview of the speaker panel's introductory discussion on selected challenges and issues in building DEAI within agritourism, including identified research and outreach needs, is provided below by topic area. Topics include gender issues and the experience of women as agritourism providers, challenges in agritourism for the LGBT+ community, obstacles to accessing agritourism opportunities for marginalized consumers, and finally, the progress and remaining issues socially disadvantaged agritourism operators face in accessing U.S. federal programs. Topics were chosen based upon panel experience and interest.

Access Obstacles for Marginalized Consumers – Susan Slocum

The term 'research' is inextricably linked to European imperialism and colonialism – which endorses and privileges Western knowledge systems (Denzin et al., 2008). Traditional research and outreach may further marginalize individuals who face discrimination in other aspects of their lives. By inviting marginalized communities into research and outreach design, and "planning a tourism future not fueled solely by demand but guided by ethics of care, social and environmental justice, and racial reconciliation" (Benjamin et al., 2020, p. 5), a more inclusive agenda can begin to heal the history of structural discrimination. Inclusion is the "intentional, open embrace of diversity by a community so that each individual feels not only included but accepted, connected, understood, supported, and valued" (Benjamin & Dillette, 2023, p. 2) and can help to dismantle oppression from dominant social groups. By embracing diversity in the research and outreach agenda, greater innovation and creativity will result, which in turn can positively influence our perceptions of others.

The process of 'othering' or defining those different from oneself based on implicit bias or stereotyping, has had profound impacts on the ability and willingness of marginalized groups to participate in tourism activities, including agritourism (Slocum, 2023). Specific groups impacted by the 'othering' process include LGBT+ populations, people of color, people with disabilities, obese persons, and immigrants, to name a few. Unintentional stares or comments can draw attention to marginalized travelers, making them uncomfortable, and too commonly, outright violence may be aimed at these individuals.

As educators and service providers, it is our job to ensure that all members of society are able to participate in travel and tourism activities. This may require some introspection as a starting point, but also specific training in diversity and inclusion to ensure operators and their employees are providing the best experience possible. Training that helps employees recognize and overcome their inherent, and often unconscious, bias can ensure a safe and welcoming environment for our guests. Moreover, including topics related to DEAI in the academic curricula assist future professionals to overcome structural marginalization and discrimination.

Gender Issues and the Experience of Women - Claudia Gil Arroyo

Agriculture, and agritourism as an extension, has historically been a male-dominated field. In recent years there have been efforts to better understand the factors that limit access and participation of women in agritourism (Halim et al., 2020). Studies show that women tend to have fewer opportunities related to agritourism entrepreneurship, despite their enhanced skill set and

increased interest and willingness to participate, relative to men, in their communities (Savage et al., 2022).

For example, the Quechua communities in Peru, like other communities in rural areas, have very traditional social structures, in which males are household decision makers, and are the only voices counted and heard in community matters (e.g., voting in community leader elections, deciding how household income is used). These represent a major constraint to women's participation in agritourism (Gil Arroyo et al., 2019). Quechua women that do participate as agritourism providers, despite the challenges, have found unexpected benefits. Their motivation to participate in agritourism is often related to enhancing their ability to provide for their family and make additional income not possible through traditional agriculture. They have found benefits beyond the financial, such as cultural pride, independence, and increased presence in political forums within their communities.

The challenges that Quechua women face are not specific to them, and can be translated to other contexts and regions beyond Peru. For example, a 2017 survey of agritourism providers in North Carolina (US) found that the largest burden for female operators was their household responsibilities, specifically balancing farm and family activities and meeting caregiver expectations (Savage et al., 2018). However, respondents indicated that the changing landscape in agriculture, such as the increased presence of women in agriculture, as well as the larger role of women in agritourism leadership, enhanced their opportunities for future success.

The discussion above provides some guidance as to the research and outreach that may assist in improving agritourism opportunities for women. The evaluation of existing policies and regulations that may constrain women's participation and the benefits that they receive when participating is necessary. Future research efforts should also focus on identifying women's needs to facilitate the creation of opportunities that encourage more women to participate in agritourism. Furthermore, it is important to have a broader and better understanding on whether the existing benefits women experience from participating in agritourism are sufficient or significant enough to improve their quality of life and to encourage other women in their communities or other social spheres to participate.

LGBT+ Community Participation Challenges – Jason Entsminger

The current data and research available on LGBT+ farmer populations are very sparse. Hence, little is known about their challenges, operations, strategies, and networks. However, preliminary research (Dentzman et al., 2021) and collective experiences indicate that LGBT+ farmers exist, sometimes in pockets or clusters and that farming can play an important role in these individuals' lives, health, and personal journeys (Hoffelmeyer, 2020; Leslie et al., 2019; Wypler & Hoffelmeyer, 2020).

Generally, LGBT+ operations are smaller scale, incorporate sustainable practices, and engage collective strategies (i.e. cooperatives, multi-family management, etc.) (Dentzman et al., 2021; Wypler, 2019). Agritourism activities are often present on LGBT+-led operations, and in wider research have been shown to play a vital role in both the economic/financial and non-pecuniary well-being of farmers and their associated farms (Joo et al., 2013; Schilling et al., 2014). However, preliminary evidence also shows that LGBT+ farmers may encounter social disadvantage via structural and/or systemic queerphobia, which impacts the resources available to their farm operation and leads them to adopt differing strategies (such as agritourism) as a means of countering discriminatory practices or mitigating against the perceived/anticipated barriers (Hoffelmeyer, 2020; Leslie et al., 2019). While this is not universal, the adoption of networks and activities outside of mainstream tourism may prove to be one strategy to enhance the success of their farm enterprises in the face of systemic bias.

On the consumption side of agricultural tourism, there is a growing segment of LGBT+ travelers seeking affirming and welcoming agritourism experiences, particularly those provided by LGBT+ agricultural entrepreneurs. LGBT+ populations often have a complex relationship with rural spaces (Gray et al., 2016), but many who leave their rural roots often still desire opportunities to return (Annes & Redlin, 2012). Rural tourism - including that associated with agritourism and aquatourism

activities - provides an alternative for urbanite LGBT+ populations to maintain connections with rural spaces, and thus is a growing albeit poorly researched tourism market (Sousa e Silva et al., 2018; Toth & Mason, 2021).

Making agritourism enterprises affirming and welcoming spaces for the LGBT+ tourist requires confronting biases imposed by *heteronormativity* (the positioning in which heterosexual perspectives, experiences, and expectations are privileged and normalized) (Usai et al., 2022). Preliminary evidence even suggests that a perception of a destination as LGBT+ affirming is associated with an overall perception by *non*-LGBT+ tourists of the destination as safe and welcoming (Ram et al., 2019). This implies that agritourism entrepreneurs may be well served in their own ventures by broader work at the community level that makes the destination LGBT+ friendly. Increasingly, resources exist which can help destination managers and agritourism enterprises understand how to access the LGBT+ tourism market (Guaracino & Salvato, 2017).

U.S. Federal Program Access for Operators: Progress and Issues Remaining - Kynda Curtis

Since 2000, the United States Department of Agriculture (USDA) has implemented and updated its agriculture-based federal assistance programs to ensure access to socially disadvantaged audiences, including women, people of color, the LGBT+ community, and veterans. This new era of USDA programming is a direct result of court cases involving Hispanic and women farmers, Native American farmers and ranchers, and black farmers who faced discrimination in USDA program access from 1980 until 2000 (Vilsack, 2014).

Depending on the program, funding includes grants and loans focused on assisting individuals and groups to develop or expand agriculture or food-based businesses. While some programs specifically target socially disadvantaged groups (Farm Service Agency, 2019), others require a certain percentage of program funds be awarded to projects that serve the socially disadvantaged (National Institute of Food and Agriculture, 2021). Many USDA programs support tourism projects, including agritourism. Other programs seek to help agricultural producers access important culinary markets in tourism destinations. Additionally, the USDA has set forth the following procedures to expand DEAI in its programs (Curtis et al., 2023):

- instated broad eligibility of applicants and/or project participants;
- promoted programs to and encouraged applications from socially disadvantaged groups;
- prioritized applications (funding percentage, points, etc.) from socially disadvantaged groups;
- allowed flexibility in proposed project scope and design;
- provided tools and resources to ease project implementation and reporting;
- responded to stakeholder feedback in program design, implementation, and adjustments; and
- created program peer-review panels that are diverse and largely representative of the targeted applicants

While the USDA has made progress in expanding DEAI in its programs, issues and obstacles remain. For example, in 2020, the USDA Farm Service Agency (FSA) approved farm loans for only 37% of black applicants but 71% of white applicants (Bustillo, 2021). Since 2021, USDA has increased efforts to make amends for years of discrimination, often a result of local USDA office personnel and site-specific program interpretation. Secretary of Agriculture Tom Vilsack provided $4 billion in direct debt relief payments to black farmers (authorized in the American Rescue Plan Act of 2021). Additionally, a provision was included in the Build Back Better Act (2021) to provide $6 billion in debt forgiveness on direct loans to underserved farmers. It also provides farmers who have experienced past USDA discrimination additional assistance up to $500,000 (Held, 2021). USDA's continued commitment to DEAI is reinforced by their published Equity Action Plan (announced April 14, 2022) as part of the U.S. Executive Order 13985 Advancing Racial Equity and Support to Underserved Communities (USDA, 2022).

3. Concluding Comments

Commentaries offered during the organized session - from panelists and participants - represent a series of snapshots of an otherwise deep and complex set of knowledge, challenges, and opportunities surrounding DEAI within agritourism. Entrepreneurs and consumers come to agritourism with myriad backgrounds, whose intersections must also be addressed. For example, commentary in this retrospective includes literature that draws on perspectives of indigenous women and transgender people of color, where the differences from distinct identity facets generate unique experiences, challenges, and needs. The snapshots highlighted in our commentaries only provide passing mention of other statuses, such as military veterans, those with different physical abilities, religious and national origin backgrounds, immigration status, and others. Each status has its own attendant scholarship and advocacy on which initiatives to improve DEAI within agritourism must draw.

To begin this work, we ended the organized session with an invitation to create communities of practice - networks of educators, entrepreneurs, and researchers within agritourism - around these facets so that deeper and more detailed conversations can continue. These communities may come together virtually or in-person, and it is our hope that they can leverage growing national and international resources as a means to connect and identify gaps in knowledge and practice. One critical resource in the U.S. context will likely be the Extension services of Land- and Sea-Grant Universities, where programming that convenes, educates, and conducts research for agritourism entrepreneurs and rural destination managers is increasing (Arbogast et al., 2021).

References

Annes, A., & Redlin, M. (2012). Coming out and coming back: Rural gay migration and the city. *Journal of Rural Studies*, *28*(1), 56–68. https://doi.org/10.1016/j.jrurstud.2011.08.005

Arbogast, D., Goetz, S. J., Entsminger, J. S., Devlin, K., Ulmer, M., Qian, X., Eversole, D., Phillips, M., Powell, J., & Rohring, E. (2021). *Extension Tourism: Impact and Opportunities of Land- and Sea-Grant Programming Across U.S. Regions.* National Extension Tourism and Northeast Regional Center for Rural Development.

Baum, T., Mooney, S. K., Robinson, R. N., & Solnet, D. (2020). COVID-19's impact on the hospitality workforce–new crisis or amplification of the norm? *International Journal of Contemporary Hospitality Management*, 32(9), 2813-2829.

Benjamin, S., & Dillette, A. (2023). Introduction. In Slocum, S.L. (Ed), *Inclusion in tourism: Understanding institutional discrimination and bias*. London, Routledge.

Benjamin, S., A. Dillette, & D.H. Alderman (2020). "We can't return to normal": Committing to tourism equity in the post-pandemic age. *Tourism Geographies*, 22(3), 476-483.

Bustillo, X. (2021, July 5). 'Rampant issues': Black farmers are still left out at USDA. Politico. https://www.politico.com/news/2021/07/05/black-farmers-left-out-usda-497876

Curtis, K., D. Tropp, & A. Hagerman, (2023). "Overcoming Institutional Discrimination in USDA Programmes: Food and Agricultural Tourism." Chapter in *Inclusion in tourism: Understanding institutional discrimination and bias* (Ed.). London, Routledge.

Dentzman, K., Pilgeram, R., Lewin, P., & Conley, K. (2021). Queer Farmers in the 2017 US Census of Agriculture. *Society & Natural Resources*, *34*(2), 227–247. https://doi.org/10.1080/08941920.2020.1806421

Denzin, N. K., & Lincoln, Y. S. (2008). Introduction: The discipline and practice of qualitative research. Chapter in N. K. Denzin & Y. S. Lincoln *Strategies of qualitative inquiry* (Eds.), (pp. 1–43). Sage Publications, Inc.

Farm Service Agency. (2019). Loans for socially disadvantaged farmers and ranchers (Fact Sheet). U.S. Department of Agriculture. https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/2019/sda_loans-fact_sheet-aug_2019.pdf

Gil Arroyo, C., Barbieri, C., Sotomayor, S., & Knollenberg, W. (2019). Cultivating Women's Empowerment through Agritourism: Evidence from Andean Communities. *Sustainability, 11*(11), 3058. MDPI AG. http://dx.doi.org/10.3390/su11113058

Gray, M. L., Johnson, C. R., & Gilley, B. J. (Eds.). (2016). *Queering the countryside: New frontiers in rural queer studies*. New York University Press.

Guaracino, J., & Salvato, E. (2017). *Handbook of LGBT Tourism and Hospitality: A Guide for Business Practice*. Columbia University Press.

Halim, M. F., C. Barbieri, D.B., Morais, S. Jakes, & E. Seekamp (2020). Beyond economic earnings: The holistic meaning of success for women in agritourism. *Sustainability*, *12*(12), 4907.

Held, L. (2021, December 1). Black farmers still await debt relief as lawmakers resolve racist lawsuits. Civil Eats. https://civileats.com/2021/12/01/black-farmers-still-await-debt-relief-as-lawmakers-resolve-racist-lawsuits/

Hoffelmeyer, M. (2020). Queer farmers: Sexuality on the farm. In *Routledge Handbook of Gender and Agriculture*. Routledge.

Joo, H., Khanal, A. R., & Mishra, A. K. (2013). Farmers' participation in agritourism: Does it affect the bottom line? *Agricultural and Resource Economics Review*, *42*(3), 471–490. https://doi.org/10.1017/S1068280500004949

Leslie, I. S., Wypler, J., & Bell, M. M. (2019). Relational agriculture: Gender, sexuality, and sustainability in U.S. farming. *Society & Natural Resources*, *32*(8), 853–874. https://doi.org/10.1080/08941920.2019.1610626

Ministry of Culture, Sports, and Tourism. (2008). Ethnic minorities development framework –– Viet Nam: Sustainable tourism development project. Asian Development Bank. https://www.adb.org/projects/documents/sustainable-tourism-development-project-ethnic-minorities-development-framework-v

National Institute of Food and Agriculture. (2021). Beginning farmer and rancher development program. U.S. Department of Agriculture. https://nifa.usda.gov/program/beginning-farmer-and-rancher-development-program-bfrdp

Pérez-Olmos, K. N., & Aguilar-Rivera, N. (2021). Agritourism and sustainable local development in Mexico: a systematic review. *Environment, Development and Sustainability*, 1-21.

Philipp, S. F. (1994). Race and tourism choice: a legacy of discrimination? *Annals of Tourism Research*, 21(3), 479-488.

Ram, Y., Kama, A., Mizrachi, I., & Hall, C. M. (2019). The benefits of an LGBT-inclusive tourist destination. *Journal of Destination Marketing & Management*, *14*, 100374. https://doi.org/10.1016/j.jdmm.2019.100374

Savage, A. E., Barbieri, C., & Jakes, S. (2022). Cultivating success: personal, family and societal attributes affecting women in agritourism. *Journal of Sustainable Tourism, 30*(7), 1699-1719.

Savage, A. E., Barbieri, C., Jakes, S., & Morais, D. (2018). Success of women in agritourism: She will get what she wants. University of North Carolina Extension publication AG-842. https://content.ces.ncsu.edu/success-of-women-in-agritourism

Schilling, B. J., Attavanich, W., & Jin, Y. (2014). Does agritourism enhance farm profitability? *Journal of Agricultural and Resource Economics*, *39*(1), 69–87.

Slocum, S.L. (2023). *Inclusion in tourism: Understanding institutional discrimination and bias* (Ed.). London, Routledge.

Slocum, S.L., & Curtis, K.R. (2017). *Food and agricultural tourism: Theory and best practice*. London, Routledge.

Sousa e Silva, S. de, Cardoso, D. de B.P., & Sousa, B.B. (2018). The role of marketing in LGBT tourism: An exploratory contribution in the Portuguese context. *Turismo e Sociedade*, *11*(2), 236–260.

Taylor, M. (2016, November 28). The latest in Native American tourism: Cultural experiences and educational opportunities. The Street. https://www.thestreet.com/lifestyle/travel/the-latest-in-native-american-tourism-cultural-experiences-and-educational-opportunities-13905349

Toth, S.J., & Mason, C.W. (2021). "Out" in the countryside: Gay tourist perspectives on rural travel in British Columbia, Canada: Gay tourist perspectives on rural travel. *Journal of Rural and Community Development*, *16*(3), Article 3. https://journals.brandonu.ca/jrcd/article/view/2052

Usai, R., Cai, W., & Wassler, P. (2022). A queer perspective on heteronormativity for LGBT travelers. *Journal of Travel Research*, *61*(1), 3–15. https://doi.org/10.1177/0047287520967763

U.S. Department of Agriculture. (2022, April 14). USDA releases equity action plan. https://www.usda.gov/media/press-releases/2022/04/14/usda-releases-equity-action-plan

Vilsack, T. (2014, March 12). USDA announces claims process for Hispanic and women farmers. U.S. Department of Agriculture. https://www.usda.gov/media/blog/2011/02/25/usda-announces-claims-process-hispanic-and-women-farmers

Wypler, J. (2019). Lesbian and queer sustainable farmer networks in the Midwest. *Society & Natural Resources*, *32*(8), 947–964. https://doi.org/10.1080/08941920.2019.1584834

Wypler, J., & Hoffelmeyer, M. (2020). LGBTQ+ farmer health in COVID-19. *Journal of Agromedicine*, *25*(4), 370–373. https://doi.org/10.1080/1059924X.2020.1814923

Expanding an Agritourism Enterprise With Processed Products

Shermain Hardesty
University of California—Davis (United States)
shermain@primal.ucdavis.edu

Keywords: processed products, vertical integration, farm profitability, entrepreneurship

Introduction/Background

Farm revenues from agritourism are increasing in the United States (USDA, 2019). While there is growing recognition of agritourism's limitations, most farm-based tourism operations in California are primarily intended to improve a farm's economic viability. The most popular form of agritourism in California involves farm stands selling fresh fruit, vegetables, herbs, flowers and/or Christmas trees (Hardesty and Leff, 2020). Other forms of agritourism include educational activities *(such as tours, demonstrations, youth camps);* entertainment/special events *(such as farm dinners, corn mazes, hayrides);* outdoor recreation (*such as picnicking, fishing, bird watching);* and accommodations *(such as bed & breakfast inns, cabins, yurts).*

Offering a single agritiourism activity (e.g., farm stand, farm dinners, pony rides, or pumpkin patch) will suffice for many farms. However, each of the above-varied forms of agritourism provide opportunities for further vertical integration by incorporating farm visits with the production and marketing of farm-based products such as specialty foods, ciders and juices, oils, dried flowers, wreaths, fibers, soaps, and lotions. Producing an expanded array of processed products can generate several direct benefits for a farm, including the enhancement of overall profitability, farm production, cash flow, and diversification of income sources (Lev, et al. 2018). Agritourism operations expanding into processed products can increase urban residents' understanding and support of agriculture. They can also strengthen the farm's local economy by creating both farm-based jobs and jobs in support services (Che, et al., 2005; Gwin, et al., 2018; New Economics & Advisory, 2019).

Case studies were developed of three established California agritourism operations of varying sizes that were willing to share information about how they expanded their processed product offerings. The primary operators were interviewed regarding the following topics: growth path; regulatory challenges; resources needed to produce processed products; marketing; and impacts of expanded enterprise on their operations, farm income, farm families, and farm communities. These three case studies are presented below, followed by discussion of their similarities and differences, and their impacts.

Morse Farms

Glennda and John Morse bought 20 acres of farmland in 1998 in the Central Valley's Butte County. Their farm is a three-hour drive from San Francisco and a one-and-a-half-hour drive from Sacramento. The Morses cleared the land and planted a variety of citrus trees in 2002 while still working full-time, then built a small shop and farm stand. They began selling mandarin oranges at their farm stand in 2005, starting in November and ending in February. They even let children pick their own bags of mandarins and started tours for groups in 2007.

When the Morses realized that their customers expected flawless fruit, they decided to have mandarins that developed brown spots from the rains processed by a co-packer into mandarin marmalade and pancake syrup. By 2010, Morse Farms was marketing these specialty food products.

California's Cottage Food Law became effective on January 1, 2013 (Contra Costa Health Services, 2013). It allows certain nonhazardous foods that are made in a home kitchen to be sold directly to consumers and indirectly through stores in California. Glennda began producing cottage foods in 2015, which were sold at their farm stand, local food stores, and community events. Approximately 30% of Morse Farms' revenues were attributable to their specialty food products.


(Photos courtesy of https://www.facebook.com/morse.farms/)

Glennda and John Morse relied on family members and close friends to help out during busy weekends. In 2020, health problems forced the Morses to remove their mandarin trees and stop producing specialty foods. However, they still sell their oranges and grapefruit at their unattended farm stand on the "honor system" (trusting customers to deposit their money into a locked drop box) during January and February. *(G. Morse, personal communication, June 9, 2022).*

Full Belly Farm

Full Belly Farm is a diverse 400-acre organic farm. It was founded in 1985 by four partners. It is located in the Capay Valley in the far west corner of Yolo County, a two-hour drive from San Francisco and an hour drive from Sacramento. The farm, which is well-known by consumers favoring organic products, produces over 80 different crops including almonds, walnuts, tomatoes, cut flowers, grains, potatoes, as well as specialty crops, lamb, pigs, and laying hens.

Full Belly's first agritourism effort was an end-of-harvest Hoes Down Harvest Festival held as a fundraiser for Ecofarm in 1987. Ecofarm is a nonprofit organization focused on advancing just and ecological farming and food systems. Full Belly hosted the event annually through 2020. Hoes Down was a two-day celebration that included numerous workshops. A wreath-making workshop was organized by one of Full Belly's founders, Dru Rivers. Several years later, Dru began hosting school group tours at the farm. Eventually, the school group tours developed into "Kids Camps." Dru and Paul Muller's daughter, Hallie, initiated the first week-long Kids Camp as part of a senior year project at her high school, and organized them for several years. Later, a hired education coordinator managed them until COVID-19 forced the cancellation of the very popular program in 2020, causing Full Belly to lose the cash flow generated from the Kids Camp registration deposits during February and March. Full Belly also operated a Friday farm stand for approximately 10 years; however, the farm's remote location limited the sales.

Full Belly's Farm Kitchen was developed to support second generation family members. One of Dru and Paul Muller's sons, Amon Muller, and his wife Jenna Clemens, developed the Farm Kitchen after making various food products at the local Grange facility from the farm's ripe or cosmetically challenged produce. But the couple found the process of moving large amounts of ripe produce, especially tomatoes, to be very cumbersome. Instead, Amon and Jenna used seed money to build the on-farm Farm Kitchen – a two-year process led by Amon. Its downstairs includes a spacious commercial kitchen with storage space; the second story is the living quarters for Amon, Jenna and their three children.

Farm Kitchen was completed in 2015. It is also used to prepare meals for the monthly dinner events (March through November), monthly Pizza Nights (July through October), and weddings and other special events (approximately nine per year). Farm Kitchen's diverse product line of shelf stable foods currently includes dried fruits, jams, marmalade, preserves, tomato sauce, candied orange peel, baked goods, grains, nuts, oils (olive and sunflower), and hot sauce. In 2021, Farm Kitchen produced at least 5,000 jars of each of its fruit products.

(Photos courtesy of Full Belly Farm website, www.fullbellyfarm.com)

Dried flowers along with wreaths are other important processed products for Full Belly; this area is now managed by Dru and Paul's daughter, Hannah, with Dru's support. They also offer yarn and sheepskins.

The shelf-stable foods and nonfood products are marketed through Full Belly's large community supported agricultural program, local food cooperatives, Full Belly's online Farm Shop (https://csa.fullbellyfarm.com/order_shop/shop#reset) and three year-round farmers markets in the Bay Area. Their processed products are also used in the farm dinners, weddings and other events held at the farm. *(A. Muller, personal communication, July 13, 2022).*

Linn's Fruit Bin

In 1976, John and Renee Linn moved from the Midwest to Cambria, a low-key tourism town on the Central Coast, with their three young children. It is a four-and-a-half-hour drive from both San Francisco and Los Angeles. The Linns bought 23 acres of farmland five miles from the town center. John used his agricultural background from managing greenhouses as a graduate student in Kansas. He and Renee learned to operate farm equipment and planted fruit trees, flowers, and various vegetable crops. In 1977, they planted olallieberries based on advice from a University of California Cooperative Extension farm advisor.

In 1979, the Linns changed their business model from growing a variety of produce to sell at the farm because they needed to become more financially viable. They built a farm store and started a pick-your-own program with berries and some vegetables. Their three children became involved on the farm as youngsters. When the farm had problems with red berry mites causing uneven ripening in the olallieberries, Renee started baking olallieberry pies and selling them at their farm store and community events. Many tourists began coming to the farm for the pies. Renee also started a mail-order pie program. In 1981, three wealthy neighbors complained to San Luis Obispo County officials about the heavy traffic created by the farm store. In 1985, the County decided that the Linns had to move their food processing off-farm and open an off-farm store. The farm store continued to attract tourists who wanted to visit the farm.

(Photos courtesy of: https://linnsfruitbin.com)

With the off-farm processing facility, Renee developed a wide variety of products (jellies, sauces, fruit butters, baking mixes, vinegars, and various desserts) to complement their offerings of seasonal citrus, apple, apricot and vegetables. The Linns continued to expand their processed food offerings as listed in the following timeline:

- 1988: Opened a restaurant in San Luis Obispo (an hour drive from the farm). It served lunch and also sold baked goods and preserves.
- 1989: With a no-interest loan and discounted rent from a friend, the Linns started a restaurant in downtown Cambria, which used most of the produce from their farm.
- 2002: The Linns closed their San Luis Obispo restaurant.
- 2006: Fire destroyed the Cambria restaurant.
- 2007: To continue selling their products, the Linns opened a bakery/cafe (Easy as Pie Café) and a store selling shelf-stable foods, kitchen tools, cookbooks and decorative goods (Gourmet Goods), both of which are close to the restaurant.
- 2010: The Linns hired a new chef to have more culinary flair and more seasonal dishes at Linn's Restaurant.
- 2013: The Linns started producing preserves for Knott's Berry Farm on contract.
- 2020: The Linns closed their farm store temporarily when COVID-19 started.

The Linns continue to adapt to changing conditions. They now have approximately 110 year-round employees, including 35 employees producing Knott's Berry Farm products. Their son manages Linn's Restaurant. Three of the Linns' grandsons work at both the restaurant and bakery/café. Their fourth grandson manages the farm. A granddaughter works as a hostess and cashier at the restaurant. One daughter lives in New York but is extensively involved with their advertising, public relations, and strategic planning, as John and Renee Linn are now in their mid-70s.

The family's off-farm processing plant has grown from 3,000 square feet to over 20,000 square feet. The United States' Food Safety Modernization Act requires the Linns to develop a Hazard Analysis Control Point plan for each processed product; this has forced the elimination some low-volume products. Linn's Restaurant is now open for breakfast, lunch, and dinner, seven days a week. Currently, approximately 60% of the Linns' revenues are generated by Linn's Restaurant and their bakery/cafe. Their farm's liability insurance was cancelled because of increased wildfire danger. Additionally, they have difficulties finding labor to staff the farm store, making it unlikely that the farm store will re-open.

(Photos courtesy of: https://linnsfruitbin.com)

The Linns had obtained a co-packer to comply with the USDA's meat processing requirements for savory pies. However, their volumes were comparatively small for the co-packer and the Linns were not pleased with the quality. Now they only produce savory pies for the restaurant and the bakery/café. They were selling frozen pies online, but shipping them has become very expensive. Therefore, they have suspended mail orders for their fruit pies. Approximately 50 local stores (including a Costco) sell their fruit pies, accounting for about 15% of Linns' revenues.

The Linns' farm produces less than five percent of the 20 tons of olallieberries that they need annually. They rely on olallieberry growers throughout the West Coast, as well as imported supplies, but continue to use the fresh fruit and vegetables from their farm at their restaurant.

(J. Linn, personal communication, June 27, 2022).

Discussion

These three case studies describe the development of different processed product structures that have enhanced the profitability of farms with agritourism enterprises. They differ significantly in their size and the complexity of their operations. Clearly, the Morse Farm model is the simplest and probably most likely to be adopted by other agritourism operations. The Morses' marketing season for their citrus was relatively short. They enhanced their farm revenues considerably by producing sauces and other preserved products from their citrus. While they are no longer processing their citrus, they are still maintaining their farm stand to sell their oranges and grapefruit on the honor system.

Full Belly Farm's extensive offerings of processed products are generating substantial revenues, along with increasing the farm's cash flow during the off season. Second generation family members are leading Full Belly's production and marketing of its shelf-stable foods and its floral and yarn products.

Linn's Fruit Bin started as a farm stand to market the farm's produce and grew into a multimillion-dollar enterprise. It is likely that the county's requirements to move their food processing off-farm and open an off-farm store actually accelerated their success. Currently, Linn's Fruit Bin is not engaged in agritourism; it is unlikely that its farm stand will re-open given difficulties obtaining hired help and insurance considerations. The Linns attribute their success mainly to their tenacity, marketing diversity, and tourist location.

All three farms were primarily motivated to start producing processed products because they had produce that consumers refused to buy. In the case of Linn's, the red berry mite caused uneven ripening of olallieberries, making them unsaleable in the fresh market. Thus, Renee Linn started making olallieberry pies and preserves.

Since Morse Farms was a small operation, its economic impact did not extend much beyond their farm. Full Belly's processed products have created more year-round employment at the farm, which strengthens its local economy. By currently employing 110 community members, Linn's has clearly strengthened its local economy. Since all three farms are also marketing their processed products in nearby communities, it is likely that they have increased consumer interest in their farms, and in agriculture in general. Agritourism operations that decide to produce an array of processed products clearly can generate several direct benefits for their farm, as well as for their community.

References

Che, D. Veeck, A. & Veeck, G. (2005). Sustaining production and strengthening the agritourism product: Linkages among Michigan agritourism destinations. *Agriculture and Human Values.* 22: 225–234. https://doi.org/10.1007/s10460-004-8282-0

Contra Costa Health Services. (2013) Homemade Food Act. https://cchealth.org/eh/food/pdf/CFO-Questions.pdf

Gwin, L., Brekken, C. A., & Trant, L. (2018). Farm Direct at five years: An early assessment of Oregon's farm-focused cottage food law. *Journal of Agriculture, Food Systems, and Community Development, 8*(3), 85–104. https://doi.org/10.5304/jafscd.2018.083.005

Hardesty, S. & Leff, P. (2020). California's agritourism operations expand despite facing regulatory challenges. *California Agriculture*. 74(3), 123-126. https://doi.org/10.3733/ca.2020a0026

Lev, L., Feenstra, G., Hardesty, S., Houston, L., Joannides, J. & King. R.P. (2018). Should you produce your own specialty food products? https://ageconsearch.umn.edu/record/278695?ln=en

New Economics & Advisory. (2019). Apple Hill/Camino Economic Study. Roseville, CA.

United States. (2019). U.S. Census of Agriculture. USDA Census 2017 Census Volume 1, Chapter 1: U.S. National Level Data, Table 7. https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1_Chapter_1_US

Three Agritourism Businesses, Three Agritourism Journeys

Caroline Morrow
Bannikin Travel and Tourism (Canada)
caroline@bannikin.com

Trevor Jonas Benson
Bannikin Travel and Tourism (Canada)

Keywords: business journeys, agritourism development, agritourism case studies

Introduction

As tourism consultants specialized in leveraging foodways to grow visitation to rural destinations, the authors have noticed in recent years a growing awareness of and interest in agritourism amongst the destination stakeholders with whom they work. The trend became increasingly pronounced with the onset of the COVID-19 pandemic and reflects growing consumer interest in rural, back-to-the-earth experiences that offer a connection to the origins of food and drink.

Figure 1: Animal interactions at Curringa Farm, Tasmania

Agritourism development at the regional level relies on business-level initiatives. The time, energy, and resources of agritourism businesses set an essential foundation to regional agritourism development. Inspired by this dependence, the authors set out to understand what agritourism development means from the perspective of different agricultural businesses. This research compares the agritourism journeys of three agricultural businesses. Case studies are used to highlight the diverse challenges and opportunities that producers face incorporating agritourism into their businesses, along with their unique approaches to overcoming challenges and leveraging opportunities. Conclusions from a comparative analysis of the cases are also shared. This paper is geared to agritourism practitioners interested in learning from the experiences of real business owners, and destination stewards, including municipal governments and tourism organizations, who want to support agritourism development in their regions.

The 2018 World Congress on Agritourism in Bolzano, Italy emphasized that across the globe, there are diverse definitions of and approaches to agritourism. Reflecting on this diversity, developed over the course of agritourism's long history, case studies from Australia, Italy, and Scotland were chosen – three countries with their own histories and traditions of agritourism. Although the case-study businesses differ in terms of the crops they produce, the livestock they raise, and the visitor experiences they offer, their owners share a desire to connect people to rural landscapes and agricultural production. It should be noted that the case-study businesses were selected from the authors' networks and not in an attempt capture the full breadth of diversity that exists in the world of agritourism.

Methodology

To better understand the agritourism journeys of the three case-study businesses, semi-structured interviews were conducted with a representative from each business. The interview questions focused on the business owners' definitions of agritourism, motivations for agritourism development, the value they place on agritourism, how agritourism fits into their business models, the entrepreneurial challenges and opportunities they face, how they work to overcome challenges and leverage opportunities, future agritourism plans, broader hopes for agritourism growth, and key learnings for other businesses and destinations. Complementing the interviews, the research process included a follow-up questionnaire completed by each representative, to gather quantitative data, such as farm size, the value of agritourism to the business, and visitor numbers. Both datasets informed the comparative analysis. The authors also conducted desk research, looking at the visitor-facing websites for each business and one of the researchers spent a month working at one of the case-study businesses providing tourism development support.

For the purposes of this paper, the authors define agritourism as tourism activities offered by agricultural businesses that reflect a connection to the landscapes where they are based and the food and drink products they produce, whether this is on-farm accommodations, a retail shop, tastings, tours, workshops, or something else.

The Case Studies

Guardswell Farm

Guardswell Farm (see Figure 3) is a market garden, sheep, and goat farm located in Kinnaird, west of Dundee in Eastern Scotland that uses an agroecological farming approach. Guardswell Farm was established in 2011 and started offering agritourism in 2017. The farm sits on 170 acres (69 hectares) with 70% of its land dedicated to farming and 30% used for tourism activities, whereas 90% of the farm's revenues come from agritourism and 10% from farming. Although the business owners intend to increase farm production to better cater to the needs of the business' agritourism activities, the percentage mix of revenue will likely remain similar with increased revenues across both sides of the business. In terms of agritourism activities, Guardswell Farm offers tastings, workshops, foodservice, a roadside farm stand, accommodations, and animal interactions. The business also works as an events and wedding venue. Guardswell Farm receives around 11,750 visitors a year, of which, 20% are international, 70% national, and 10% from the nearby region. The typical visitor profile includes urbanite couples aged 25-45 years and young families from cities around Scotland and London seeking a slower pace of life.

(T. Parsons, personal communication, May 26, 2022)

Azienda Agricola Foradori

Azienda Agricola Foradori is a biodynamic family wine estate in Northern Italy that recently diversified into vegetable (2019) and cheese (2020) production. Azienda Agricola Foradori is known within the wine world as a pioneer in sustainable production techniques including innovative projects such as promoting biodiversity through experiments to grow local grape varieties from seed. Azienda Agricola Foradori's main cellar is in Mezzolombardo, between Trento and Bolzano, however, the winery has vineyards and vegetable plots on sites across a broader region that extends towards Lake Garda. They have seven cows, 28 laying hens and four pigs, however, most the agricultural land is dedicated to vineyards. Its agricultural assets cover 77 acres (31 hectares), of which 95% of the land area is dedicated to farming and 5% to tourism. Azienda Agricola Foradori was established in 1935 as a winery and the company expanded into agritourism in 2012. Before then, tastings and tours were only offered in a business-to-business context. Azienda Agricola Foradori's agritourism offerings include tours, tastings, foodservice, and retail. They have a retail shop, where they sell their vegetables, wine, cheese, eggs, and food products from other regional producers. For the past few summers, Azienda Agricola Foradori has hosted "Bar Rurale" (see Figure 2), an informal biweekly

opportunity for locals and visitors to enjoy wines from the estate paired with their cheeses and vegetables. Today, the winery receives around 750 visitors a year of which 60% are international, 35% national, and 5% regional. Primary markets include visitors from North America and Europe ranging from 30-70 years of age. Their visitors usually have a particular interest in wine. Wine sales are the highest revenue generator for the business, with onsite agritourism activities accounting for 15% of revenues.

(M. Zierock, personal communication, June 9th, 2022)

Curringa Farm

Curringa Farm is a working sheep and seed farm, located in Central Tasmania about one hour from Hobart. This multigenerational family farm business was established in 1969 and started with agritourism in 1984. It has grown into an internationally recognized farm stay and farm tour business. The farm is 770 acres (312 hectares) in size, 95% of which is dedicated to agriculture, while 5% is used for tourism, which makes up two thirds of the business's revenue. In 2019, the farm attracted around 13,500 visitors, of which 85% were international, 7.5% national, and 7.5% regional. The agritourism offerings of Curringa Farm include tours, workshops, demonstrations, accommodations, animal interactions (see Figure 1), retail, and some food and beverage. The accommodation offerings tend to attract young professionals, honeymooners, families, and self-driving visitors, whereas the tours usually attract larger groups including retirees.

Figure 2:
Bar Rurale agritourism experience at Azienda Agricola Foradori, Italy.

(A. Lamotte, personal communication, July 25, 2022)

Results and Discussion

As part of the analysis process, interview responses were grouped according to theme and compared across the three businesses to look for similarities and differences. One of the key areas of investigation was around initial motivations for developing agritourism at their businesses. Curringa Farm diversified into agritourism to build resilience into the business and on-farm employment for the family. For Azienda Agricola Foradori and Guardswell Farm, their motivations were more educational. Azienda Agricola Foradori sought to close the production loop, teach people about sustainable farming, and celebrate their farm products by allowing people to see the quality first-hand. Importantly, they want to make sure people understand that wine is an agricultural product. Similarly, Guardswell Farm saw agritourism as a way to get people out for a day in the countryside and teach them about food and farming.

From these motivations, the authors wanted to learn more about the benefits associated with running an agritourism enterprise, to compare if they matched original expectations. In terms of the benefits the business owners saw from agritourism development, Guardswell Farm noted that they were able to reinvest the revenue from agritourism activities back into the business to support their sustainable farming practices. Long term, they hope it will also help fund other not-for profit ventures, such as protecting local woodlands. Another benefit they noted was the ability to provide fresh food to local families and teach them where their food comes from. The benefits seen by Curringa Farm largely align with the initial motivations that inspired the business's diversification into agritourism, like strengthening the business, making it more resilient to shocks, and providing intergenerational

employment on-farm. For Azienda Agricola Foradori, an unexpected benefit was the direct-to-consumer contact that agritourism offered. It is a chance to learn who is buying their wines and get feedback from them right away, while also building relationships and loyalty with these customers.

When it comes to the challenges of setting up agritourism, all three of the case study business owners underlined difficulties finding a sufficient number of employees to meet their staffing needs. Guardswell Farm pointed out that part of the difficulty was related to the fact that although they are close to the urban centre of Dundee, there is no public transportation option to bring people to the farm. Other challenges in agritourism development brought up by the business owners included, as mentioned by Azienda Agricola Foradori, developing products and price points geared to both local consumers and visitors. Curringa Farm experienced a similar challenge when the business owners needed to pivot their offerings to cater to the demand of domestic markets due to the COVID-19 pandemic. Some of the business owners also mentioned challenges related to government support that favoured other kinds of agricultural businesses, whether that be large scale farms or new businesses. Marketing their agritourism businesses was another challenge the case-study businesses needed to overcome. For example, for their marketing, Guardswell Farm decided not to sell their accommodations or workshops through third party sites. This was challenging as it slowed their growth, but it also allowed them to maintain control over their story. Curringa Farm noted a lack of marketing coordination between agritourism producers in the region, and the need for more marketing support and coordination.

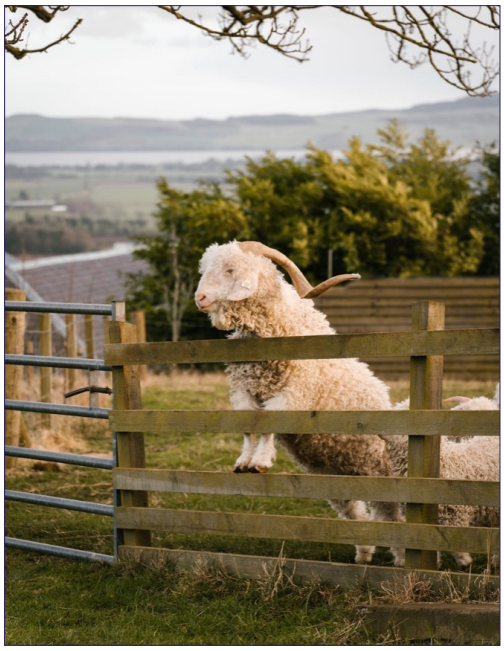


Figure 3: Guardswell Farm, Scotland (photo credit: Murray Orr)

The authors also asked the business owners about their agritourism developments plans. As may be expected, the business owners see a wide array of opportunities for the future of agritourism at their diverse businesses. Following Curringa Farm's recent pivot to new markets since the COVID-19 pandemic, they see the potential of bespoke offerings and developing products that cater to special interest groups such as birders and bushwalkers. When it comes to their visitor offerings, Guardswell Farm is exploring how different parts of the business can complement and support each other. For example, can revenues from weddings and events help them to hire a full-time chef who can also offer meaningful culinary experiences, like pop-up dinners featuring farm products, to their overnight guests? Azienda Agricola Foradori, is in a position where facility and infrastructure constraints mean that they have a limited capacity to produce more wine. Therefore, to grow their business, they need to explore other options. This provides an interesting opening for agritourism to play a more important role in their business model and help to grow the business in different ways. One option they are considering is to build visitor accommodations on their dispersed lands.

All three business owners recognize the important role they play for their communities as agritourism providers and as local food suppliers, rural employers, stewards of the land, and educators about all things food and farming. For these benefits to be realized, however, there are ways that destination stewards can better work with agricultural and agritourism business owners. An important first step is recognizing agritourism within both the agricultural and tourism industries, to better collaborate with these businesses and ensure that they qualify for support streams. It can be as simple as recognizing these businesses as legitimate categories on marketing platforms and collaborating with land-use planning partners to facilitate agritourism business development, through how-to workshops and streamlined permitting processes, etc. Guardswell Farm also

mentioned infrastructural supports that would make agritourism development easier including providing more public transit options in rural areas and adding electric vehicle charging stations and broadband connectivity. To maximize the benefits that agritourism can deliver, Azienda Agricola Foradori stressed the importance of planning for agritourism at a regional level using participatory research processes. As mentioned by Curringa Farm, this may include rebranding the word "agritourism" in English and selecting more descriptive and approachable terms for visitor-facing materials that celebrate established and emerging businesses, and develop a critical mass of product worth talking about. For this to happen, it is important to bring industry together and create more opportunities for regional collaboration.

Conclusions and Future Thinking

Reflecting on the three case studies, the authors identified several broad themes. It is clear that agritourism is a diversification tool that can be used to build resilience into agricultural businesses. Part of this comes from the fact that agritourism can attract both high-yield visitors from international markets as well as locals interested in connecting to their food. Tourism revenues can also help to support other on-farm initiatives, such as sustainable agriculture and providing meaningful employment for family and community members. Of course, the availability of staff to fill these roles has a big impact on the level of benefits that agritourism can provide at the business and regional levels.

When it comes to running a successful agritourism business, all the case study owners agreed on the importance of first needing a great product and then crafting a compelling story around it, especially one built on collaboration with nearby businesses. Offering high quality experiences also has implications at the regional level. With the agritourism industry still in a growth phase globally, every agritourism experience reflects on the industry at large, so it is important to have quality assurance. In consideration of the responses that business owners shared around both their hopes for the future of agritourism and advice that they have for businesses considering diversifying into agritourism, the authors were encouraged by not only the positive sentiment expressed but also by the constructive feedback provided. What follows is a paraphrase of the final comments from each business owner.

> *Guardswell Farm: As Scotland continues to develop its demand for agritourism and as connecting to food-producing places becomes part of the public consciousness, there will be more and more interesting and innovative agritourism businesses to choose from. The key for businesses interested in developing agritourism is to take small steps and focus on quality.*
>
> *Curringa Farm: Agritourism is a boots-and-hearts movement where customers are exposed to the stories and lives of the farmers behind the visitor experience, so it is important not to focus too much on what's on the plate. Think about how to leverage your story and the story of your land, and work with others, including neighbours, to package what you share as a collective to attract people to experience the whole place.*
>
> *Azienda Agricola Foradori: There is so much interaction between humans and nature when it comes to food, from production through to enjoyment, and people have the power to dream up more ways to connect with the places that produce food, so the future is bright! Businesses seeking to develop agritourism will benefit from focusing not on the product itself but on the intangibles, like processes and stories, which is where meaningful connection takes place.*

Agritourism Critical Success Factors

Chadley R. Hollas
Cultivating Tourism
crhollas@gmail.com

Lisa Chase
University of Vermont

Claudia Schmidt
Penn State

R. David Lamie
Clemson University

Lori Dickes
Clemson University

Doolarie Singh-Knights
West Virginia University

Rachael Callahan
University of California-Davis

Gail Feenstra
University of California-Davis

Mary Stewart
Oregon State University

David Conner
University of Vermont

(All authors are in United States)

Keywords: Agritourism, profitability, economic development, rural tourism, agriculture

Introduction

As the agritourism sector continues to rapidly grow and evolve in recent years, its practice has outpaced the research and outreach required to support farms and ranches and their communities. More research is needed to understand why agritourism operators succeed (or fail) and what barriers they face. To address these needs, a multi-state team of research and extension faculty collaborated on a multi-year project which sought to understand the state of agritourism in the U.S., the relationship of profitability to various agritourism activities, the goals of agritourism operators, and the barriers to success faced by operators in the U.S. The following paper provides an overview of the survey employed by the research team and the results from all 50 states in the U.S.

Background

While agritourism has taken place for generations, our research into and understanding of the phenomenon is still in its infancy. As with many other sub-sectors within the tourism economy, agritourism can take on a variety of definitions depending on the cultural contexts in which it thrives. Researchers have operationalized these various definitions in their work (Chase et al., 2018; Phillip et al., 2010; Gil Arroyo et al., 2013) but we have not yet seen a consensus in scholarship, nor are there consistent practical definitions globally.

Much of the work exploring agritourism in the U.S. emphasizes regional and state-level inquiry. From the benefits of agritourism (Tew & Barbieri, 2012) to a regional clustering of operations (Van Sandt et al., 2018), research in the sector is plentiful and diverse. Perhaps one of the more common fields of inquiry is with regard to the motivations of agritourism operators. These studies, like Barbieri and Mahoney (2009), find that a primary motivator for starting an agritourism enterprise is a desire to improve the financial standing of a farm. Scholarship in this area has begun to give us a better idea of what might lead to profitability in agritourism. For example, Lucha et al. (2016) found that certain operational, financial, and demographic characteristics have an impact on profitability among operators in Virginia. Barbieri and Mshenga (2008) found that members of the NAFDMA International Agritourism Association organization on larger acreage or with more employees were more likely to be profitable.

Shown by the review above, the need for this type of project is evident. Researchers and service providers must gather a clearer understanding of the agritourism sector, the benefits we might see from it, and the challenges we might encounter. Through this, agritourism operators will be better equipped to reap benefits while a part of a sustainable sector. This project is a step towards that goal.

Methods

The survey used in this study was developed by integrating three sources: (1) synthesis of related literature (referenced above), (2) qualitative interviews of 23 farms and ranches in five U.S. states (Vermont, Oregon, California, Minnesota, and West Virginia) (Quella et al., 2021), and (3) survey instruments previously applied to related studies used with the permission of authors (Tew & Barbieri, 2012; Chase et al., 2018). The research team worked with practitioners within the university-based Cooperative Extension System, state departments of agriculture and tourism, and private agritourism associations to solicit respondents in each of the 50 United States. The online survey was emailed as a link throughout this network. The research team then employed a snowball sampling approach in which the agritourism operators recruited their peers to complete the survey. Other sampling methods were considered, such as a random sample. However, there exists no farm-level database from which an adequate sample could have been drawn. Other researchers have previously mentioned this limitation of the sector (Barbieri & Mshenga, 2008). Due to the sampling method used, we do not have an accurate count of how many responses were solicited. However, we received 1,834 complete survey responses. While the sample size is large, the sample is not necessarily representative of the U.S. agritourism operator population. Therefore, the results cannot be generalized outside of the sample population. The survey was open for responses from November 2018 through February 2019.

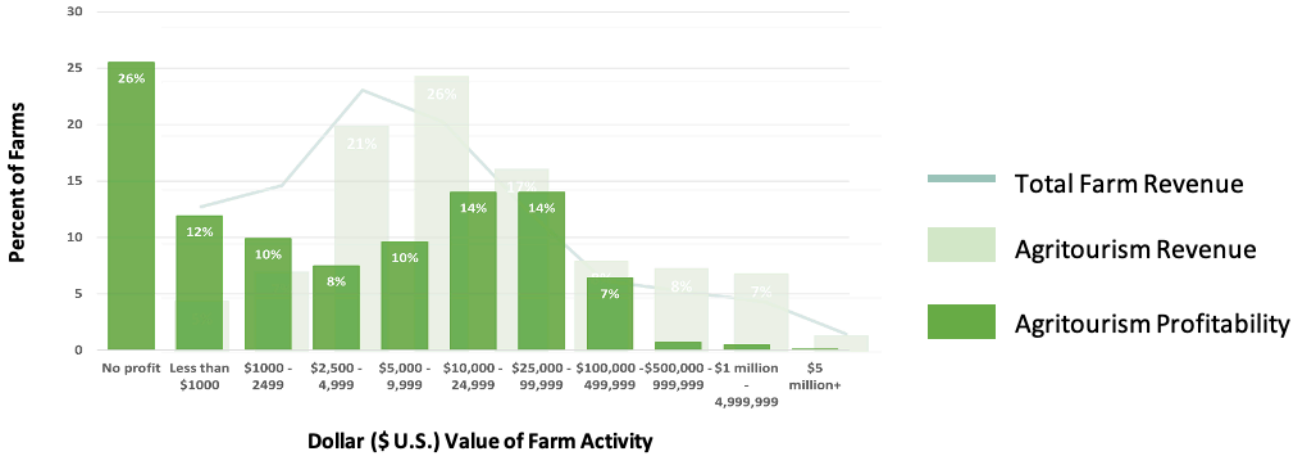


Figure 1. Profitability of agritourism compared to Farm Revenue and Agritourism Revenue

Findings

The survey employed and the resulting responses are, to date, the largest single survey of agritourism operators in the U.S. The following section outlines these findings and offers visual summaries.

Revenue and Profitability

In the survey, respondents indicated both farm revenue (in 2018) and revenue from agritourism in the same year. The distribution of the revenue figures for all respondents was normally distributed (seen in the opaque areas of Figure 1). Twenty-six percent (26%) of respondents indicated agritourism revenues of $10,000-24,999, while 33% claimed less than $10,000 of revenue from agritourism. Since offering agritourism was a prerequesite to completeing the survey, no respondents indicated they did

not receive any revenues from their agritourism enterprises. However, the same cannot be said for profit from agritourism.

Achieving profitability with agritourism was a challenge for our respondents. Twenty-six percent (26%) of respondents indicated they obtained no profit from their efforts with agritourism. The next 30% of respondents (shown in green on Figure 1) indicated an annual profit of less than $5,000 from agritourism enterprises.

The survey also offered insight into what characteristics might be correlated with achieving profitability. Among those, respondents who identified as female and those who offered off-farm direct sales (such as participation in a farmers' market) were less likely to be profitable. In contrast, respondents who offered events and entertainment or on-farm direct sales, or those who were motivated by revenue generation or by social interactions were more likely to be profitable in their efforts. Details of associations with profitability and further analysis of this survey data have been previously published (Hollas et al., 2021; Wang and Chase, 2020).

Goals of Agritourism Operators

Respondents ranked various goals related to agritourism by importance, and also by how successful they felt they were with each goal. These goals were categorized as (1) financial goals, (2) personal and family goals, and (3) community-related goals. It was with responses regarding community-related goals that we found the largest discrepancies between how important the goal and how successful operators felt with the goal. More operators felt successful with enjoying public than felt it was important. Respondents felt less successful with the two other community-related goals. These results are outlined in Table 1 below.

Table 1: Community-related Goal Importance and Success

Goal	**Respondents felt goal was important**	**Respondents felt successful**
Enjoy Social Interaction with the public	83%	90%
Educate public about agriculture	87%	81%
Build goodwill in the community	91%	88%

Challenges to Success in Agritourism

The survey offered insights into specific barriers and challenges faced by agritourism operators in the U.S. The respondents indicated whether each item listed in the survey was (1) very challenging, (2) somewhat challenging, or (3) not at all challenging. For the purposes of this paper, we have indicated each of these responses in red, yellow, and green, respectively. Three of the top challenges indicated by respondents were liability, challenges with state and local regulations, and issues with e-connectivity. The following section reviews responses to these issues and shows regional differences in the responses received.

Challenges with Liability

Liability was the most significant challenge faced by agritourism operators in the U.S., with 82% indicating it as somewhat or very challenging. Operators in the West and Midwest regions of the U.S. found liability to be most challenging. Liability was least challenging for operators in the Northeast. Figure 2 outlines the regional responses regarding liability.

Challenges with State and Local Regulations

Overall, 73% of respondents felt state and local regulations were a challenge to their operations. Operators in the West found state and local regulations to be most challenging, while those in the South found this to be less challenging. This is shown in Figure 3 below.

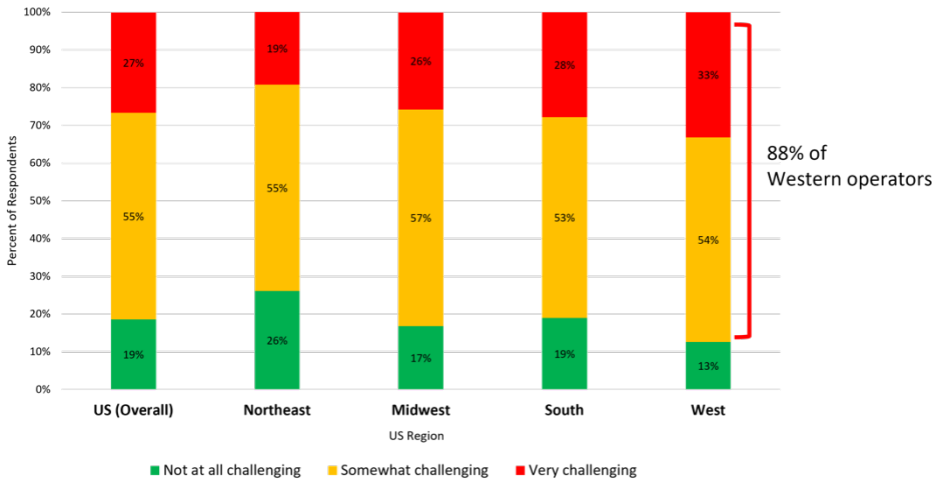


Figure 2. Challenges with Liability by U.S. Region (Wang & Chase, 2020)

Challenges with E-Connectivity

Of our 1,834 respondents, 61% indicated that e-connectivity was a challenge for them. As shown in Figure 4, operators in the South found e-connectivity to be most challenging while operators in the Northeast found this issue to be less of a challenge.

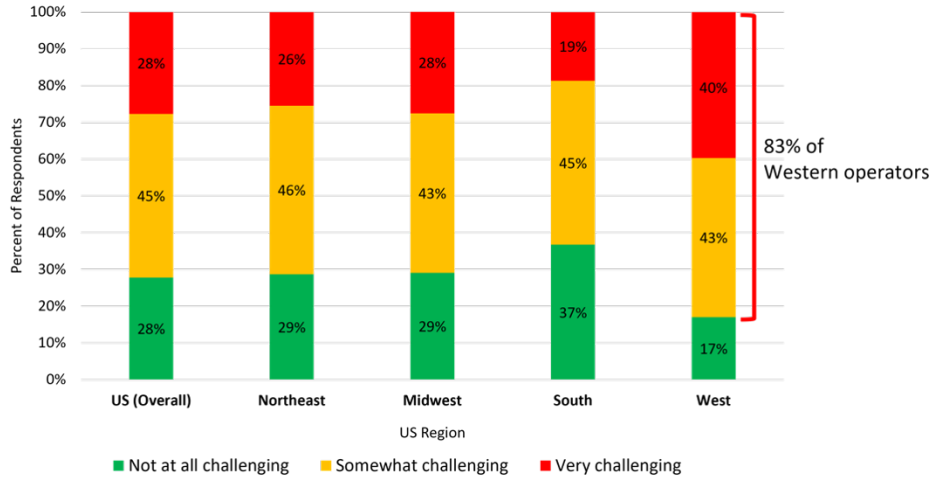


Figure 3. Challenges with State and Local Regulations by U.S. Region (Wang & Chase, 2020)

The Future of Agritourism

In general, respondents to the survey offered a positive outlook on the future of agritourism in the U.S. To summarize, 69% of respondents indicated a plan to expand their agritourism services, 55% planned to invest in more buildings, and 36% planned to hire more employees. In contrast, only 4% of respondents planned to reduce the number of services offered and 2% planned to close their enterprises entirely. Nineteen percent of respondents indicated no changes planned.

Conclusion

As mentioned in the Methods section, the results above are applicable only to the population surveyed and are not generalizable. However, the results are still valuable, offering insights into many of the perceived opportunities and challenges faced by agritourism operators across the United States. What we learned about agritourism operators in the U.S. and the challenges they face adds significant knowledge to existing literature. This study gives practitioners a groundwork for asking salient questions about agritourism in their communities. For example, how do the local or State-

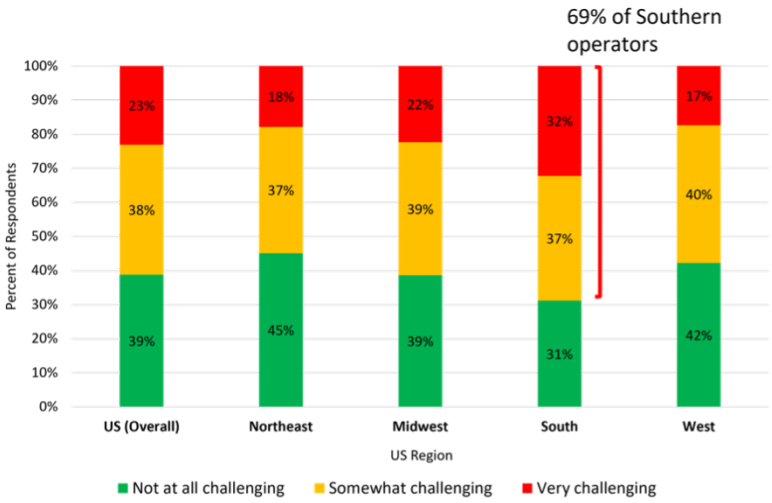


Figure 4. Challenges with E-connectivity by U.S. Region (Wang & Chase, 2020)

level policies in the West (or a lack thereof) reinforce the challenges with liability seen by 88% of operators? Addressing questions like these is necessary for the viability of agritourism on small family farms in the U.S., however this task is outside the scope of this paper.

Using the results of this study, many publicly available resources have been created to further support the viability of agritourism in the U.S. Improvements could be made in future studies of this nature. We suggest efforts to assemble listings of agritourism operators so that a more robust sampling approach can be used in the future so the resulting analyses can be used to adopt more relevant policies and systems of support. Further work towards building a stronger support system will also be imperative as more small family farms in the U.S. embrace agritourism as a diversification strategy.

References

Barbieri, C., & Mahoney, E. (2009). Why is diversification an attractive farm adjustment strategy? Insights from Texas farmers and ranchers. *Journal of Rural Studies, 25*(1), 58-66.

Barbieri, C., & Mshenga, P. M. (2008). The role of the firm and owner characteristics on the performance of agritourism farms. *Sociologia ruralis, 48*(2), 166-183.

Busby, G., & Rendle, S. (2000). The transition from tourism in farms to farm tourism. *Tourism Management, 21,* 635-642.

Chase, L. C., Stewart, M., Schilling, B., Smith, B., & Walk, M. (2018). Agritourism: Toward a conceptual framework for industry analysis. *Journal of Agriculture, Food Systems, and Community Development, 8*(1), 13-19.

Gil Arroyo, C., Barbieri, C., & Rich, S. R. (2013). Defining agritourism: A comparative study of stakeholders' perceptions in Missouri and North Carolina. *Tourism Management, 37*, 39-47.

Hollas, C. R., Chase, L., Conner, D., Dickes, L., Lamie, R. D., Schmidt, C., Singh-Knights, D., et al. (2021). Factors Related to Profitability of Agritourism in the United States: Results from a National Survey of Operators. *Sustainability, 13*(23), 13334.

Lucha, C., Ferreira, G., Walker, M., & Groover, G. (2016). Profitability of Virginia's agritourism industry: A regression analysis. *Agricultural and Resource Economics Review, 45*(1), 173-207.

Phillip, S., Hunter, C., & Blackstock, K. (2010). A typology for defining agritourism. *Tourism Management, 31*(6), 754-758.

Quella, L., Chase, L., Conner, D., Reynolds, T., Wang, W., & Singh-Knights, D. (2021). Visitors and values: A qualitative analysis of agritourism operator motivations across the U.S. *Journal of Agriculture, Food Systems, and Community Development, 10*(3), 287-301.

Tew, C., & Barbieri, C. (2012). The perceived benefits of agritourism: The provider's perspective. *Tourism management, 33*(1), 215-224.

Van Sandt, A., Low, S. A., & Thilmany, D. (2018). Exploring Regional Patterns of Agritourism in the U.S.: What's Driving Clusters of Enterprises?. *Agricultural and Resource Economics Review, 47*(3), 592-609.

Wang, W., and L. C. Chase. (2020). Access to resources for agritourism operators in the U.S.: A regional view. Proceedings of the FoodTreX Food Travel Research Summit hosted by the World Food Travel Association, October 16, 2020.

The Magic of Experience: Agritourism as an Experiential Marketing Strategy for Maine Farm and Fishery Products

Caroline S. Paras
University of Maine
caroline.paras@maine.edu

Tracy S. Michaud
University of Southern Maine (United States)

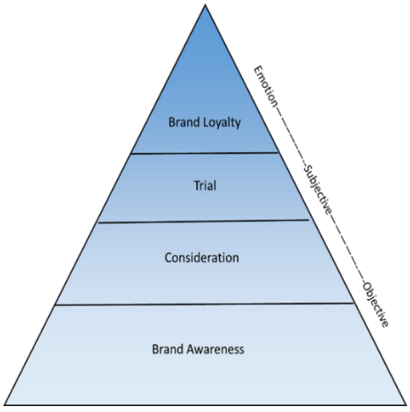
Abstract

Over the last decade, the market value from Maine farms and fisheries has declined by 13% (Maine Department of Marine Resources, 2012 and 2017; NASS, 2012 and 2017). When inflation is factored in, it is a drop of 20%. One bright spot, however, is agritourism. From 2012 to 2017, direct sales on Maine farms increased 53%, and from other agritourism activities, 268% (NASS, 2012 and 2017). Can these experiences serve as powerful forces to accelerate the process of consumer loyalty? First coined in 1998, "Experience Economy" describes the movement of businesses beyond the mere sale of goods and services to the design of memorable experiences, with the memory itself becoming the product (Pine & Gilmore, 1999). The emotions generated by the experience can translate into sales in real time as well as behavioral intentions to purchase in the future. As emotionally charged experiences, agritourism has the potential to accelerate consumer loyalty. This theory was put to the test through an evaluation of two agritourism experiences new in 2021 – the Maine Oyster Trail and Maine Wild Blueberry Weekend.

Keywords: Agritourism, culinary trails, Experience Economy, consumer loyalty, brand experience

I. Introduction/Background

First coined in 1998, "Experience Economy" describes the post-industrial movement of businesses beyond the mere sale of goods and services. Instead, businesses orchestrate memorable experiences for customers, with the memory itself becoming the product. Emotions generated by the experience translate into behavioral intentions to purchase a product, both in real time and in the months and years following the event. These experiences are classified into four realms— educational, entertainment, escapist, or esthetic— depending on whether they are staged or authentic and demand an active or passive level of participation (Pine & Gilmore, 1999). Although this research occurred largely before the Internet age, it is still relevant today: according to a survey by Eventbrite (2014), 75% of Millennials, the largest consumer group in the United States, report that they value experiences over things. Compared to the purchase of goods, experiences engage consumers in the correlates of happiness, including social activities with family and friends and physical efforts that result in the accomplishment of goals (Nicolao et al., 2009).



Brand loyalty pyramid adapted from Aaker (1991)

"Brand experience" is a term used to capture how a consumer interacts with a brand. It includes the emotions and the behavioral intentions of consumers evoked by brand stimuli, including design elements, packaging, marketing, and retail environments. Positively correlated with consumer satisfaction and loyalty, brand experience can be measured by a scale that encompasses four

dimensions: sensory, affective, intellectual, and behavioral (Brakus et al., 2009). While this research has been widely used by businesses to build brand loyalty, it has been underutilized in the tourism and hospitality sector, which largely relies on an evaluation of service quality, e.g., AAA Travel Diamond rating system, that excludes emotional aspects (Brunner-Sperdin & Peters, 2009).

Agritourism could serve as a powerful force to build customers for Maine's local food economy. The University of California defines agritourism as "a commercial enterprise at a working farm, ranch, or agricultural plant conducted for the enjoyment of visitors that generates supplemental income for the owner," including outdoor recreation, education, entertainment, lodging, and direct sales from U-Pick and farm stands (Rilla et al., 2011). Agritourism is positively correlated with farm profitability, especially for small farms operated by individuals (Schilling et al., 2014). But agritourism is more than direct sales. Combined with education, agritourism can provide consumers with a memorable experience. Through Maine Wild Blueberry Weekend and the Maine Oyster Trail, visitors have the opportunity to travel to rugged natural landscapes, smell the earth and salty air, learn about the history of the product, use their hands to rake berries or shuck oysters, talk with farmers face to face, and taste different varieties. Because agritourism engages all of the senses, it has the potential to facilitate the creation of memorable experiences. The strongest driver of memory is the extent to which the experience elicits emotion (Kastenholz et al., 2017), a prerequisite for consumer loyalty.

The concept of the memorable tourism experience has been expanded to culinary tourism. Tsai et al. (2016) conducted an intercept survey of visitors in Tainan, Taiwan, who were asked to recall their most memorable food experience and rate it against the scale developed by Kim (2012), including hedonism, involvement, novelty, meaningfulness, refreshment, local culture, and knowledge. Results showed that culinary tourism created positive and unforgettable memories, which in turn generated a strong attachment to place that increased visitor intention to return along with their willingness to recommend the destination to family and friends. Williams et al. (2019) expanded this research on memorability by interviewing 40 recently retired individuals to elicit their most memorable travel experiences, revealing seven dominant themes: 1) deliberate and incidental gastro-tourists; 2) travel stages; 3) foodie risk-taking; 4) interdependent co-created tourist–host relationships; 5) authenticity; 6) sociability; and 7) emotions. According to their findings, memorable experiences draw the visitor to an authentic landscape where they co-create with the producer, a physical and social risk that generates emotion.

The Experience Economy framework has been further validated for tourism in rural settings. Kastenholz et al. (2017) found that education and esthetics positively predict rural tourists' arousal while escapism and esthetics determine memorability. They recommended that rural tourism operators design opportunities that generate emotion, incorporate education, engage the five senses, and involve visitors in the meaningful co-creation of experience. Beyond the establishment level, the attributes of memorable experiences can be applied on a macro level in terms of destination branding (Andéhn & Decosta, 2020). Furthermore, extending the Experience Economy to rural areas is a viable development model that preserves the working landscapes on which the broader tourism economy depends (Sidali et al., 2015).

Over the last three decades, the Experience Economy framework has been expanded beyond the business world to describe satisfaction in the tourism and hospitality sector, including culinary tourism, rural tourism, and agritourism. Its application in the context of a culinary trail, particularly one that shapes the brand experience of an agricultural commodity, has not yet been explored. While there is no standard definition, a culinary trail might be described as a route that organizes culinary assets into a cohesive theme, including landscapes, farms, fisheries, producers, restaurants, museums, and festivals. The scant research available has applied the construct of a touring route to food trails (Anderson & Law, 2012; Hardy, 2003), with a focus on infrastructure rather than on the content, or the magic, of the experience itself.

II. Research Questions

1. What aspects of the agritourism experience are most memorable for visitors?
2. Does a memorable experience drive direct sales in real time and/or behavioral intention to purchase in the future?

III. Methodology

Research questions were investigated through a survey of visitors who participated in Maine Wild Blueberry Weekend (WBW) on August 7-8, 2021, and the Maine Oyster Trail (MOT) from July-October, 2021. Both agritourism experiences were 1) introduced to the public for the first time in 2021; 2) involved a choose-your-own-adventure format, where potential visitors could access an online map and set of activity descriptions to plan their trip; 3) developed by trade associations - the Wild Blueberry Commission of Maine and Maine Aquaculture Association; and 4) designed with the goal of helping producers sell more products and promote their industry's brand to residents and visitors.

During WBW, visitors were randomly intercepted at 10 of the 13 participating farms. A total of 56 people participated, which represented about 1% of the estimated attendance of 5,000 visitors. Because experiences along the MOT were by appointment only, an online survey was used instead, with links sent to 1,600 visitors who voluntarily provided email addresses when they checked in via QR code at a participating site. A total of 400 responses were collected, representing a 25% response rate. Results from the WBW and MOT surveys were added together for a total of 456 responses, with 50% from Maine residents and 50% from out-of-state visitors.

The survey included a mix of open response, multiple choice, and Likert scale questions, depending on the goals of the industry association. A subset of questions common to both surveys were analyzed for this report. Responses both in the field and online were collected via Phonic, a software platform with audio recording capability. Approximately 200 people offered an audible comment or story in response to a single question, "Tell us about your experience." This response was analyzed by the research team, who employed the principles of grounded theory to identify patterns and themes (Glasier & Strauss, 1967):

1. Each audible response was transcribed verbatim by the software program.
2. An inductive approach was used to open code responses.
3. A conceptual framework was developed – Participation, People, Product, and Place, along with three subthemes for each construct.
4. Responses were deductively recoded according to the conceptual framework.
5. Only one instance of a subtheme expressed by a respondent was tallied.

Table 1. Memorable Attributes of Agritourism

Participation (36%)	Product (29%)	People (20%)	Place (15%)
Co-creation: Mental or physical engagement in an activity.	***Five senses:*** Sampling, attributes of taste, or engagement of other senses.	***Producer:*** Personal connection made with a farmer or fisherman.	***Region:*** Geography tied together by common name or environmental qualities.
Purchasing: Opportunity to buy products or branded merchandise.	***Terroir or Merroir:*** Understanding that different places yield different tastes.	***Education:*** Information learned about products or production practices.	***Landscape:*** Natural environment, including air, sea, sky, and scenery.
Discovery: Trip planning to visit multiple sites or visit again.	***Brand:*** Belief that Maine grows or raises "the best in the world."	***Social:*** Social experience of being together with family, friends.	***Vibe:*** Ambiance created by host, e.g., seating, music, food, etc.

IV. Findings

Question 1: What aspects of the agritourism experience are most memorable for visitors?

"Tell us about your experience" was the prompt that encouraged visitors to share their top-of-mind memories about their day. These stories were coded using the principles of Grounded Theory, resulting in a new framework for evaluating agritourism experiences: Participation, Product, People, and Place.

Participation: Of the four P's, the strongest driver of memory was Participation, with 36% of respondents describing this attribute. The following anecdote hits all the aspects of Participation, including the discovery aspect of planning, physical participation in the experience, and purchasing products following the trip.

> *I found out about the Maine Oyster Trail because I love oysters… I was excited to plan a trip to Maine for my 40th birthday this year and making several stops along the Oyster Trail was definitely part of the trip, which made it really fun. Getting to have oysters shucked at Scully's, going to Glidden Point, taking the boat cruise down the Damariscotta River. All those were highlights. It's a really fun program. I've ordered oysters from several people that are a part of the oyster trail. The meal ordering through the pandemic was a bright spot for me and being able to continue to do that. Obviously, Michigan doesn't have fresh oysters. Getting those provided by farmers on the trail has been a really fun way to enjoy oysters and perfect my shucking skills at home, but it is nice to also go somewhere and have them shucked for me. So I just have loved this whole initiative and love supporting things like this."*

Product: Product attributes were cited by 29% of respondents. The following response hits all of the Product attributes, including sense of taste, merroir, and brand.

> *The oysters from the Midcoast are some of the sweetest, the most wonderful, full of the ocean. I think sometimes it's the lime deposits up around Rockland and stuff that make up the water in that area around Damariscotta, Wiscasset, and Boothbay so good. And slow growing, cold water oysters taste so much better than those ones from the Gulf of Mexico. I'd really love to have oysters from the Oyster Trail around here.*

People: Aspects of the experience related to people were mentioned by 20% of respondents. The following anecdote captures some attributes on the People construct, particularly the opportunity to have a social experience with family.

> *It was really positive. We came for the story time. We were excited about that. When you have little kids, you want to bring them where there's like "kid stuff." The other events were more like adult oriented.*

The second response describes the education gained by respondents from the producer.

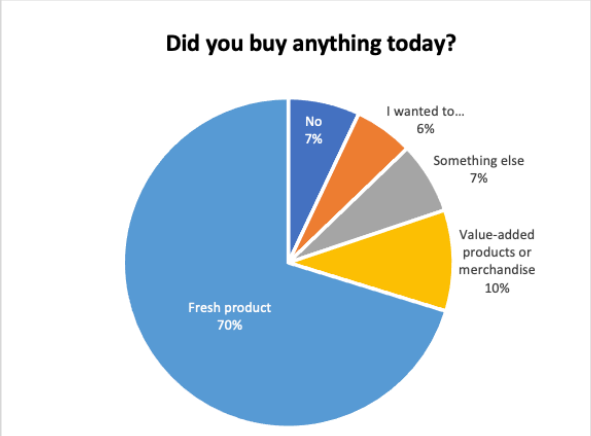
> *We learned about the history of the blueberry farm and then just kind of learned about how to harvest blueberries. We got to go up into the field and obviously harvest berries and learn more about pollinators and things that are needed to maintain the difference between wild and blueberries and harvesting those rather than taller ones.*

Place: Place attributes were cited by 15% of respondents. The following anecdote captures some attributes related to the Place construct, including the geography and the vibe.

> *First of all, it's a great location and it's wonderful to be able to see the winnowing in action and just see all the people around. It is terrific. I'm glad that the blueberry industry is making it accessible to the public so they understand the importance of keeping blueberry fields viable.*

Question 2: Does a memorable experience drive direct sales in real time and/or behavioral intention to purchase in the future? To explore this relationship, respondents were asked whether they purchased anything during their trip. Overall, 87% of respondents purchased something in

real time during their experience: 70% purchased fresh blueberries or raw oysters and/or value-added products and merchandise; 10% purchased only value-added products or merchandise; and 7% purchased something else. During WBW, fresh products included pints and boxes of wild blueberries. Along the MOT, fresh product included oysters eaten on-site or taken to-go. Merchandise included branded t-shirts and hats promoting the farm or commodity while value-added products included pie, jam, sauce, and syrup. Other items offered for sale included books and shucking knives. Another 6% wanted to purchase something but, due to temperatures or travel plans, could not follow through.



Overall, 83% of visitors agreed or strongly agreed that, in the future, they are likely to purchase the commodity promoted during their experience. By comparison, the Wild Blueberry Commission hosted an in-store promotion of wild blueberries during the week of August 12, 2018, at ShopRite stores throughout the Northeast. A total of 8,257 consumers in 39 stores participated. As a result of the promotion, which included free samples, just 16% of shoppers purchased wild blueberries in real time - versus 87% during WBW, and 64% stated they would "very likely" purchase fresh wild blueberries in the future - versus 83% during WBW (PromoWorks, 2018). Thus, as a form of consumer education, agritourism demonstrates promise as a more effective strategy for building consumer loyalty than a traditional in-store promotion.

V. Discussion

Culinary trails represent a fresh new avenue to organize, package, and promote singular farm and fishery products that define states and regions. The "choose your own adventure" format cultivates a sense of discovery and engagement as visitors curate their own itineraries, an important subtheme related to the construct of Participation.

Establishment Level: The framework can be used as a checklist to plan memorable agritourism experiences at the establishment level that incorporate elements of active participation, sampling opportunities that engage the senses, and meaningful connections with producers in scenic outdoor settings. This research indicates that memorable experiences drive sales in real time and intention to purchase in the future.

Industry Level: This research indicates that culinary trails are powerful tools at the industry level to organize and promote the distinctive commodities of states and regions, reinforcing the brand of farm and fishery products. Trails, which feature producers along with eating and drinking establishments that incorporate local products, can be effectively marketed in a self-guided, choose-your-own adventure format.

Maine tourism is big business. In 2021, 15 million visitors from outside the state spent $7.8 billion that accounted for 12.7% of Maine's Gross Domestic Product and 21% of its employment (MOT, 2022). Known as Vacationland, Maine tourism is highly dependent on the scenic rural landscapes and iconic working waterfronts cultivated by 15,000 farmers and fishermen, who take very seriously their role in protecting, preserving, and restoring the environment (Paras et al., 2022). These working landscapes not only generate $1.3 billion in food, they define the state's character and quality of life. While 74% of Mainers believe it is important or very important to buy local to support farmers and producers (Atlantic Corporation, 2021), Maine's anemic population growth, up 2.6% since 2010, does not bode well for keeping rural landscapes in production (U.S. Census Bureau, 2020).

Visitors represent a potential new "local" consumer market for Maine agriculture and fisheries. Most visitors are motivated by culinary interests, earn 51% more than Maine households, and are

repeat visitors from a one-day drive of the state. About 44% of out-of-state visitors hail from other parts of New England or the Mid-Atlantic. Furthermore, 77% are repeat visitors. Thus, 6.6 million are concentrated in the Northeast, positioning themselves as potential lifelong customers with an average household income 51% higher than Maine's (MOT, 2020). When these products are purchased directly from Maine farms and fisheries in-person or through E-commerce, it generates a higher margin of profit for the farmer and fishermen that increases their long-term viability. In addition to sales, e.g., a bag of Maine oysters or a bottle of wild blueberry wine, these products have the potential to trigger positive memories of their time in Maine that can be leveraged into a repeat visit. Lessons learned can also be used to engage more Maine residents in agritourism and aquatourism experiences, increasing the market share of Maine products purchased by the state's households while sustaining the landscapes on which tourism depends.

VI. References

Aaker, D. A. (1991). *Managing brand equity*. Free Press.

Andéhn, M., & Decosta, J. N. P. L. (2020). Authenticity and product geography in the making of the agritourism destination. *Journal of Travel Research*, *60*(6), 1282-1300. https://doi.org/10.1177/0047287520940796

Anderson, A., & Law, L. (2012). An advanced framework for food trail performance. *Journal of Vacation Marketing*, *18*(4), 275–286. DOI: 10.1177/1356766712451075

Atlantic Corporation (2020). *Maine consumer perceptions and attitudes about local food and the COVID-19 pandemic* [research report].

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (May 2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73, 52–68. https://www.jstor.org/stable/20619022

Brunner-Sperdin, A., Peters, M., & Strobl, A. (2012). It is all about the emotional state: Managing tourists' experiences. *International Journal of Hospitality Management*, *31*(1), 23-30. https://doi.org/10.1016/j.ijhm.2011.03.004

Eventbrite (2014). *Millennials fueling the Experience Economy* [research report]. https://eventbrite-s3.s3.amazonaws.com/marketing/Millennials_Research/Gen_PR_Final.pdf

Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine Transaction.

Hardy, A. (2003). An investigation into the key factors necessary for the development of iconic touring routes. *Journal of Vacation Marketing, 9*(4), 314-330. DOI: 10.1177/135676670300900402

Kastenholz, E., Carneiro, M. J., Marques, C. P., & Loureiro, S. M. C. (2018). The dimensions of rural tourism experience: impacts on arousal, memory, and satisfaction. *Journal of Travel & Tourism Marketing, 35*(2), 189-201. DOI: 10.1080/10548408.2017.1350617

Kim, J., Ritchie, J. R. B., & McCormick, B. (2012). Development of a scale to measure memorable tourism experiences. *Journal of Travel Research*, *51*(1):12–25. DOI: 10.1177/0047287510385467

Maine Department of Marine Resources [MaineDMR]. *Commercial fish landings data.* https://www.maine.gov/dmr/commercial-fishing/landings/

Maine Office of Tourism [MOT] (2022). *2021 Economic impact & visitor tracking report: December 2020-November 2021*. https://motpartners.com/wp-content/uploads/2022/04/2021EconomicImpactVisitorTrackingReport.pdf

National Agricultural Statistics Service [NASS], U.S. Department of Agriculture. *Census of Agriculture*.

Nicolao, L., Irwin, J. R., & Goodman, J. K. (2009). Happiness for sale: Do experiential purchases make consumers happier than material purchases? *Journal of Consumer Research*, *36*(2), 188-198. https://doi.org/10.1086/597049

Oh, H., Fiore, A. M., & Jeong, M. (2007). Measuring Experience Economy concepts: tourism applications. *Journal of Travel Research*, 46, 119-32. DOI: 10.1177/0047287507304039

Paras, C., Michaud, T., & Hoffman, M. (2022). Sustaining New England's iconic tourism landscapes: An exploratory study to examine perceptions of value from farmers and fishermen. *Journal of Agriculture, Food Systems, and Community Development*, *12*(1):141-156l. https://doi.org/10.5304/jafscd.2022.121.014.

Pine, B. J., & Gilmore, J. H. (1999). *The Experience Economy: Work is theatre & every business a stage*. Harvard Business School Press.

PromoWorks (2018). *PromoWorks in-store engagement final report for project #7580196*. Wild Blueberry Commission of Maine.

Rilla, E., Hardesty, S. D., Getz, C., & George, H. (2011). California agritourism operations and their economic potential are growing. *California Agriculture*, *65*(2), 57-65. https://doi.org/10.3733/ca.v065n02p57

Schilling, B. J., Attavanich, W., & Jin, Y. (2014). Does agritourism enhance farm profitability? *Journal of Agricultural and Resource Economics*, *39*(1), 69–87. http://www.jstor.org/stable/44131315

Sidali, K. L., Kastenholz, E., & Bianchi, R. (2013). Food tourism, niche markets and products in rural tourism: combining the intimacy model and the experience economy as a rural development strategy. *Journal of Sustainable Tourism*, *23*(8-9),1179-1197. DOI: 10.1080/09669582.2013.836210

Tsai, C.-T. (2016). Memorable tourist experiences and place attachment when consuming local food. *International Journal of Tourism Research*, *18*(6), 536–548. DOI: 10.1002/jtr.2070

U.S. Census Bureau (2020). *Decennial Census of Population and Housing*.

U.S. Census Bureau (2020). *American Community Survey, 2016-2020*.

Williams, H. A., Jingxue, Y., & Williams, Jr., R. L. (2019). Attributes of memorable gastro tourists' experiences. *Journal of Hospitality & Tourism Research*, *43*(3), 327–348. DOI: 10.1177/1096348018804621

Tourism Meets Agriculture

Alexander Plaikner
University of Innsbruck (Austria)

Marco Haid
Tyrolean Private University UMIT TIROL (Austria)

Johanna Sparber
University of Innsbruck (Austria)
johanna.sparber@uibk.ac.at

Keywords: landscape, diversification, cooperation, added value

Introduction

Achieving competitive advantage is strategically crucial for any rural tourism destination seeking long-term sustainable success. Cooperation and working relationships create advantages for participating companies and help to create sustainable destinations (Czakon & Czernek-Marszałek, 2021). Critical factors of cooperation and the perceived importance of sustainability influence the benefits of cooperation. The issue of cooperation between tourism and agriculture has become increasingly important, especially in recent years. Although this cooperation has been referred to as saving farms in alpine areas (Stotten et al., 2019), the continuance of the farms depends mostly on governmental or EU-level support. Besides recreation, farm holidays offer tourists a wide range of activities and an opportunity to get to know life in the countryside. Many connections between agriculture and tourism can be seen as spillover effects. These effects are impacts on economic, ecological, or socio-cultural activities in other areas (Gabler, 2013).

Landscapes offer numerous added values to holidaymakers (vacationers) (Scaglione & Mendola, 2017). In particular, the active holiday experience in agricultural landscapes is unique for holidaymakers (Klepeis et al., 2001; Mitchell & Popham, 2008). The potential of the landscape creates a value that enhances the quality of the holiday stay (Kaplan & Kaplan, 1989) and the tourist offers in general (Simon, 2013).

The research area of collaboration and networks has been studied in depth by researchers such as Selin and Chavez (1995), Strobl and Peters (2013), Bellini et al. (2019), MacDonald et al. (2019) and Kubickova and Campbell (2020).

Objective

For more than 150 years, it has been predicted that small-scale agriculture, especially in alpine regions, is threatened with extinction and will give way to the constantly increasing agricultural industry (Schermer & Kirchengast, 2006). The failure of the Austrian mountain regions to meet this forecast makes this issue unique and indisputable (Davis, 1971).

The fast-moving tourism industry, the changing trends, and the related challenges require constant adaptation and innovation from tourism stakeholders. Collaboration within the industry is often seen as a potential competitive advantage in terms of sharing knowledge and resources. One of the reasons for the growing recognition of external partnerships is the belief that it leads to better policy organization and more efficient implementation (De Araujo & Bramwell, 2002).

The interaction between agriculture and tourism is very important in rural areas. For example, tourism creates opportunities for farmers to increase their income (Giaccio et al., 2018; Jęczmyk et al., 2015) and provides jobs (Veeck et al., 2016). This is made possible by offering various tourism services on the farm (Giaccio et al., 2018; Jęczmyk et al., 2015). However, tourism also benefits from

agriculture (Gabler, 2013). The present work aims to shed light on the coexistence and cooperation between agriculture and tourism. Therefore, three sub-studies were conducted.

The first sub-study aims to investigate the added value and potential of farm holidays for regions.

The second sub-study aims to explore the advantages and opportunities of cooperation between tourism and agricultural stakeholders.

The third sub-study aims to identify forms of cooperation at destination level and the resulting difficulties.

Method

The data of the sub-studies were collected by means of qualitative and quantitative methods. Between 2019 and 2021, a total of 136 qualitative surveys and 396 quantitative datasets were collected as part of the three sub-studies. The qualitative and quantitative surveys focused on spillover effects, valorization and pricing policy, cooperation with a focus on networks, and the diversification potential of farms. In order to obtain a broad and well-founded data basis, the surveys were carried out in Tyrol, Lower Austria, Salzburg, Vorarlberg (regions of Austria) and South Tyrol (Italy).

Qualitative surveys: Qualitative social research was chosen for the empirical surveys. The surveys were conducted with the help of problem-centered interviews. The interview guidelines were based on the relevant literature (Mayring, 2016). With the help of the analysis software MAXQDA, qualitative content analysis was used to analyze the collected data (Kuckartz, 2018; Rädiker & Kuckartz, 2019).

Quantitative surveys: For the quantitative research approaches, the hypotheses were derived from the relevant literature and tested using a cross-sectional study to allow for a natural observation of the situation (Saunders et al., 2019; Field, 2009). Data were collected via online questionnaires. Data analyses were performed using SPSS software.

Table 1: Coding tree, first sub-study, research 1

Title	Aggregate theoretical dimensions	Second-order themes	Third-order themes
Tourism meets agriculture: Mutual spillover effects	Spillover effects	Marketing	Effects of the vacation experience
			Effects of the tourism industry advertising
		Regional developent	Tourist flows
			Use of local products
			Economic efficiency
			Distribution opportunities
			Quantities
		In economic terms	Care of the landscape
			Events
			Preservation of tradition
			Cost bearer
		Knowledge spillover	Effects of associations
			Effects of tourist feedback
			Influence of other companies
	Collaboration	Conflicts	Competitive thinking
		Cooperation	Suggestions for improvement

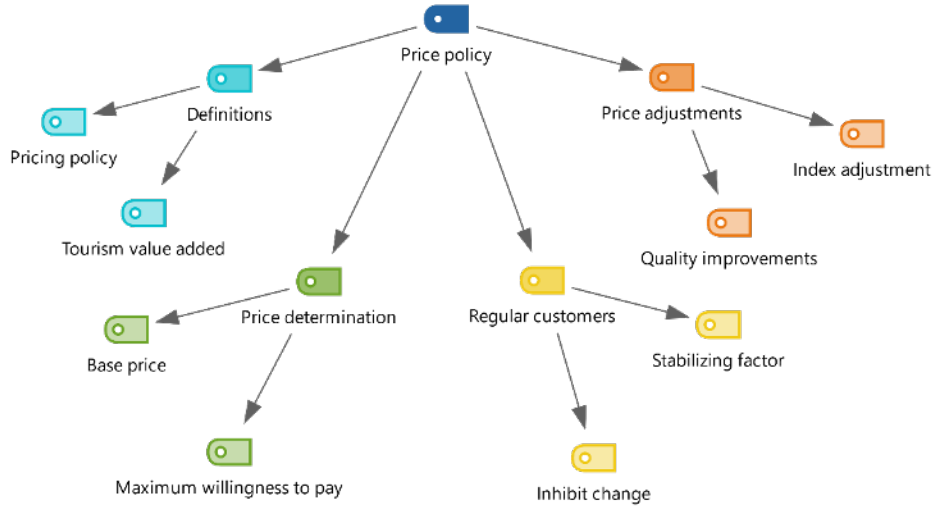


Figure 1: Coding tree, second sub-study, research 1

Main Results

Research 1: Tourism and cultivated landscapes

Main Results – first sub-study

There are proven positive transfer effects (spillovers) between tourism and agriculture when these two sectors work closely together. Spillover effects are shown to positively impact the maintenance of the cultural landscape and/or the preservation of traditions. In particular, farmers actively promote the maintenance of the historical and cultural development of agriculture. For some farmers, tradition maintenance and landscape preservation are a matter of the heart.

In addition, direct marketing is noticeably increasing due to the increased demand for regional products from tourists.

Furthermore, many agrotourism farms have the ability to develop their own tourists by expanding the necessary infrastructure.

Main Results – second sub-study

The valorization of the regional landscape has an important influence on pricing policies in rural tourism due to the trend towards sustainability. In some cases, it was expressed that maintaining agriculture is not financially worthwhile when comparing the amount of work with the income. However, by enhancing the tourist environment, agriculture can be strengthened through the tourism sideline. In this context, the added value for tourists lies mainly in experiencing agriculture, participating in farm life, and interacting with the farm family. This is because tourists are looking for sustainable offers with authentic experiences and are willing to pay more for them than is currently charged in rural tourism.

It turns out that most providers are in similar price segments. In addition, higher prices also open up access to new and larger target groups. In some cases, prices were estimated many years ago, and small, appropriate changes were made on that basis. In order to exploit potentials, the analysis of the price history could be an important criterion.

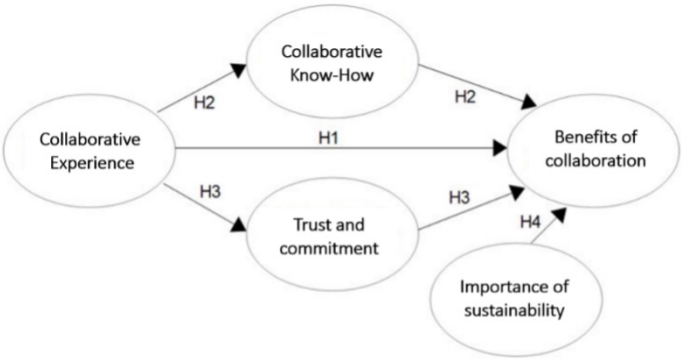


Figure 2: Theoretical Model, research 2

Research 2: Cooperation in rural tourism

Regional networking and cooperation are described as important. There are many different types of networking. On the one hand, networking takes place via the tourism associations and the "Urlaub am Bauernhof" association; on the other hand, networking can occur through joint events, regional products, food production, gastronomy, trade, leisure facilities, and transport companies.

Around the tourism associations, there are various offers for tourists. Landlords give their guests recommendations for alpine pastures, restaurants, attractions and farm shops in the area. Further their cooperation takes place with direct marketers and food producers. According to some participants, a common goal is important for well-functioning cooperation.

Due to the relationship between agriculture and tourism, there are numerous positive effects for participants, according to the interviewees. In addition, offers can be differentiated from classic rental offers due to the "regionality" trend, and tourists can be sensitized and further educated.

Cooperation brings some social knowledge spillover effects. The ability to cooperate is improved, and contact points for various regional issues are created. In addition, network support and training are very helpful. The offer of farm holidays is important for the preservation of rural culture. Farmers teach tourists about rural life, customs, and traditions, and involve them directly in activities. In addition, consumer behavior is changed and influenced.

Research 3: Diversification potential of agritourism

Four reasons were identified for diversification: Adaptation to the needs of customers and to family circumstances, preservation, creation of an additional source of income, the desire of families to use existing resources efficiently and to create synergies, and business growth. Above all, the expansion of the already existing offer contributes to diversification.

Table 2: Coding table, research 3

Title	Aggregate theoretical dimensions	Second-order themes	Third-order themes
Diversification potential of agricultural enterprises	Reasons for diversification	Preservation	
		Adaptation	
		Growth	
		Using synergies/resources	
	Corporate resources	Location	
		Reputation of the company	
		Farmer family	Social resource
			Economic resource
		Partnership and cooperation	
		Products	
		Areas, buildings, and material	
		Working farm	
	Effects of diversification	Job creation	
		New products/offers	
		Women in the center	Decisions
			Role understanding
			Role distribution
		Partnership and cooperation	
		Culture and tradition	
		Status of the family	Social status
			Economic status
		(personal) Development	
	Diversification as an opportunity	Support	
		Succession	
		Continued existence	

The farmers used different business resources for diversification. On the one hand, the farm family as a social and economic resource (labor) as well as existing partnerships and cooperations, are included. On the other hand, the location and a working farm, in order to enable the authentic experience of farm life, were named as further resources. The most important resource, however, is the farm family because the accommodation offer can only exist on the farm because all family members pull together.

The tourism offer on the farm not only enables the creation of local jobs but also increases the family's status. On the one hand, the economic status increases; on the other hand, the farm family experiences an improvement in its social status.

Further training and developing competencies regarding tourism activities on the farm is predominantly a matter for women. In the same way, women are at the center of the offer of rural guest accommodation. Through the presence of guests on the farm, female farmers have further developed existing products and generated new offers based on the guests´ wishes, demands, and needs. In addition to offering their own products, which the guests perceive as being produced especially for them, the communication of culture and tradition is essential to the farmers.

Implications and Recommendations

Providers of rural tourism businesses are not sufficiently aware of the added value of the proximity to culture, tradition, nature, and cultural landscapes, but their offer leads to an increase in sustainable added value (Barbieri, 2013; Stotten et al., 2019). This results in how tourism can be significantly strengthened in many respects by implementing business management elements (Homburg & Krohmer, 2017). According to Tew and Barbieri (2012), farmers contribute to raising awareness among tourists and the local population, which in turn represents added value for the region. Therefore, it is important to support the agricultural enterprises through targeted promotion on the part of politics and to promote cooperation in connection with the opening of their farms also for tourists in the region.

Demand patterns and price elasticities are significant for pricing. Price psychological elements can also be integrated (Nussbaumer, 2018). From an innovation perspective, market research systems could be used in the context of the digitalization of tourism. To develop the data basis, professional market research related to tourism is recommended (Müller, 2013). An exciting side effect of qualitative market research processes could also be the reference of people to cultural landscapes, which come from different cultures, regions, and living conditions (Kühne, 2019).

Cooperation between different sectors is not always easy, but conflict prevention can facilitate cooperation (Plaikner et al., 2022). In this context, communication is crucial (Plaikner et al., 2022). Therefore, it can be considered essential to involve rural accommodation providers in the strategy development of tourism associations. Thus, rural accommodation businesses can benefit from the offers of tourism associations if they align their services with them.

Cooperation between tourism and agriculture leads to innovative products, services, and diversification of joint projects. Digitalization can be helpful in the development of projects, in communication between the sectors, and in differentiating the image of a destination (Plaikner et al., 2022). An online platform is needed for the interaction of the two sectors. In this way, the participants would be able to see the necessary information. Cooperation is more successful in Tyrol than in other regions. Due to this, bridges between the regions should be established to show successful good practices and disseminate knowledge (Plaikner et al., 2022).

Due to increasing demands, Brandth and Haugen (2011) emphasize the need to increase know-how and competences on farms. Further training is an important element to prepare for entering agritourism and advancing professionalization of the tourism offer on one's own farm. A clear increase in competence can be seen in the majority of the women, which goes hand in hand with a willingness for further education and training. The "Urlaub am Bauernhof" association is of

particular importance. A cooperation between the association, the tourism board, and the chamber of agriculture in the field of further education and training could promote the professionalization of agritourism and ensure the quality of the offers. There is a special need for further training for women.

Farmers' wives are seen as a central driving force in establishing the offer on the farm (Flanigan et al., 2014; Seuneke & Bock, 2015), but the operational decisions are predominantly made jointly (Talbot, 2013; Annes & Wright, 2015). This shows that family cohesion is the be-all and end-all of these enterprises. While the results of Fischer (2019) show that farmers' income from tourism is significant for the continuation of many small farms, farmers also have key social obligations other than for tourism-related recreational activities. Thus, it is also important for future research to critically question whether collaboration with tourism serves to support traditional agricultural activities and regional supply, especially in marginal rural areas, and to secure these core activities through the additional source of agricultural income.

Comprehensive evaluated support from the federal and state governments is important in order to cooperate despite doubts. Therefore, government policies and incentives for cooperation in rural areas are proposed. Joint project ideas or subsidies for joint projects between tourism and agriculture could be beneficial.

References

Annes, A., & Wright, W. (2015). 'Creating a room of one's own': French farm women, agritourism and the pursuit of empowerment. *Women's Studies International Forum* 53, S. 1–11. DOI: 10.1016/j.wsif.2015.08.002.

Barbieri, C. (2013). Assessing the sustainability of agritourism in the US: a comparison between agritourism and other farm entrepreneurial ventures. *Journal of Sustainable Tourism* 21 (2), S. 252–270. DOI: 10.1080/09669582.2012.685174.

Bellini, E., Piroli, G., & Pennacchio, L. (2019). Collaborative know-how and trust in university–industry collaborations: Empirical evidence from ICT firms. *The Journal of Technology Transfer* 44(6), S. 1939–1963. DOI: 10.1007/s10961-018-9655-7.

Brandth, B., & Haugen, M.S. (2011). Farm diversification into tourism - Implications for social identity? *Journal of Rural Studies* 27(1), S. 35–44. DOI: 10.1016/j.jrurstud.2010.09.002.

Czakon, W.; Czernek-Marszałek, K. (2021). Competitor perceptions in tourism coopetition. *Journal of Travel Research*, 60(2), 312-335.

Davis, M. S. (1971). That's interesting! Towards a phenomenology of sociology and a sociology of phenomenology. *Philosophy of the Social Sciences,* 1(2), S. 309–344. https://doi. Org/10.1177/004839317100100211

De Araujo, L. M., & Bramwell, B. (2002). Partnership and regional tourism in Brazil. *Annals of Tourism Research,* 29(4), S. 1138–1164. https://doi.org/10.1016/S0160-7383(02)00033-6

Field, A. P. (2009). Discovering statistics using SPSS: And sex, drugs and rock 'n' roll. 3. Aufl. SAGE Publications.

Fischer, C. (2019). Agriculture and tourism sector linkages: Global relevance and local evidence for the case of South Tyrol. *Open Agriculture*, 4.1 (2019): 544-553.

Flanigan, S., Blackstock, K., & Hunter, C. (2014). Agritourism from the perspective of providers and visitors: A typology-based study. *Tourism Management*, 40, S. 394–405. DOI: 10.1016/j.tourman.2013.07.004.

Gabler (2013): Gabler Kompakt-Lexikon Wirtschaft. Wiesbaden: Springer Fachmedien.

Giaccio, V., Giannelli, A., & Mastronardi, L. (2018). Explaining determinants of Agri-tourism income: Evidence from Italy. *Tourism Review*, 73(2), S. 216–229. DOI: 10.1108/TR-05-2017-0089.

Homburg, C.; Krohmer, H. (2017): Grundlagen des Marketingmanagements. Wiesbaden: Springer Fachmedien

Jęczmyk, A., Uglis, J., Graja-Zwolińska, S., Maćkowiak, M., Spychała, A., & Sikora, J. (2015). Research note: Economic benefits of agritourism development in Poland – An empirical study. *Tourism Economics*, 21(5), S. 1120–1126. DOI: 10.5367/te.2014.0391.

Kaplan, R. & Kaplan, S. (1989): The experience of nature: A psychological perspective. Cambridge University Press. ISBN: 0-521-34139-6.

Klepeis, N. E., Nelson, W. C., Ott, W. R., Robinson, J. P., Tsang, A. M., Switzer, P., Behar, J. V., Hern, S. C., & Engelmann, W. H. (2001). The National Human Activity Pattern Survey (NHAPS): a resource for assessing exposure to environmental pollutants. *Journal of Exposure Science & Environmental Epidemiology,* 11(3), S. 231-252. DOI: 10.1038/sj.jea.7500165.

Kubickova, M. & Campbell, J. M. (2020). The role of government in agro-tourism development: A top-down bottom-up approach. *Current Issues in Tourism*, 23(5), S. 587-604. DOI: 10.1080/13683500.2018.1551338.

Kuckartz, U. (2018). Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstützung. 4. Auflage. Weinheim, Basel: Beltz Juventa (Grundlagentexte Methoden). Online verfügbar unter http://ebooks.ciando.com/book/index.cfm?bok_id/2513416, zuletzt geprüft am 07.09.2021.

Kühne, O. (2019). Phänomenologische Landschaftsforschung. O. Kühne, F. Weber, K. Berr, C. Jenal (Ed.): Handbuch Landschaft. RaumFragen: Stadt – Region – Landschaft. Wiesbaden: Springer VS. DOI: 10.1007/978-3-658-25746-0_10.

MacDonald, A., Clarke, A., & Huang, L. (2019). Multi-stakeholder partnerships for sustainability: Designing decision-making processes for partnership capacity. *Journal of Business Ethics*, 160(2), S. 409–426. DOI: 10.1007/s10551-018-3885-3.

Mayring, P. (2016). Einführung in die qualitative Sozialforschung. Eine Anleitung zu qualitativem Denken. 6., überarbeitete Auflage. Weinheim, Basel: Beltz. Online verfügbar unter http://content-select.com/index.php?id=bib_view&ean=9783407294524, last checked: 07.01.2021.

Mitchell, R., & Popham, F. (2008). Effect of exposure to natural environment on health inequalities: An observational population study. *The Lancet*, 372(9650), S. 1655-1660. https://doi.org/10.1016/S0140-6736(08)61689-X.

Müller, K. M. (2012). NeuroPricing: Wie Kunden über Preise denken (Vol. 1332). Freiburg, München: Haufe-Lexware. ISBN: 978-3-648-03025-7.

Nussbaumer, C. (2018). Preiselastizität in der Hotellerie. Hotelinsider.

Plaikner, A., Haid, M., Sparber, J., Iashina, T., Kayser, J., Mintah, P., Nussbaumer, L., Prantl, J., Schillfahrt, S., Schüssling, A., Tschenett, N., Tangl, P., Villgrater, J., & Wachter, A. (2022): Tourismus trifft Landwirtschaft. Enbericht an den Fördergeber: Tourismusforschungszentrum Tirol.

Rädiker, S. & Kuckartz, U. (2019). Analyse qualitativer Daten mit MAXQDA. Wiesbaden, Deutschland: Springer Fachmedien Wiesbaden. DOI: 10.1007/978-3-658-22095-2.

Santander, E. (2019). Fostering sustainability and competitiveness in European tourism. *Worldwide Hospitality and Tourism Themes*, 11(6), S. 647–651. DOI: 10.1108/WHATT-08-2019-0047.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8. Aufl.). Pearson. ISBN:.978-0-273-71686-0.

Scaglione, A., & Mendola, D. (2017): Measuring the perceived value of rural tourism: a field survey in the western Sicilian agritourism sector. *Quality & Quantity*, 51(2), S. 745–763. DOI: 10.1007/s11135-016-0437-8.

Schermer, M., & Kirchengast, C. (2006). Perspektiven für die Berglandwirtschaft. na.

Selin, S., & Chavez, D. (1995). Developing an evolutionary tourism partnership model. Annals of Tourism Research 22(4), S. 844–856. DOI: 10.1016/0160-7383(95)00017-X.

Seuneke, P., & Bock, B.B. (2015). Exploring the roles of women in the development of multifunctional entrepreneurship on family farms: An entrepreneurial learning approach. *NJAS – Wageningen Journal of Life Sciences*, 74-75, S. 41–50. DOI: 10.1016/j.njas.2015.07.001.

Simon, H. (2013). *Preisheiten. Alles was Sie über Preise wissen müssen*. Frankfurt: Campus Verlag. ISBN:.978-3-593-50450-6

Solís-Radilla, M. M., Hernández-Lobato, L., Callarisa-Fiol, L. J., & Pastor-Durán, H. T. (2019). The importance of sustainability in the loyalty to a tourist destination through the management of expectations and experiences. *Sustainability* 11(15), S. 4132. DOI: 10.3390/su11154132.

Stotten, R., Maurer, M., & Schermer, M. (2019). Agrotourismus. Eine Untersuchung zum Einfluss der bäuerlichen Gästebeherbergung auf die landwirtschaftlichen Strukturen im Ötztal. Abschlussbericht. LFU, Innsbruck. Institut für Soziologie. Online verfügbar unter https://www.uibk.ac.at/soziologie/forschung/pdfs/agrotourism_endbericht_29082019-1.pdf.

Strobl, A., & Peters, M. (2013). Entrepreneurial reputation in destination networks. *Annals of Tourism Research*, 40, 59-82.

Talbot, M. (2013). Farm tourism in Wales. Products and markets, resources and capabilities. The experience of six farm tourism operators. *European Countryside*, 5(4), S. 275–294. DOI: 10.2478/euco-2013-0018.

Tew, C., & Barbieri, C. (2012). The perceived benefits of agritourism: The provider's perspective. *Tourism Management*, 33(1), S. 215–224. DOI: 10.1016/j.tourman.2011.02.005.

Veeck, G., Hallett, L., Che, D., & Veeck, A. (2016). The economic contributions of agricultural tourism in Michigan. *Geographical Review*, 106(3), S. 421–440. DOI: 10.1111/j.1931-0846.2016.12161.x.

Hospitality on the Farm: The Five-Star Guest Experience

Scottie Jones
Leaping Lamb Farm (United States)
Farm Stay USA
scottie@farmstayus.com

There are places to be hospitable on a farm – a u-pick or farm stand come to mind – but the Hospitality offered by a farm stay, to travelers looking for a non-traditional overnight vacation, is an experience with a capital 'H'. Done right, your guests will do more for your marketing to generate repeat and new business than any ad you might buy. And they might become friends along the way as well.

When we think of hotels excelling at Hospitality, it might be the Ritz Carlton that makes sure all staff, from the front desk to the porter, address you by name. Or how about the Doubletree with warm cookies at check-in? Their standards include clean rooms and just about any amenity you might need. How do you match (or beat) these standards in your less-than-standard lodging? This is, after all, your home and not a hotel. It is also a working farm.

Not to worry. It just takes attention to detail and a little give-and-take with the farm universe (that's what makes it memorable) to offer a five-star guest experience that will have guests coming back, often with friends in tow. What do best practices in the Hospitality world look like? That would be Presentation (online and on site), Amenities (what's necessary), and Managing and Exceeding Guest Expectations.

Presentation

Presentation, presentation, presentation. While this is a retail chant, it's all about creating a good first impression.

Online Presence

That first place a guest is likely to "meet" you is usually online, so you want to make sure you have a website that is easy to find, easy to use, offers complete contact information, has clean, informative copy, automated reservations, and of course great photos. This goes for your social media (e.g., Facebook and Instagram) profiles as well.

How do you make your website easy to find? In my experience, Google promotes sites with simple, natural language; it also looks for keywords. Keep this in mind when describing your farm. Consider keywords matching those that travelers would use to search for lodging on a farm. Google also offers free business listings with both website and contact information included. Make sure to take advantage of this signup. These listings appear on the right-hand side of searches and are almost like ads. Finally, fill in your website's meta description because this is a thumbnail opportunity to add premium content, enticing those searching for farm stays to click on your link.

As for automated reservations, most travelers using the Internet want to be "one and done". This includes booking their accommodations. There are a variety of booking software companies offering integrated packages that look just like your website (e.g., Resnexus, Availabilityonline, Ownerrez). Guests click Book Now and are taken from your site to another to finish the reservation, thus no worries about handling credit cards and compliance issues on your end. These are your reservations to handle however you wish, with full contact information, calendar syncing, and pricing. For these you pay a flat fee.

The alternative for automated reservations is to use one of the large Online Travel Associations (OTAs) such as Airbnb, Vrbo, Hipcamp, Booking.com). You can link to these companies directly from your website as well. Cost for these is a percentage of the reservation, so much more expensive, but less management on your part. It can be a good way to start because of the traffic and again makes it

easy for a guest to book. Just be aware your guest is paying additional fees to the OTA as part of his or her reservation.

Guest Arrival Experience

The real meet-and-greet starts at the front entrance to your property where you set expectations with good signage, an attractive entrance, and a welcoming drive to the main farmhouse. Lights for nighttime arrival are a good idea to mark dark driveways and paths for safety. No use scaring your guests, who may be unfamiliar with rural America, before they even get in the front door!

The Farm Tour

Greeting new guests in person is always preferable as we don't want to be thrown into the stew pot with vacation rentals and absent landlords. Invite them right off for a farm tour to go over farm 'rules' and give them the lay of the land. No, you may not drive the tractor. Yes, you may collect the eggs. Chores start at 9:00 a.m. Like that. Setting expectations at the beginning creates a positive experience going forward because guests relax and accidents are less likely to happen (in my experience, accidents happen within the first 30 minutes of arrival, mostly due to unfamiliar terrain).

Amenities

We use the term Amenities as an overarching term that includes the lodging and the extras to make your guests comfortable and happy they chose to stay with you. Amenities will obviously differ depending on what kind of accommodations your offer. If you just host a campsite, some of this won't apply, but the general standards are the same: clean, safe, and comfortable.

Clean and Safe

Start off with a clutter-free environment. In a house, this means some of your favorite tchotchkes might need to be packed away. But this is a good thing, so family heirlooms don't get broken or disappear. This also makes it easier for guests to find things right off; reduces the chance of leaving their personal effects behind because they don't see them for the clutter; and helps in the cleaning process for staff (or you). For glamping, keep the site free of tripping hazards and clear out site lines.

Comfortable

Good bedding (e.g., nice sheets, firm mattress, good pillows, warm blankets) makes for a good sleep and guests who have slept well are happy guests. Of course, there is nothing you can do about the rooster crowing early in the morning! Clean bathrooms and kitchens are a must as this is the place you will most likely be compared to a hotel stay. This goes for outside showers, barbecues, and composting toilets as well.

Extra Special Touches

Then there are the extras. These are the little things that make people feel comfortable. It might be a sign board welcoming them by name to the farm. It could be a fresh vase of flowers on the table. Boots in the boot room; hats for sun and rain; a guest book with pertinent information about farm rules, how things work, local attractions, and emergency contacts (both hard copy in situ and virtual for download). Many farms do not offer TV so groups revert to game nights and having some of the regular board and lawn games can add to the fun.

Managing and Exceeding Expectations

Most farm stay guests are urbanites. Many have never set foot on a farm, so this is their first experience. Questions before arrival often focus on three areas: will it be boring, will it be dirty, and will they have to work hard? We try to allay many of these fears with copy on our website but are just as happy to answer these questions in emails or phone calls.

I often joke that farms are never boring because something unexpected is always happening, like the goats escaping onto the lawn. Where guests sleep will not be dirty even if the fields are muddy.

And, this is a paid vacation, not indentured servitude, so if guests want to accompany us for chores that is great, but we won't hold it over them if they just want to relax on the deck with a book.

The Golden Rule When Hosting

Sometimes the measures outlined above are not good enough and problems arise. It is important to handle these immediately. Treat guests the way you would want to be treated. Most people are afraid of things that are small and move fast. Mice, spiders, bats, and snakes fall into these categories and, because our farms are in the country, it's common to find these animals both inside and outside our accommodations.

It's fine to laugh it off if your guest is honest with you that the daddy longlegs in the corner is no problem, but there are times when it is better to offer alternative lodging or a refund than force guests to stay in a place where they are uncomfortable and afraid.

Farm dogs can also cause problems for guests who have only experienced the family dog. Make sure rules are understood and if not, you have a backup solution. It's interesting but, in my experience, problems handled well can sometimes bring you better word-of-mouth, not worse.

Exceeding Expectations

As for exceeding expectations, sharing your farm life has already done that for many of your guests as soon as they set foot on your property. Of course, there are the other things that add to the experience. How about setting up a place for an iconic family photo that is card worthy (and might even include the farm name)? Share recipes for on-farm produce and meat, either to be used onsite or taken home and tried. If there is something you are good at and like to teach, teach it. This could be weaving, cheese or soap making, crafts of all types. Many will pay extra if you call it a class. Allow for hands-on opportunities like egg collecting, feeding livestock, brushing the donkey, even "scooping poop" or whatever daily chores you do regularly.

Go the Extra Mile

We have discovered that friendly farmers who talk about what they do, and answer questions, make for that memorable experience your guest is looking for. Who are you? Why do you do this? What's your background? What's the best and worst part about farming? It allows your guests to be included in the operation. Insider recommendations for local food, wine, restaurants, things to do, driving routes are always appreciated. You are the expert in the area.

We have two extra "Exceeding Expectation" experiences that we do specifically on our farm, one expected to exceed and the other just an old-fashioned courtesy that is worth the time to do. The first we do because we have woods and creeks on our property (and lots of old trees and moss). In those woods, we have fairy houses carved into some of the trees and stumps. It's like a treasure hunt; it's a reason to set out on the forest trails; it a reason to use one's imagination. The second are hand-written 'thank-you' cards sent to every guest after their departure. These are often acknowledged with their own thank-you notes.

The Payoff for Great Hospitality

While life could be simpler if you kept strangers off your farm, diversifying operations by inviting them to stay the night has the benefit of adding income not dependent on your riskier farm production. It also pays better wages for your time.

Why the focus on Hospitality? It honestly is not that hard to achieve. You are on the farm anyway and the hands-on experiences your guests will love are your regularly scheduled chores. Nothing like a little help! The questions they ask are fun to answer (it seems no one paid attention in biology class), and the information about farming is important to convey because it ends up back in the city.

Making a stay memorable will pay you back in spades with free word-of-mouth marketing and repeat guests. All money in the bank. 'Memorable' is not hard to do either. What we might see as an everyday chore can be, for a guest, a first-time experience that excites, that is wonderous, that makes

them laugh, and even makes for a great photo opportunity. With social media these days, those photos tell their own story to friends and family. Voila, the modern word-of-mouth.

As for those repeat guests, our farms often offer a connection to the earth and the n atural world that for many urbanites is medicine for the soul. We provide a connection to food and place. We are grandma's farm or uncle Billy's ranch, land long gone from the family tree. We are that place our guests come back to, or get back to, the land as we welcome them warmly into our world.

Conclusion

In the end, there is nothing like receiving a five-star Google Review in which the writer mentions all the things that were so great about their stay on your farm and the memories it created. That's the reward for great Hospitality. It is even better when the reviewer is a kid who is sure you remember him because you taught him something cool about farming, let him brush the donkey and sent him off on his own to collect the eggs. That is the result of Hospitality grounded in the experience and that is the way we introduce agriculture to those who would follow us.

Author's Note

Not only have I hosted guests at Leaping Lamb Farm in Oregon since 2007, I also founded (2010) and run Farm Stay USA, a trade association for working farms and ranches with lodging. We have lots of trainings, from startup to best practices. I have provided a link in the resources here and we are happy to help. Please join us!

Resources

Farm Stay Toolkit: https://farmstayus.com/wp-content/uploads/2019/03/farm-stay-feasibility-guide.pdf

U.S Farm Stay Association: https://farmstayus.com. Become a member for more best practices, marketing, education, referrals, resources, and camaraderie.

Agritourism and Nature Tourism in California, 2nd ed., by Holly George and Ellie Rilla, 2011, University of California Agriculture and Natural Resources Publication 3484. To order https://anrcatalog.ucanr.edu/Details.aspx?itemNo=3484

Online Farm Stay Manual, University of MN Institute for Sustainable Agriculture, https://www.misa.umn.edu/Publications/FarmstayManual

National Children's Center for Rural and Agricultural Health and Safety. (2008). Policies and Procedures Guide and Worksite Guide, http://www.marshalfieldclinic.org/agritourism

University of Vermont Agritourism Guides. Many resources for setting up all kinds of agritourism operations, not only farm stays: https://www.uvm.edu/extension/vtagritourism

How Much Do College Students Know About GMOs? A Pilot Study

Aditi Rao
University of Connecticut (United States)
aditi.rao@uconn.edu

Stacey Stearns
University of Connecticut (United States)

Keywords: GMOs, college students, science communication, agricultural education

How Much Do College Students Know About GMOs? A Pilot Study

Genetically Modified Organism (GMO) crops were first planted in the United States in 1996 (Johnson & O'Connor, 2015). Over the years, GMOs have become a scientific and social issue worldwide (Wen et al., 2016). The agricultural community has a higher knowledge of GMOs than their consumer counterparts (Wunderlich & Gatto, 2015). As a result, consumers, agritourism customers in particular, may have questions about GMOs and their use (Higgins, 2018; Wunderlich & Gatto, 2015). Thus, even if agritourism operators do not use GMOs, they should be able to successfully respond to consumer questions about GMOs.

In recent times, the current generation of college students have grown more connected to the environment and often support local foods and produce (Shafiei & Maleksaeidi, 2020). Hence, in this pilot study, we surveyed college students to assess consumer knowledge about GMOs and to understand how we can best convey GMO-related information. While student audiences may not currently have high purchasing power, developing relationships via storytelling can contribute to developing them into future agritourism customers.

Background

In 2017, we, at University of Connecticut (UConn) Extension, created a GMO-working group with the intention of helping farmers and consumers make informed decisions about GMOs, whether they were for or against GMOs. In the first phase, we surveyed farmers and consumers separately to determine what they knew about GMOs, what information they wanted, and how UConn Extension could help. We disseminated the results through our existing Extension network and farmers, and on their request, we developed several educational outreach resources such as a website, a social media campaign, and animated videos. Consumers were curious about agricultural and production practices; our team wanted to support that, and agritourism operations are one place where they seek information. In the second phase, we tested the communication materials to determine their impact on consumer knowledge and GMO awareness, such as attitude and behavior changes. We decided to begin with the communication material with the highest reach – an animated video on the GMO version of the American Chestnut tree. We conducted a pilot study to test the effects of the animated GMO video by using a convenience sample of undergraduate students.

Methods

We surveyed 336 undergraduate students (male = 158; female = 175; other = 1) enrolled at UConn. Their age range was 18-22 years ($M = 20.5$, $SD = 1.56$). The seven-minute survey was administered online using the Qualtrics survey software. All students who participated in the survey received research credits, and the study was approved by the university's institutional review board. The study participants were randomly assigned into one of two groups: the test group ($n = 156$) or the control group ($n = 180$). The test group watched an animated video about genetically modified American Chestnut trees potentially saving the species (Figure 1). The control group watched a video on how chocolate chips are selected for preparing the UConn Dairy Bar ice cream (Figure 2); this video was

selected as the control since it was also produced by UConn. Using a pre-post experimental design, the study participants were asked to respond to a total of 33 questions. Specifically, knowledge-based trust, identification-based trust, and willingness to consume were measured before and after the participants watched the video. Identification-based trust was defined as that which relates to the knowledge and intentions of the other person or source (Hernández & Santos, 2010).

Measures

Knowledge-based trust was measured using a three-item scale (e.g., *Most of my previous experiences with GMOs were positive* and *Most of the times I purchased GMOs I was satisfied)*. Identification-based trust was also measured using a three-item scale (e.g., *I feel happy about buying*

The American Chestnut Tree: A GMO Story

The Science Behind Choosing a Chocolate Chip | UConn

GMOs and I feel good about buying GMOs). Both scales were measured using a five-point Likert Scale (1 = Strongly agree; 5 = Strongly Disagree). Willingness to consume GMO foods was measured using a four-item scale (e.g., *How willing would you be to consume GMO foods if it reduces the amount of pesticides applied to crops?*), with a five-point Likert scale response (1= Extremely willing, 5 = Extremely unwilling). Other questions measured participant agreement or disagreement on food insights (e.g., *There is a lot of conflicting information about what foods I should eat or avoid)* and GMOs (*Have you ever heard of GMOs or seen a GMO label on a product?, What crops do you think contain GMOs?, etc.*). Lastly, participants were asked about the sources they would trust to receive GMO-related information (e.g., university professors, government agencies, social media, etc.)

Results

Overall, 79% of students reported they know what GMO stands for and over 50% said they never check if the product contains GMOs. Interestingly, we found a significant association between those who reported knowing what GMO stands for and those who check if the products contain GMOs ($X2(8) = 20.80, p < 0.01$). Their willingness to consume GMOs significantly decreased post stimulus, $t(153) = 2.028$, $p < .05$. The means for knowledge-based trust, $t(155) = 2.29$, $p < .05$, and identification-based trust, $t(154) = 3.31$, $p < .01$, also decreased significantly post stimulus. Interestingly, women ($M = 13.23$, $SD = .68$) scored higher on identification-based trust than did men ($M = 12.99$, $SD = .67$). According to the participants, the GMO crops grown in the United States were corn, apples, cotton, soybeans, tomatoes, alfalfa, squash, and papaya. Approximately 40% stated their knowledge about GMOs was average. In addition, we conducted a poll during the 2022 International Agritourism Conference and found that approximately one-third respondents were asked about GMOs by their customers.

Discussion

Overall, this study found that the GMO video decreased the participants' willingness to consume GMOs, and students incorrectly named several crops as a GMO crop, indicating a lack of knowledge when it comes to GMOs. While the study results cannot be generalized, the implications are relevant to agritourism operators for multiple reasons. First, current students are heavily interested in sustainable practices and they hold future purchasing power (Anderson-Wise, 2022). Second, as a commercial enterprise offering additional income to farmers, agritourism often includes educational activities (The National Agricultural Law Center, 2022), indicating that agritourism operators need to wear multiple hats. Third, our

Figure 3. Conference Poll

one-question survey at the 2022 International Agritourism Conference (Figure 3) revealed that about one-third of the participants faced GMO-related queries. Taken together, these findings attest the need for agritourism operators to be prepared to have GMO-related conversations.

We also found that students rated their professors as the most trusted source for learning about GMOs. While this is likely to change when they are no longer in an academic setting, the study results revealed key insights into trusted sources for education and learning. Based on these findings, we offer some guidelines for agritourism operators faced with GMO-related queries: (1) Be transparent about the use of GMOs in your operation; (2) Share general GMO knowledge when asked (e.g., the list of crops with a GMO version); (3) Explain the benefits and drawbacks of GMO use; (4) Address "What's in it for me?": how does it affect the consumer; (5) Conduct an audience analysis; (6) Don't be afraid to cite research; and (7) Collaborate with universities/colleges for additional information and resources.

Our study had a few limitations. First, the undergraduate participant pool limits generalizability. Second, the GMO video did not address the drawbacks of GMO use. Third, the survey was conducted before the pandemic.

Conclusion

Agricultural education about topics like GMOs is not a primary reason for consumers to visit an agritourism operation. However, the topic can arise during the course of a visit, and agritourism operators should be prepared to provide science-based information about GMOs and other agricultural practices as part of their tours and activities. We encourage agritourism operators to focus on why a customer is visiting them, share knowledge, and intersperse it with the other activities and opportunities that address the customer's interest.

References

Anderson-Wise, T. (2022, March 11). Opinion: Gen Z demands attention and change from food and agriculture. *AgriPulse.* https://www.agri-pulse.com/articles/17354-opinion-gen-z-demands-attention-and-change-from-food-and-agriculture

Hernandez, J. M. D. C., & Santos, C. C. D. (2010). Development-based trust: Proposing and validating a new trust measurement model for buyer-seller relationships. *BAR-Brazilian Administration Review*, *7*, 172–197. doi.org/10.1590/S1807-76922010000200005

Higgins, K. T. (2018, June 07). What do consumers think of GMOs? *Food Processing.*

https://www.hartman-group.com/acumenPdfs/foodprocessing_com-What%20Do%20Consumers%20Think%20of%20GMOs.pdf

Johnson, D. & O'Connor, S. (2015, April 30). These charts show every genetically modified food people already eat in the U.S. *Time*. https://time.com/3840073/gmo-food-charts/

Shafiei, A., & Maleksaeidi, H. (2020). Pro-environmental behavior of university students: Application of protection motivation theory. *Global Ecology & Conservation,* (22). https://doi.org/10.1016/j.gecco.2020.e00908

The National Agricultural Law Center (2022). *Agritourism – An Overview*. https://nationalaglawcenter.org/overview/agritourism/

Wen, N., Hao X., & Han X. (2016). Examining the role of mobile media in public engagement with GMO foods among Chinese consumers. In Wei R. (Ed.) *Mobile media, political participation, and civic activism in Asia* (pp. 103–121). Springer. https://link.springer.com/chapter/10.1007/978-94-024-0917-8_6

Wunderlich, S., & Gatto, K. A. (2015). Consumer perception of genetically modified organisms and sources of information. *Advances in Nutrition*, *6*(6), 842–851. https://doi.org/10.3945/an.115.008870

Agritourism in the Tetons: Gauging Interest in Agritourism and Local Food During the COVID-19 Pandemic

Jennifer Werlin
University of Idaho Extension, Teton County (United States)
jwerlin@uidaho.edu

Keywords: agritourism directory, local food, survey, COVID-19 impacts

Introduction

The Greater Yellowstone-Teton region in the western United States is known for its rugged and diverse environment, wildlife, public lands, resorts, recreation, and agricultural roots. With tourism and the service industry as large economic drivers in Teton Counties of Idaho and Wyoming, development pressure has converted substantial agricultural land. However, a new crop of agriculture is thriving—small and diversified farms and ranches. With limited availability of agriculture and private land, less favorable climatic and soil conditions, and some of the highest land values in the nation in Jackson Hole, Wyoming, the western side of the Tetons in Teton Valley, Idaho hosts much of the farming community. Increasing interest in locally produced food makes Teton Valley's agricultural heritage an important economic force. Despite an abundance of recreational tourism, little information about agritourism has been aggregated or promoted by regional travel and business development organizations. The shift to a lifestyle, amenity-based, and tourism economy continues to create pressure on farmers and rural landowners to sell and convert agricultural lands to commercial and residential uses. Agritourism is one opportunity to help farmers in the "Teton Foodshed" diversify their farm enterprises and help sustain the profitability of working farms.

This paper highlights current work by the University of Idaho (UI) Extension and the Teton Food and Farm Coalition to inventory and highlight agritourism activities on the western slope of the Tetons in Teton Valley, Idaho/Wyoming. It also summarizes results from online surveys conducted in 2020 and 2021 that gauged local food purchasing behaviors of consumers regarding the COVID-19 pandemic as well as interest in leveraging agritourism activities.

Methods

Part 1: Online Surveys

An online Qualtrics™ survey was designed to determine important local sectors of agritourism, potential areas of growth based on consumer interest, and identify how consumer habits and agritourism participation may have shifted due to the COVID-19 pandemic. For this study, agritourism was broadly defined as any agriculturally based activity that brings visitors to a farm or ranch or an activity in which consumers interact with farmers or ranchers. Types of agritourism activities may include direct-to-consumer sales (e.g., farmers markets, farm stands, community supported agriculture/CSA's); agricultural education (e.g., farm tours and on-farm workshops); hospitality (overnight farm stays); recreation (e.g., horseback riding, hunting); and entertainment (e.g., farm dinners, festivals) (The National Agricultural Law Center, 2022).

Surveys were distributed to residents, farmers market patrons, nonprofit listservs and email lists, social media pages, and economic development organizations, where mixed methods of quantitative and qualitative evaluations were utilized. Through the surveys, data were collected from two voluntary survey samples of 215 individuals in 2020 and 197 individuals in 2021. Surveys were distributed online in Teton County, Idaho and Wyoming. In addition to demographic questions inquiring about race, income, gender, and place of residency, several questions asked about individual agritourism participation and local food purchases before and during the COVID-19 pandemic.

Part 2: Agritourism in the Tetons Online Directory

The second component of the project was to assess the presence of agritourism sectors and activities currently in operation in the region for the development of an online agritourism directory. Farmers market sales data were also collected to assess the economic growth of local food sales during the pandemic. Between 2020 and early 2022, three Teton Science School AmeriCorps Service members assisted UI Extension with the project by helping inventory regional agritourism efforts. Data were gathered by phone, email, and online. AmeriCorps service members contacted local farms and ranches for permission to be included in the online directory that would be available on the Teton Food and Farm Coalition website: www.tetonfoodfarmcoalition.org, as well as linked to the UI Extension's local food directory list hosted through Idaho Food Works.

Regional data were separated into 14 different municipalities in Idaho—Driggs, Victor, Tetonia, Rigby, Roberts, Idaho Falls, Sugar City, Felt, Rexburg, Alta, St. Anthony, Ashton, Swan Valley, and unincorporated Teton County. Data from Wyoming was divided into four towns including Jackson, Wilson, Teton Village, and Kelly. The goal was to determine levels of agritourism activity across farms and ranches, by assessing levels of participation within three main sectors of agritourism including: 1) food and sales (e.g., CSA/subscriptions, farm stands, direct sales, plant sales, farmers markets, supplying to local restaurants, packaged food/value-added products); 2) experiences (e.g., farm tours, workshare/volunteer programs, horseback riding, overnight experiences, guided hunting tours, fishing tours, summer camps, and other events); and 3) education (e.g., workshops, school tours, and consultations).

Findings

Survey Results

A total of 412 people participated in the surveys in 2020 and 2021: 57% from Teton County, ID; 32% Teton County, WY; and 11% other locales. Seventy one percent of respondents identified as female with their primary ages between 21-44 years old. Eighty percent identified as Caucasian, and 4% Hispanic/Latinx. The most common income bracket was individuals earning over $100,000 annually. Over the past several years, the U.S. Economic Policy Institute identified the municipalities of Teton County, WY and ID as the area with the highest income gap in the nation, with $122,447 as the average income of 99% of residents (Economic Policy Institute, 2022).

Results of the online Qualtrics surveys were used to help learn about the survey participants' shopping habits for purchasing local food and their desire to participate in agritourism activities. Early in the start of the COVID-19 pandemic, Teton Food and Farm Coalition members were also curious whether this would affect people's food purchasing behavior, so survey questions were added regarding the pandemic.

Nearly half of the survey respondents reported that their overall agritourism participation stayed the same during the pandemic, with 46% of respondents reporting that they occasionally participate

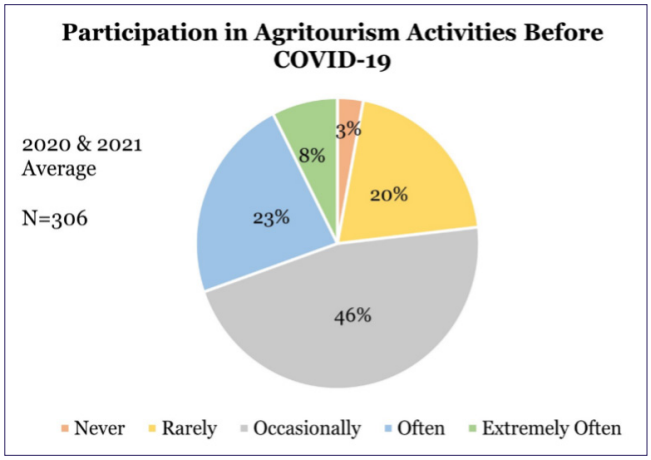


Figure 1. Percentage of responses to the question, "In a normal year, how often would you expect to participate in agritourism related activities? (based on a Likert scale of 1-5, with 5 as "extremely often" and 1 as "never").

Confidence levels and margin of error:
Never 95% CI [.01, .05]; ME .02
Rarely 95% CI [.16, .24]; ME .05
Occasionally 95% CI [.41, .52]; ME .06
Often 95% CI [.18, .28]; ME .05
Extremely Often 95% CI [.05, .10]; ME .03

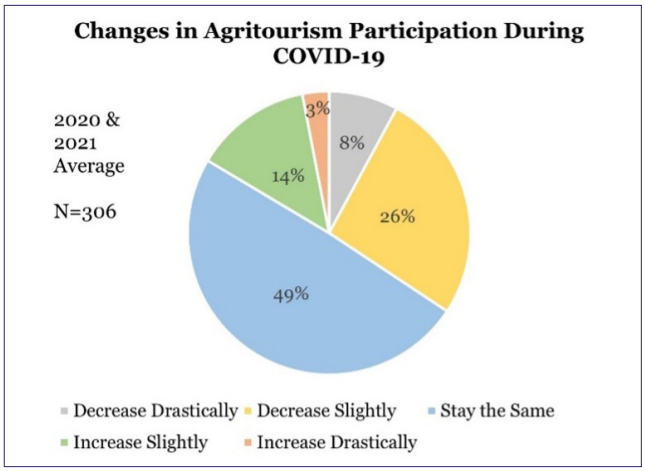


Figure 2. Percentage of responses to the question, "Do you expect your participation in agritourism activities to increase or decrease in light of COVID-19?" (based on a Likert scale of 1-5, with 5 as "increase drastically" and 1 as "decrease drastically").

Confidence levels and margin of error:
Decrease Drastically 95% CI [.05, .11]; ME .03
Decrease Slightly 95% CI [.21, .31]; ME .05
Stay the Same 95% CI [.44, .55]; ME .06
Increase Slightly 95% CI [.10, .18]; ME .04
Increase Drastically 95% CI [.01, .05]; ME .02

in agritourism activities in normal pre-pandemic years (8% extremely often, 23% often, 20% rarely and 3% never) (Figures 1 and 2). It is noteworthy that survey respondents indicated that they purchased 41% of their food locally prior to the pandemic. Half of the respondents reported that their local food purchasing habits would stay the same.

Approximately 17% of respondents reported that their agritourism participation would increase due to the pandemic, whereas 34% reported that they would decrease their participation in agritourism. In the 2021 survey results, there was a slight reduction in the likelihood of participating in specific agritourism activities compared to 2020, but overall, the trends were the same in both 2020 and 2021. Over 50% of respondents reported that they would like an increase in farm stands, purchasing local agriculture products at retail stores, and consuming local products at restaurants. The top agritourism activities ranked as: 1) visiting/shopping at farmers market; 2) buying local agriculture products at grocery/retail stores; 3) eating locally produced/grown food at restaurants; and 4) farm stands.

Qualitative survey questions and comments reiterated the desire for locally produced food and farm products, gratitude for the project, as well as an overall desire for increased agritourism activities. One respondent wrote, "Really like our Farmer's Market! Was involved for 12 years and saw it grow so much in that period of time. Would love to see farm stands and U-pick places grow, too." Others wanted to see more marketing and promotion of agritourism in the region—"Region VI (Yellowstone Teton Territory) of the Idaho Tourism Council needs to be more active in promoting these endeavors on its website and numerous social media platforms."

Figure 4. On-farm events such as "baby goat snuggle session" are a popular activity in Teton Valley, Idaho (own photo).

Land use regulations and zoning were also mentioned by a few respondents, with one comment stating, "County zoning should allow farmers a pathway to building infrastructure for ag-tourism. It is very important that the region works together to develop and support agritourism…" Others expressed interest in learning more about regional agritourism opportunities: "It would be helpful to have one website which lists all of these activities throughout the year."

Agritourism in the Tetons Online Directory

In the spring of 2022, an online agritourism directory for the region was published at www.tetonfoodfarmcoalition.org/agritourism.html using a GIS story map format hosted with the University of Idaho. The directory is evolving and will be linked on other websites such as Idaho Food Works and

Slow Food in the Tetons. The directory lists local farms, ranches, and other businesses that currently participate in agritourism in the foodshed, with specific activities outlined under each listing. Work is underway to increase the search accessibility of the directory by organizing listings under specific agritourism activities such as food and sales, experiences, and education.

Discussion and Conclusion

Due to COVID-19 safety precautions, survey data were taken from an online convenience sample—89% of respondents were local Teton County Idaho or Wyoming residents. Additional research could include surveying visitors to the region about their agritourism preferences since this demographic accounts for a large portion of local sales. Further, farmers market sales at the Teton Valley Farmers Market increased substantially over the two years, despite safety protocols such as the reduction or elimination of live music, reducing the number of vendors, and spacing booths further apart for social distancing. Teton Valley Farmers Market Rapid Market Assessment data from 2017 and 2019 showed that just under half of market visitors were non-local (Werlin, 2019). Overall market sales slightly increased in 2020 from 2019 despite a 20% reduction in vendors due to the pandemic. In 2021, sales increased by an astounding 27% from 2020 (Werlin, 2021). These data corroborate a strong consumer market for local food and farmers market items in the region.

Moving forward, UI Extension can continue to assist the Teton Food and Farm Coalition with needs assessments, meeting facilitation, and website development. UI Extension can also help with updating the online agritourism directory. Additionally, regional tourism boards, organizations, and governments could help promote local agriculture by highlighting the Teton foodshed's diverse agritourism opportunities. These include promoting and assisting growth of farmers markets, food festivals and events, school garden and agriculture programs, developing agritourism-friendly land use policies, and "buy local" campaigns.

Author's Note

Thanks to Teton Science School AmeriCorps service members Eve Cinquino, Jennifer Hudson, and Giovanna Wallis for project assistance.

References

Economic Policy Institute. (2022). Accessed August 15, 2022, *The Unequal States of America: Income inequality in the United States*, from https://www.epi.org/multimedia/unequal-states-of-america/.

The National Agricultural Law Center. (2022). *Agritourism: an overview*. Accessed November 15, 2022, from https://nationalaglawcenter.org/overview/agritourism/.

Werlin, J. (2019). [Unpublished raw data on Rapid Market Assessment of the Teton Valley Farmers Market]. Teton Valley Farmers Market, Driggs, Idaho.

Werlin, J. (2021). [Unpublished raw data of the Teton Valley Farmers Market sales]. Teton Valley Farmers Market, Driggs, Idaho.

Managing Agritourism Amidst Insecurity: A Workshop in Overcoming International Tourist Concerns About Safety Outside the Gates

Daniel Baker
President, Vermont Partners of the Americas
University of Vermont (United States)
daniel.baker@uvm.edu

Honduras has one of the highest murder rates in the world and is amongst the most dangerous countries to visit due to high crime rates, narco trafficking, and weak institutions. According to the World Bank it is one of the poorest countries in the Western hemisphere with more than 25% of the country living in extreme poverty in 2020, prior to two major hurricanes and the COVID pandemic (World Bank, 2022). In August 2022 the famine early warning system put the whole country at crisis level food insecurity (FEWSNET).

Honduras is also a beautiful country full of wonderful people. Higher education institutions, church groups, medical missions and volunteer organizations have for many decades hosted volunteer travel to Honduras to assist in development initiatives. Many of those programs were closed as crime violence and insecurity in Honduras increased. The closing of those programs exacerbated problems in Honduras by limiting the flow of professional and technical expertise, the lost income from expenditures of these groups while in Honduras, as well as the intangible loss of direct person-to-person contacts that build networks that support policy initiatives in the sending countries. The need for sustainable development in Honduras has only increased in recent years, while travel warnings from national governments such as the U.S. State Department continue to warn travelers to avoid visiting the country (U.S. State Dept. 2022)

This paper summarizes the perspectives shared during a workshop that took place during the 2022 International Workshop on Agritourism in Burlington, VT. The workshop considered whether and how project-based international tourism could resume in Honduras from several perspectives. Three presenters are US organizations with many years organizing volunteer travel to Honduras, as well as the perspectives of a Honduran regional conservation organization and a tourism operator who receive foreign travelers.

Vermont Partners of the Americas

Vermont Partners of the Americas, a chapter of the national Partners of the Americas (POA), has had a formal, reciprocal volunteer relationship since 1964. Over the years, hundreds of Vermonters and Hondurans have visited each others' countries. Projects have ranged from individual volunteer assignments to major multiyear, grant-funded development projects. Faculty from the University of Vermont (UVM) have been integral to guiding that relationship since its inception, with Deans and professors serving as executive officers during that time.

Starting in 2000, UVM Associate Professor Emeritus Dan Baker (the author) began working in Honduras with funding from the Farmer to Farmer program, and later the Inter-American Development Bank. Soon after, he began his work in Honduras with small-scale artisan "panela" sugar producers. He began teaching project-based learning classes that brought UVM students to Honduras to work on projects that ranged from agricultural development to water systems, ecotourism, and women-owned small business.

As crime and violence soared in Honduras, the U.S. Peace Corps pulled out in 2012. Following that pullout, many institutions, including many university programs, ended their travel to Honduras. UVM continued to take students down to Honduras for two more years, based on the sense of security provided by years of working with the same community partners and on the experience of key faculty.

However, in 2013 the University determined that the risks were too great and ended the program. Annual in-country expenditures by the UVM international program at that time were about $28,000 per year, with nearly all that money spent remote areas.

Since the program was shut down, Vermont POA has maintained programs primarily through the efforts of two of their officers. UVM Professor Dan Baker has continued to work with panela producers, and Dave Chapelle maintains close personal contacts in the country. What we have found is that when either Dave or Dan is able to travel and accompany volunteers, Vermont POA is able to manage projects. However, both Dave and Dan have young families in the United States that limit their ability to travel. Consequently, Vermont POA finds itself stymied by the bottleneck of depending on these two individuals as critical assets. The challenges of insecurity in Honduras have limited the ability to recruit new leadership with the experience necessary to facilitate travel. Outside of Dr. Baker's work with panela producers Vermont POA has focused on strengthening networks here in Vermont with more active programs in Honduras.

Hands to Honduras Tela

Hands to Honduras Tela (H2HT) has been organizing volunteer travel to Tela, Honduras on the north coast since 2005. They have been a resilient organization running projects in Honduras with volunteers every year except for one year during the COVID-19 pandemic's peak. With as many as 90 volunteers in a single year they have built many projects supporting the local hospital, particularly a neonatal unit and supporting structures. This is in addition to many projects supporting schools and water systems. Volunteer numbers have been trending down since their peak in 2011, but have remained strong enough that they now cap volunteers at 30. All H2HT volunteers pay their own costs of trip; there are no paid employees. The funds for projects are generously given by foundations, friends, family, Rotary, and fundraising events.

Linda Gilbert, along with her husband Al, have led the program since the beginning. Linda believes that the security of the program is based on long and deep community connections and good communications with their partners. The organization works closely with the municipal government and has stayed at the same locally owned hotel for many years. Volunteers are strongly encouraged to follow the safety guidelines outlined by their partners, and they do. Linda also emphasizes that as soon as the group arrives in San Pedro Sula, they get into vehicles with known and experienced local drivers and immediately leave the city. Crime rates and insecurity tend to be significantly higher in urban areas than rural areas.

H2HT depends heavily on Linda and Al Gilbert's personal drive and organization. Similar to Vermont POA, Linda and Al are critical assets and it is not clear how the organization will continue when they are no longer able or willing to do this work.

Pure Water for the World

Pure Water for the World (PWW) was founded in 1994 by Vermonter Carolyn Meub. Since becoming a 501c3 in 1999, it has run volunteer travel in both Honduras and Haiti. Through its work in these countries, it has developed significant experience in the design and implementation of water, sanitation, and hygiene (WASH) systems. It has run three volunteer trips annually to each country since 2000. Over that time it hired and trained professional in-country staff to sustain projects between volunteer trips. As the security situation deteriorated in both countries, PWW reduced its dependence on volunteerism in favor of managing projects with professional staff. This change in practice decreased donors and supporters' personal experience in water projects, something the organization values highly. The importance of volunteer engagement and projects, combined with years of experience managing volunteer travel, has led PWW plan to resume volunteer travel to Honduras in 2023.

An important initiative undertaken by PWW's founder several years ago significantly enhanced the sustainability of the organization. As Carolyn Meub anticipated her retirement, she expanded

and strengthened her Board of Directors. Carolyn and her board sought to avoid the critical asset problem by hiring and keeping a paid, experienced staff member here in the United States, and planning a formal search for a new Executive Director. Matt Korn has taken over the helm of PWW and has initiated new programming to expand the donor base and sustain its local projects. Matt has determined that the best way to support sustainable projects in Honduras and Haiti is to build from the base that they have established, and not seek to rapidly expand their geographic range or scope. Instead, they're going to focus on their long-term partnerships, their successes in WASH, and engage volunteers in those established areas.

Mancumunidad de Municipios del Parque Nacional Montana Celaque (MAPANCE)

MAPANCE is a regional conservation organization working in the area around the highest mountain in Honduras , Mount Celaque, in Gracias, Honduras. Jose Luis Flores Reyes , Coordinator of Development at MAPANCE, summarized MAPANCE's initiatives to coordinate efforts amongst municipalities in the region to promote eco-tourism and agricultural tourism. Their focus has been primarily on coffee and developing the infrastructure to both support the coffee industry and to draw tourists into the region through the widespread appreciation of outstanding coffee. These efforts paid off in surprising and significant ways during the COVID-19 pandemic, when diminishing international tourism to the region was exacerbated by the pandemic shutdown. However instead of ending tourism to the region, MAPANCE found that domestic tourism to the region increased dramatically.

MAPANCE has been a key partner with Dr. Baker in the panela project, organizing groups of farmers and providing technical assistance in the adoption of more efficient evaporators. When asked about how international tourists could visit Gracias and engage in agri-tourism, Jose Luis suggested that MAPANCE and other local tourist businesses could organize to help travelers get from the airport, out of the city, and into the safer countryside.

Hotel Guancascos

Frony Miedema is the founder and operator of Guancasco's, a small hotel and restaurant in Gracias, Lempira, Honduras. Guancascos open-air patio restaurant is popular with national and international development professionals who can often be found holding meetings over a meal.

Frony noted that the potential for agritourism as a development strategy has enormous potential. Despite the decline of international travelers due to insecurity Gracias has steadily become a major destination for domestic tourists. This is due to the region's resources, attractions and investments that have been highlighted by the increasing number of Hondurans who travel to the region. Specifically, Gracias offers:

- Social and physical infrastructure
- Hiking and adventure tours
- Cultural and artistic events
- Traditional cuisine
- The desire of Hondurans to revisit their agricultural and rural roots

From Frony's perspective, these resources can also benefit international tourism as that renews.

The greatest challenge facing international tourism is the perception that the entire country is dangerous, when in fact most of the insecurity is in urban areas. She highlighted that infrastructure, medical centers, and communication have all improved in recent years. Further, while overall international tourism has declined, the reality is that certain groups have continued to travel safely here, particularly medical brigades, mission groups, and bird watchers.

Conclusion

Economic development is critical for creating sustainable livelihoods in rural Honduras. Over the past decade the Honduran government, non-governmental agencies, and the international community invested in developing built and human infrastructure to encourage foreign tourists to appreciate and access the country's cultural and natural resources. This has included emphasis on

the famously fine coffee grown in the region, as well as interest in Mayan history. Political insecurity, violence, and crime significantly reduced international travel to the country, with disincentives including travel warnings from the U.S. State Department, the withdrawal of Peace Corps volunteers, and reduction in the involvement of international higher education programs concerned about security risk.

COVID-19 might have seemed to be the end of rural tourism. However the pandemic resulted in a surprisingly different outcome. During the pandemic, urban Hondurans flocked to Western Honduras, utilizing the tourism infrastructure that had been built over the past decade. These domestic tourists, as well as tourism from adjacent countries, supported tourism businesses in Western Honduras through the pandemic. Early indications are that this domestic tourism is more robust and sustainable for the foreseeable future. Local tour operators noted that domestic tourists arrive with a greater interest and preference for traditional foods, increasing demand for local products and supporting regional agriculture.

International organizations maintain their ties to Honduras and seek out opportunities to rebuild past volunteer travel. When travel warnings severely limited volunteer travel to Honduras, PWW shifted to a local, professional staff to maintain its water and hygiene programs. H2Ht maintained its programs through strong local partnerships. Over time the organizations have developed procedures to quickly move volunteers through more precarious urban areas and out to more peaceful rural areas with lower crime levels.

Institutions of higher education have been slower to resume faculty-led student travel to Honduras. UVM has reduced its programming and maintains former projects through partnerships in Honduras and the U.S., particularly through its long-term connections to Vermont-Honduras POA. The UVM program continues to provide technical support through committed faculty to the farmers, schools, and businesses engaged in its long-term project assisting small-scale producers of *panela*, an artisan block sugar.

Expanding programming to include resumption of student travel for institutions of higher education like UVM depend on the successful resumption and expansion of non-profit and non-governmental organizations, reduction of the State Department travel warnings, and continued strong connections to local partners. In the case of agritourism organizations in Western Honduras, they plan to continue to support and expand their tourism infrastructure, and express strong interest in developing programs that encourage educational institutions to come to the region and re-engage in agritourism in the region.

Providing Agritourism Education and Support in the Virtual World

Audrey Comerford
Oregon State University Extension Service (United States)
audrey.comerford@oregonstate.edu

Melissa Fery
Oregon State University Extension Service (United States)

Keywords: producer, education, online, curriculum, agritourism

Introduction

Farmers and ranchers in Oregon have been looking to incorporate on-farm sales and agritourism activities to their business as a farm viability and education strategy. Due to the lack of an agritourism statewide agency or organization, roadmaps to incorporate these marketing strategies were housed in various locations with unclear steps for producers. The Oregon State University Extension Service's Agricultural Tourism workgroup applied for and received Western Extension Risk Management Education funding to create an online course, host individual county webinars with planning departments, and provide one-on-one technical assistance. The topics covered ranged from managing liability to customer service and hospitality. One hundred and twenty-eight individuals registered for the online course, ranging from those who have not started farming to those with more than 20 years of farming experience. Forty-seven of the course participants completed the course evaluation with the majority reporting an increased understanding across all the major topics.

Project collaborators included Travel Oregon, Oregon Department of Land Conservation and Development, Willamette Valley Visitors Association, Strategic Economic Development Corporation, Oregon Farm Bureau, and a number of county planning departments.

Program Need

Interest in agricultural tourism is becoming more popular in Oregon, both from the visitor wanting to engage with agriculture and farmers wanting to add it to their business (Stewart et al., 2021). In-person education challenges include lack of resources and available staff and a large geographic area to serve. There has not been one specific training where Oregon producers can obtain information on operating an agritourism business or apply these concepts to their own operation. This information needed to be available in a way that could accommodate busy participants' schedules and be self-paced while still being interactive.

A farmer survey completed by Oregon State University (OSU) Extension Service showed that direct-to-consumer sales in 2020 increased from 2019 for 61% of respondents. Survey results also indicated that producers planned to start, continue, or expand farm stands, u-pick/cut operations, and on-farm pick up in 2021 (Fery et al., 2022). If this trend continues post-COVID, it's anticipated that if customers are visiting farms for direct sales, there will also be opportunity to offer additional agritourism activities.

The Process

To fund curriculum development, the OSU Extension Agricultural Tourism team successfully obtained a Western Extension Risk Management Education grant. Priority topic areas to include were identified through two local needs assessments (Fery & Garrett, 2017; Comerford & Fery, 2022). The online learning module was created along with all the content, case study videos, factsheets, and an action plan for producers to work through and apply concepts to their own operation.

In addition to the online course, the team hosted five county-specific Q&A webinars with the planning departments. This allowed farmers and ranchers to ask specific questions related to permitting certain activities in the county where their land was located. Question topics included permits needed for farm stands, on-farm lodging, educational events and tours, and festivals. Twenty-three farmers and ranchers participated in the webinars.

The third step of the project was to offer one-on-one consultations to the participants that completed the course. These consisted of site visits, phone calls and emails. Some of the topics covered included their action plan, agritourism activities they want to incorporate, whether they had talked to the county planning department, insurance, marketing, and others. Twenty-one farmers and ranchers took advantage of the individual teaching opportunities.

The overall design was to help producers start or expand agritourism and consider the various risk-management strategies needed when opening farms to the public.

The Course

The objective of creating the online course entitled "Developing a Successful Agricultural Tourism Business" was to provide farmers and ranchers a streamlined educational program that is easily accessible. The online module was pertinent to all 36 counties in Oregon. Marketing materials (Figure 1) were distributed in OSU Extension newsletters, farmer networks, agricultural publications, and social media.

Seven course sections engage learners through text, supporting resources, and case study videos. The curriculum guided participants through topics such as agritourism in Oregon, types of activities, incorporating agritourism into farm/ranch business plan, assessing risks and reducing liability, understanding regulations and permitting, determining marketing strategies, and providing high-quality customer service. Producers developed an action plan to guide their next steps in the exploration and development of their identified agritourism activities.

Figure 1: Advertising graphic for online course

The Participants

One hundred twenty-eight individual participants registered for the online course. Fifteen of those resided in states outside of Oregon: Nebraska, California, Washington, Alaska, Texas, Wisconsin, Nevada, Montana, and Canada. The years of farming experience among the participants includes those who have not started yet to producers with over 20 years of experience (Table 1). Participants' farm sizes ranged from less than five acres to over 100 (Table 2).

Table 1: Years of farming experience (n=128).

Years of Experience	Number of Participants	Percentage of Participants
Have not started yet	19	15%
Less than 5 years	44	34%
5 to 10 years	14	11%
11 to 20 years	32	25%
More than 20 years	19	15%

Table 2: Number of acres managed (n=128).

Acreage	Number of Participants	Percentage of Participants
No land yet (N/A)	16	13%
Less than 5	24	19%
5 to 10	25	20%
11 to 20	10	7%
21 to 50	18	14%
51 to 100	10	7%
More than 100	25	20%

The types of crops the participants reported producing were highly diverse and include fruit, vegetables, livestock, and cut flowers. Other crops and farm products of note include honey, nursery stock, fiber, Christmas trees, wine/cider/beer, lavender, hay, and filberts. It is also worth noting that many of the participants reported growing several different crops, showing agritourism can be of interest to diversified operations.

Course Evaluation

Forty-seven participants have completed the course and course evaluation. All of the respondents strongly agree (70%) or agree (30%) that the course helped them improve their understanding of agricultural tourism in Oregon and how it relates to their farm. Over half of the respondents have not started any agritourism activities and 57% of respondents have no experience with on-farm direct marketing of farm products.

Participants were asked to rate their level of understanding or knowledge of key topics of the course, retrospectively, before and after completing the course. A 1-5 Likert Scale was used where 1 = None- Have no understanding of the content, 2 = Low- Have very little understanding, 3 = Moderate- Have basic understanding, 4 = Advanced- Have working understanding, and 5 = High- Consider myself to have complete understanding and can fully apply the content (Figure 2). The biggest gain in level of understanding was reported to be on the topic of liability risks of agritourism and how to mitigate them.

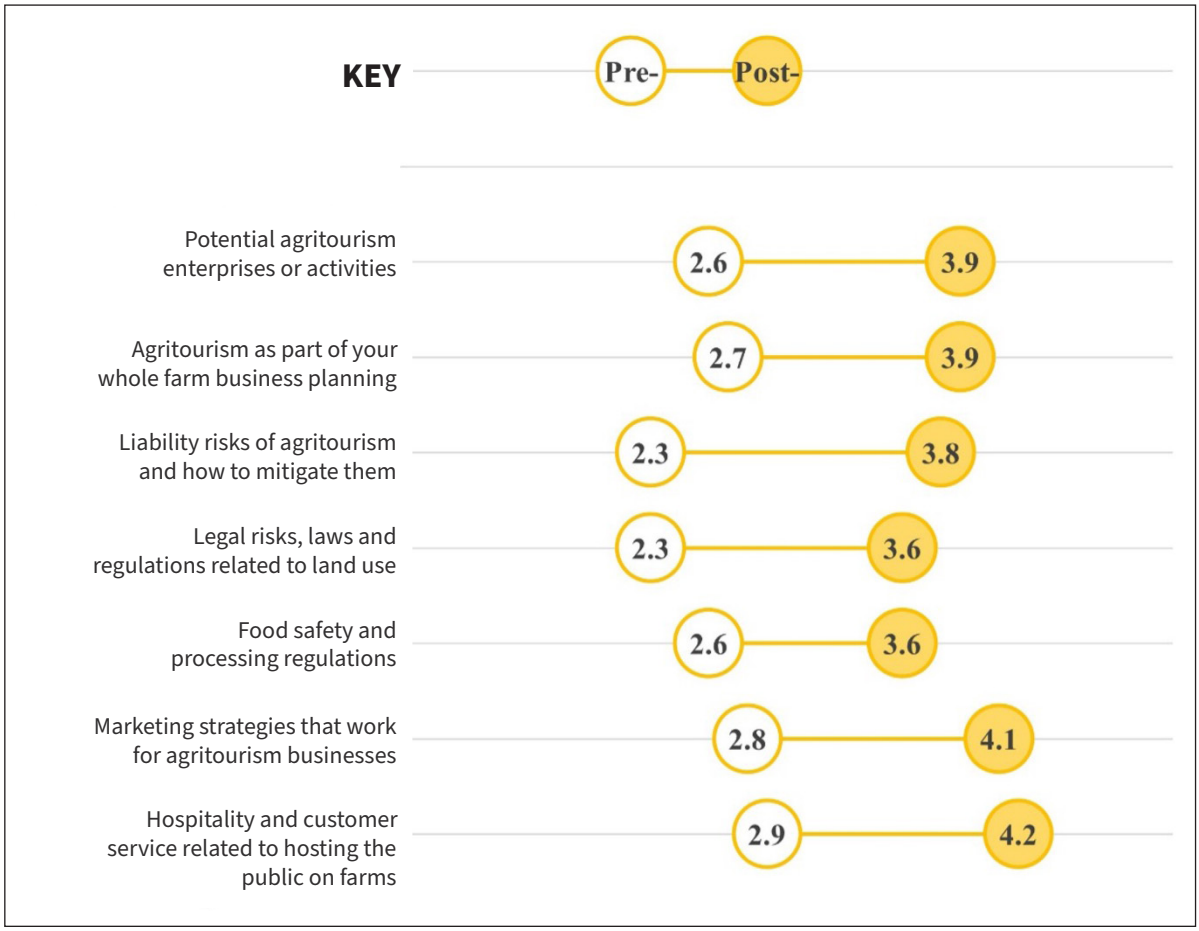


Figure 2: Average of respondents' ratings of their level of understanding on seven key topics before (pre) and after (post) course participation (n=44).

The evaluation asked respondents to indicate if they will take any of the action steps in the future (Table 3). The most frequently identified action steps that participants plan to take are determining proper insurance policies to protect personal and business liability (74%) and adding an agritourism activity into their farm or ranch business (71%). Fifty-two percent shared they would take five or more actions and 73% shared at least three.

Table 3: Actions steps participants will take as a result of the course (n=42).

1	Determine proper insurance policies to protect personal and business liability.	74%
2	Add an agritourism activity into my farm or ranch business.	71%
3	Contact my county planning office regarding adding an agritourism activity.	66%
4	Consider and improve visitor safety by completing a walk through to identify risks.	62%
5	Install an Oregon Limited Liability sign to reduce liability.	60%
6	Add additional marketing strategies such as social media or a website for your business.	60%
7	Add additional customer service and hospitality features such as signage, staff training or improved communication with customers.	60%

Next Steps

The online course will continue to be accessible to people in the state of Oregon and beyond. The project team will review revisions and add content based on feedback in the winter of 2023. Risk management topics to be added include biosecurity and farm evacuation plans. Additional case-study videos will also be added on the topics of on-farm lodging, farmstands, and multigenerational operations. Looking forward to the future, networking opportunities for participants will be created and facilitated to incorporate peer-to-peer learning.

References

Comerford, A., & Fery, M. (2022). *Oregon producers continue to look to diversify through agricultural tourism*. Oregon State University Extension. Retrieved November 21, 2022, from: https://smallfarms.oregonstate.edu/sites/agscid7/files/smallfarms/agricultural_tourism_needs_assessment_2022_final.pdf

Fery, M., & Garrett A. (2017). Southern Willamette Valley Needs Assessment. Oregon State University Extension, 24-25. Retrieved November 21, 2022, from: https://agsci.oregonstate.edu/sites/agscid7/files/2017swvsmallfarmsneedsassessmentfinal.pdf

Fery, M., Gwin, L., & Monnette, P. (2021). Oregon producers continue to adapt direct to consumer marketing. *Oregon Small Farm News*, Winter 2022, 9-10. Oregon State University Extension. Retrieved November 21, 2022, from: https://smallfarms.oregonstate.edu/sites/agscid7/files/smallfarms/winter2022sfn.pdf

Stewart, M., Comerford, A., Sorte, B., Angima, S., Chase, L., Wang, W., Bartlett, R., Conner, D., Hollas, C., Brittain, C., & Quella, L. (2021). *Increasing farm viability through agritourism and on-farm direct sales: An oregon producer survey*. Oregon State University. Retrieved November 21, 2022, from: https://catalog.extension.oregonstate.edu/em9325

A Framework for Developing and Training to Achieve Awesome Customer Service

Rob Leeds
Ohio State University Extension (United States)
leeds.2@osu.edu

Eric Barrett
Ohio State University Extension (United States)

Kate Hornyak
Ohio State University Extension (United States)

Keywords: Customer Service, Agritourism, Management, Employee Training

Introduction

To any agritourism business, returning customers are vital to the success of a business. Not only do we seek to keep families returning each year, but we seek to keep the next generation committed to making their annual visit to the operation. One of the most important factors to customer loyalty is quality customer service (Jahmani et al., 2020; Chai et al., 2009). This emphasizes how important quality customer service is to the sustainability of the business. However, it is difficult to keep up with the changing environment of customer service. In competitive industries research has shown that companies that plan, execute, and provide services that satisfy their customers are in a better competitive position (Almossawi, 2012). Research has also found that operations can use unique clientele services to set themselves apart and gain a competitive advantage even over larger businesses (Haynes, 2007). The customer-service plan needs to include all facets of a business. This includes the quality of the product, the location and physical aspects, and reliability of the business (Diem, 2021). Every contact with a customer defines the business brand and affects the future of the agritourism business. Customer experiences, both positive and negative, are shared more frequently in the age of social media, influencing customer decisions (Dimensional Research, 2013).

Although research studies have shown the importance of quality service in enhancing customer satisfaction and loyalty (Romdonny & Rosmadi, 2019) most businesses that believe they excel in customer service fall short of the mark set by their customers. In a study published by Bain and Company (Allen et al., 2005) 80% of businesses surveyed said they delivered superior customer-service experience. However, when their customers were surveyed only 8% said they had received superior customer service (Allen et al., 2005). Customers of an agritourism business will likely have both positive and negative experiences, but with such a divergence, it is more likely that customer-service delivery is not in line with customer expectations.

Why do we see this kind of variation in the perception of great customer service? Is it because the businesses are not trying? Is it because the employees are not trained? We suggest it is due to the lack of a well-designed customer-service system based on the individual business. It is important for businesses to understand the wants and needs of their customers, but it is even more important to know what customers expect while interacting with the business.

To tackle the challenges of today's customer service environment, we worked with agritourism businesses across the United States to develop a system to help operators focus on consistent customer engagement and high-quality customer service. This focus enables the farm team to provide consistent service that improves the customer experience.

Developing a System for Customer Service

This system for customer service was adapted from the Federal Emergency Management Agency's (FEMA) national preparedness goals (Federal Emergency Management Agency's [FEMA], 2020). This system has been used worldwide to prepare for and address disasters. While customer service is not considered a disaster, the FEMA system was selected due to its systematic process that engages the whole farm and for its tactical approach to meeting goals.

This customer service system starts with having the agritourism business examine current stereotypes that may affect the business, customer expectations, and how they engage with the agritourism business. This will enable the businesses to develop a firm foundation on which to build an improved customer-service plan. This system includes four steps to providing awesome customer service. These steps are: 1. Prepare – examine current expectations and stereotypes of the business; know the business products, mission, vision, and most of all why you do what you do (Sinek, 2009); develop a plan that includes all possible customer interactions 2. Respond- Empower all employees to assist, provide training and incentives, and align performance assessment with customer experience. 3. Recover – Things will go wrong; have a plan for potential customer-service failures. Designate who is in charge. Communicate, understanding it is a long-term relationship not just about the issue at hand. Fix things with the relationship mind. 4. Improve – Update the plan, prepare for next time, add the real-life failures to your training, anticipate future customer-service issues.

1) Prepare

Quality customer service can change with the business sector and customer base, but it all starts with knowing the product and values of the business. To position the business to provide consistent awesome customer service it is important to keep focused on the core product, mission, values, and the "why" of the business. Starting with an internal focus, the agritourism business must know themselves and what their brand is all about. They must know their product, how to position themselves in the market, why they do what they do, and how to effectively communicate the company brand to customers. This process will help businesses set realistic expectations for their employees and customers. One business cannot be all things to all people. Trying to do so invites negative customer experiences. Finding a niche that is sustainable and attainable is the goal to have a strong working knowledge of who the customer is and what their expectations are.

Once a business knows itself and its brand, the business needs to operationalize its values in such a way as to empower members of the business. They need to define how an employee will behave to reflect a certain value, how a value will look to the customer, and most of all, how that behavior will make the customer feel. It is vital for agritourism businesses to recruit, hire, and train their staff based on an operational process built from their values. This will help the business hire the right people and develop training to help them succeed.

2) Respond

The employee interview process is a vital start to an awesome customer-service experience. The satisfaction of customers of an agritourism operation is dependent not only on the product but also on the quality of the employees (Biswas et al., 2019). Therefore, it's important to hire employees that possess the technical skills but also the soft skills needed for developing quality relationships with customers (Litecky et al., 2004). Agritourism businesses need to ensure they select employees who will reflect the organizational culture through their behaviors. To do this, the interview process must reflect the customer service culture of the business. A good interview process will give the business a chance to assess how well a candidate fits within the values and the culture of the company. Taking these steps will also allow the prospective employee to assess whether they fit into the organizational culture of the business, and it is somewhere they would like to work. One of the businesses we worked with in creating the model reported that after an interview they offer the prospective employee $1000 to end the hiring process right there and both parties can walk away with no hard

feelings. This allows the business to hire only employees who are committed to the business. So far, only one prospective employee has taken the money.

Finding the right employees is not easy. Our research in Ohio has shown finding and retaining the right employees is a significant issue in the agritourism industry. The majority of Ohio's agritourism operations were unable to recruit the number of employees needed for their operation in 2022. Many of the operations offered increased pay and bonuses to secure their workforce.

Employees are the front line, interacting with customers every day, and impacting all aspects of customer service. Research has found that only a small percentage of customers make businesses aware of their customer-service concerns (Goodman, 2009). Another recent study showed that 96% of customers are somewhat to extremely willing to switch brands for a better customer-service experience (Hyken, 2020). This finding highlights the necessity for proper training in customer service. Moreover, this need is for employees to be trained with specific expectations based on the business's core values and to be empowered to take quick action in customer-service situations (Wu, 2019). Training was also seen as an issue from the Ohio survey, where the agritourism farms rate themselves average in this component and are looking for more expertise in this area. Employees who are not trained will improvise. This may lead to them either not acting at all or acting in an incorrect manner. Neither option will help the situation. All customer-service interactions need to be intentional and in line with business values. This is why it's important for an agritourism business to communicate its vision and mission in a way that employees can use that knowledge to make practical day-to-day decisions. Research has found that for employees to perform at a high level they need to have a complete understanding of the culture and vision of the business (Reidhead, 2020). Understanding this concept, combined with a high-quality training program will allow the employee to know what the business expects of them and what they can and cannot do to help remedy the situation. However, this puts pressure on the managers of the business to not only train employees in consistent procedures but to also constructively coach in a manner that encourages the employee to keep trying, even if they make a mistake. Most employees want to help the business. It is a manager's job to train them and to let them shine.

3) Recover

Even if the right people have been hired and the right training program has been implemented, things will go wrong. It happens in every business. Therefore, every agritourism business must have a plan for potential customer-service failures. Recovery is not waiting until after the customer-service failure to learn from it. Recovering is defined as fixing the problem to the satisfaction of both the business and the customers.

When a customer-service issue is handled well it can lead to an increase in customer loyalty and satisfaction. Customer loyalty is key to building long-term relationships, making it easier for customers to forgive occasional customer-service failure (Hess et al., 2003). The key to keeping customer loyalty and satisfaction high is to train employees and empower them to address the issue directly and try to resolve the issue as quickly as possible. Employees need to have the freedom to act and to solve customer problems.

Employees need to be trained in active listening. When actively listening, employees must listen to understand the issue, ask questions to clarify the issue, and avoid distractions. They must avoid taking things as personal attacks and focus on the problem while thinking of solutions. Employees need to be able to empathize with the customer, expressing a willingness and ability to help. Sometimes the employee is not able to give the customer what they want. In these situations, it is important to ensure employees are well trained and confident in explaining why they cannot provide what the customer wants. It is best to be as open and honest as possible about the issue. Customers are usually happier when presented with a reason versus a simple no. Not all issues will be handled at the front line, so it is important to have a plan in place to escalate the issue. However, customer complaints that require a manager to solve can take more time and add to customer frustration. It's best to empower employees to deal with complaints and provide awesome customer service.

4) Improve

The customer-service plan is not something written in a binder, used once a year at training, and put on the shelf to collect dust. The staff needs to revisit the service plan on a regular basis using examples of actual customer encounters. When a customer-service issue arises, these examples should be used to update the plan for use in future employee-training courses and to help prepare the business for the next time a situation may arise. Thinking through actual customer service issues will also provide management and employees with more information on how to respond and help anticipate future customer service issues because these real-life examples become more meaningful to everyone in the business.

Implementing a System for Customer Service

In the fall of 2021 and winter of 2022, the customer-service system was presented at state, national, and international agritourism conferences including economic development meetings. In the summer 2022, the system was pilot tested on three farms in Ohio. The farm managers and owners of the agritourism operations gave positive feedback on the system. The farms cited increased employee engagement as a benefit. One business noted an increasing number of customers commenting on excellent customer service to managers and citing employees by name when making comments. They also offered insightful comments on implementation of the system.

One owner commented that there was no need to wait for a customer-service issue to improve practices. This farm held weekly meetings with their employees and managers on issues they encountered that had the potential to become customer-service failures. They then brainstormed as a team on how to improve the situation. It was also reported employees at this farm found benefits of a systems approach, which many found extremely useful. Another farm reported that they conducted a formal survey of staff after it focused systematic training on customer service for a specific quarter. The farm received comments such as: "I learn how far smiles and communication with others can go such a long way and makes people's day 10X better," and "____ Farm has taught me how to care for customers to make their experience at the farm memorable. Also, how to empower others (employees) to take the initiative, solve problems and have fun at work." The owner stated that these statements accurately reflect the customer service values they seek among their employees.

Conclusion

As agritourism farms adjust business operations to deal with changing customer expectations, their ability to provide awesome customer service will change. To keep up with these changes, this systematic approach to customer service can help agritourism businesses improve customer loyalty and thus gain a competitive advantage in the marketplace. Using the business values as a basis for the system will help customer service evolve as the business grows and changes. The steps of this customer-service system can help agritourism businesses be prepared for excellent customer service, know how to respond to customer-service issues, have the ability to recover from failures to maintain positive relationships with customers, and learn how to improve customer service based on experiences in their own businesses. The result can be awesome customer service which is vital in developing and keeping relationships with customers and enhancing the sustainability of the business.

Future Evaluation and Research

We are formalizing our pilot project to include more farms to gain a deeper understanding of implementation for developing a consistent customer-service system on agritourism farms. Curriculum is being developed for professionals as are guides for farm managers. The completion of formal assessments is critical to improving templates to consistently deliver high-quality customer service across the organization. Surveying past participants will increase our understanding of success and give input for continuous improvement of this system.

References

Allen, J., Reichheld, F. F., Hamilton, B., & Markey, R. (2005). Closing the delivery gap. Bain & Co.

Almossawi, M. M. (2012). Customer satisfaction in the mobile telecom industry in Bahrain: Antecedents and consequences. *International Journal of Marketing Studies*, 4(6), 139.

Biswas, D., Giri, A., & Chatterjee, S. (2019). Factors influencing customer satisfaction of horticulture products in West Bengal: An empirical analysis. *Business Studies,* (XL)2.

Buil, I., Martínez, E., & Matute, J. (2016). From internal brand management to organizational citizenship behaviours: Evidence from frontline employees in the hotel industry. *Tourism Management*, 57, 256-271.

Chai, K.H., Ding, Y., & Xing, Y., (2009). Quality and customer satisfaction spillovers in the mobile phone industry. *Service Science*: 1(2), pp.93-106

Daengs, G. S., Istanti, E., Negoro, R. M., & Sanusi, R. (2020). The aftermath of management actions on competitive advantage through process attributes at food and beverage industries export import in Perak Harbor of Surabaya. *International Journal of Criminology and Sociology*, 9, 1418-1425.

Diem, P. T. (2021). Factors impacting customer satisfaction at VinMart supermarkets in Vietnam. *International Journal of Research in Human Resource Management*, 3(2), 53-61.

Dimensional Research. (2013). *Customer service and business results: a survey of customer service from mid-size companies*.

FEMA (2020). Mission areas and core capabilities. Federal Emergency Management Agency National Preparedness. Retrieved March 6, 2023, from https://www.fema.gov/emergency-managers/national-preparedness/mission-core-capabilities

Goodman, J. (2019). *Strategic customer service: Managing the customer experience to increase positive word of mouth, build loyalty, and maximize profits*. Amacom.

Haynes, C., A.M. VanDerZanden, and J.K. Iles (2007). A survey of the ornamental horticulture industry in Iowa. *HortTechnology* 17:513–517.

Hess Jr, R. L., Ganesan, S., & Klein, N. M. (2003). Service failure and recovery: The impact of relationship factors on customer satisfaction. J*ournal of the Academy of Marketing Science*, 31(2), 127-145.

Hyken, S. (2020). Ninety-six percent of customers will leave you for bad customer service. *Forbes*. https://www.forbes.com/sites/shephyken/2020/07/12/ninety-six-percent-of-customers-will-leave-you-for-bad-customer-service/?sh=7e6f0fed30f8

Innis, D. E., & La Londe, B. J. (1994). Customer service: The key to customer satisfaction, customer loyalty, and market share. *Journal of Business Logistics*, 15(1), 1.

Jahmani, A., Bourini, I., & Jawabreh, O. A. (2020). The relationship between service quality, client satisfaction, perceived value and client loyalty: A case study of fly emirates. *Cuadernos de Turismo*, (45), 219-238.

Ngo, L. V., Nguyen, N. P., Huynh, K. T., Gregory, G., & Cuong, P. H. (2020). Converting internal brand knowledge into employee performance. *Journal of Product & Brand Management*, 29(3), 273-287.

Press, I., Ganey, R. F., & Hall, M. F. (1997). What's most important to customer satisfaction? *American Bankers Association ABA Banking Journal*, 89(9), 73.

Litecky, C. R., Arnett, K. P., & Prabhakar, B. (2004). The paradox of soft skills versus technical skills in IS hiring. *Journal of Computer Information Systems*, 45(1), 69-76.

Reidhead, C. (2020). Impact of organizational culture on employee satisfaction: A case of Hilton hotel, United Kingdom. *Journal of Economics and Business*, 3(1).

Romdonny, J., & Rosmadi, M. L. N. (2019). Factors affecting customer loyalty in products. *Budapest International Research and Critics Institute-Journal* (BIRCI-Journal) Volume 2, 337-343.

Sinek, S. (2009). *Start with why: How great leaders inspire everyone to take action*. Penguin.

Tax, S. S., Brown, S. W., & Chandrashekaran, M. (1998). Customer evaluations of service complaint experiences: implications for relationship marketing. *Journal of Marketing*, 62(2), 60-76.

Weitzel, W., Schwartzkopf, A. B., & Peach, E. B. (1989). The influence of employee perceptions of customer service on retail store sales. *Journal of Retailing*, 65(1), 27-40.

Wu, S. H., & Gao, Y. (2019). Understanding emotional customer experience and co-creation behaviours in luxury hotels. *International Journal of Contemporary Hospitality Management*.

Geographical Indication (GI) as a Means of Conserving Traditional Knowledge through Agritourism: A Case of Muga Silk (*Antheraea assamensis*) in Assam-India

Niranjan Das
ICSSR (Indian Council of Social Science Research)
Tezpur University-Assam (India)
das_niranjan2002@yahoo.com

Sujata Deori
North Gauhati College-Assam (India)

Abstract

Geographical Indications (GI) is one of the tools of Intellectual Property Rights (IPR) in the territory of a WTO member country, a region, or locality in that territory, where a given quality, reputation, or other characteristics of the good are essentially attributable to its geographical origin. Muga Silk has been and continues to be an integral part of Assamese life and tradition. Muga, the unique golden-yellow silk of Assam, was granted the Geographical Indication (GI) registration in the year 2007.

Muga silk is one of the main agricultural products in the state of Assam and is reputed all over the world for its distinctive quality. There are sizeable numbers of Muga reared in Assam particularly dispersed in Brahmaputra valley. The method of yarn preparation and the production of Muga silk has boosted the state economy in terms of revenue generation by selling products as well as attracting tourists to enjoy the venture.

The congenial climate and environment have made the region a natural abode of 'Sericigenous' (silk-producing) insects and their host plants. Muga silk is an indigenous product of Assam known for its smoothness, durability, and eco-friendly nature. It can be used as source for the rural economy of Assam as it has immense agritourism potentiality.

In this paper, the researcher emphasizes the geo-environmental condition and agritourism prospect of Muga silk as well as its contribution to livelihood generation in the Brahmaputra valley of Assam. The research describe here also examines the nature of production and its limitation, livelihood condition of the community engaged, measures to be taken for future improvement and conservation of the Muga silk, and the economic benefit gains through agritourism by the local community.

Keywords: Muga silk, traditional knowledge, geo-ecology, agritourism and community livelihood

Introduction

Handloom industry has been playing a vital role in the tradition, economy, and culture of Assam. Traditionally every handloom fabric created was unique because the colors and designs varied from weaver to weaver who used to put the images of birds, animals, creepers, flowers, and people in the pattern or embroidered the motifs on the finished articles.

Assam is literally a 'Silk country' where silk culture is rooted in the rural life and culture of Assamese people (Hugon, 1837). This is the only state in India and the world where Muga silk *(Antheraea assamensis)* is grown. One hundred percent of India's Muga silk production is originated in Assam and hence Assam silk occupies a unique position in the sericulture map of the world (Phukan, 2010). Muga production has been an effective means for generating gainful employment in rural Assam and it has enormous potential in the context of building the rural economy and generating livelihood of this region. The Muga silk is golden-yellow in color. Muga possesses the highest tensile

strength among all the natural textile fibers (Chowdhury, 2001). Muga cloth has 85.8% absorption capacity of ultra-violet ray of sunlight.

Muga possesses excellent characteristics as an organism. There are numerous characters in all stages of silkworm that are heritable. The morphological characters like body color, shell weight, cocoon weight, etc., have been traditionally used to identify a strain. Considering the ecological conditions, food plant distribution, presence of eco-types, and species of diverse nature in co-existence, it is speculated that Assam is possible home of origin of *Antheraea*. This species has the lowest number of chromosome (n=15) compared to other species of *Antheraea* and also is considered to be endangered in the near future.

Geographical isolation of Muga silkworm is indicative of its special requirements of geo-climatic conditions that prevail in this region, i.e., high-humidity temperate climate and forest vegetation of its primary and secondary host plants. Thus, this species is phylogenetically (evolutionary development) less adaptive, reaching its ecological isolation that is indicative of being on the verge of extinction. The declines of Som (*Machilus bombycina*), Soalu (*Litsaea ppolyantha*) plantation areas in rearing and sericulture farms have pushed Muga silk towards the verge of extinction (Tikader, 2012). Encroachment in government Som plantation areas is one of the prime causes of decreasing food availability of Muga silk worm. If measures are not taken the Muga (*Antheria assamensis*) heritage of Assam may face extinction in the next decades. To save the Muga heritage it will need a comprehensive effort covering common people and everybody will have to work towards improving the general environment (Dutta, 1998).

The present study has been conducted in the upper Brahmaputra valley (Lakhimpur, Dhemaji, Sadiya, Tinsukia, Dibrugarh, Sibsagar, and Golaghat districts) of Assam as the geo-environmental condition for Muga silk is favorable the area. There is a great scope of promoting craft tourism in the area that might be a source of livelihood among the local populace.

Review of Literature

Handicrafts are offering an important avenue for women, the poor, and indigenous communities to earn income from tourism (Baishya, 2002). Despite many possible linkages, the World Tourism Organization is convinced that the synergy between tourism and handicrafts is still, in most countries, far from its full potential (Kumaresan, 2002). Muga has been identified with Assamese traditional knowledge, expressions of folklore, and culture since antiquity. The scientific name of Muga silk (*Antheraea Assama)* itself shows its origin. The term 'Muga' unlike Pat (*Pattaja*) and Endi (*Eranda)* is an Assamese term connoting the rich amber color of the cocoon.

The first official records of Muga worm and Muga silk culture appeared in 1662. The culture of silkworm could be traced out from the notes of great writer Shihabuddin Tallish, in his famous book *Fathiya-i-Ibriyya,* who was accompanied by Mirjumla at the time of invasion of Assam. There was mention in his description of the dresses the people of Assam used during that period. Barua (1969) stated that about 1300 years ago (mentioned in *Harchacharita*), '*Bhaskarverma'* sent to '*Harshabardhan*' through '*Hamsabhega'*, silk cloths which included the Muga silk.

Tavernier's *Travels in India* (1662) made special mention of the silkworm variety from Kamarupa (Assam) that remained on trees all year round, meaning nothing but the conventional outdoor rearing of Muga worm which persists even today. Bogle (Treaty with Bhutan, 1775) mentioned that Bodo tribals traded *Munga* silk (*Anthera assama*) with Bhutan through the Buxa pass. Helfer (1837), in his book *On the Indigenous Silkworms of India,* mentioned that rearing of silkworms is the main occupation of many castes of Assam. Barua (1969) quoting various sources states the following: that Assam enjoyed a good reputation for producing natural silk of fine texture; that Muga was a stouter and more durable fabric than other silk; that Muga silk from Assam was very much in demand in Europe; and, that it formed a trade of the British East India company during the 18th through early 19th centuries.

The ancient kings of Assam patronized the development of Muga silk in the state. The Ahom kings, as an economic incentive, exempted the rearers from the payment of land revenue, and separate administrative machinery was set up to look after the silk production. During the regime of Pratap Singha (1603-1641) it became obligatory on the part of every household to contribute one seer (0.94kg) of home-spun silk to the king's exchequer (Chowdhury, 1982; Saikia, 1999). In the Ahom kingdom, royal dresses such as Shupkan, Gomesang, Karship, Sisupat, and Bankara, etc., were made from Muga. During British regime, the British rulers did not pay much attention to the development of the golden silk (Kumaresan, 2002). Whatever attention was paid remained confined to the technical up-gradation of mulberry culture (Saikia, 1999).

Muga Silkworm is a domesticated insect having been cultured for a period of over 5,000 years (Goldsmith, 1995). Being exposed to a natural environment, Muga cultural practices encounter lots of problems right from brushing of worms to spinning of cocoons. Outdoor silkworm larvae are invariably exposed to nature's vagaries such as seasonal climate change, rainfall, strong wind, soaring temperature, as well as pests, predators, and pathogens, inflicting heavy loss particularly in early three instars (Chowdhury, 1981; Samson, 1987; Thangavelu et al., 1988). Prophylactic measures adopted for pest and disease in outdoor rearing became fruitless due to cross infestation by both pests and pathogens common in open conditions. In an average of all seasons more than 50% larval loss has been reported by many scientists. Sengupta et al. (1992) reported that during summer more than 50% loss was due to abiotic factors and 80% of the total loss of Muga silkworm occurred in second/third instars only.

Besides manufacturing of Muga silk cloths, the industry is also giving employment to thousands of peoples, and the Silk industry is playing a leading role in the economy of the state (Rahman, 2004). As Brahmaputra valley of Assam is also known for tourist destination, tourists are visiting the valley every year and now the Muga silk has reached each corner of the country and also in the other parts of the world (Tamuli, 1997-1998).

Objective of the Research

- to highlight the nature and production of Muga silk in the upper Brahmaputra valley;
- to analyze the socio-economic impact of Muga silk production on livelihood in the area;
- and to make an assessment of Muga silk as a means of craft tourism in the state

Research Questions

Whether Geographical Indication (GI) for Assam Muga silk is adequate to protect and promote the economic return through craft tourism

Whether there is a scope of craft tourism in the state that enhances long term financial sustainability for rural populace?

Data Collection

The methodology is a combination of doctrinal as well as non-doctrinal approaches for the research topic. Doctrinal methods involve legal text, books, journals, published and unpublished study material; some online material also is involved. Non-doctrinal methods involve visits, interviews, discussion, and data collected from the Assam State Technology and Environment Council (ASTEC) of Assam and also from the local people involved in production of Muga silk.

The research is also based on empirical observations as it also using interview tools and open questionnaire to collect the data. The non-doctrinal part of the research gave the first-hand information, i.e., primary data to realize the legal issue and economic feasibility, which is very important for the research topic.

Data Processing

Six districts (Sub-divisions of concerned district) of upper Brahmaputra valley (Lakhimpur, Dhemaji, Tinsukia, Dibrugah, Sibsagar, Golaghat) are selected where Muga silk production is

dominantly practiced as compared to other livelihood activities. A total of 40% of households in the surveyed area are selected based on their participation in Muga production. The questioner mainly focused on Muga production, host-plant cultivation, pre-harvest concerns, post-harvest losses at different stages of handling, production constraints, and its importance as tourism activity or product of the Muga. The data was collected through focus group discussion (FGD) and field observation on farming sites via formal and informal survey.

Discussions

Assam enjoys global trust in Muga silk (also known as golden silk) production. The state accounts for around 95 per cent of global Muga production. Moreover, Assam is the country's major Eri silk producer (about 65% of the country's Eri silk production). Under State Budget 2020-21, Government allocated Rs. 289 crore (US$41.35 million) for the handloom and textiles. In tourism sector during 2018, foreign tourist arrivals in the state reached around 5.85% while domestic tourist visits stood at 36,846 persons to enjoy craft tourism in the state.

Muga silkworms show diversity within the species which indicate the possibility of isolation of new inbreed lines and hybrid development in the species. Although, the species shows heterozygous nature, there are not any improved Muga silkworms breeds for commercial exploitation. As old-aged traditional practices of Ahom Kings, seeds were collected preferably from forests of Garo Hills through rearing in jungle in *in-situ* habitats which was further multiplied as commercial crop in the valley during '*Kotia'* (October-November) and further multiplied through selection breeding in pre-seed crop (December-January) and seed crops (February-March) until '*Jethewa*' (April-May) commercial crop when bumper cocoons were harvested. The historic Muga crop-management practices of Ahom kings indicated the needs of *in-situ* conservation of Muga silkworms and improvement of breeding strategies. The breeding of Muga silkworms from P4 stock to Pl stock is directly correlated with dfl (Disease Free Laying's) production systems, which need detailed investigation of breeding technologies of species. Thangavalu (1988) reported Muga management system from P-4 stock (seed rearing) to P-l stock (commercial rearing), indicating the modification is due to changes of global climates and rapid deforestation in Assam.

Muga Silk as a Means of Craft Tourism

Handicrafts always possess tourism potentiality and for the economic development of a society or a place. It enhances the livelihood of the host community apart from the other tourism activity. After getting GI designation to Muga silk of Assam in 2007, its demand has risen up in the international market as a '*traditional product with indigenous knowledge*' (Kakati, 1993). Its durability and resistance capacity has popularized the product since time immemorial. Rearing of host-tree plantation is a common activity in Muga farming areas. Pre-harvest rearing requires manpower for cleaning and planting of seedlings.

Since the tourism activity in the present-day situation involves active participation in production activity, the production of Muga silk is a growing opportunity in these regards. A Muga-rearing farm can offer packages to intending tourist to visit during Muga-rearing period. The package includes collection of cocoons from the field, processing of cocoons for threading, weaving, traditional dying, and ultimately manufacturing of finish product or Muga cloth.

During the activity the local people or farm owner can provide local cuisine to the tourist in an ecofriendly location. Locally available raw materials could be used while preparing the tourist guest house or, more commonly, home stays. Home stays provide a very good affordable accommodation mainly in the rural areas. It is another way of enhancing livelihood generation of the local youths. The educated youth may take part as a local tour guide to promote the area with sufficient knowledge about the resources available in the place. Since the rural economy always flourish with agriculture, the production of organic foods has a ready demand among the tourist. Villagers can sell the ready organic food to the tourist and earn revenue for subsistence. These craft tourism activities not only sustain the rural flocks but also maintained 'Sustainable Tourism' in an area for a better future.

Conclusion

This study has been an effort to portray the role of rural tourism in local economic development, taking Muga silk weaving in the village of Sualkuchi as an example. Although the owners of the handlooms are the indigenous people, most of the weavers are from places outside this village. At present there is felt a scarcity of weavers, often one out of every six looms remains without a weaver. There has also been a shortage of raw materials, particularly Muga. Previously, the cocoon from which the raw material was extracted used to be reared in the village itself; hence, there was no question of procuring it from outside. But the present situation is quite grave in the sense that not only is the cocoon not reared in Sualkuchi, its presence is seen diminishing in the other adjoining places. This has led to a serious demand–supply anomaly. In order to rectify this, the Government has to play its part. Encouragement from the government to the local handloom industry, especially this Muga silk weaving industry, which is both labor intensive and tourist attracting, is the need of the hour.

Author's Note

I take the opportunity to express my deep gratitude and acknowledgement to ICSSR (Indian Council of Social Science Research) New Delhi, induce me to pursue the present research problem. I am also thankful to Prof. Chandan Goswami, Dean, Department of Business Administration, Tezpur University for his uninhibited guidance and encouragement in preparation and completion of this manuscript.

References

Baishya, P (2002). Prospect of Muga Silk, *Indian Silk*, July, pp10- 14

Barua, B. K. (1969). *A Cultural History of Assam (Early Period)*. Vol. 1 page 103 – 104.

Chowdhury, S. N. (1981). Muga silk industry, Directorate of Sericulture & Weaving, Gauhati Assam. V.178, pp-46

Chowdhury, S. N. (1982). Muga silk industry, Directorate of Sericulture & Weaving, Gauhati Assam. V.178, pp-46

Chowdhury, S .N. (2001). *Sericulture and weaving (an overview)*. Designer Graphics Press Dibrugarh, Assam, India.

Dutta, P.C., (1998): *Problems and prospects of Muga silk production*. Agro Economic Research Center for North East India, Jorhat, Assam.

Goldsmith, M.R. (1995). Genetics of the silkworm. In: M. R. Goldsmith & A. S. Wilkins (Eds.), *Molecular model systems in the Lepidoptera* (pp. 21-76). Cambridge University Press, London.

Helfer, T. W. (1837): On the indigenous Silkworms of India, *The Journal of the Asiatic Society of Bengal* (Calcutta), VI (I), 1837: 38–47, pl. V–VI. 104): Rearing of silkworms is the main occupation of many castes of Assam

Hugon. T, (1837) Remarks on the silkworms and silks of Assam. *Journal Asiatic Society*, *Bengal* 6: 21–38.

Kakati, P. K. (1993). Diapause strain of Muga silkworm – An alternative to boost up Muga industry. *Indian Silk*, 31: 22–25.

Kumaresan, P. (2002): Quality silk production: Some economic issues. *Economic and Political Weekly*, Vol.37, No.39, pp41-46.

Phukan, R. (2010): Muga silk: problems and prospects of Muga silk industry of Assam, India.VDM Verlag Dr. Müller, GmbH, Saarbrücken. pp -146.

Rahman, A. (2004): Prospect of Muga Silk Industry in Non-Traditional Areas of Assam. *Journal of North-East India Council for Social Science Research*, April, pp.20-24.

Saikia, P. (1999). The Muga silk industry and its status. *Proceedings of All India Symposium of Sericulture Science*, University of Agriculture Science, Bangalore.

Samson M. V. (1987). *Bacterial diseases of silkworm and their control*. Unpublished Ph. D. thesis, CSR&TI, Mysore; pp 1-137.

Sengupta, A. K., Siddique, A.A., Barah, A., & Negi, B.K. (1992). Improved technologies for Muga silkworm rearing, A development perspective. *Indian Silk,* 31(5): 21-24.

Tallish, Shihabuddin (1662) Fathiya-i-Ibriyya or On Account of Assam.

Tamuli, M. K. (1997-1998). Economics of Muga in Assam (A case study of Dhakuakhana sub-division of Lakhimpur district), OKDISD, Guwahati.

Tavernier, J. B. (1662): '*Travels in India'*, who made special mention on silkworm variety from Kamarupa (Asom) p-220.

Thangavelu, K., & Subba Rao, G. (1982). Insect parasitisation of Muga silkworm, *Antheraea assama* Westwood (Lepidoptera: Insecta). Current Sciences 51:1023–1024

Tikader A. (2012). Feed performance of Muga silkworm (*Antheraea assamensis* Helfer) on different host plants. *Geobios*, 39: 104–108.

Sustainable Agritourism Development in Florida: Challenges and Opportunities for Promoting Regenerative Agriculture and the SDGs

Brooke Hansen
University of South Florida (United States)
kbhansen@usf.edu

Jesse Coates
US Green Building Council (United States)

Keywords: UN Sustainable Development Goals, regenerative agriculture, sustainable tourism, Florida

Introduction

Agritourism has been growing globally over the last several decades and is featured and promoted by the World Trade Organization (UNWTO) and many other organizations. The interlinking of agritourism with food, beverage, culture, and heritage tourism has only strengthened its appeal (LaPan & Barbieri, 2014). At the same time, the sustainable tourism paradigm has also been gaining more ground with tourism operators and businesses adopting sustainable practices and pondering the plethora of sustainability certifications for tourism that are now available (Futagami, 2019; GSTC, 2022). Sustainable tourism can be defined as tourism that upholds the triple bottom line of people, planet and prosperity or "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" (UNWTO, n.d., para. 1). The term regenerative is beginning to replace the sustainability concept with the idea for tourism that visitors should not just leave no trace but leave their destinations better. For farming the concept indicates that agriculture should not just be sustainable but regenerate soils and ecosystems. For this research, both sustainable and regenerative are seen as important concepts to consider and promote in regard to agritourism.

With COVID-19 contributing to the worst year on record for global tourism in 2020, and other pressing global issues such as climate change, there has been some deep reflection in the industry of how to build forward better. The timing is opportune to promote sustainable agritourism with increased diversification of tourism, local food production, and resilience in the face of coming challenges. With 90% of travelers desiring more sustainable options (Expedia Group, 2022), one research question we addressed is whether or not people can easily find organic, regenerative or sustainable farms to visit in Florida. We found that these opportunities need to be better highlighted to support tourism and agriculture, Florida's top two industries. The call for sustainability in both sectors is only heightened by multiple threats including the pandemic, climate change, sea level rise, and the relentless frequent algae blooms along the Florida coast in part caused by non-sustainable agricultural practices. All of this is prompting a call to action among diverse stakeholders to pursue sustainable agritourism. These efforts align with the United Nations Sustainable Development Goals (SDGs) and the Tourism for SDGs platform (https://tourism4sdgs.org/). Some scholars have noted the great potential to achieve the SDGs through agritourism (Ghidouche et al., 2021).

The Growth of Sustainable Agritourism and Challenges to Further Development: A Research Study from Florida

The UNWTO recently designated 2020 as the Year of Tourism and Rural Development and reiterated this theme for 2020 World Tourism Day (https://www.unwto.org/rural-tourism). They have provided numerous reports and tools for enhancing rural tourism development with sustainability

in mind, in addition to using this as a tactic to disperse overtourism from popular destinations. Agritourism and food and beverage tourism are amongst the focal points for these programs. The Global Sustainable Tourism Council (GSTC) has also identified agritourism as a resilience strategy for tourism that can promote sustainable ideas and foster neolocalism and biocultural conservation (Day, 2021). It is evident that building a sustainable agritourism is already occurring globally with solid roadmaps to build on from Italy (Paniccia & Baiocco, 2020), Thailand (Tseng et al., 2019) and elsewhere (Baipai et al., 2021). Information is becoming readily available on how to purchase carbon offsets, book sustainable travel, and look for sustainable certifications. It is illustrative to examine the potential for such a model in Florida, a tourism and agricultural center in the U.S.

While there are over 122 million visitors a year (Visit Florida, 2022) and over 47,500 farms in Florida (USDA, 2022), agritourism is not as well developed as in other parts of the country. This is understandable when considering that marketing funds have been heavily focused on Florida beaches. With the ever-increasing threats of sea level rise and red tide algae blooms, coupled with questioning the overreliance on beach tourism, there is a renewed interest in promoting agritourism. Compared with other locations amenable to agritourism with year-round warm weather such as Hawai`i, the policies regulating tourism are more lenient and in general very supportive for starting agritourism operations in Florida.

The Florida Agritourism Association (FATA) is "the state-wide organization that supports the growing agritourism market in Florida, which includes destinations such as working farms and ranches, u-pick fruit and vegetable operations, vineyards and wineries, specialty crops and products, and numerous other types of farms" (FATA, n.d., para. 3). FATA is a volunteer-run organization that provides detailed information on the policies, rules, and regulations for agritourism operations, and offers technical support to their 250 members and a listing of sites for visitors organized by themes such as farms, crop mazes, distilleries, and wildlife (https://visitfloridafarms.com/activities/#!directory/map). Their comprehensive toolkit has checklists for assessing readiness to start an agritourism operation and information on business plans, best practices, and the state's official agritourism definition. According to Florida Statute 570.86, agritourism is "any agricultural related activity consistent with a bona fide farm or ranch or in a working forest which allows members of the general public to view or enjoy activities related to farming, ranching, historical, cultural or harvest-your-own attractions for recreational, entertainment or educational purposes."

Methodology and Results

For this research, analyses were conducted in the fall of 2021 using key word searches on Tripadvisor and the FATA website and phone app to determine if sustainable, organic, eco, and regenerative farming and producer sites in Florida can be easily searched and located by the average tourist. From the Tripadvisor results, operators listed were cross-checked against the FATA listing to see if members were represented. Searching the keywords "sustainable farm tours" on Tripadvisor resulted in over 34 pages with some listings that appeared be actual sustainable farms while most were not, including Dolphin Jet Ski Tours, Go Fly Tours, and Kissimmee Ghost Tours. Results for bona fide sustainable agritourism operations included ECHO Global Farm, Daiken Dairy, and Three Suns Ranch. The FATA website was searched with the terms "regenerative," "organic," "sustainable," and "eco tour" (see Table 1). From the total membership of FATA, which is about 250, only 18 FATA members appear to be doing anything related to sustainability. It is more likely that many are engaged in sustainable practices but are not branding as such, thus missing a marketing opportunity for the 90% of travelers looking for sustainable options (Expedia Group, 2022). Results varied from the FATA website versus the phone app for finding activities. For example, under "regenerative," the phone app produced just one listing, Whitetail Hollow Farms, while the website listed this operation as well as Irish Acres. For "sustainability" the website suggested no listings while the app produced two: GreenByrd Farms and Kai Kai Farm.

To determine if FATA members appear on Tripadvisor, the search terms “farms in Florida” were applied with 146 results. Of the top 25 only 5 were FATA members: #1 Showcase of Citrus; #12 Southern Hill Farms; #15 Bedner’s Farm Fresh Market; #16 Daikin Dairy Farms; and #25 Old McMickey’s Farm.

Table 1. Search of the FATA website and phone app for sustainable agritourism operators to visit.

Search Term	Number of Entries	Farm/Operation
Ecotour	1	Babcock Ranch EcoTours LLC
Organic	14	Ex. Grady Goat Farm
Regenerative	1	Whitetail Hollow Farms

It is clear that agritourism is underdeveloped in Florida and that there are not nearly enough agritourism operations, much less sustainable and regenerative ones, to meet the growing demand. Of the 47,500 farms in Florida, only 761 reported agritourism income on the last agricultural census (USDA, 2022) which is only 1.5% of all farms in Florida. FATA members listed on the directory of experiences for visitors account for only .21% of all farms in Florida. FATA, currently a volunteer-run organization, needs an influx of resources and staff to expand membership across the state and to educate about and promote not just agritourism but sustainable, regenerative, and organic farmers and producers. Based on the FATA keyword search, it can be deduced that ‘green’ terminology is not widely used in a way that is easily searchable. This could have a major impact on business for members who practice organic and sustainable farming as the green-minded tourist may have difficulties locating these types of farmers. Further research needs to be conducted to better understand how FATA can attract more members, especially those using sustainable and regenerative practices.

How Can Agritourism Promote Resiliency and the United Nations Sustainable Development Goals?

To advance agritourism in Florida, the following steps need to be taken:

- Increase diversification of tourism offerings to redistribute people away from sites of overtourism (such as the Gulf coast beaches during peak season) and spread the economic benefits of tourism to rural, inland areas and even underutilized urban and peri-urban areas that can host shipping container farms, sustainable distilleries using local produce, and more.
- Increase diversification of local food production - address food-supply shortages, food insecurity, and precarious monocropping with regenerative, climate-friendly, and resilient agriculture.
- Increase the number, diversity and resiliency of farmers through training programs and business incubators for multiple income streams.

Promoting sustainable and regenerative agritourism in the state of Florida has a number of corollary benefits aside from increasing tourism opportunities. With severe red tide outbreaks along the Gulf Coast beaches in 2018 and 2021, it is clear there needs to be more tourism development in inland areas. As most tourists are not clamoring to see large chemically reliant monocropped farms, there is an opportunity to support small and medium sized farmers engaging in regenerative practices that provide an opportunity to educate people. There are many different types of production that can be considered sustainable, and these include organic and regenerative farming practices. Lack

of consensus about definitions makes the task even more difficult to promote, identify, and brand sustainable and regenerative agritourism offerings. Regenerative agriculture can generally be defined as "…a suite of practices that restores and maintains soil health and fertility, supports biodiversity, protects watersheds, and improves ecological and economic resilience… regenerative agriculture can also sequester increasing quantities of atmospheric carbon (CO2) underground, making it a low-cost 'shovel-ready' solution to climate change" (White, 2020, p. 799). There are growing numbers of farmers in Florida, including Brad Turner of Turner Citrus Farm, who are producing diverse crops and helping to address climate change (SDG 13 Climate Action) by sequestering carbon in the ground with methods such as no-till and continuous cover cropping. The increase in local food production that comes from making sure farmers/producers can make a living at what they do, which is difficult without a diverse business plan, adds another layer of resilience in light of disasters that disrupt global food systems.

Developing sustainable and regenerative agritourism in Florida supports a number of UN SDGs such as SDG 12 Responsible Consumption and Production and SDG 15 Life on Land. If we can leverage the SDGs and overcome the hurdles, there is an opportunity to promote tourism diversification for resiliency, increase local food production, reduce carbon emissions through climate friendly agriculture, and educate residents and visitors about sustainable food systems.

References

Baipai, R., Chikuta, O., Gandiwa, E., & Mutanga, C. N. (2021). A critical review of success factors for sustainable agritourism development. *Afr. J. Hosp. Tour. Leis*, *10*, 1778-1793.

Day, J. (2021). Neolocalism and tourism. *Global Sustainable Tourism Council Destination Stewardship Report* – Winter 2021 (Volume 1, Issue 3). https://www.gstcouncil.org/destination-stewardship-report-2021-q1-issue-3/

Expedia Group. (2022). Sustainable Travel Study April 2022. https://go2.advertising.expedia.com/sustainability-study-2022

FATA. (n.d.). About us. https://visitfloridafarms.com/operators/about-us/#:~:text=The%20Florida%20Agritourism%20Association%20is,and%20marketing%2C%20and%20legislative%20advocacy

Futagami, M. (2019). Global sustainable tourism standards and certification schemes: How transnational private meta-governance operates at the destination level. http://www.erepo.lib.uwu.ac.lk/handle/123456789/765

Ghidouche, K. A. Y., Nechoud, L., & Ghidouche, F. (2021). Achieving Sustainable Development Goals through agritourism in Algeria. *Worldwide Hospitality and Tourism Themes*, 13(1), 63-80. https://doi.org/10.1108/WHATT-08-2020-0092

GSTC. (2022). About the Global Sustainable Tourism Council. https://www.gstcouncil.org/about/

LaPan, C., & Barbieri, C. (2014). The role of agritourism in heritage preservation. *Current Issues in Tourism*, 17(8), 666-673. https://doi.org/10.1080/13683500.2013.849667

Paniccia, P. M., & Baiocco, S. (2020). Interpreting sustainable agritourism through co-evolution of social organizations. *Journal of Sustainable Tourism*, 29(1), 87-105.

Tseng, M. L., Chang, C. H., Wu, K. J., Lin, C. W. R., Kalnaovkul, B., & Tan, R. R. (2019). Sustainable agritourism in Thailand: Modeling business performance and environmental sustainability under uncertainty. *Sustainability*, *11*(15), 4087.

UNWTO. (n.d.). *Sustainable Development*. https://www.unwto.org/sustainable-development

USDA. (2022). 2021 State Agriculture Overview. https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=FLORIDA

Visit Florida. (2022). About us. https://www.visitflorida.com/about-us/

White, C. (2020). Why regenerative agriculture?. *American Journal of Economics and Sociology*, 79(3), 799-812.

Twenty Years of Rural Tourism in Belarus: Main Stages and Tendencies

Valeria Klitsounova
Belarusian State University
Belarusian Association of Agro- and Ecotourism "Country Escape"
lera.greenbelarus@gmail.com

Darya Pukas
Belarusian Association of Agro- and Ecotourism "Country Escape"

Keywords: rural tourism, Belarus, homestay, tourism product, experience

Background

Belarus is one of the former Soviet Union countries. The countries of the so-called former Soviet bloc have chosen a variety of liberalization paths as a means to enter the global economy. Countries like Hungary, Poland, and the Baltic states have embraced Western values and sought an alliance with the European Union (EU). Other countries such as Belarus have maintained strong ties with Russia. In Asia, Kazakhstan and Uzbekistan have aligned their economic relations with China or close Islamic/ Buddhist neighbors (Slocum & Klitsounova, 2020)

There are different scenarios, a different pace, and different models of economic and political development which are reflected through tourism. Belarus has its own path, unlike other post-Soviet countries.

It is a country with a transitional economy, tolerant people, and a number of tourism resources. Situated in the center of the former Soviet Union countries, it borders Russia, Ukraine, Poland, Lithuania, and Latvia. Belarus includes the largest peat bogs and fen mires in Europe, as well as the oldest forest in Europe, the National Park of Belovezhskaya Pushcha, a UNESCO Man and Biosphere Programme site. The forests, rural countryside, villages, towns, and cities of Belarus provide an excellent venue for an outstanding, world-class visitor experience. One of the most important elements of this experience is interacting with the warm, friendly, and hospitable citizens of Belarus.

Over the past decades, Belarus has made a strong start in developing rural tourism. Rural tourism is a type of sustainable tourism that contributes to regional socio-economic development and nature preservation. It fully aligns with the concept of a 'green economy,' which is quite relevant in Belarus. According to a UN report, there are four main accelerators that can boost sustainable development in Belarus: 'green' economy, youth involvement, digitalization, and gender equality. All of them are relevant to rural tourism.

Milestones of Rural Tourism Development in Belarus

Rural tourism is a relatively new type of tourism in Belarus. Our country was probably the last European country to start developing this kind of tourism.

The process of 'touristification' in rural areas started in Belarus as a bottom-up approach. In 2002, the Belarusian Association of Agro- and Ecotourism 'Country Escape' was created. 'Country Escape' managed to build a strong team around an agro-ecotourism theme in Belarus, supporting the development of social capital through a network of a few thousand people who shared certain values, norms, and standards. The organization promotes these stakeholders on various levels, including lobbying the interests of the whole group, and as a result, rural tourism developed very quickly.

Unlike other European countries, Belarus has never had special governmental rural tourism support programs. However, a special law provided ideal conditions for rural tourism development (Decree of the President of the Republic of Belarus No. 372 on the development of rural tourism,

adopted in 2006) – no taxes for homestay owners and craftsmen, no bureaucracy, and formalities. People invested their own money in business and created tourism products based on local traditions. Besides, there was a successful combination of resources in Belarus: natural resources, intangible heritage and, of course, social capital – people with great creative potential who wanted to open their own small business and develop their communities.

During these 20 years, rural tourism has shown incredible growth, and now around 3,000 homestays work in the country, and more than 500,000 tourists spend time there (according to Tables 1 and Figure 1).

Table 1. Number of homestays in Belarus

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Brest region	4	32	75	124	151	178	199	253	296	346	343	368	388	423	434	462
Vitebsk region	5	50	157	222	322	359	401	449	502	605	606	609	601	647	670	732
Gomel region	5	11	31	60	131	332	358	289	228	196	180	161	156	171	182	206
Grodno region	11	33	70	181	180	185	229	246	281	303	324	327	356	399	433	455
Minsk region	7	48	125	214	255	304	412	482	541	597	639	662	763	891	972	1054
Mogilev region	2	14	16	75	208	218	176	162	189	216	187	192	209	229	245	245
Total	34	188	474	884	1247	1576	1775	1881	2037	2263	2279	2317	2473	2760	2936	3150

Source: National Statistical Committee of the Republic of Belarus (2022)

Rural tourism can be considered an accelerator for the socio-economic development of the Belarusian village for several reasons. First, it creates new jobs and self-employment opportunities. Second, it attracts investments in the regions, leading to a multiplier effect. Third, it helps revive village traditions such as folklore, rituals, crafts, and food. Fourth, it humanizes society by fostering interaction between urban and rural areas. Additionally, it attracts tourists, including foreign ones, and increases the attractiveness of the country's image. Finally, it creates a new tourist infrastructure to support continued growth in the industry.

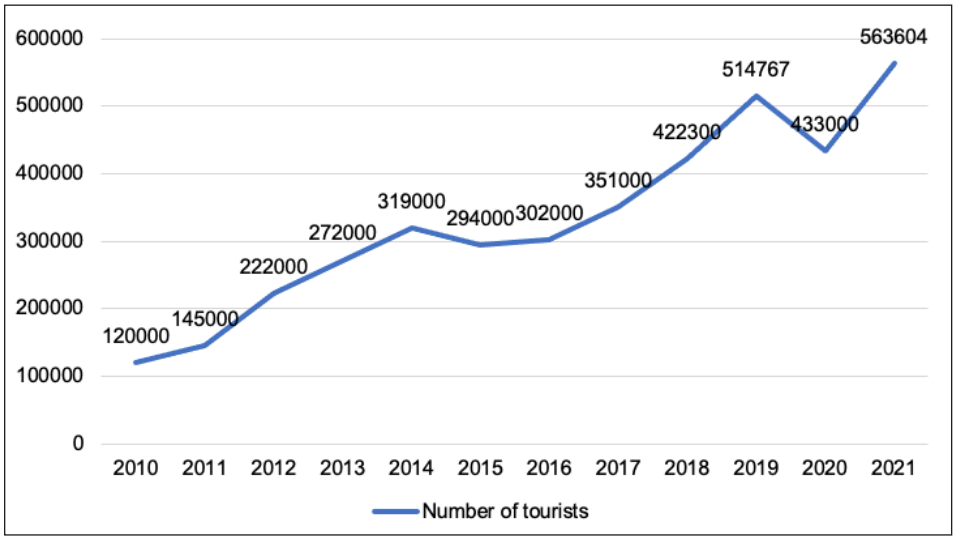


Figure 1. Number of tourists in Belarusian homestays

The Role of the Non-Governmental Organization "Country Escape"

As mentioned earlier, the development of rural tourism in Belarus began in 2002 with the creation of the first regional NGO called "Agro- and Ecotourism." One year later, it was transformed into National Belarusian Association "Country Escape" with the aim of developing economic and social activities in rural areas through tourism.

The association has achieved the following:

- 500 members
- 40 international projects
- 1,000 seminars, trainings, and webinars
- 10 tourist clusters
- 15 international conferences
- 10 greenways
- 100 educational and promotional materials such as books, guidelines, videos, and leaflets.

The association has based its activities on the lessons and experiences of Europe, which include the importance of liberal legislation and tax reduction for boosting rural tourism, the need for a national association at the beginning of the process, the necessity for regulation at the national level, and the fact that rural tourism is primarily oriented towards the local market. Moreover, it has recognized that rural tourism providers are the core of this business and special attention must be paid to their education and upbringing.

While in many European countries, the development of rural tourism was initiated by the government (top-down approach), in Belarus, the initiative came from the people themselves (bottom-up approach). The Belarusian Association "Country Escape" has made significant contributions to this process by providing consultancy and educational services to homestay owners, unifying people, and participating in legislation formation in this sphere. It has played a vital role in the liberalization of laws and the establishment of a special loan program by Belagroprombank for rural tourism providers.

For 20 years, "Country Escape" has implemented more than 40 projects that played a significant role in the development of rural tourism. Initially, there were projects and initiatives focused on the development of standards and improvement of accommodation services in homestays. The organization supported many start-ups, and organized hundreds of trainings, schools, and internships in various countries such as Lithuania, Latvia, Poland, Ukraine, Germany, Italy, and the United States.

Later, many innovative projects were implemented, leading to the creation of many regional tourism products on a public-private partnership basis, such as thematic greenways, tourism clusters and cooperatives, and local foundations.

An analysis of the development of rural tourism reveals three main stages (periods) with different priorities in goals and directions of projects and initiatives (refer to Figure 2).

The period from 2002 to 2010 is associated with the creation and development of infrastructure, the formation of a legislative system, and an increase in the number of homestays. During this period, the Decree of the President of the Republic of Belarus No. 372 on the development of rural tourism was passed. This decree reflected and protected the interests of rural residents who decided to start working in the rural tourism sphere. Also, at that time, standards in the field of rural tourism were developed by the "Country Escape," and the Belagroprombank loan program was established.

In the period 2011-2013, the emphasis was placed on forming partnerships and creating regional products, e.g., green routes, clusters, and festivals.

In 2014-2021, the focus shifted to the creative economy and experience as the most demanded tourism product. Pine and Gilmore (1998) stated that an experience is as real as any service, good, or commodity. Therefore, the emphasis was placed on the high-quality human capital, which included knowledge of traditions, creativity, and skills of the estate owners. Emotions and experiences add value to the tourism product.

Figure 2. Stages of rural tourism development in Belarus

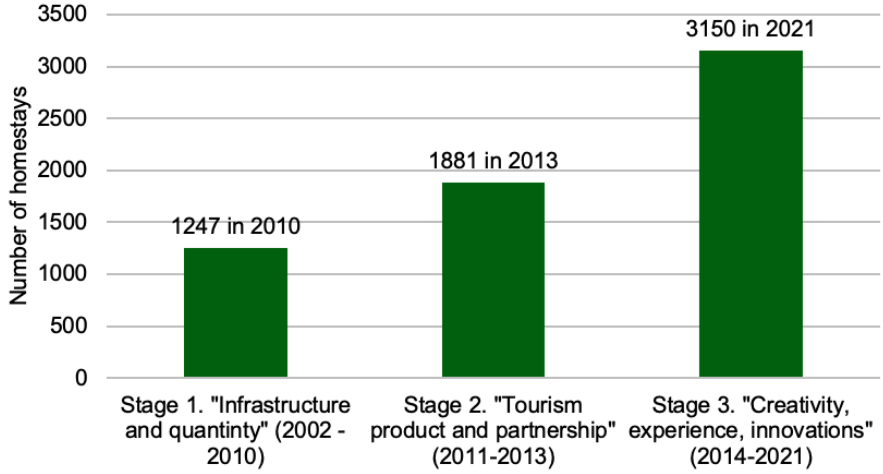


Figure 2. Stages of rural tourism development in Belarus

These stages have led to the emergence of trends that characterize rural tourism in Belarus, including creativity, innovation, ecological and craft products, youth participation, accessibility, gastronomy, thematic festivals, cooperation with tour operators, and trade of farm products through homestays and in-house production. These trends are constantly evolving with new ones being added and existing ones expanding. The COVID-19 pandemic has also caused changes such as more outdoor events being organized by homestay owners for weddings and corporate parties, and more people preferring to spend their holidays in rural areas in small groups. As a result, there is now a diverse rural tourism product range that includes educational farm tours, folk dancing and culinary workshops, as well as yoga retreats, spiritual practices, and team-building events.

Despite the turbulent times in Belarus due to political and economic issues, sanctions, and isolation, rural tourism remains a strong and resilient segment. It demonstrates remarkable resistance to obstacles and continues to attract tourists. It is considered a territory of creativity and freedom in the country.

Conclusion

The Eastern European bloc countries are known for their multicultural, multi-ethnic, and heterogeneous nature, and historically, Belarus shares these characteristics. The country has always been home to people of different religions (Orthodox, Catholic, Jewish, and Muslim) and cultures, which has earned it the reputation of being a melting pot in Eastern Europe. Additionally, Belarus has been a crossroads country, where many events have taken place, such as wars, migration processes, political changes, and territorial shifts. Only in 1919 Belarus became an independent country for the first time, with its unique identity.

The entrepreneurial spirit in rural areas survived despite 70 years of socialism and its collectivistic values in Belarus. Unlike in other countries, there are no big transnational corporations in rural areas, and the main employers are collective farms that belong to the state. Therefore, when the idea of rural tourism development emerged, it attracted many people from villages and cities, resulting in the fastest growth of this type of tourism in Eastern Europe.

The professional national NGO, “Country Escape,” played a crucial role in securing a bottom-up approach in rural tourism development.

Belarus has followed the same international trends in rural tourism development, such as creativity, ecology, accessibility, locality, and traditionality.

Rural tourism in Belarus has been a remarkable phenomenon, experiencing significant growth and success without large government investments and promotion. In fact, it has become one of the fastest-growing tourism directions in the country. This success has been recognized internationally, with Belarus winning the National Geographic Award (Russia) in the "Agrotourism" category in 2016 and 2018. The United Nations World Tourism Organization had even planned to hold the World Rural Tourism Summit in Belarus in 2020. Unfortunately, it was postponed because of COVID-19 pandemic.

After two decades of development, rural tourism in Belarus has become a strong and sustainable sector, with the number of homestays and rural tourists continuing to grow, even in the face of challenges such as the COVID-19 pandemic, political sanctions, and the recent closure of "Country Escape" due to political reasons in 2022.

References

National Statistical Committee of the Republic of Belarus (Belstat). (2022). Tourism and tourist resources in the Republic of Belarus, statistical data book, Minsk, Belarus.

Pine, J. & Gilmore, J.H. (1998). Welcome to the experience economy. Retrieved from https://hbr.com/1998/07/welcome-to-the-experience-economy.

Slocum, S.L., & Klitsounova, V.A. (2020). *Tourism Development in Post-Soviet Nations*. Palgrave Macmillan, 218.

Opportunities and Challenges in Agritourism Development in Rathnapura District in Sri Lanka

S. H. P. Malkanthi
Sabaragamuwa University of Sri Lanka
malkanthi@agri.sab.ac.lk

Abstract

Agritourism, a good combination of the agriculture sector with the tourism industry, has gradually become a popular concept in most countries in the world as it creates a specific effort to diversify income-generating activities of farmers, leading to the development of rural areas. Although most of the people in Ratnapura district in Sri Lanka are engaged in agriculture, returns from the sector are not at satisfactory levels. Meanwhile, some farmers have incorporated tourism into their farmlands to earn extra income. Thus, this study aimed to assess the main opportunities and challenges in agritourism development on farms in this area to improve tourism activities by the practitioners and also to form better policies to enhance the industry. Primary data were collected through a field survey using 20 randomly selected agritourism farmers. In addition, key informant interviews and case studies were also conducted. Data collection was carried out from March to October 2019. Data were analyzed through descriptive statistics. According to the results, several challenges and issues restrict farmers' involvement in agritourism activities, which vary from the farmer level to the policy-making level. Furthermore, the dearth of proper initiatives at the farmer level, and lack of promotion of direct participation of farmers in agritourism can be seen. As farmers' awareness of agritourism activities is vital for achieving the best outcomes, actions should be taken to provide proper awareness, training, and guidelines on the agritourism industry to farmers as well as other relevant officials. Sufficient attention needs to be paid to agritourism activities and product development, considering locally available resources to gain maximum benefits. There also should be clearly defined locally important products and services. Strong supply chains and dependable networks should be built between the tourism industry and the farming community with the participation of responsible government bodies. The formulation of context-specific agritourism standards and guidelines that are in line with international agritourism standards to establish high-quality and sustainable agritourism operations by relevant practitioners and also policymakers are crucial to develop agritourism in this area.

Keywords: Agritourism, opportunities, challenges, policymakers, Ratnapura district, Sri Lanka

Introduction

Agritourism—also named agrotourism, farm tourism, farm vacation business, and so on—is a type of farm-family business or commercial enterprise where agriculture and tourism meet. Furthermore, it can be defined as "a form of commercial enterprise that links agricultural production and/or processing with tourism to attract visitors onto a farm, ranch, or other agricultural business for the purposes of entertaining and/or educating the visitors while generating income for the farm, ranch, or business owner." (National Agricultural Law Center, USA, 2021). Not only that, agritourism can be explained as a business venture on a working farm or agricultural enterprise that offers educational and fun experiences for visitors while generating supplemental income for the owner. Visitors participate in friendly "discovery" and learning activities in natural or agricultural settings (Malkanthi & Routray, 2012). Therefore, it is a win-win situation for agritourism visitors and also agritourism suppliers. Agritourism is rapidly popularizing all over the world, giving agricultural experience and recreation in many ways (Mahaliyanaarachchi, 2017).

Agritourism can create lots of opportunities for the parties involved in it. One of the important features of agritourism is that it can be used as a good farm diversification and rural development strategy (Malkanthi, 2020). Diversifying business activities on the farm, primarily through agritourism, increases the farm's income and helps reduce financial problems.

Agritourism in Sri Lanka

Sri Lanka is an agricultural country and very good agricultural landscapes are there. Moreover, it is rich in ancient farming techniques, organic farming, traditional seeds and planting materials, ancient irrigation systems, and huge old tanks facilitating large and better quality agricultural production systems. At present, some small- and medium-scale agritourism destinations are operating in the country (Table 1).

Table 1: Some agritourism destinations in the country

Destination	**Location**	**District**	**Starting year of Agritourism operation**
CIC Farm	Higuraggoda	Polonnaruwa	2005
New Zealand Farm	Ambewela	Nuwara Eliya	1996
Paradise Farm	Kitulgala	Kegalle	1999
Ceylinco Fruit Farm	Midigama	Galle	2002
Spice Garden	Mawanella	Kandy	1998
Sigiriya Village	Sigiriya	Matale	2001
Hotel Sigiriya	Sigiriya	Matale	2002
Galapita Healing Garden	Buttala	Moneragala	2003
Landa Holiday Resort	Belihuloya	Ratnapura	2000
Adventure Park	Ella	Moneragala	2004
Kanda Land Eco-Centre	Buttala	Moneragala	2001
Tree Tops Farm	Buttala	Moneragala	1998
Woodland Network	Bandarawela	Badulla	1997
Walawa Nadee Ecotourism	Ambalanthota	Hambantota	2006
Samakanda Ecological Centre	Habaraduwa	Galle	2002

(Malkanthi & Rautray, 2011)

Agritourism in Rathnapura District in Sri Lanka

Rathnapura district is situated in the Sabaragamuwa Province of Sri Lanka, Figure 1. Out of the total population of the district (1,190,000), 38% (452,200) are engaged in agriculture (Department of Census and Statistics, 2021). There are very good climatic conditions, and natural and agricultural landscapes. Most tropical crops can be cultivated very easily. There are lots of opportunities to start agritourism

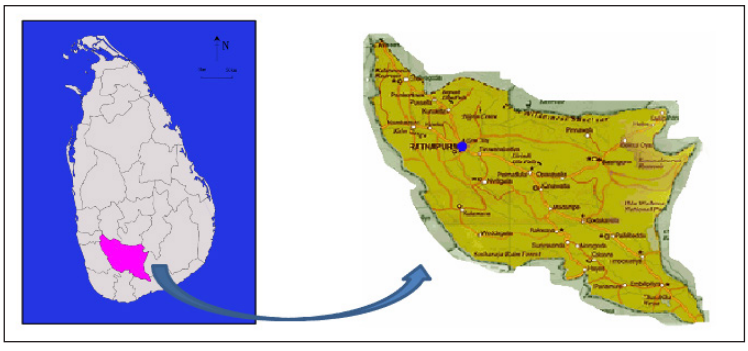


Figure 1: Map of Sri Lanka, showing the Rathnapura district.

operations in the farming community and to earn a significant level of additional income. At present, some agritourism destinations are operating in this area. Before 2019, there were a large number of visitors to these destinations. Although during the last two to three years, the number of visitors had gone down, at present, a gradual increase in the number of visitors can be seen.

Research Methods

Several strategies were applied in this research study. First, a literature review was conducted to understand the past studies related to this research in other countries and also in Sri Lanka. After that, primary data was collected through a field survey using 20 randomly selected agritourism farmers in this area. Even though farmers are not able to give publicity for their agritourism operations, as it is costly, some farmers are conducting agritourism activities on their farms from time to time. In addition, key informant interviews and three case studies were also carried out. Data collection was conducted from March to October 2019. Data were analyzed through descriptive statistics.

Findings and Discussion

Opportunities for Agritourism Development

Rathnapura district is a very famous agricultural area including paddy fields, tea, rubber, coconut plantations, spice gardens, vegetable farming, orchards, and much more. Moreover, lots of opportunities could be identified related to the initiation and development of agritourism destinations in this district. Findings are presented in Table 2.

According to the information in Table 2, several opportunities are there to start agritourism in this area. Existing farms with various crops, fruits and livestock, traditional and diversified agricultural activities, handicrafts and cottage industries, educated people, favourable climatic conditions, good infrastructure facilities, beautiful natural landscapes, rural cultural attractions, high level of hospitality of local people, and increasing demand for agritourism at the local level as well as the international level are the main ones. Not only that, traditional and distinctive agricultural activities, delightful Sri Lankan cuisine and culinary arts, rural farm-based accommodation, the opportunity of using value-added products, local handicraft and cottage industries, cultural events, activities and traditions are among the most promising activities that can be linked with the agritourism industry. In the literature, somewhat similar findings have been reported by many other researchers (Hollas & Chase, 2021; Mahmoudi, et al., 2021).

Table 2: Opportunities for agritourism development (n=20)

Opportunity	Frequency	Percentage
Farms with crops, fruits, livestock,	16	80.0
Traditional and diversified agricultural activities	15	75.0
Handicraft, Cottage industries (Spices, Milk & Curd, Ayurveda practices)	15	75.0
Educated manpower	14	70.0
Favourable climatic conditions	18	90.0
Infrastructure facilities	14	70.0
Beautiful natural landscapes	17	85.0
Rural cultural attractions	18	90.0
The hospitality of local people	14	70.0
Increasing local and international demand for agritourism	12	60.0

(Field survey from March to October 2019)

Challenges for Agritourism

Some challenges are also found in the initiation and development of agritourism in this area. They are presented in Table 3.

Table 3: Challenges for Agritourism Development (n=20)

Challenge	Frequency	Percentage
Management problems	17	85.0
Lack of land resource	13	65.0
Lack of credit/finance	15	75.0
Marketing and promotion	14	70.0
Environment pollution	18	90.0
Poor responsibility of visitors	11	55.0
Seasonality of agritourism operations	10	50.0
Competition among destinations	10	50.0
Lack of policies	11	55.0
Political influences	10	50.0

(Field survey from March to October 2019)

As per the findings in Table 3, management problems of agritourism operations, lack of land resources for the tourism operators, lack of capital, marketing and promotion of agritourism destinations, environmental pollution of some agritourism places due to inappropriate constructions and poor management of solid waste and wastewater, irresponsible behaviour of some visitors, seasonal nature of agritourism operations, competition among tourism destinations, lack of proper policy and bad political influences are the main challenges. Other than that lack of support from responsible organizations, excessive capital cost, poorly established linkages, lack of awareness, insufficient facilities to provide a satisfactory service to the visitors, lack of suitable training, marketing problems, and poor entrepreneurial behaviour of farmers were among the major challenges in developing agritourism among the farmers interviewed. When reviewing the literature, similar research findings have been reported by other researchers as well (Mahmoudi et al., 2021; Adom et al., 2021).

Discussion

As per the literature review, agritourism is a very good strategy to diversify farms in most countries. It can provide benefits for visitors and also for farm operators. Not only that but also agritourism can provide some benefits for other stakeholders such as local residents and local governments. Thus, agritourism will be crucial for the enhancement of farms in the Rathnapura district.

Also according to the findings of the field survey, it was found that there are many opportunities for the development of agritourism in this district. They can be used as motivational factors for the potential farmers to start and run agritourism destinations. However, some challenges to the development of agritourism were also found in this district. With better planning and management, most of the challenges can be overcome up to a significant level.

Future strategies for the development of agritourism activities in Rathpura district in Sri Lanka

Even though several challenges are there, some strategies can be used to overcome them and develop agritourism. After studying the situation in this area and also reviewing the literature thoroughly, important strategies could be found. They can be briefly explained as follows:

- provision of training on management activities for the agritourism operators;
- arrangement of necessary land facilities for properly functioning agritourism operations;
- arrangement of useful loans or credit facilities for the needy agritourism operators;
- support for better marketing and promotion by the national or local government;
- provision of necessary education and training programs in useful aspects of agritourism;
- the motivation of stakeholders towards the protection of the surrounding environment;

- enhancement of knowledge and awareness of visitors towards responsible behaviour in agritourism destinations;
- in cooperation with other possible activities as well for the agritourism operations, to make it more attractive;
- formulation of suitable government policies for the development of agritourism businesses; and,
- avoidance of negative political influences and provision of freedom to the agritourism operators to do business well.
- Also, favourable macroeconomic factors are highly important for the development of agritourism businesses in a country. Among them, the following factors are highly important:
- maintenance of better political stability of the country, without having struggle among political parties;
- protection of peace and justice in society, by creating an equitable society for the local people and the visitors or tourists;
- maintenance of safety and protection of the people, especially visitors—then people can move freely without fear and doubt anywhere in the country;
- provision of the requirements for the tourism industry. The tourism industry needs a large number of inputs and basic facilities. Without them, it is not possible to provide a satisfactory service for the visitors.
- controlling inflation and maintaining it at a fair level. High inflation badly affects the development of any industry in a country. A fair level of inflation will motivate people to invest in the agritourism industry and get better returns while creating many job opportunities for the local people.

On one hand, this information will be useful for agritourism practitioners to adjust their business in a better way by getting maximum benefits from the available opportunities and minimizing the existing challenges. On the other hand, these findings will act as eye-openers for policymakers in relevant sectors of the country. They can discuss with relevant government institutions and form suitable policies to enhance this important industry in suitable locations of the country.

References

Adom, D., Alimov, A., & Gouthami, V. (2021). Agritourism as a preferred travelling trend in boosting rural economies in the post-COVID-19 period: Nexus between agriculture, tourism, art and culture. *Journal of Migration, Culture, and Society*, 1(1). Accessed on 14.06.2022 through; https:// royalliteglobal.com/jmcs/article/ view/671

Chenari, H. M., Sheikhani Nejad, M. A. R., Jan Agha, F. N., Jensi, Z., & Kahaki, F. (2021). Providing a model of agritourism In rural development case study: Masal county, Guilan Province, Iran. *Journal of Agricultural Sciences – Sri Lanka*, 16(1), 93–107. https://doi.org/10.4038/jas.v16i1.9187

Department of Census and Statistics (2021) Number and area of Agriculture holdings by all sectors and by district. Accessed on 15.06.2022 through http://www.statistics.gov.lk/Agriculture/StaticalInformation/CensusOfAgriculture/NumberAndAreaOfAgricultureHoldingsByAllSectorsAndbyDistrict.

Hollas, C., & Chase, L. (2021) Agritourism: Challenges and opportunities for the rural future. Travel and Tourism Research Association. Advancing tourism research globally. Accessed on 15.05.2022, through; https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=2675&context=ttra

Mahaliyanaarachchi, P. R. (2017). Agritourism segment of rural tourism. Sabaragamuwa University of Sri Lanka. ISBN: 978-955-644-054-6.

Malkanthi, S. H. P. (2020). *Agritourism Development in Sri Lanka*. Sara Publication, Kottawa, Sri Lanka. ISBN: 978-624-96445-1-9.

Malkanthi, S. H. P., & Routray, J. K. (2012). Visitor satisfaction in agritourism and its implications for the agritourism farmers in Sri Lanka. *International Journal of Agricultural Management*, Vol. 2-1, October 2012 pp17-30.

Malkanthi, S. H. P., & Routray, J. K, (2011). Potential for agritourism development: Evidence from Sri Lanka. *Journal of Agricultural Sciences-Sri Lanka,* Sabaragamuwa University of Sri Lanka, Vol. 6, Number 1, January 2011. pp 45-58.

National Agricultural Law Center, (2022). Agritourism: An overview. Accessed on 21.05.2022, though; https://nationalaglawcenter.org/overview/agritourism/.

Sustainable Gastronomy as a Key Driver in Agritourism Development in Eastern Hungary

Katalin Vargáné Csobán
University of Debrecen (Hungary)
vargane.csoban.katalin@econ.unideb.hu

Anett Godáné Sőrés
University of Debrecen (Hungary)

Péter Horváth
University of Debrecen (Hungary)

Károly Pető
University of Debrecen (Hungary)

Abstract

The Eastern part of Hungary still has a strong traditional food culture based on using local and seasonal ingredients. For the last few years we have seen an increasing demand for authentic culinary experiences, which contributed to the emergence of international and domestic gastronomic exhibitions, thematic routes, and food festivals in the region. The majority of these events are initiated and organized by local governmental agencies. There are also some initiatives at the national level to encourage small-scale producers to sell their agricultural produce locally, although the legislation on food safety hinders agritourism businesses from providing catering on farms.

This study aims to explore the linkages between gastronomy and sustainable tourism development, as well as to investigate how tradition and innovation in gastronomy may contribute to agritourism development. Through an analysis of the present-day situation of the various aspects of the local gastronomy at the agritourism market in Eastern Hungary, examples of good practice are highlighted and the most important challenges are identified. The research is based on qualitative methods: participant observation on-site and focus-group interviews of the stakeholders of agritourism. Findings reveal the importance of governmental intervention and the need for long-term planning in agritourism development.

Keywords: gastronomy, agritourism, sustainable tourism, thematic route

Introduction

Rural communities in Eastern Europe have had to face several economic and social challenges in the last decades such as unemployment, lack of services and ample infrastructure, and consequently growing outmigration and depopulation, which threatened the livelihood of the villages as well as the future perspectives of the rural areas (Vargáné Csobán & Bauerné Gáthy, 2009; Csobán & Serra, 2014; Kataya, 2021). Tourism is often considered to be the panacea for the rural problems, as it may contribute to preserving the region through the revenues generated by the sector (Winter et al., 2020). In addition to its economic benefits, rural tourism may help to preserve local traditions and folk art, reduce regional differences and ensures a better understanding and cooperation among stakeholders (Kataya, 2021). Tourism in rural areas may appear in many forms depending on the motivation of the tourist involved, such as rural tourism, culinary tourism, ecotourism, etc. In all cases, local gastronomy is most often part of the tourism product. Sampling the local dishes may be an additional activity during or simply part of the everyday routine during the holiday, however it may be the primary aim of travel as in the case of culinary tourism.

The concept of culinary tourism covers journeys whose primary motivation is the exploration of dishes, beverages, and food materials through visiting growers and processors, participating in culinary festivals, visiting restaurants and other places of catering, and/or visiting destinations famous for their gastronomy to explore local dishes and drinks, and to try and learn how to prepare them (Hjalager & Richards, 2011). The actors of food tourism are tourists who plan their journeys at least partly with the intention of tasting the dishes offered by local cuisines or conduct some

gastronomy-related activity during their journey (UNWTO, 2012). Culinary tourism comes in innumerable shapes and is accompanied by the continuous appearance of new and innovative gastro tourism products. Its most widespread forms are food festivals, culinary tourism trails, food museums, special restaurants, conditioners, wineries, gastro tours, gastronomy walks, thematic dining and cooking courses (Könyves & Csobán, 2015).

As gastronomy and agritourism are intrinsically linked, agritourism and culinary tourism complement each other. In Eastern Europe and in many parts of the world, production of specific types of food and drink are the crux of agritourism (Chase et al., 2018). According to the conceptual framework suggested by Chase et al. (2018) agritourism involves core and peripheral activities. Core activities are directly connected to agricultural production and typically take place on farms, such as direct sales of a farm's products, farm-to-table dinners or overnight stays on farms, while peripheral activites are less closely related to agriculture such as concerts on farms, or do not take place on working farms, e.g., farmers markets, agricultural fairs. Both core and peripheral activities may be connected to gastronomy and culinary activities.

The development of these tourism types may exert a significant impact on the region affected. In addition to the economic effects of tourism, such as increasing employment, income generation, and enhancing tax revenue, locally produced premium products can greatly contribute to the destination's positive image (Fehér & Kóródi, 2008). Certain dishes, especially local specialties, can become an important part of an authentic tourism experience; in addition, local dishes and foodstuffs themselves constitute tourist attractions. Relationship with local producers strengthens the possibility of having authentic and original experiences. The markets, the winery, and the scenery to which the culinary experiences are linked represent adequate motivation for people to visit the destination. Continuously renewing tourism products can also result in lengthened stays. The success factors of agritourism also include the creation of high quality gastronomy supply, which can function as a value for the local population, too. It is indispensable to build a network of local farmers and restaurants which are capable of demonstrating national and regional cuisine and to promote their cooperation domestically as well as internationally. Finally, it is important to coordinate gastronomy supply and tourist demand and to monitor the impacts of tourism (Croce & Perry, 2010).

In our experience, tourism development – in rural and urban areas alike – should not be planned and implemented without considering the principles of sustainable development. In the case of agritourism it also applies to its culinary aspects, since food and gastronomy may contribute to the economic, social, and environmental sustainability of a destination while potentially representing factors that increase the attractiveness and the competitiveness of a destination (Rinaldi, 2017).

In this study we aimed to analyse the present situation of agritourism in Eastern Hungary, and identify the linkages between gastronomy and sustainable tourism development through the case study of Szabolcs-Szatmár-Bereg county. We intended to analyse the connection between tradition and innovation in gastronomy and agritourism and finally to explore the best practices and major challenges in agritourism development through gastronomy.

Materials and Methods

We used qualitative methods for analysis. First, we conducted focus-group interviews with 12 agritourism business leaders and local decision makers, as well as 14 members of local communities during 2021 and March to June, 2022. We also relied on participant observations on site, as we visited local farms, accomodation facilities, and culinary festivals between 2019 and 2022.

The geographical area where we conducted our research is in Eastern Hungary. Hungary is a landlocked country in Eastern Europe, and its easternmost territory is Szabolcs Szatmár Bereg county, which is bordered by the Ukraine. In the past, this part of the country was *not* a tourist destination as the most significant tourist attractions and destinations in Hungary are the capitol Budapest, the Lake Balaton, and the thermal spas.

This geographical area is one of the most disadvantaged regions of the country, and its economy is traditionally based mainly on agriculture. Besides the drawbacks, it also means that the area has a priority in national development projects. Although it was a productive agricultural area for many years, after the change of the political system in 1989 it lost the Eastern markets. Although a few multinational companies settled in the area in the past few years, the number of small and medium-sized enterprises is relatively high and black economy is also present. The GDP per capita is 57% of the national average and the unemployment rate is much higher than in Hungary; the labour force is less qualified as a result of the increasing outmigration of the highly qualified young people (Északkelet-magyarországi Gazdaságfejlesztési Zóna, 2020).

Results and Discussion

Overall this county has a rather negative image among Hungarians; they generally associate this area with poverty and backwardness, so it became clear that a fundamental change was needed to boost the economy, retain the population, and increase the quality of life (Vargáné Csobán & Serra, 2015). Until the turn of the millenium, the local economy was based almost solely on agriculture. Although there were not any big family farms, people used to have orchards and gardens around their houses, they cultivated their small pieces of land. However, tourism as an economic activity was not present here in the region.

The majority of interviewed members of the local governments in the region agreed that probably as a result of the post-communist past, people were less willing to start their own businesses here. Therefore the local goverments, who are in the position to initiate and promote economic activities, have had a vital importance. Goverment initiatives in the county started in the first decade of the 21st century and aimed at economic and social development, and also at improving the image of the region. First the developers from the local governments proposed tourism as a new economic activity. When the government officers were asked about the process of tourism development, they described the various phases of their development strategy in detail. In the beginning they identified the major resources, like: unspoilt nature, unique gastronomy based on local produce, hospitable local people, and rich cultural heritage.

Tourism development for this rural area was chosen for its positive economic, social, and environmental benefits. It is worth noting that planning and monitoring of the impacts was considered essential by the developers, which was also undertaken by the local governments.

Initially, thematic routes were designed in the county, as they may bring lesser known attractions and features into the tourism business and increase the overall appeal of a destination. Thematic routes are a good opportunity for less mature areas with high cultural resources that appeal to special interest tourists, who often not only stay longer but also spend more to pursue their particular interest. They also appeal to a great variety of users such as international overnight visitors who visit the route as part of a special interest holiday, staying visitors that frequent the route on day excursions, or urban domestic day visitors. The first thematic route in the county was the so called "Plum Route." Plums are typical fruits in the area and the traditional way of plum jam making in huge brass bowls outside in the open air is unique. During the interviews, tourism business leaders were asked about the hands-on agritourism activities that they offer to the tourists. They mentioned that these days tourists might take part in plum jam making, fruit picking and tasting of the plum products. Some business leaders, who took part in the focus-group interviews also claimed that the beginning of tourism development was challenging because of the lack of funding, but when state funding was granted, the development became fast. One of the respondents, who had personal contacts in Transylvania, thus contributed to the crossborder development of the thematic route, highlighted that the Plum route became international with the cooperation of Romanian partners. The Romanian partners were civil organizations, as well as the Romanian Chamber of Agriculture and Commerce and funding came from the Hungarian – Romanian Crossborder Cooperation Programme.

It provided financial resources for marketing activities and tourism product development. One of the mayors, who participated in the focus group interviews, emphasized that a very important milestone was when a multilingual website was created for the marketing of the plum route and new tourist attraction was also established, which was the showroom for the plum and its processing. This is the so-called "jam house," which is an interactive exhibition for the plum and the products made from it.

The other popular product made in the region is "plum palinka,"a strong Hungarian alcoholic drink. Organic dried fruits are also made here from plums and apples. Later on, based on the fruits and the local gastronomy, the interviewed local businessmen recalled the complex tourism products they created in the last ten years: creative holidays involving drawing and painting were introduced, and also heritage, cultural, and health tourism products were established. Cycling tourism and sports tourism on the River Tisza also became popular in the region.

As a result of the successful developments, the county became an EDEN destination, which is the prestigious European Destinations of Excellence. As tourism started in the region, new accommodation facilities were set up by private businesses. Many of them have an authentic outlook typical of the farmer houses of the region. The interviewed developers and the locals emphasized that they made serious efforts to provide authentic experiences to the tourists and involve them in the activities, for example in fruit picking, fishing, and arts and crafts activites. Local cooking courses and food and drink tasting are regularly organized and local gastronomy is also presented at the music festivals. There are also several culinary festivals in the region focusing on the various local fruits, for example the "Sour cherry festival" or the "Walnut festival." A pálinka (local alcoholic drink) distillery and showroom was opened as a new tourist attraction in the region.

These tourist developments were strengthened by another project, the so-called Fairy field project, which was also initiated by a governmental agency, the Szabolcs-Szatmár-Bereg County Regional Development Agency. The aims of the project were brand development for the region, a new marketing strategy for the tourism, and encouragement of investments. A local product cluster was also formed to promote the marketing of local culinary products. Meanwhile a new thematic route was created based on the cultural heritage of the region. It is important to note that the plum route and local gastronomy meant the first steps in starting tourism development and the new route would not have been possible without the initial culinary product development. The visitor-friendly, interactive approach remained in the center of the new development in the case of the new route, too.

It needs to be emphasized that the thematic routes and the tourism developments in all cases are based on the cooperation of the villages, and its local communities. They cooperate to organize the programmes, festivals, and other events. The interviewees from the local communities agreed that the individuals are the key to success: they take part in the tourism product development and the implementation of the projects.

Conclusions

The conclusions of the case study relate to the most important feature of rural development. First of all, building a positive image of a destination is vital. The new, positive image of pálinka (local alcoholic drink) contributes to the improving image of the region. Effective marketing in general has a decisive importance for this region, which previously had no tradition in tourism. The results of the tourism development projects are clearly seen: the growing number of guests and guest nights, and longer average time of stay. However, funding was essential to initiate and maintain the tourism development projects, and ample financial resources are still needed for tourism destination management. It must also be emphasized that cooperation is very important from the individual to the interregional level. A good working relationship among the stakeholders of tourism is especially important in marketing and product development. Product development in agritourism must take into account the current trends of tourism demand, for example the search for authenticity, which has a central role in creating a memorable tourist experience. Finally sustainability has remained a major issue in the tourism development of the region – local government takes part in long-term

planning and monitoring the impacts of tourism, paying attention to the perceptional carrying capacity as well.

Summarizing the critical factors in the success of the tourism development, we can conclude that understanding the visitors' needs in the changing world is essential: a wide range of cultural and natural attractions contribute to the experience. Second, devoted and inspiring leaders of the projects are as important as available funding for product development. Finally, local community support is the basis for the sustainable development of tourism.

In order to improve the diversity of the services on the farms and the sustainable practices of agribusinesses, it would be vital to support agricultural producers and other stakeholders of agritourism by different mechanisms, such as long term strategies, policies, promotional/public awareness campaigns, financial funding for investing in catering on farms. However, at present there is not a separate gastronomy tourism or agritourism strategy in the region, although the significance of gastronomic heritage in the complex tourism product development is emphasized in the comprehensive national, regional, and local documents. Principles of sustainability are respected by some hospitality businesses, as they not only use local goods, but also employ local workforce and thus strengthen the local communities. Additionally, given the fact that the promotion of healthy life and well-being, ensuring sustainable consumption and production patterns, and making human settlements sustainable are principal tenets, our insights can be of importance to policy makers seeking to promote appropriate measures to develop sustainable agritourism.

Authors' Note

We have no conflict of interest to disclose. Correspondence concerning this article should be addressed to Katalin Vargáné Csobán, vargane.csoban.katalin@econ.unideb.hu.

References

Chase, L. C., Stewart, M., Schilling, B., Smith, B., & Walk, M. (2018). Agritourism: Toward a conceptual framework for industry analysis. *Journal of Agriculture, Food Systems, and Community Development, 8*(1), 13–19. https://doi.org/10.5304/jafscd.2018.081.016.

Croce, E., & Perri, G. (2010). *Food and Wine Tourism.* CABI, Italy.

Északkelet-magyarországi Gazdaságfejlesztési Zóna (2020). *Helyzetelemzés: Szabolcs-Szatmár-Bereg megye.* https://www.uni-miskolc.hu/files/11823/SZSZB_12_05.pdf Downloaded: 10/08/2022.

Fehér, I., & Kóródi M., (2008). *Vidéki turizmus fejlesztése*. Szaktudás Kiadó, Budapest.

Hjalager, A., & Richards G., (2011). *Tourism and Gastronomy*, Routledge, London.

Kataya, A. (2021). The Impact of rural tourism on the development of regional communities. *Journal of Eastern Europe Research in Business & Economics 1*(10). https://doi.org/10.5171/2021.652463

Könyves, E., & Csobán K. (2015). *Gasztronómia és turizmus*. Debreceni Egyetem Gazdaságtudományi Kar, Debrecen.

Rinaldi, C. (2017). Food and gastronomy for sustainable place development: A multidisciplinary analysis of different theoretical approaches. *Sustainability, 9*(10), 1748. https://doi.org/10.3390/su9101748

UNWTO (2012). *Global report on food tourism*. UNWTO, Madrid.

Vargáné, Csobán K., & Bauerné, Gáthy A. (2009). Long-term government responses to sustainable tourism development: principles and strategies. *Apstract - Applied Studies In Agribusiness and Commerce 3*(4) 89-92.

Vargáné Csobán K., & Godáné Sőrés. A., (2021). Challenges of the development of culinary tourism in the Balaton tourism region. In: Pop, Gh.; Bíró, B. E.; Csata, A.; György, O.; Kassay, J.; Koroseczné Pavlin, R.; Madaras, Sz.; Pál, L.; Péter, K.; Szőcs, A.; Tánczos, L. J.; Telegdy, B. (Eds.) *Challenges in the Carpathian Basin: global challenges - local answers: interdependencies or globalisation?* 15th International Conference on Economics and Business Cluj-Napoca, Románia. Risoprint 1322-1337.

Vargáné, Csobán K., & Serra, G. (2015). A sportturizmus lehetőségei a vidékfejlesztésben az Észak-Alföldi régió példáján. Köztes Európa: Társadalomtudományi Folyóirat: A Vikek Közleményei *8*(1-2) 145-156.

Winter, P. L., Selin, S., Cerveny, L., & Bricker, K. (2019). Outdoor recreation, nature-based tourism, and sustainability. *Sustainability*, *12*(1), 81. https://doi.org/10.3390/su12010081

Agritourism in Botswana: Challenges and Prospects

Oliver Chikuta
Nanjing Tech University Pujiang Institute (China)

Tonderai Vumbunu
Botho University (Botswana)
tonderai.vumbunu@bothouniversity.ac.bw

Tlotlo Phuduhudu
Botho University (Botswana)

Abstract

Botswana's tourism industry is primarily wildlife based and concentrated in the northern parts of the country. Tourism product diversification has been put on the national agenda yet very little has been done on the ground. Even though Botswana has semi-arid climatic conditions, agriculture is considered one of the pillars of the economy. The key agricultural activities in the country are agronomy (particularly small grains like sorghum and millet) and animal (cattle, goats, sheep) ranching. The study explored the possibility of developing agritourism as a sustainable alternative to the traditional wildlife tourism product in Botswana. Using a qualitative approach, the study established the challenges and prospects of agritourism in Botswana by interviewing farmers as well as key informants from tourism and agricultural authorities in the country. Findings revealed that very few farmers are engaged in agritourism, and they encounter multiple challenges such as a lack of knowledge and financial resources. With adequate support, prospects are bright since farmers are embracing the new product.

Keywords: agritourism, diversification, challenges, prospects, tourism product

Introduction

The development of Botswana's tourism industry has a direct association with the rapid economic and social development triggered by the discovery of diamonds soon after independence in 1966 (Seidler, 2010). Likewise, tourism also experienced steady growth from around 500,000 arrivals in 1994 to 1.9 million before the immense impact of COVID-19, becoming the second highest contributor to GDP at around 9.5% (World Travel and Tourism Council [WTTC], 2018). However, this swift growth has been solely dependent on wildlife and wilderness product, accounting for over 80% of all tourism activities (Mbaiwa, 2015). Based on this background, diversification is a high-priority focus area of the government's development strategy focusing on developing alternative products such as agritourism within the wider field of tourism.

Over the past four decades, Botswana's tourism landscape assumed the following characteristics: reliance on wildlife product; the concentration of tourism activity in the northern parts of the country, that is, Okavango Delta and Chobe; large foreign ownership of tourism enterprises; expensive and exclusive tourism products; dependence on international tourists (over 90% before Covid-19); and high leakages and very low levels of domestic tourism (Morupisi & Mokgalo, 2017; Van Zyl, 2019; Mbaiwa & Hambira, 2020).

Although wildlife tourism has been and is still key to tourism development, the characteristics explained above present significant challenges and threats exacerbated by the fact that neighboring countries Namibia, South Africa, Zambia, and Zimbabwe are strong competitors offering largely a similar wildlife product (WTTC, 2007). Based on this background, tourism product diversification is vital. Mahachi and Ketshabile (2013) noted that the tourism sector is in a dynamic stage typified by

challenges demanding innovative approaches to maintain competitiveness. Despite the adoption and promulgation of multiple guidelines for diversification to widen the product base, progress has been very limited and empirical research is scant, especially focusing on the potential of agritourism as an alternative option. The diversification options suggested in the literature are mostly generic, providing various options that lack a specific implementation framework (Vumbunu et al., 2021). This study, therefore, examines the potential of developing agritourism as an alternative to wildlife and wilderness tourism. Although agriculture contributes 2% to the GDP, the government is committed to developing a resilient and reliable agricultural sector that will form a solid base for food security. The development and promotion of agritourism will go a long way in achieving this end.

Agritourism

Agritourism is a steadily expanding industry globally, given the focus on sustainable development, especially in rural areas. Over the years agritourism has developed to become a well-established ecotourism product and diversification option promoting economic growth as well as heritage and environmental preservation, for example in the United States earnings increased five-fold between 2002 and 2007 (Canovi, 2019; Rauniyar et al., 2021). Despite the phenomenal growth, it is important to note that agritourism research is in its infancy given that it emerged in the 1980s (Barbieri, 2020) and almost non-existent in developing countries (Chikuta & Makacha, 2018; Bannor et al., 2022). The term agritourism is contentiously characterized by multiple definitions, synonyms, conceptualizations, applications, and theorizations such that a precise definition has remained elusive for the past four decades. Literature (Rauniyar et al., 2021; Lamie et al., 2021; Paniccia & Baiocco, 2021) identified that differences emanate from multiple terminologies addressing the same concept, interpreting the degree of tourist involvement, the role of farm-specific and external factors in shaping types of activities and scale of economic and social impacts. Based on this background, the definition of agritourism is usually contextualized concerning what is being researched. Although expressed differently, the definitions revolve around the following common aspects; a fusion of tourism and agriculture, the authenticity of the agricultural experience, the nature of contact between tourists and agricultural activities (consumptive and non-consumptive tourism) and the need for travel (Rauniyar et al., 2021; Suhartanto et al., 2020; Lamie et al., 2021). Botswana adopted the term, 'agro-tourism' which is defined as; "The act of visiting a working farm or any agricultural, horticultural or agribusiness operation for the purpose of leisure, education, or active involvement in the activities of the farm or operation or just staying in rural areas and visiting attractions in those areas." (Ministry of Environment, Natural Resources Conservation and Tourism (MENT), 2020) Agro-tourism activities in Botswana's context "include taking part in growing, harvesting and processing locally grown food crops on farms, farm tours, farm stay with bed and breakfast, tractor or bullock cart rides, donkey riding, horse riding, fishing, milking, Ostrich riding, peacock viewing and other farming activities in the area" (MENT, 2020).

In view of the multiple perspectives and definitions of agritourism there have been efforts to devise typologies or classifications (Phillip et al., 2010:754; Gil Arroyo et al., 2013). Chase et al. (2018) classified agritourism into core and periphery activities related to five categories, namely outdoor recreation, entertainment, hospitality, education, and direct sales. Despite the different viewpoints, the classifications are rooted on common considerations such as working farm and experience. Given the multiple perspectives, this study adopted the Chase et al. (2018) typology to classify agritourism activities in Botswana.

Agritourism diversification provides a dependable alternative that has great potential to develop rural areas and improve the overall standard of living for local communities (Bannor et al., 2022). Agritourism perfectly fits into Botswana's image as a sustainable ecotourism destination. Besides poverty reduction in marginal areas, there are other potential benefits of developing agritourism such as resource and environmental conservation, reduction of urban drift, especially of young population, and preservation of cultural traditions especially those related to farming (Bannor et al.,

2022). Despite the multiple positive impacts, there are challenges associated with the establishment and development of agritourism. Canovi (2019) classified the challenges as tangible and intangible where the former relates to a shortage of skills and capital, cost of marketing, and lack of labor whilst the latter denotes the perception of agritourism as an activity where farmers are actively diluting the profession of agriculture. It is important to note that just like in many developing countries (Baipai et al., 2022; Bannor et al., 2022) agritourism operates at a minute scale and is a relatively new phenomenon in Botswana hence the need for a detailed empirical study to establish prospects and challenges.

The country realizes the importance of developing agritourism as an alternative to wildlife-based tourism and in promoting sustainable development in mostly marginal rural areas. This is reflected in the setting up of guidelines for establishing agritourism enterprises in different parts of the country (MENT, 2020). In 2021, the government approved the keeping of non-dangerous game such as kudu and impala on farms for tourism purposes and this is viewed as a peripheral agritourism activity. The guidelines provide information on land use, safety and security, buildings (interior and exterior), natural environment, meals, license application, guest information, and other compliance requirements.

Botswana's climate is largely semi-arid hence it is part of the government's broad agenda to achieve Sustainable Development Goals (SDGs) by enabling citizens to derive maximum economic benefits from sustainable and eco-friendly forms of tourism. The study objectives were, to establish the current state of agritourism in Botswana, to explore the challenges being faced by agritourism operators in Botswana, to project the future of agritourism in Botswana and to recommend strategies for developing and promoting agritourism in Botswana. The potential for agritourism in Botswana development looks promising, however, no empirical demand or supply-based studies have been carried out to support this view. It is against this background that the study seeks to fill the gap by examining the prospects and challenges of agritourism in Botswana.

Methodology

The study adopted a qualitative research approach and respondents were drawn from the farm owners in the Greater Gaborone area, particularly those with working farms (where agricultural activities are taking place) as well as key informants from the ministries and parastatals responsible for agriculture and tourism. A total of 23 respondents were regarded as adequate after reaching data saturation as supported by Clarke and Braun (2013) and Fugard and Potts (2015), who argued that a sample of 12 is adequate to reach data saturation in qualitative studies. The sample size of 23 comprised 20 respondents engaged in agritourism and three key informants from the ministry responsible for agriculture, the Department of Tourism and Botswana Tourism Organisation (BTO). Convenience and purposive sampling were used to select the 20 farmers and key informants respectively. Semi-structured interviews were used to collect data. The interviews enabled the acquisition of in-depth information about the current state, challenges, and prospects of agritourism in Botswana.

Findings

The state of agritourism in Botswana

Agritourism is still a very new concept in Botswana, hence there is some misunderstanding and confusion as to what it constitutes. This was evidenced by the fact that only eight farmers had a clear understanding of what the concept entails. The newness is also reflected in that only 15 agritourism operators are on the official tourism enterprises list compiled by the Department of Tourism. Findings revealed that young farmers are more interested in agritourism and are willing to take the risk, given that 17 of the respondents are under 40 years old. Half of the participating operators are operating tourism activities on non-working farms, especially around Gaborone where accommodation and hosting of events are the main activities. Using Chase et al.'s (2018) framework, the most dominant

core activity highlighted by 16 respondents is overnight farm stays whilst 13 respondents indicated game drives as the most sought-after peripheral activity. It is important to note that 75% of game drives are based in national parks or game reserves whilst only 15% are directly offered on the farms. The sizes of farms are generally too small to accommodate wild animals. The strong inclination towards tourism activities is largely based on lower investment costs. Botswana is a semi-arid country, hence huge capital investment is required to establish viable agricultural activities. Most farms, therefore, offer minimal core activities, U-pick/U-cut 20%, retail nursery and greenhouse and onsite farm shop 10%. Findings revealed that 5% of the farms are well established offering organic farming, workshops and cultural tourism activities that attract international tourists. Despite the positive development most registered 'agritourism operators' are not practicing any meaningful farming. They are mainly offering peripheral activities.

Challenges

The challenges are centered around the cost of investment in farming as well as tourism equipment. Although the government promised to fund upcoming projects, implementation has been very slow, hence focus switched to less capital-intensive tourism activities. Fifteen respondents indicated that the loan application process was lengthy as some lending institutions did not also fully understand the concept. Some banks are providing funding, however, access is limited as 18 respondents do not have collateral security. Additionally, farmers indicated that banks according to their policies only support one activity whereas agritourism has two components. One farmer lamented that,

> *"It is very difficult to make a choice since the agriculture and tourism components complement each other."*

Based on this background most respondents opted to utilize the loan for tourism development such as the construction of Chalets. Given the limited support, most farms lack adequate farming equipment, are prone to destruction of farm produce by wild animals, and experience perennial water challenges. Fourteen out of the 20 farmers do not have expertise in farming, especially on marginal lands characterized by pests and generally poor soils. All respondents highlighted a lack of expertise to blend farming and tourism given the fact that the climate is semi-arid and generally not profitable to farm. Farmers also highlighted competition from established tourism facilities making it difficult to penetrate the market.

Prospects

Despite being a new phenomenon, agritourism in Botswana has great potential and there is room for growth, given that all the respondents expressed a willingness to learn. The young farmers are eager to embrace this new product however technical and financial support is required. The government is willing to promote tourism diversification and has invested resources in promoting agritourism. Specific agritourism guidelines have been developed however implementation has been very slow, thus inhibiting the growth of the sector. With more education, support, and resources, agritourism has great potential for success in Botswana.

Conclusions

Agritourism in Botswana is still very limited and the few who have embraced it have only adopted a few elements of agritourism. Most of the farms have tourism-related activities with little or no agricultural activity. There remains confusion as to what constitutes agritourism. The development of agritourism is being hampered by multiple challenges related to limited funding, lack of know-how, and appropriate equipment, especially for farming. Despite the constraints, there is a future for agritourism in Botswana, given that young farmers are actively incorporating agritourism as an alternative new product.

Recommendations

The government of Botswana should take a more active role in raising awareness on the importance of agritourism especially in promoting diversification and empowering disadvantaged communities. Information can be disseminated through workshops, brochures, and skills training. The process of applying for funds needs to be simplified to ensure that all qualifying farmers are capacitated, especially those who want to venture into agritourism. The bank lending policies require revision to accommodate agritourism which combines two aspects that complement each other. There is a need to form an agritourism society to encourage sharing of ideas and for the effective representation of agritourism operators at district and national levels. Farmers need to fully understand the merits and challenges related to agritourism so that they are well-informed before venturing into the business. To ensure growth of the sector, agritourism must be infused into the education curriculum from the grassroots. There is also a need to research on the demand side to determine needs of agritourists and widen the area of study beyond Greater Gaborone.

References

Baipai, R., Chikuta, O., Gandiwa, E., & Mutanga, C. (2021). A critical review of success factors for sustainable agritourism development. *African Journal of Hospitality, Tourism and Leisure*, 10(10(6)), pp.1778–1793. doi:10.46222/ajhtl.19770720.192.

Bannor, R. K., Oppong-Kyeremeh, H., Amfo, B., & Allotey, A. A. (2022). Diversification into agritourism by cocoa farmers in Ghana as an alternative source of income. *Agricultural Finance Review*, Vol. 82 No. 5, pp. 960-982. https://doi.org/10.1108/AFR-10-2021-0136

Barbieri, C. (2020). Agritourism research: A perspective article. *Tourism Review*, 75(1), pp.149-152. doi:10.1108/tr-05-2019-0152.

Canovi, M. (2019). Resistance to agritourism diversification: An analysis of winery owners' identities. *Tourism Management Perspectives*, 32, p.100566. doi:10.1016/j.tmp.2019.100566.

Chase, L. C., Stewart, M., Schilling, B., Smith, B. & Walk, M. (2018). Agritourism: Toward a conceptual framework for industry analysis. *Journal of Agriculture, Food Systems, and Community Development*, 8(1):13-19.

Chikuta, O., & Makacha, C. (2016). Agritourism: A possible alternative to Zimbabwe's tourism product? *Journal of Tourism and Hospitality Management*, 4(3). doi:10.17265/2328- 2169/2016.06.001.

Clarke and Braune (2013). Successful qualitative research: Practical guide for beginners. Sage Publications Ltd, London.

Fugard, A. J. B., & Potts, H. W. W. (2015). Supporting thinking on sample sizes for thematic analyses: A quantitative tool. *International Journal of Social Research Methodology*, 18(6), pp.669–684. doi:10.1080/13645579.2015.1005453.

Gil Arroyo, C., Barbieri, C., & Rozier Rich, S. (2013). Defining agritourism: A comparative study of stakeholders' perceptions in Missouri and North Carolina. *Tourism Management*, 37, pp.39–47. doi:https://doi.org/10.1016/j.tourman.2012.12.007.

Lamie, R. D., Chase, L., Chiodo, E., Dickes, L., Flanigan, S., Schmidt, C., & Streifeneder, T. (2021). Agritourism around the globe: Definitions, authenticity, and potential controversy. *Journal of Agriculture, Food Systems, and Community Development*, 10(2), 573–577. https://doi.org/10.5304/jafscd.2021.102.002

Mahachi, D. & Ketsabile, L.S. (2013). Diamond mining as a possible strategy for tourism product diversification in Botswana. *Journal for Development and Leadership*, 2(2), pp.35–50.

Mbaiwa, J. E. (2015). Ecotourism in Botswana: 30 years later. *Journal of Ecotourism*, 14(2-3), pp.204–222. doi:10.1080/14724049.2015.1071378.

Mbaiwa, J. E., & Hambira, W. L. (2020). Enclaves and Shadow State tourism in the Okavango Delta, Botswana. *South African Geographical Journal*, 102(1), pp.1–21. doi:10.1080/03736245.2019.1601592.

Ministry of Environment, Natural Resources Conservation and Tourism (MENT) (2020). Revised agro-tourism guidelines. [online] Available at: https://www.gov.bw/sites/default/files/2020- 03/Revised%20Guidelines%20for%20Agro%20Tourism%20Operations%20at%2020%2001%202020.pdf [Accessed 12 Jun. 2022].

Morupisi, P., & Mokgalo, L. (2017). Domestic tourism challenges in Botswana: A stakeholders' perspective. *Cogent Social Sciences*, 3(1), pp.1–12. doi:10.1080/23311886.2017.1298171.

Paniccia, P. M. A., & Baiocco, S. (2021). Interpreting sustainable agritourism through co- evolution of social organizations. *Journal of Sustainable Tourism*, 29(1), pp.87–105. doi:10.1080/09669582.2020.1817046.

Phillip, S., Hunter, C., & Blackstock, K. (2010). A typology for defining agritourism. *Tourism Management*, 31(6), pp.754–758. doi:https://doi.org/10.1016/j.tourman.2009.08.001.

Rauniyar, S., Awasthi, M.K., Kapoor, S., & Mishra, A.K. (2021). Agritourism: Structured literature review and bibliometric analysis. *Tourism Recreation Research*, 46(1), pp.52–70. doi:10.1080/02508281.2020.1753913.

Seidler, V. (2010). Why did Botswana end up with good institutions: The role of culture and colonial rule. *SSRN Electronic Journal*, [online] pp.1–33. doi:10.2139/ssrn.3051011.

Suhartanto, D., Dean, D., T. Chen, B., & Kusdibyo, L. (2020). Tourist experience with agritourism attractions: what leads to loyalty? *Tourism Recreation Research*, pp.1–12. doi:10.1080/02508281.2020.1736251.

Van Zyl, H. (2019). *Botswana Protected Areas fees review*. [online] Gaborone, Botswana: Ministry of Environment, Natural Resources Conservation and Tourism (MENT), Biodiversity Finance Initiative (BIOFIN) and United Nations Development Programme, pp.1–82. Available at: https://www.researchgate.net/publication/343254303_Botswana_Protected_Areas_Review_o f_Entrance_and_Other_Fees [Accessed 5 Jan. 2021].

Vumbunu, T., Viviers, P. A., & du Plessis, E. (2021). A demand-based analysis of ecotourism product diversification in Botswana. *African Journal of Wildlife Research*, 51(1). doi:10.3957/056.051.0019.

World Travel and Tourism Council (WTTC) (2007). *Botswana: The impact of travel and tourism*. New York: World Travel and Tourism Council.

World Travel and Tourism Council (WTTC) (2018). *Travel & tourism economic impact 2018: Botswana*. New York: World Travel and Tourism Council.

The Making of an International Trail

David Gillespie
(Canada)
Canadian/American Exchange (CANAMEX)
International Culinary Tail Committee (ICTC)
keenefarm@yahoo.ca

Abstract

Culinary trails are just one of the options from an emerging global agritourism industry. Their popularity is shown through farm and food routes being established throughout the world. Trails can show a common theme as demonstrated by "La Route Des Vins" in Southern Quebec or multifaceted farm products such as "The Adirondack Cuisine Trails" in Upstate New York. All of the regions within the international route described in this paper share similar farm and enterprise products and services yet provide for varied development and transformation. An international trail offers to the world the aspect of collaboration and shared values while providing further rural development and economic activity to a larger international audience. In this article, the reader will be presented the manner in which existing and developing farm and food trails are being linked in Vermont, New York, Quebec, and Ontario. Topics include the benefits and challenges in establishing an international trail.

Keywords Cross-border collaboration, existing/new trails, regulations, teamwork, challenges

1. Introduction

Culinary trails are just one aspect of many types of farm and food trails appearing throughout the world. Although many trails presently exist in this entire region comprising Vermont, New York, Quebec, and Ontario, and are relatively close to each other, none is linked. Doing so and especially across states/provinces as well as national borders provides for a larger international tourism destination, which would further justify visitors' travel budget and extended vacation. An international trail such as the one presented here requires foremost the collaboration of all partners and regions as well as dedication and understanding by the collaborators. Culinary trails, while offering the traditional direct consumer sales, also include value-added enterprises, farmers' markets and restaurants serving local products. Other farm destinations provide services such as education, hospitality, entertainment, and recreation.

2. History: Building a Coalition

The coalition in the making of this international trail began in January 2016 when Quebec and New York individuals met to determine if a collaborative effort could be undertaken on a common agricultural theme. This was the beginning of the CANAMEX committee (CANadian AMerican EXchange). The first phase was determined to be the sharing of an existing agricultural entity, in this case, agritourism through the already well-established culinary trails within the Montérégie region of southern Quebec. The Adirondack region soon developed a trail system that was, at first, developed for regional tourism and then adapted towards an international trail. In 2017, Vermont expressed interest in this venture and offered to develop a trail system devoted to it, entitled Lake Champlain Tasting Trail. In 2018, Eastern Ontario and Western Quebec also expressed a strong interest in participating on an international trail. The first in-person meeting occurred in the early fall of 2018 on a Vermont farm, thereby completing the coalition. It became commonly known as the 2+2+2 project (2 countries, 2 provinces, 2 states). It was also presented at the first World Congress on Agritourism in Bolzano, Italy, of that year. Another in-person meeting took place in New York State in 2019 in order to further advance the project, in particular to deal with setting standards, criteria, and cross-border regulations including interstate and interprovincial commerce. The global COVID-19 pandemic in 2020 put the entire project on hold due to border and office closures as well as frequent staff changes. Virtual meetings began in 2021 and the process resumed to this day with regular monthly committee meetings. In late August 2022, the project was presented at the International Workshop on Agritourism in Burlington, Vermont.

3. Fitting a Square Peg in a Round Hole

Forming such a coalition means different approaches and ideas as to how best to form the trail. Some regions, particularly Quebec, have well established trails. Others were at the embryonic stage and therefore had to develop a route based on their own needs and requirements. A few regions had circuits showing specific destinations while others developed unmarked trails (no dedicated routes) showing all destinations for the visitor to choose from based on their needs and requirements. In addition, a clear definition of culinary trails had to be established early on, along with minimum standards and criteria, in order to offer the same expectations to the traveler.

4. Trail Diversity and Managing Expectations

By means of regional committee member preliminary discussions, it was soon determined that all parties within the committee wanted the trail to share the same goals while highlighting the travelling, cultural, historical, climatological, and topographical subtleties. For instance, the "Circuit du Paysan" in Southern Quebec shows specific routes with varied agriculture whereas in Vermont, the "Lake Champlain Tasting Trail," while also having varied agriculture, does not show any routes on the map but does highlight each farm. Both have the same goals of highlighting the farms but by different means of a travelling mode. It was agreed by the committee that these variances are acceptable for the sake of this trail. Other variances had to be worked in order to make it agreeable to all. An example would be the kind of restaurant serving local food. The definition of local food had to be clearly defined in order to fulfil tourism expectation. Embracing this concept should ensure the visitor a high quality, authentic farm and food experience while managing their expectations. It was also felt that agritourism being dynamic in nature and not static, will ensure that their expectations will be continually met as the farms and enterprises evolve their products and services to the ever changing needs of their clientele be it product innovation, cultural diversity and evolution, demography, educational changes, taste requirements, and other such criteria.

5. Why a Mega Trail?

The need for such an approach is based on the concept that regional tourism has limited growth potential and that an international perspective has a much larger market target. The concept of the international tour will likely extend the travel plans from that of an afternoon visitation to, at the

very least, a weekend excursion and quite possibly a week's holiday with other sites to visit such as in nearby cities and non-agritourism destinations. Therefore, the option has evolved from local to regional to national and eventually to international in scope. Furthermore, expanding both the added international market target and the vacation period would contribute to greater economic benefit not only to the participants on the trail but also to their surrounding rural communities such as the restaurant and lodging facilities and if none exists, their future development. However, more planning, effort and cross border collaboration is required with its own challenges and is discussed in the next section.

6. The Challenges

Being international in nature has its challenges and includes the following: international, interstate, and interprovincial border regulations, collaboration and management efficiencies, and funding requirements, amongst others.

State, Provincial, and National Border Regulations:

Border and regional regulations not only affect goods and services being allowed but are also issues for the travelers. One country might for instance allow any foreign visitors while others require visas or simply not allow certain nationals. Goods that are permitted in one country might simply not be permitted in another, or, if allowed, a limit may be placed on its quantity or through tariffs and taxes. The commerce of goods could also be restricted between states or provinces as well. Easily obtained information must be provided to all visitors before their travel plans are finalized. The committee will be providing a well-illustrated document and in simple terminology by means of its upcoming website when completed. Pamphlets are also an option being considered. Given the ever-changing border regulations, the committee will keep contact with the appropriate border agencies on a regular basis to best inform the tourist when crossing the border.

Complexities in collaboration and expectations:

Collaboration and management challenges increase as the trail extends beyond regional efforts. More time and resources in terms of both capital and human is required by all committee members when defining an international trail so as to come to an agreement. Several meetings are required for a fluid and clear plan to bear fruit while ensuring that all of the needs and expectations are met by everyone. At the very least, compromise and common denominators are the necessary formula should it be successful. This often necessitates independent regional meetings taking place with a negotiator so as to understand their concerns should they arise and then consensus building with the other regions—often a systematic approach. In this case, it took the equivalent of two years and several meetings to address many obstacles.

Funding:

Funding has been a big challenge simply because many states, provinces and countries are generally obliged to keep all grants and subsidies as well as accountability within their jurisdiction. Determining the name, logo, and the website for the trail as well as providing a marketing and business plan are common to all regions implicated in the international trail and thereby requiring a pool of money. Despite many attempts and means of negotiations and an inordinate amount of time (well over a year), in the end, Quebec's government as well as some regions in southern Quebec came up with the necessary funding to achieve the above strategies. It allowed two consulting firms to handle these critical strategies and is in full progress at the time of this paper. Each region will provide funding for their own trail system in advancing and promoting the international trail. In the future, funding for common strategies will need to come from other sources such as corporate donors and/or organizations.

7. The Team

The committee includes organizations and government agencies from each state and province. All committee members volunteer their time although many are professionals in the fields related to this project such as agriculture, tourism and international relations. It is critical that they can work in collaboration and have the necessary skillsets to work as a team. Though simple in thought, this international trail is a long process requiring a full understanding of all the complex regulations and different criteria. Therefore, knowledge, tolerance, and patience are key factors for this project to succeed given the many obstacles in particular the borders and their accompanying regulations as well as trying to accommodate the diverse expectations. Several committee members have many years of service and expertise in their domain and their experience is incredibly helpful in tackling the technical aspects of the project. Given the large scope of this trail and the complexities of the regulations, it is imperative that a team consists of people from each region in order to ensure a clear understanding of the requirements for each region and dealing with problem solving in order to accommodate all regions.

8. Data Analysis

It has been determined from the onset that successive long-term studies will need to be carried out beginning the year following the inauguration of the trail and will be based on socio-economic data so as to demonstrate the profitability of the trail to all the enterprises as well as their surrounding communities. Given that this culinary trail covers well over 1,600 km (1,000 miles) making it the longest and most extensive (two countries, two states and two provinces) in the world, such a mega trail will offer the opportunity of extended holiday travel by the visitor and thereby attract worldwide tourist attention. This opportunity should yield a significant return on investment when one considers the time and money that the traveler will need to spend through accommodation and purchases. It gives an opportunity to go from a daily visit to that of a full holiday travel that will necessarily provide greater tourism dollars to both the enterprises and their communities. Such an analysis will provide opportunities for improvement as well as for applying new strategies such as consumer trends. This ongoing analysis will be critical for the continual health and profitability of the trail's enterprises and communities.

9. Next Steps

Given that sufficient funding has been acquired to fulfill the requirements as mentioned in section six, once the plans have been fulfilled as determined by the two consultants, it is hoped that the trail will be inaugurated in the summer of 2023, barring any unforeseen circumstances. Promotion will likely be catered to the local and regional audiences with all necessary corrections made before being promoted to the national and then the international traveler. The committee will constantly be monitoring the activities and make any adjustments or use new strategies given the dynamic nature of this emerging industry. It will require the consultation with all actors in the industry including all levels of government, businesses, institutions, and organizations specialized in the food and tourism sectors. Consumer feedback should allow for new trends and opportunities for all enterprises to apply. For this culinary trail to be successful, all available tools and resources need to be sought, analyzed, and implemented.

10. Conclusion

So long as there is enthusiasm for culinary delights, there will always be the need for a trail, be it regional or international. Its length and extensiveness will be determined by the needs and expectations of both the trail provider and user. Should one consider an international trail, although simple in concept, reality shows that it is a complex undertaking in most instances for the many reasons described in this article. Success will depend on the skillset, enthusiasm, patience, experience, tolerance, and understanding from the team or committee. It is a continual process and

is dynamic in nature with constant provider and customer evolution. A successful international trail should reap the economic rewards to its providers and their surrounding communities through a larger customer base. Hopefully, this particular international trail will provide further information to all trail builders in future years by sharing its findings and data analysis through future conferences. It, like all agritourism and culinary trails, should further contribute toward a dynamic and prosperous agritourism industry worldwide. It is hoped that this committee can provide its findings at the second World Congress on Agritourism in Bolzano, Italy in 2024.

Websites for the International Culinary Trail

- https://laroutedesvins.ca/en
- https://lecircuitdupaysan.com/en/
- https://tourismehautrichelieu.com/en/categorie/inspirations/routes-and-tours/
- https://adirondackharvest.com/adirondackcuisine-trails/
- https://diginvt.com/trails/detail/lakechamplain-tasting-trail
- https://en.prescottrussell.on.ca/discover/broue-chew_road_trip
- https://outaouaisgourmetway.com/en/
- https://tapandcork.ca/

International Research Network for Agritourism

R. David Lamie
Clemson University (United States)
dlamie@clemson.edu

Lisa Chase
University of Vermont (United States)

Claudia Schmidt
Penn State University (United States)

Corinne Stewart
ISLE Association (France)

Emilio Chiodo
University of Teramo (Italy)

Rita Salvatore
University of Teramo (Italy)

Lori Dickes
Clemson University (United States)

Keywords: agritourism, research, network, global

According to the USDA National Agricultural Statistics Service Census of Agriculture, nominal farm agritourism revenue more than tripled between 2002 and 2017 in the United States. Though the results of how much of an increase has occurred since then will not be known until the 2022 figures are finalized, even anecdotal observation of consumer response to the pandemic by increasing outdoor experience-based tourism expenditures, like agritourism and culinary tourism, leads to the conclusion that these growth trends are likely even stronger. Though less than 10% of U.S. farms participate in agritourism and direct sales directly, it is the highest in the Northeast, where almost 19 percent of all farms engage in agritourism and direct sales (Schmidt et al., 2023). Globally, the agritourism market was estimated at nearly $70 billion in 2019, but, according to recent private consulting research reports, is expected to grow to nearly $120 billion by 2027 (Fortune Business Insights, 2020).

Likewise, Europe is expected to continue to lead in agritourism development due to farmers' unique product offerings, but mostly due to the amount and types of support offered by organizations and agencies at various geographic levels mounting focused efforts to support these farm-based businesses. At the same time, agritourism is an increasingly important strategy across the globe for farmers interested in diversifying their operations. However, research resources are not consistently available in all geographies, nor are deep appreciations of the economic and social value inherent in providing support to this emerging sector.

The International Research Network for Agritourism (IRENA) was created in 2021 to bring together an international pool of researchers interested in studying agritourism and related phenomena. The initial project was to facilitate the adaptation of the 2019 U.S. national survey of agritourism operators to other countries in Europe and beyond. The International Research Network for Agritourism (IRENA) was created to facilitate this work.

The first project of IRENA involves researchers from the United States and several European Union countries to deploy national surveys to better understand the patterns of development of the agritourism sector, its successes and challenges, and to facilitate cross-country comparison and knowledge transfer. IRENA became a special project of the EU-based ISLE network, whose focus is on sustainable development research and teaching . The foundational project of IRENA is the country-level survey. To successfully deploy surveys at the country level, there are several things that must take place. Surveys must be translated into the various languages of those countries, key in-country stakeholders must be engaged in the survey review and modification process to ensure relevancy. And stakeholders who have credibility with agritourism operators should be involved in communicating with and sharing in the actual deployment of the surveys. Two founding members of IRENA, from Clemson University, are managing the Qualtrics online survey platform and have

developed both a "rules of engagement" document and an international data-sharing agreement to help clarify roles and expectations between collaborating parties.

Thus far, translations of the survey include French, Spanish, Portuguese, German, and Italian. Pilot surveys have been deployed in Brazil and Italy, and several other countries have expressed interest in participating. IRENA is expecting to work with stakeholders to deploy surveys over the coming years and to engage in other collaborative research related to agritourism development. They will also seek out broader collaboration as interest in this research (and agritourism in general) develops, and institutions evolve to help meet their needs. Going forward, IRENA has ambitions to coordinate this network of researchers, to help facilitate a broader research agenda for agritourism, to help these researchers locate each other, and to help encourage its members to seek collaborative projects and related funding opportunities.

European Agritourism Network

IRENA has recently been involved in the submission of an EU-funded Cooperation in Science and Technology (COST) proposal entitled "Agritourism4eu - European Agritourism Network: strengthening societal and environmental benefits for Europe and beyond." A COST Action is an interdisciplinary research network that brings researchers and innovators together to investigate a topic of their choice for four years. COST Actions are typically made up of researchers from academia, Small to Medium Enterprises (SMEs), public institutions, and other relevant organizations or interested parties. The IRENA proposal involves 40 partners from 22 countries worldwide, the rationale being that in many countries, agritourism is commonly considered a particular form of additional on-farm income diversification and of sustainable tourism in rural areas (Fonte, 2008; Streifeneder, 2016; Eurac Research, 2018). In recent years, its socio-economic relevance has been rising in most European and non- European countries. Recent studies show its potential in maintaining small-structured family farming (Khanal, 2014), enhancing the vitality of rural communities, improving urban/rural relationships, and diversifying the offer in rural areas. Its role has broadened to include increasing employment in rural areas, especially for young people and women (Gil Arroyo et al., 2013; Halim et al., 2020, Schmidt et al., 2021), preserving cultural and natural resources, preventing countryside depopulation (Lupi et al., 2017; Sharpley, 2002), and bringing city-dwellers closer to agriculture and to the countryside (Barbera, 2021).

Each country has a different approach to this sector, often confusing it with other forms of rural tourism (for a deeper analysis about differences and similarities see, among others: Chiodo et al., 2019; Lamie et al., 2021). Agritourism still lacks a common understanding and political agreement on key common characteristics and objectives enhancing local features. This hinders progressing in a goal-oriented way toward enabling sustainable perspectives and potentialities of the sector. The IRENA proposal aims at creating the first interdisciplinary pan-European network on agritourism, based on different expertise across multiple boundaries. It focuses on the environmental and societal benefits that agritourism can provide for both rural and urban areas compared to other forms of tourism in Europe and beyond. The applicants believe that the exchange and sharing of knowledge and best practices will empower participants in elaborating sectoral strategies and proposals for policies, better positioning and defining the sector. This will have a concrete impact on European and international strategies about sustainable agriculture, tourism, and quality of life.

The COST proposal is the first example of international collaboration on research that IRENA hopes to facilitate going forward. As the network evolves and gains capacity, they hope to assist with other similar projects.

Engaging with Parallel Efforts

As agritourism continues to evolve and grow into a more mature sub-sector of both the agriculture and tourism industries, it is becoming increasingly evident that supporting organizations must also evolve. Very recently an effort has emerged to help foster communication and collaboration

on agritourism at a global scale. The Global Agritourism Network (GAN) is a network of "leading scholars and practitioners of agritourism" composed of farmers and agricultural producers, researchers, educators, community planners, government entities, agricultural service providers, development organizations, tour operators, hospitality operators, event planners, and other agritourism stakeholders. GAN officially launched in April 2023 and IRENA is engaging with them, essentially serving as GAN's auxiliary committee on research. More information is available on their website (https://agritourism.eurac.edu/gan/).

Next Steps

IRENA, in concert with GAN, welcomes participation from researchers, and those interested in research on agritourism, around the globe. Priority projects moving forward include:

Strengthening and expanding the existing network to be more inclusive of countries throughout the globe. Agritourism4eu is one such effort focused on the EU. We invite researchers from other regions to lead complementary efforts in their respective geographies.

Expanding the survey of agricultural operators to include many more countries. Data collection will be followed by consolidating and comparing findings across countries and regions.

Developing a series of online and in-person events to foster networking, build collaborations, and promote sharing of research results.

In order to learn more and to engage in this process, please go to the IRENA website and complete the intake form provided there.

Discussion

IRENA is a fledgling network, largely conceived as a vehicle to respond to expressions of interest by researchers from other countries to perpetuate the initial survey project based in the U.S. As such, it is subject to many of the expected issues of any recently formed organization. Honestly, it is too soon to know how well IRENA, and GAN for that matter, will serve the needs of the emerging agritourism sector. The classic work of Bruce Tuckman (1965 era) focused on the stages of group development (Forming, Storming, Norming, and Performing) is a particularly good lens through which to view these efforts. Those leading these efforts, and those looking to them for useful work products, should acknowledge that it will take some time for such efforts to reach peak performance, that mistakes will be made along the way, and that there will be frustrations along the path to success. However, this will always be the case with any newly formed group and it is the role of all involved in leading such efforts to help guide these groups through this process.

References

Barbera F. (2021). Per un progetto metromontano, *Mentromontagna.* Donzelli, pp. 3-26

Chiodo E., Fantini A., Dickes L., Arogundade T., Lamie R.D, Assing L., Stewart C., & Salvatore, R. (2019). Agritourism in mountainous regions—Insights from an international perspective. *Sustainability,* 2019, 11, 3715.

Eurac Research (2018). Outcome Statement 1st World Congress on Agritourism. https://agritourism.eurac.edu/wac/wac2018/WAC_2018_Outcome%20Statement_A4.pdf

Fonte (2008). Knowledge, food and place. A way of producing, a way of knowing. *Sociologia Ruralis*, 48(3)

Fortune Business Insights (2020, July). *Agritourism Market Size, Share & COVID-19 Impact Analysis, By Type (Direct-market, Education & Experience, and Event & Recreation), and Regional Forecast, 2020-2027*. Retrieved June 14, 2023, from https://www.fortunebusinessinsights.com/agritourism-market-103297

Gil Arroyo, C., Barbieri, C., & Rich, S.R. (2013). Defining agritourism: A comparative study of stakeholders' perceptions in Missouri and North Carolina. *Tourism Management*, 37, 39–47.

Halim, M. F., Barbieri, C., Morais, D. B., Jakes, S., & Seekamp, E. (2020). Beyond economic earnings: The holistic meaning of success for women in agritourism. *Sustainability*, *12*(12), 4907.

Khanal, A. R., & Mishra, A. K. (2014). Agritourism and off-farm work: Survival strategies for small farms. *Agricultural economics*, *45*(S1), 65-76.

Lamie, R. D., Chase, L., Chiodo, E., Dickes, L., Flanigan, S., Schmidt, C., & Streifeneder, T. (2021). Agritourism around the globe: Definitions, authenticity, and potential controversy. *Journal of Agriculture, Food Systems, and Community Development (JAFSCD)*. Volume 10, Issue 2 / Winter 2020–2021. https://doi.org/10.5304/jafscd.2021.102.002

Lupi, C., Giaccio, V., Mastronardi, L., Giannelli, A., & Scardera, A. (2017). Exploring the features of agritourism and its contribution to rural development in Italy. *Land Use Policy*, *64*, 383-390.

Schmidt, C., Goetz, S. J., & Tian, Z. (2021). Female farmers in the United States: Research needs and policy questions. *Food Policy*, *101*, 102039.

Schmidt, C., Tian, Z., Goetz, S. J., Hollas, C. R., & Chase, L. (2023). Agritourism and direct sales clusters in the United States. *Agricultural and Resource Economics Review*, *52*(1), 168-188.

Sharpley, R. (2002). Tourism: A vehicle for development? *Tourism and development: Concepts and issue*s, 11-34.

Streifeneder, T. (2016). Agriculture first: Assessing European policies and scientific typologies to define authentic agritourism and differentiate it from countryside tourism. *Tourism Management Perspectives*, 20, 251-264.

Tuckman, B. (1965). Developmental sequence in small groups. *Psychological Bulletin*, Volume 63, Number 6, Pages 384-99.1965. https://web.archive.org/web/20151129012409/http://openvce.net/sites/default/files/Tuckman1965DevelopmentalSequence.pdf

The School of Alpine Pastures: A Best Practice for Agritourism and Education in the Tyrolean Alps

Monica Nadegger
University of Innsbruck and MCI - The Entrepreneurial School (Austria)
monica.nadegger@uibk.ac.at

Birgit Bosio
MCI - The Entrepreneurial School (Austria)

Christoph Engl
MCI - The Entrepreneurial School (Austria)

Keywords: alpine tourism, alpine pasture, business plan, tourism education, traditional agricultural practices

Introduction

In alpine areas, both tourism and agriculture play crucial roles in contributing to the region's economy and cultural heritage. Small-scale farming on alpine pastures is essential in maintaining the typical alpine landscapes, which attract summer tourists to the region (Wanner et al., 2021). However, tensions arise due to competing demands from both sectors. While local farmers are primarily responsible for preserving the unique alpine pastures, tourism businesses do not always translate to profits for the farmers themselves. As Socher and Tschurtschenthaler (1994, p. 37) note, "farmers produce positive externalities that come at a cost but do not result in revenues." Thus, the needs of local farmers are often overlooked in tourism development (Wanner et al., 2021).

Moreover, the vulnerable alpine ecosystem requires cooperation between all involved sectors to ensure a pleasurable tourism experience and to guarantee locals' quality of life, especially in the face of climate change (Steiger et al., 2022). To address these challenges, the "Schule der Alm" (referred to herein as the School of Alpine Pastures) in the Vals Valley (Tyrol, Austria) provides an excellent example. This initiative combines tourism and agriculture from an educational perspective, honoring the traditions and needs of local agriculture while implementing successful tourism products. Tourists are given the opportunity to experience "alpine working days (or a week), in which they receive an explanation of the ecological and agricultural conditions as well as an introduction to typical pasture management" (Wanner et al., 2021, p. 8).

This article explores the implementation of the School of Alpine Pastures and highlights it as a best-practice example. The success of this initiative is due to the cooperation between tourism higher education institutions, traditional alpine agriculture, and a tourism experience. By combining these elements, the School of Alpine Pastures offers an integrated approach to sustainable tourism and agriculture, promoting both sectors' interests while preserving the unique alpine environment.

This article will be structured as follows: First, we will explain the history, vision, and challenges of the School of Alpine Pastures, and then we will highlight the necessity and implementation of tourism education to benefit this association. Lastly, we discuss the central learning for the non-profit association, tourism educators, and students.

School of Alpine Pastures - Roots, Visions, Challenges

The School of Alpine Pastures is an association of like-minded people wanting to preserve the local agricultural traditions of a non-tourism-intense region in Tyrol, Austria. The roots of the association lead back to Helga Hager. She started reviving the family business of goat farming and traditional alpine agriculture in the Vals Valley in Tyrol. However, the labor-intensive practices required her to think about a business model that would allow the traditional practice to thrive while

decreasing her workload. When her paths crossed with Werner Kräutler in 2016, they founded the non-profit association "School of Alpine Pastures" to bring this business idea to life (see Nadegger (2020) for further information).

The project aims at preserving both the traditional craftsmanship and alpine mountain meadows, which can only be mown by hand and are thus very labor- and time-intensive. The association's mission is:

- to educate volunteers and guests about traditional agricultural practices; and,
- to preserve alpine pastures and mountain meadows in the Vals Valley (Tyrol, Austria).

To do so, the School of Alpine Pastures organizes four three-day courses during summer to find and encourage volunteers for this work while, at the same time, educating them and raising awareness for the unique characteristics of these alpine landscapes and the people living in and from these landscapes. The three central building blocks of the School of Alpine Pastures include:

- **People:** Local instructors from nearby valleys form the backbone of the association. Local people like farmers, herb specialists, beekeepers, protected area officers, and the local tourism association share their knowledge and craft with the participants. As such, this project highlights the centrality of locally situated knowledge for tourism experiences and the preservation of heritage and local practices (Peters & Siller, 2013).
- **Practices:** The courses include an introduction to traditional alpine agriculture and landscapes: its peculiarities, information on local flora and fauna with a particular focus on mountain herbs and flowers, as well as old techniques like scything, building dry stone walls, special traditional fencing, and irrigation systems. This hands-on approach aims to pass on knowledge and to give volunteers another layer of exploring the alps, compared to conventional travel approaches.
- **Outcomes**: The outcomes are beneficial for the region and participants. First, voluntary work in the summer courses contributes to the maintenance of the alpine pasture and cultural landscape of the Alps. It sustains the protection against natural hazards, erosion, and scrub encroachment while simultaneously carrying on the legacy of alpine traditions and knowledge about these landscapes' historical and cultural heritage. It offers participants an authentic experience in the alpine ecosystem. Course fees, membership fees, and donations finance the association.

However, the non-profit association also faces challenges in its business endeavors. Internally, the succession of the association is very challenging, as many of the leading actors are retired or face other challenges in maintaining their involvement and workload. This generational change also impacts the continuation of activities and voluntary conservation of traditional agricultural knowledge and practices. Therefore, it is all the more essential to preserve the knowledge exchange via the project. In addition, external pressures in competitive markets with new providers, copycat patents, the competition with mass tourism, and the volatility of the economic situation due to the pandemic lead to growing pressure on the non-profit business model.

To tackle the problem, the School of Alpine Pastures association teamed up with students from the Master Program "Entrepreneurship & Tourism" at the MCI, a higher education institution in Innsbruck, Austria. In the course "Business Plan & Startup" of the program, students were introduced to the project and their problems. They were asked to develop innovative solutions to tackle these challenges and help develop the offer further. The course objective was to map the core elements of the existing product and develop a business plan for future succession and, thus, the continuation of the project.

Entrepreneurship is a crucial component of tourism business education. At MCI Tourism, entrepreneurial thinking and action form the basis for developing future tourism leaders. In entrepreneurship education, teaching methods are not limited to passive learning methods (Ahmed et al., 2018). They focus on active, situational, individual, and experiential learning techniques in

small groups. Entrepreneurship courses typically include experiential and experimental learning activities to provide students with knowledge and practical, hands-on experiences. The business plan helps to evaluate a product and business idea (Ripsas, 1998) by highlighting added value for the customer and its communication to diverse markets. As a holistic view of the business model, it combines the business strategy with the underlying processes and makes assumptions for future developments. The importance of entrepreneurship, the development of entrepreneurial impact on alpine regions, and the university education of future tourism managers are central in an industry dominated by small businesses (Siller & Zehrer, 2016; Weiermair et al., 2006).

Developing New Business Models for the School of Alpine Pastures

The course aimed to simulate a business foundation and evaluate diverse options for action. The outline of the course first provided the students with theoretical input on business plan development, followed by practical input from individual interviews with association members. In the first reflective observation phase, students explored various options in small groups. Their first ideas were translated into a concept including competitive and SWOT analysis and then further developed, discussed, and adapted. After finishing the project, the students could visit the School of Alpine Pastures and exchange ideas with association members. A significant advantage of this experience-based learning approach lies within the combination of theoretically possible options with the difficulties of active implementation.

The Outcomes of the Students' Concepts

Student ideas were diverse and included a comprehensive spectrum of further development for the School of Alpine Pastures. Students identified the core strengths of the project as the high credibility of the product and the people involved, the profound knowledge of practices and the region, the vast and robust network, and the "soft tourism" approach. The core values included authenticity, openness, the common good, and deceleration. Based on these values, the students' proposals ranged from introducing a loyalty pass and creating an online platform for volunteering, to analyzing necessary conditions for a tourism concept focused on deceleration and experiencing nature.

As a possible potential for improvement, the students suggested two main directions:

- the diversification of revenue sources, and
- the strong involvement of existing customers.

To diversify the income resources, the suggestions focused on expanding activities to a broader set of activities and side valleys to include various stakeholders and expand the mission to preserve these landscapes. To tap into the existing product and network's potential and generate new revenue opportunities, the students developed the idea of "goat sponsorships." With this sponsorship, the School of Alpine Pastures can generate extra income and establish long-term connections with customers, supporters, farm animals, and practices.

A group of students was tasked with finding, motivating, and retaining volunteers in the long term to increase the involvement of existing customers. One solution they proposed was to introduce a loyalty pass, which serves as a motivation for customers to return. Through the badge system, each participant's success is tracked, fostering their involvement and engagement with the association. Another group of students aimed to inspire nature-loving individuals to participate actively as volunteers in preserving the unique cultural landscape of the alpine pastures and mountain meadows in the Tyrolean Vals Valley in the coming years. To achieve this goal, they identified the School of Alpine Pastures as a platform for volunteering and developed an online platform to link former and future participants with active members. The platform provides information on new projects, supports better coordination of planning and implementation of activities, and connects new volunteers to the community. In addition, other students focused on the tourism concept with the themes of deceleration and experiencing nature. They analyzed necessary conditions such as

authentic overnight accommodations in neighboring huts and the offering of activities such as goat walks in greater detail.

In summary, the students proposed various ideas for increasing volunteer involvement and engagement in the association while promoting sustainable tourism and preserving the unique cultural landscape of the alpine pastures and mountain meadows in the Tyrolean Vals Valley. The resulting implications suggest expanding the existing project into new products and regional areas, improving the management of members, and diversifying the financial sources of income. A major lesson learned for students and the association was identifying and evaluating business ideas that preserve the existing cultural landscape while providing a stable financial income for the local community.

Concluding Thoughts

The project shows how agriculture, tourism, and education can actively work together to preserve local knowledge and crafts in the Alps and prevent the extinction of traditional agricultural practices by creating an innovative approach to combining tourism and agriculture. Students helped develop strategies for diversifying the existing product portfolio to guarantee this valuable project's future. We will now summarize the main benefits for the association and the students from these corporations between tourism education and local project initiatives.

For the association, the exchange and integration with the Master's program "Entrepreneurship & Tourism" generated three main benefits. First, the analysis of strengths and weaknesses with the SWOT analysis and the interviews provided an in-depth engagement with the (future) challenges of the association and a solid starting point for developing the business potential further. Second, the engagement and creative ideas of a group of students tapped into the potential of new activities for the educational scope of the association. Alpine mountain and meadow care, herbs, and bee courses and the subsequent generation of new offers for participants strengthened the association's position in a competitive market. Third, the proposed activities like the "Goat Sponsorship" and the diversification of services have already been successfully implemented and have had an immediate impact on the association's success.

For the students, the cooperation with the association offered significant benefits, especially after the challenging years of the pandemic, with little chance to interact with on-site tourism businesses and experiences. The hands-on project and the visit strengthened the social bond and team building among students after spending most of their education in distance learning. Second, the engagement with the educators of the School of Alpine Pastures set up an authentic possibility to learn more about the environment, culture, and practices of tourism in alpine regions. Third, the cooperation between agriculture, tourism, and education highlighted the benefits of in-depth exchange between different sectors. Integrating various stakeholders, their needs, and challenges gave students a glimpse of the complex work in destination management and tourism entrepreneurship. Moreover, the successful implementation of the suggested practices materializes the immediate benefits these corporations can have on small-scale, sustainable business practices beyond the classroom.

Authors' Note

A video version of the presentation at the International Workshop on Agritourism can be found here: https://youtu.be/XAQCGMaVCgQ

References

Ahmad, S. Z., Abu Bakar, A. R., & Ahmad, N. (2018). An evaluation of teaching methods of entrepreneurship in hospitality and tourism programs. *The International Journal of Marketing Education*, 16, 14-25.

Nadegger, M. (2020). *Almidylle und Tourismus? Ein Erfolgsbeispiel: Die "Schule der Alm" im Valsertal.* Tirol Tourism Research. https://www.ttr.tirol/innovation-und-inspiration/almidylle-und-tourismus-ein-erfolgsbeispielPeters, M., & Siller, H. J. (2014). Tourismusentwicklung im alpinen Lebensraum: Zur Erforschung der Rolle der Einheimischen. In K. Matzler, H. Pechlaner, & B. Renzl (Eds.), Strategie und Leadership (1st ed., pp. 175–190). Springer Fachmedien Wiesbaden GmbH.

Ripsas, S. (1998). Der Business Plan-Eine Einführung. In: G. Faltin (Eds.) Entrepreneurship: wie aus Ideen Unternehmen werden. (p. 141-151). Beck.

Siller, H. J., Zehrer, A., & Siller, H. (Eds.). (2016). Entrepreneurship und Tourismus: Unternehmerisches Denken und Erfolgskonzepte aus der Praxis (2., aktualisierte und erweiterte Auflage). Linde Verlag.

Socher, K., & Tschurtschenthaler, P. (1994). Tourism and agriculture in alpine regions. *The Tourist Review*, 49(3), 35–41. https://doi.org/10.1108/eb058163

Steiger, R., Knowles, N., Pöll, K., & Rutty, M. (2022). Impacts of climate change on mountain tourism: A review. *Journal of Sustainable Tourism*, 1–34. https://doi.org/10.1080/09669582.2022.2112204

Wanner, A., Pröbstl-Haider, U., & Feilhammer, M. (2021). The future of Alpine pastures – Agricultural or tourism development? Experiences from the German Alps. *Journal of Outdoor Recreation and Tourism*, 35, 1-11. https://doi.org/10.1016/j.jort.2021.100405

Weiermair, K., Siller, H. J., & Mössenlechner, C. (2006). Entrepreneurs and Entrepreneurship in Alpine Tourism. *Journal of Teaching in Travel & Tourism*, 6(2), 23–40. https://doi.org/10.1300/J172v06n02_03

Community-Based Sustainable Tourism in Practice: Co-Creating Experiential Learning Programs with a Range of Specialists in Crete, Greece

Nikki Rose
Crete's Culinary Sanctuaries Educational Network (Greece)
nikkirose@cookingincrete.com

Abstract

Community-Based Sustainable Tourism (CBST) can help protect Crete's distinctive cultural and natural heritage. By rekindling interest in cultural-natural heritage, CBST can help sustain communities, support small-scale organic farmers, and provide an extraordinary learning experience for visitors.

Kewords: agroecology, organic agriculture, study abroad, educational travel, sustainable tourism

Introduction: Crete's Culinary Sanctuaries Initiatives

I have a school without walls in Crete, Greece, called Crete's Culinary Sanctuaries Educational Network. I built it in 1997 to support residents working hard to protect their cultural and natural heritage and to provide opportunities for them to share their knowledge. Our teachers are archaeologists, agroecologists, organic farmers, vintners, chefs, botanists, mountaineers, artists, ecolodge owners, and many others. Together, we organize academic study tours and open seminars on Crete's culture, nature, and cuisine. We have hosted over 3,000 students, teachers, chefs, doctors, nutritionists, ecologists, sustainable tourism professionals, and journalists to date. Many of them have gone on to create inspiring initiatives in their own regions of the world.

Brief History of Crete

The isle of Crete is credited as the birthplace of the first civilization in Europe. The Minoan Civilization flourished from about 2600 BCE until 1150 BCE. The Minoans cultivated and exported olive oil, wine, herbs and textiles with ancient Egypt, Mesopotamia and other ancient civilizations in the region. Women played a powerful role in society. Respect of nature and her food sources played a central role in society. Artifacts depicting their beliefs indicate that Zeus was born in Crete, as there are several mountain sanctuaries in his honor (Detorakis, 1994; McDonnell, 2021**)**.

After the collapse of the Minoan civilization, a series of invasions, occupation, and traders through the ages shaped the cultural and natural heritage of Crete. Crete's strategic location at the crossroads of Europe, Africa, and Asia, and mild climate for agricultural production, made Crete an ideal target for occupation. Crete succeeded in joining Greece in 1913, after a series of rebellions against the Ottoman Empire and rejecting pressure by the great powers of Europe to consider autonomy. Crete's diverse ecosystems, terrain, music, literature and heroic resistance movements encompass the distinctive character of the isle and its people. Crete is known as "The Garden of Greece." Agriculture plays an integral role in everyday life.

Modern Crete

Modern Crete is blessed with a fascinating history spanning over four thousand years, natural beauty, and an abundance of healthy food choices, both wild and cultivated. There is much to discover and enjoy. There is also much to protect. Beyond the seaside tourist resorts and imposing limestone cliffs are people striving to preserve their heritage – ecologists, historians, sustainable organic farmers, artisan food producers, beekeepers, fishers, chefs, and many others. They are

striving to maintain what many of us have lost touch with – a connection between their community and nature. Their knowledge of sustainable living practices is beneficial to the global community.

Crete is also the center of the Mediterranean Diet studies. The renowned traditional healthy cuisine of Crete is not a phenomenon; it is a matter of respecting the land and the bounties it provides. Every great chef might admit that their creations begin with excellent ingredients. The foundation of the Mediterranean Diet concepts, inscribed by UNESCO in 2013 on the Representative List of the Intangible Cultural Heritage of Humanity, requiring protection, is fresh, local, organic food and a clean environment. Who is really protecting this "intangible heritage?" (Bonn-Muller, 2010; Miller, 2008; Rose, 2011; Simopoulos & Robinson, 1999).

Threats to Maintaining Healthy Traditional Foodways: Mass Tourism and Globalization

Tourism and agriculture are primary industries in Crete. The majority of tourism planners support generic services, such as large beach resorts and imported continental food. Both industries compete for increasingly scarce natural resources.

In 2019, Crete attracted over 5 million tourists (ELSTAT 2019). Our population is approximately 650,000 people. That creates massive pressure on local well-being and our environment. Mass tourism has been expanding along Crete's coastal regions for decades. Industrial agriculture and imported junk food are prevalent. This has nothing to do with sustaining our heritage, health, or protection of finite natural resources. It is a warning signal across the globe (Andriotis, 2011; Becker, 2013; Briassoulis, 2003; Christ, 2012).

Awareness Leading to Action

When I first visited Crete 26 years ago, I was excited to learn about my ancestor's culture and cuisine. As a Greek-American child and later a pro chef, I cherished every bottle of olive or honey we could acquire from our family's homeland. I imagined that excellent fresh and local food would be everywhere. But what I witnessed instead was a society in transition. People were encouraged to give up their traditional trades, including time-honored small-scale organic farming practices, and follow "a new model."

Villages that had been inhabited for thousands of years were being transformed into tourism amusement parks, leaving no trace of local life or nature behind. Traditional restaurants and

bakeries were replaced by pizza joints. Monoculture and chemical agriculture were the "new model" to follow, along with package-mass tourism.

I knew that not everyone was following this new model. But they were not easy to find in these mountains far away from over-development. I began my search to meet them to learn about their crucial work, in the hopes that they could share their knowledge with us. My mission was to work with communities to implement programs that work for them - to rekindle resident and visitor interest in our culture, nature, and real food. Responsible Travel = Respect, Value, Benefits. We can all benefit from these initiatives.

I was writing, teaching, and speaking about these issues long before I moved to Crete. I organized large events in Washington DC and San Francisco with Certified Master Chefs and organic farmers to celebrate culinary artists and address the problems of industrial food. What I witnessed in Crete was the destructive wave of globalization we were already experiencing in the United States for decades. In a place like Crete with thousands of years of culinary history, globalization seemed to be an avoidable tragedy. My solution was to create awareness and alternatives.

After years of exploring Crete, I wrote many articles, including a widely read piece for my alma mater, the Culinary Institute of America, in *Mise En Place Magazine*: "What's the Mediterranean Diet...and Who Is on It Anyway?" (Rose, 2006). My book, *Crete: The Roots of the Mediterranean Diet* (2011), covers these topics, along with articles in *The Destination Stewardship Report* (2020), the *Routledge Handbook on Sustainable Food and Gastronomy* (2015), as well as speaking at international conferences, major media outlets and podcasts. This outreach creates awareness of alternative

programs like Crete's Culinary Sanctuaries Educational Network (CCS) around the world. (Rose, 2000, 2007, 2011, 2014, 2019, 2020; Agroecology World Podcast, 2021; International Institute for Peace through Tourism, 2021).

Crete's Culinary Sanctuaries Strategies: Collaboration and Curriculum Development

Many people around the world are striving to "return to the land," while many people in rural Crete have never left the land. But modern society beckons and rural communities are abandoned or developed. CCS introduces visitors/students to residents like Yiorgos, who maintains his small family farm much like his ancestors, using sustainable organic methods. He refuses to buy food from outside sources and even collects salt from a rocky beach nearby. "The chicken I eat must first dine at my house," he says (Y. Spyridakis, personal communication, July 1999).

Since most of us are not farmers, we do not know what to expect from an agritourism experience. Agritourism is meant to support farmers and their communities. In the case of organic agriculture, it also helps to protect our health and environment. If done right, agritourism can make a difference as part of the bigger picture of heritage preservation. Farming is not a "9 to 5" position, but a lifelong commitment. While it is a lovely notion if farmers or fishers could take the day off to entertain us, we are asking for a lot. The time they devote to sharing their knowledge with us is a rare privilege.

The fact that the place we call home has interesting cultural and natural heritage does not mean that communities should open up the area to visitors. Before residents invite tourists to their villages and farms, they need to consider how they will invest, present, and sustain their programs and protect their communities from exploitation and "overtourism." They cannot leave these decisions up to public agencies or tour operators.

It is the sustainable tourism practitioner's job to develop valuable programs and create awareness of that value, which will be offered at a fair price. This is a partnership between providers and beneficiaries. Residents are investing their time and money to share valuable knowledge. Creating an action-packed series of cultural activities for visitors requires the participation of many local people. They need to be compensated well for their work. Thus, all beneficiaries – the public and private sectors, the media, and travelers – need to be aware of the value of these programs.

Results: Sharing the Benefits of Community-Based Sustainable Tourism

By tailoring small-group seminars in harmony with the seasons, cultural and environmental impacts, availability of resident-teachers, and interests of attendees, CCS has the advantage of flexibility. These intensive programs can only be organized a few times a year. In consideration of our collective and individual projects, CCS seminars serve a dual purpose – to support local heritage preservation work and to share those benefits with visitors. We link many specialists in our communities with travelers through:

- our educational programs on Crete's history, nature, organic agriculture, and cuisine;
- staying in locally owned lodges and eco-lodges in small villages, thereby supporting other small businesses in the area;
- providing free training and referral services to current and future CCS Network teachers;
- global promotion of projects via our articles, videos, conference participation, outreach; and,
- sharing seminar revenues equitably (in contrast with standard mass tourism practices).

Many travelers benefit from community-based preservation work, anticipating "authentic experiences," such as local life-culture, cuisine, architecture, or nature. Communities must greatly benefit from their heritage-preservation work – not just for travelers' entertainment but to maintain their quality of life as they choose, rather than altering it to suit an outsider's vision of foreign travel. (Adams, 2008; Blangy, 2006; Christ, 2012; Rose, 2015; Frederick, 2017).

Over the years, our CCS Network has grown from a few teachers to over 50. We invite residents from varied backgrounds to teach in our programs. Some have expanded their work, invested in

tasting rooms, visitor centers, exports, or creating programs specific to their field. CCS acts as a gateway for communities to expand or create their own programs. By collaborating with communities, visitor learning experiences stretch beyond a single region or farm. (IFOAM Organics Europe, 2021).

We work to inspire young organic farmers and try to find ways for them to make a good living, which is crucial. Future generations depend on the decisions we make today. Creating and implementing experiential learning programs is not an easy job. It requires a lot of dedication and skills in many different fields – curriculum design, communications, logistics, budgeting and much more. Careful consideration, strong alliances, and outreach are required to sustain these programs for generations to come.

Seed Sovereignty

The Food and Agriculture Organization of the United Nations (FAO), estimates that 75 percent of global crop diversity was lost between 1900 and 2000. (FAO, 2010; FAO, 2019). For thousands of years, farmers saved and shared their seeds. Today, most seed production is controlled by just a few companies. This corporate control over seeds diminishes farmers' ability to cultivate diverse organic crops inexpensively with local seeds that have adapted to climate conditions. It detrimentally impacts their livelihood and well-being. It also diminishes the community's access to traditional cuisine and beneficial nutrition. Seed sovereignty is the farmer's right to breed and exchange diverse open-source seeds which can be saved and which are not patented, genetically modified, owned or controlled by emerging seed giants. (Agroecology Europe, 2023; La Via Campesina, 2023; Patel, 2012).

There are initiatives creating awareness of unsustainable chemical agriculture and sharing solutions, including La Via Campesina, Peliti.gr, Navdanya, Seed Freedom.info, International Federation of Organic Farming Movements, Agroecology Europe, Organic Seed Alliance, The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Crete's Culinary Sanctuaries works with heirloom seed savers in Greece and collaborates with some of these organizations on outreach. Our forthcoming documentary, *Heritage Protectors,* is a continuation of our work. It is a teaching tool to share knowledge and solutions with the global community on issues that impact all of us. What's happening in Crete is a global problem requiring many people to work together on solutions.

Organic Food Consumption on the Rise: Is the Tourism Industry Ready?

According to the World of Organic Agriculture Report (Willer et al., 2023), global retail sales of organic products were over 124.8 billion Euros in 2021. It is likely these consumers are seeking organic products when traveling. Currently in Crete, there are over a dozen organic wineries and olive oil mills with visitor centers. That number continues to climb as more farmers convert to organic production. There are also ecolodges with working organic farms, and vegetable and medicinal herb farms. Restaurateurs that are also farmers is customary (farm-to-table). As Crete's history of olive oil and wine production spans over four millennia, there are also historical aspects to visitor experiences. Communities that are prepared have an advantage - to help visitors discover their cultural-culinary heritage while supporting local providers for generations to come.

Conclusion

Community-Based Sustainable Tourism/Responsible Travel provides a wide range of benefits to communities and visitors (Center for Responsible Travel, 2017; International Center for Responsible Tourism, 2014; UNEP, 2013). It provides an opportunity for entrepreneurs and travelers to be active participants in sustainable development programs. It requires direct collaboration with preservationists and tangible returns on their investments. CBST can help preserve our world's sanctuaries and even reverse some damage caused by unsustainable development. It can build meaningful careers for future generations and protect the very reason why people visit countries like Greece – to discover her significant cultural legacy and natural beauty.

References

Adams, B. (2008). *The new agritourism: Hosting community & tourists on your farm,* California: New World Publishing.

Agroecology World. (2021, August 2). Episode 14, Agroecology World: Crete, Greece [Audio podcast]. https://podcasters.spotify.com/pod/show/robert-kluson/episodes/Episode-14_Agroecology-World_Crete--Greece-e144ffh

Andriotis, K. (2011). A comparative study of visitors to urban, coastal and rural areas - Evidence from the Island of Crete. *European Journal of Tourism Research*, 4(2): 93-108.

Blangy, S. (2006) *Le Guide Des Destinations Indigènes,* INDIGENE EDITIONS, Collection Indigène Esprit.

Bonn-Miller, E. (2010). The joy of Cretan cooking. *Archaeological Institute of America Magazine*.

Briassoulis, H. (2003). Crete: Endowed by nature, privileged by geography, threatened by tourism? *Journal of Sustainable Tourism*, *11*(2–3), 97–115. https://doi.org/10.1080/09669580308667198

Becker, E. (2013). *Overbooked: The exploding business of travel and tourism.* New York: Simon & Schuster.

Christ, C. (2012). Out of the chaos. *National Geographic Traveler*, https://www.nationalgeographic.com/travel/article/greece

Center for Responsible Travel. (2017). Trends and Statistics 2017. https://www.responsibletravel.org/wp-content/uploads/sites/213/2021/03/trends-and-statistics-2017.pdf

Crete's Culinary Sanctuaries (forthcoming). *Heritage Protectors*. Documentary in post-production. https://www.cookingincrete.com/documentary.html

Detorakis, T. E. (1994). *History of Crete*. Iraklion: Detorakis.

ELSTAT. (2019). Hellenic Statistical Authority. https://www.statistics.gr/en/statistics/-/publication/STO12/2019

Food and Agriculture Organization [FAO] (2010). The Second Report on the State of the World's Plant Genetic Resources for Food and Agriculture. http://www.fao.org/3/i1500e/i1500e00.htm

FAO (2019). The state of the world's biodiversity for food and agriculture, in J. Bélanger & D. Pilling (Eds.) FAO Commission on Genetic Resources for Food and Agriculture Assessments. Rome. 572 pp. http://www.fao.org/3/CA3129EN/CA3129EN.pdf

Frederick, B. (2017). Crete cook cultivates sustainable sanctuaries. Interview with Nikki Rose, in *Food Tank*. https://foodtank.com/news/2017/04/crete-cook-cultivates-sustainable-sanctuaries/

IFOAM Organics Europe. (2021). Crete's culinary sanctuaries, leading by example. https://euorganic2030.bio/initiatives/improve-inspire-deliver/cretes-culinary-sanctuaries-educational-network/

International Institute for Peace through Tourism, Family Meeting. (2021). Nikki Rose presentation at 1:52:16. https://peacetourism.org/peace-through-tourism-iipt-family-meeting/

International Center for Responsible Tourism. (2014). *Progress in Tourism*.

La Via Campesina. (2023). Building shared knowledge on peasant seeds (training modules). https://viacampesina.org/en/tag/lvc-seed-modules/

McDonnell, G. (2021, April 08). Beauty in the bronze age - Minoan & Mycenaean fashion. World History Encyclopedia. Retrieved from https://www.worldhistory.org/article/1723

Miller, D. (2008). *The jungle effect: The healthiest diets from around the world – Why they work and how to make them work for you,* New York: HarperCollins

Patel, R. (2012). *Stuffed and starved: The hidden battle for the world food system,* New York: Melville House

Rose, N. (2006). What's the Mediterranean Diet? *Mise en Place Magazine*, Culinary Institute of America, No. 37.

Rose, N. (2007). Interview in ECOCLUB Magazine, http://ecoclub.com/news/093/interview2.html

Rose, N. (2011). *Crete: The roots of the Mediterranean Diet,* San Francisco: Blurb Books.

Rose, N. (2014). Development endangers Med Diet foods. National Geographic Center for Sustainable Destinations. http://destinationcenter.org/2014/02/development-endangers-med-diet-foods

Rose, N. (2015) Responsible travel as a means to preserve cultural and natural heritage. In P. Sloan, W. Legrand, & C. Hindly (Eds) *The Routledge Handbook of Sustainable Food and Gastronomy*.

Rose, N. (2020). Crete needs to restore its gastronomic heritage. Destination Stewardship Report and Yearbook, https://destinationcenter.org/dsr-introduction/destination-stewardship-report-inaugural-issue/crete-needs-to-restore-its-gastronomic-heritage/

Simopoulos, A., & Robinson, J. (1999). *The Omega diet: The lifesaving nutritional program based on the diet of the Island of Crete.* HarperCollins.

United Nations Environment Programme. (2013). Green Economy Report, Tourism chapter http://www.unep.org/greeneconomy/Portals/88/GETReport/pdf/Chapitre%207%20Tourism.pdf

UNESCO, Mediterranean Diet, Inscribed in 2013 (8.COM) on the Representative List of the Intangible Cultural Heritage of Humanity https://mediterraneandietunesco.org/

Wezel, A., Grard, B., & Gkisakis. V. (Eds) (2023). *Agroecology in Europe*. Country Reports Series, Vol. 1, ISARA, Lyon, France; Agroecology Europe, Corbais, Belgium. https://www.agroecology-europe.org/wp-content/uploads/2023/03/Mapping-book_1st-volume_FV.pdf

Willer, H., Schlatter, B., & Trávníček, J. (Eds.) (2023). *The world of organic agriculture 2023: Statistics and emerging trends*. Research Institute of Organic Agriculture FiBL, Frick, and IFOAM – Organics International, Bonn. Online Version 2 of February 23, 2023.

GLOBAL AGRITOURISM NETWORK

The sharing, learning, and community building at the International Workshop on Agritourism inspired agritourism scholars and practitioners to explore options for developing an international network. The Global Agritourism Network (GAN) was officially launched through a virtual meeting on April 11, 2023. This network of agritourism stakeholders (farmers, ranchers, and other agricultural producers; researchers; educators; community planners; government entities; agricultural service providers; development organizations; tour operators; hospitality operators; event planners; and others) aims to enhance the capacity of agritourism worldwide.

We welcome you to join this growing network of agritourism professionals!

Please fill out the form here if you would like to be a part of the Global Agritourism Network.