

Agro-tourism as an Extension Strategy to Promote Agriculture in the Northern Region of Thailand

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ABSTRACT. This study contributes to the body of knowledge on agro-tourism by highlighting how it promotes agriculture and local culture among visitors in the northern region of Thailand. A case study research design was used on two government-assisted and two independent agro-tourism sites selected from a list of best performing agro-tourism sites ranked by the Department of Agricultural Extension and Tourism Authority of Thailand. On-site data gathering was conducted from January to February 2020. Site owners were interviewed about their strategies in promoting agricultural technology, practices, and local culture. Visitors were likewise interviewed regarding their chosen activities and satisfaction with these activities. Results show that the agri-focus in all sites was organic farming, consistent with the campaign of the Tourism of Thailand on Green Travel. Each site has a showcase specialty crop such as grapes, passion fruit, tea, and vegetables. Lecture, demonstration, training, and participation in agricultural activities were among the strategies implemented to promote agricultural practices. Cooking/food preparation and decoration, selling, outfitting, and photography were among the common methods in showcasing the site's culture and traditions. The possibilities of agro-tourism as a learning site for component technologies, agriculture as a business venture and way of life, and local culture need to be maximized by agricultural extension program as agro-tourism proves compatible with the elements of experiential learning.

Keywords: *Agricultural tourism, agricultural practices, local culture, teaching learning strategies, Thailand*

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INTRODUCTION

Agriculture remains to be an important sector for Thailand, employing 30% of the total labor force in the country. However, many Thai farmers earn below the poverty line and a third of farming households incur debts higher than their monthly earnings (United Nations Thailand, 2020). Hence, Thailand has pursued agro-tourism as a strategy to increase the income of the farmers and to promote agriculture and local economy. In Thailand, agro-tourism is referred to as “green tourism” (Ministry of Tourism and Sports of Thailand, 2017, p. 4) where visitors can explore various agricultural products, traditions, and landscapes while enjoying environment-friendly locations.

The Tourism Authority of Thailand (TAT) looks at agro-tourism as a venue where various stakeholders experience first-hand agriculture and rural life as a way to promote and appreciate local culture and embrace the concept of sustainable agricultural production processes. Hamzah et al. (2012) describes agro-tourism in Malaysia as a niche of tourism that “maximizes the use of farm setting and environment with local hospitality to increase income and welfare of the farming population.” Both the Malaysian and Thailand definitions add the importance of maintaining the environmental integrity of the area, with Thailand equating agro-tourism with green travel and emphasizing sustainable agriculture systems in their agro-tourism areas (TAT, 2013).

Agro-tourism was launched as a government program by the Department of Agricultural Extension (DOAE) and TAT in 1999 with funding of USD 4 million (Srisomyong, 2010, as cited in Choenkwan et al., 2016). The DOAE promotes agro-tourism through farm tours, farm seminars, and agricultural events and festivals. The Department supports agro-tourism through technical training of the owners and staff members, marketing of products, and the planning of site development. Meanwhile, the TAT promotes agro-tourism by advertising the various sites in print and tri-media and assisting the agro-tourism sector to form linkages with other tourist attractions.

Agro-tourism has been adopted as a development strategy of various governments to promote agriculture and rural development (Kurnianto et al., 2013; Magdato, 2015; Chatterjee & Prasad, 2019; Stanovčić et al., 2018), such as in the Philippines through Republic Act No. 10816 or “An Act Providing for the Development and Promotion of Farm Tourism in the Philippines” and in Thailand through the Tourism Authority of Thailand Act B.E. 2522.

Yang et al. (2010) enumerated three methods that enhanced the development of agro-tourism in Xiedao Green Resort in Beijing, China, namely: combining agricultural production and tourism services; upgrading the environment (e.g., repair and rehabilitation of an area) and recycling and re-use of resources; and developing and promoting rural and agricultural culture. Through these methods, more agro-tourism products were produced and better services were rendered. These services were further adopted and merged with modern urban tourism programs based on the demands of the urban market. The findings of Homnan (2004) offer additional insights by highlighting key elements in a potential agro-tourism site. These are access convenience, attractiveness of the site, tourist-holding capacity, tourism area management, and local people participation.

Pandey and Pandey (2011) showed that the presence of a nearby world heritage site such as Bhaktapur in Nepal can help package an agro-tourism site by highlighting traditional agricultural activities, for instance. A related point was raised by Joshi and Bhujbal (2012) on innovative products from the rural markets. Promoting these products can bring agro-tourism in its full potential.

Ibrahim and Razzaq (2010) noted that rural communities in Malaysia developed rural tourism primarily through the homestay program which is aligned with the country's national plan. The homestay program provided benefits such as earning from hiring and selling local products, which can be distributed in the community, thus improving the local economy.

While studies on agro-tourism in Asia have increased over the past decades, researchers on agro-tourism in European countries started much earlier (Wicks & Merrett, 2003). Presently, it is being embraced by small rural communities as they recognize the benefits of sustainable development generated by similar forms of nature travels (Na Songkhla & Somboonsuke, 2011). Agro-tourism is seen as a strategy to promote regional development and conserve diversity (Deutsche Gesellschaft für Technische Zusammenarbeit, 2005).

Known for its relatively cool climate, the northern region of Thailand is home to some of the major tourist destinations in the country. It has numerous notable agro-tourism sites that can serve as models to improve the agro-tourism programs in other regions of the country. However, there is a dearth of literatures that documents the agro-tourism practices and how these promote agricultural technologies and local culture especially in the northern region of Thailand.

Based on literature from other countries, studies on agro-tourism usually focus on assessing its contribution to rural development or on the environmental management of agro-tourism. These studies normally rely on previous studies, which did not include interviews with agro-tourism site owners (Stanovčić et al., 2018; Kurnianto et al., 2013). On the other hand, Magdato (2015), interviewed owners of agro-tourism sites; however, he focused on the knowledge management practices and not on the actual strategies implemented to promote agricultural practices and local culture.

This study aims to contribute to the body of knowledge on agro-tourism by investigating the strategies of agro-tourism to promote agricultural practices and local culture particularly in the context of a country that has been favored as a tourist destination.

Development of Agro-tourism

Agro-tourism represents two industries referring to agriculture and tourism that encourage appreciation of farm life and rural landscapes. Agro-tourism capitalizes on the increased interest to travel as a way to revitalize rural communities, improve appreciation of rural life and agriculture, and thereby increase the income of farmers and the whole rural community through various enterprise development associated with the influx of visitors (Mansor et al., 2015). In Austria for example, it is estimated that 25% of farms had been receiving guests for a century (Hummelbrunner & Miglbauer, 1994 in Busby & Rendle, 2000).

As more and more countries promote agro-tourism, research interest on this continue to grow. Frater (1983) in Busby and Rendle (2000) stated that the practice of accommodating tourists in the farm is not new and may have existed for over a hundred years ago in Northern America. The practice intensified in the early 1980s due to the decline in farm income, which led small farmers to offer a variety of other services in response to the intensification and consolidation of other farms.

However, despite the increase in research, the theoretical body of knowledge on agro-tourism remains undeveloped partly because of the competing terms and definitions referring to agro-tourism. The term is used interchangeably with agritourism or agri-tourism and with farm tourism or farm-based tourism, and overlaps with rural tourism. In particular, Stanovčić et al. (2018) acknowledged that the terms “agro-tourism (agri-tourism), farm tourism, farm-based tourism, and rural tourism are often used interchangeably” (p. 754). In their article, they adopted the definition of Fahmi et al. (2013) to define agro-tourism as

“the set of tourism-related activities relying on agriculture, carried out in rural areas either in groups or individually” (p. 109). The authors imply that agro-tourism (agrotourism) is the same with agri-tourism (agritourism).

The term agritourism was mainstreamed in Europe when the Italian National Legal Framework for Agritourism in 1985 encouraged Italian farmers to diversify income to maintain farming by accommodating overnight stays (Chase et al., 2018). Agritourism is exclusively defined as “tourism activities exercised by farmers through the exploitation of their own farm according to logic of “connection”, “complementarity” and “non-prevalence” (Ammirato & Felicetti, 2013, p. 483). In Europe, the practice of welcoming tourists to farms have become popular and had led to production of specific food and drinks which has spawned labels such as “designation of origin” (PDO), “protected geographical indication” (PGI), and “traditional specialties guaranteed” (TSG) region of origin, which imply that these products follow specific protocols (Chase et al., 2018).

Phillip et al. (2010) reviewed dominant definitions of agro-tourism from three authors, and the dominant themes revolved around the main setting (i.e., non-urban areas), scale (i.e., small-scale or family or cooperative), main source of employment (i.e., primary or secondary sector), and the activities (i.e., provision of touristic opportunities).

The review shows the fluidity of the terms associated with farming and tourism with agro-tourism, agri-tourism, and farm tourism as the dominant terms to describe the nexus of farm operations with that of tourism. For the purposes of this study, agro-tourism, which is the term used in Thailand, is adopted. The definitions normally include the following elements: multiple roles of agro-tourism (e.g., agricultural, economic, social, and environmental), key actors (e.g., farmer, visitors, and tourists), and plurality of activities (e.g., accommodation, activities, and attraction). In this study, agro-tourism is defined as an enterprise that combines various agriculture and agriculture-based activities with tourism-related activities and services intended to benefit the farmer, the tourist, and the community members.

Strategies of Agro-tourism in Promoting Agriculture and Local Culture

Agro-tourism is a form of tourism that aims to make learning about agriculture enjoyable (Mahaliyanaarachchi, 2015). It showcases knowledge and technologies about various aspects of agriculture such as herb production, orchard management, aquatic and animal raising,

through hands-on activities coupled with other activities that encourage taking care of the environment such as trekking, fishing, horseback riding, and eating freshly cooked viands with ingredients coming from the farm.

Specific to Thailand, numerous insights on agro-tourism management are available in the literature. Wongsuwan et al. (2007) enumerated the following strategies in their study in the southern and northeastern regions of Thailand: each place relied on themselves and the available local resources in terms of equipment, personnel, and other essential aspects of their operations; there was tourism partnership in nearby tourist attractions; and community members also collaborated in planning a tour for tourists, which encouraged everyone to take part in doing activities together, exchanging opinions, and helping each other; and public relations about the involved places, educational media, seminar, or accommodation were also provided.

Several other insights are mentioned in the study of Na Songkhla and Somboonsuk (2011) in the Changklang agro-tourism site in Nakornsritammarat province. The authors found that the site implemented various agricultural activities (e.g., beekeeping, mushroom farming, organic farming) in the forms of demonstration, products distribution, and agribusiness prospects (e.g., agricultural products processing). They managed the site through conservation of natural resources and expansion of those agricultural activities. Utilizing local agricultural resources as the primary way to improve its agro-tourism practices was a key to the site's success.

Objectives of the Study

Agro-tourism studies mostly focused on describing the activities in agro-tourism sites (Yang et al., 2010; Ibrahim & Razzaq, 2010; Pandey & Pandey, 2011; Joshi & Bhujbal, 2012) and on assessing the contribution of agro-tourism to rural development or environmental management based on desk review (Stanovčić et al., 2018; Kurnianto et al., 2013). The cases in the desk review also showed that the data came from the analysis of official statistics, and the key informants were mostly government officials, not the owners of the agro-tourism sites. Thus, this study aimed to add to the body of knowledge on agro-tourism by investigating how agro-tourism owners promote agriculture and local culture in their site. Specifically, the study aimed to: 1) describe the development of selected sites into agro-tourism sites; 2) discuss the sites' strategies in promoting agricultural technologies and practices and local culture; and 3) explain why tourists visit the agro-tourism sites.

METHODOLOGY

This research applied the exploratory case study, which investigates using questions such as “what and how,” analyzes a problem in a real situation, and uses information from that situation to come up with an analysis (Seaton & Schwier, 2014; Bennett, 2015). It sought to understand how agro-tourism owners promote agriculture and local culture by describing their teaching-learning strategies and determining whether the visitors actually participated and were satisfied with what the agro-tourism sites offer.

Four major agro-tourism sites in the northern region of Thailand were selected for the study (Figure 1). These sites have different agriculture focus and can be classified as government-supported or privately managed agro-tourism (Table 1). They were adjudged by the TAT as best performing agro-tourism sites for their exemplary performance in management, conservation of natural resources, pollution control, landscape and structure, economic and social services, and marketing.

Secondary data were gathered from the DOAE, TAT, and agro-tourism sites' website. A semi-structured questionnaire about the activities and facilities offered was used to interview the owners of the agro-tourism sites. Agricultural extension officers directly involved in the development of the agro-tourism sites were also interviewed. Moreover, a total of 53 visitor-interviewees were selected through convenience sampling during the researcher's visit in the sites. The visitors, Thai and non-Thai speakers, were first asked about their willingness to be interviewed and given a questionnaire adopted from Tew and Barbieri (2012). As the questions were directed to visitors who were there primarily to only enjoy the sites, a major limitation was the need to keep these as short as possible.

Data gathering was conducted from January to February 2020. Interviews were conducted among the visitors for two days in government-supported sites and one day for the privately managed sites. More visitors were interviewed in the larger privately managed sites (43 respondents) as compared to the smaller government-supported sites (10 respondents).

Because of the pandemic, the interviews with tourists and the site observations were shortened. All interviews and site observations were conducted by the main author. Descriptive statistics was used to summarize the data.

Figure 1
Location of agro-tourism sites covered by the study (Google Maps, n.d.)

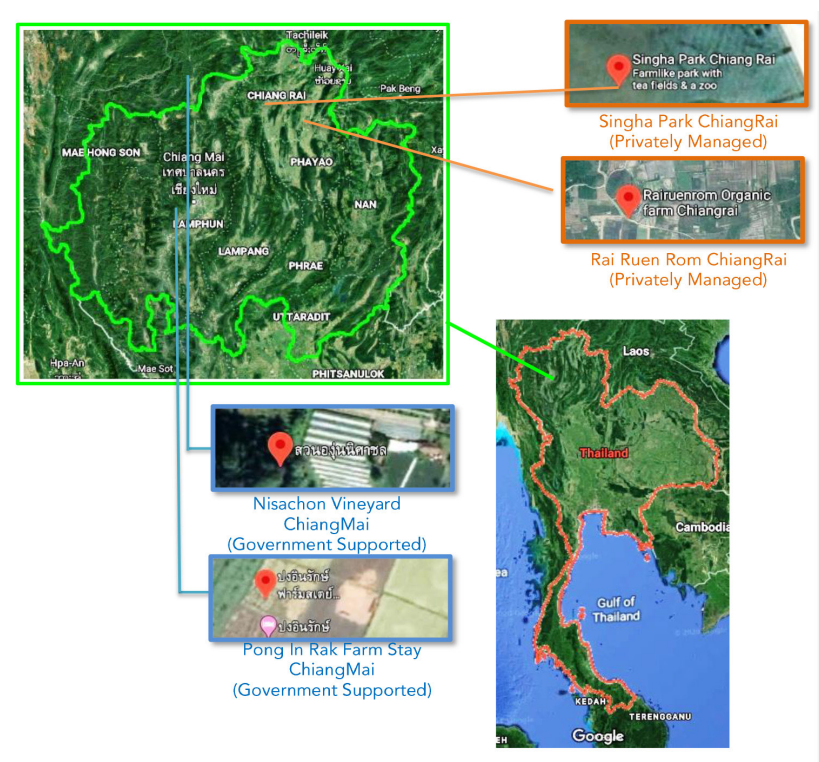


Table 1
Agro-tourism sites in the northern region of Thailand covered by the study

Agro-tourism site	Location (province)	Featured agricultural technology
Government-supported		
Pong In Rak Farm	Chiang Mai	Organic farming - passion fruit
Nisachon Vineyard	Chiang Mai	Organic farming - grape
Privately managed		
Rai Ruen Rom	Chiang Rai	Organic farming - vegetables
Singha Park	Chiang Rai	Organic farming - tea

RESULTS AND DISCUSSION

Development of Selected Agro-Tourism Sites

Government-supported agro-tourism sites are registered as agricultural tourist attractions under the DOAE. These are community enterprises that have agricultural activities and outstanding agricultural innovations that have been developed to become a tourist destination. On the other hand, privately owned tourist destinations are registered under the Department of Tourism (DOT).

Both privately managed and government-supported sites have to meet the same criteria to be recognized as an agro-tourism site. From the DOT guidelines, the following are the prescribed qualities of an agro-tourism site: safe for visitors, has convenient transportation, near the main attraction or nature tourism, and the natural resources and environment are being jointly conserved by communities and visitors.

Based on DOAE ranking, the two government-supported agro-tourism sites are Pong In Rak Farm Stay and Nisachon Vineyard, both of which scored above 80 points, an excellent rating for tourist destinations. For privately managed agro-tourism sites, Rai Ruen Rom and Singha Park both have outstanding ratings based on the DOT guidelines.

Pong In Rak Farm Stay. This 1200-m² site (Figure 2), situated in Ban Pong sub-district of Hang Dong in Chiang Mai province, is owned by an agricultural entrepreneur, Nujjarin Pimpa. Her family planted various crops such as passion fruit, rice, spring onion, “*Cha-om*” or climbing wattle. They decided to shift to organic farming when one of their relatives got extremely sick, and they suspected that the illness was due to chemical use in their farm. Inspired by the campaign of TAT and capitalizing on the natural setting of the farm, the owners then embarked on agro-tourism.

Figure 2
Pong In Rak Farm Stay in Chiang Mai province



The highlights of this site are the organic passion fruit and “tupna” (signature tents). Interestingly, visitors can see the Mt. Doi Kham shaped like a Buddha lying down from Huean Long Kaow (service point), an area outside of Pong In Rak Farm Stay.

Nisachon Vineyard. In Muang Na sub-district of Chiang Dao district in Chiang Mai province, Nisachon Apaiwong and her family started farming in 1991 in their 3.04-ha land. Their main crops were lychee and maize. At that time, they also raised livestock such as pigs and chickens. Initially, they used both bio- and chemical fertilizers, but after some time, they reduced the use of chemicals along the lychee plantation area and began to utilize compost and manure to improve the soil quality. In 2003, they shifted to organic agriculture. With assistance from the DOAE extensionists, they divided the whole area into four parts – ponds, rice field, fruits and vegetables areas, and residence. Additional ponds were built as water reservoirs. Some lychee trees were cut down in order to cultivate grapes. In 2014, they adopted integrated agriculture and conducted agro-tourism (Figure 3). Later, they were able to establish a learning center for agro-tourism and a learning center network to increase the efficiency of agricultural production (integrated agriculture).

Figure 3
Nisachon Vineyard in Chiang Mai province



Rai Ruen Rom. Siriwimol Kitapanich, a Communication Arts graduate from the University of Melbourne in Australia and heiress of a major automotive parts manufacturing business, established this agro-tourism site in 2014 in Ngio sub-district, Thoeng district, Chiang Rai province (Figure 4). Despite her lack of experience in agriculture, she took charge of managing the operations of their 32-ha land that is now recognized as a Center for Creative and Sustainable Agriculture. Her goal in founding Rai Ruen Rom was to improve the quality of life of people and communities through organic farming.

Figure 4
Rai Ruen Rom in Chiang Rai province



Unexpectedly, during that time, she had an opportunity to study about organic farming in the 1 Rai 1 hundred thousand Baht project of the Thai Chamber of Commerce (Kongkaew, 2015). This project allowed the participants to learn the basics of organic farming with the help of senior farmers using one plot divided into rice planting, aquaculture, vegetable cultivation, and chicken and duck raising. The project aimed to enable the participants to manage a small plot of land to generate a hundred thousand Baht. Subsequently, she developed a farm café by using all their agricultural products; farm stay for accommodating visitors; and a learning center about solar cell, bio-fertilizer, and integrated agriculture.

Singha Park. Singha Park, managed by Boon Rawd Brewery, is located in Mae Korn sub-district of Mueang district, Chiang Rai province. Established on 13 March 1993, this large agro-tourism site aims to develop agricultural products, focusing on integrated agriculture and emphasizing the balance of nature to be able to live sustainably with the community.

Barley, a foreign species, was the first crop grown in this field. With an area of more than 1,376 ha, as well as the abundance of natural water sources in 50 joint farms, the owners increased the variety of products by planting oolong tea, jujube, giant sweet carambola, strawberry, mulberry, melon, and economic plants such as rubber tree and vegetables. These agricultural products are distributed in and out of the country.

Singha Park was launched on 2 December 2011 as an ecotourism attraction in the form of natural agriculture. It aims to become a learning center for tea making, an avenue for jobs, and a source of income for the people in the community. This agro-tourism site is not only a tourist attraction with a beautiful scenery but also a place for exercise and relaxation. Currently, Singha Park can cater to more than 10,000 visitors a day (Figure 5).

Figure 5
Singha Park in Chiang Rai province



Strategies in Promoting Agriculture Technologies and Practices

Pong In Rak Farm Stay. In Pong In Rak Farm, passion fruit is the signature crop. Upon entering the farm, the plantation area with organic passion fruits is the most recognizable fixed attraction. High-quality fruits are sold inside the farm while those below standard are processed into jam and/or juice.

Aside from organic passion fruits, the site is also into organic rice and vegetables. With the assistance of Chiang Mai Rajabhat University and DOAE, organic farming is taught through initial lectures, demonstration of practices, and actual engagement of the visitors in certain farm practices of fruits and vegetables. Likewise, the use of machinery like maneuvering a small tractor in a rice field is first demonstrated by the owner followed by training and participation of the visitors. As for the irrigation system, the owner, together with the Highland Research and Development Institute, demonstrate the drip irrigation system to teach visitors how to control the amount of water supplied to the passion fruit and how to use water safely (Table 2).

Another agricultural technology adopted by the site is fruit preservation (Table 2). The owner learned about passion fruit preservation by attending workshops led by professors from the Rajamangala University of Technology Lanna. This food preservation, specifically for jam and juice, is demonstrated to visitors. The visitors can participate in doing the activity and may get their own finished product. Moreover, the people who facilitate the learning process are practitioners who are actually doing the technologies daily.

Visitors of Pong In Rak Farm can do fish-feeding. The site has a fishpond that irrigates the whole area. Often chosen as a venue for corporate or school conferences, the site also has a camping area near the welcome signboard. It has also farm equipment such as small tractor

Table 2
Strategies in promoting agricultural technologies and practice

Agricultural technologies and practices	Teaching learning strategies
Pong In Rak Farm Stay	
1. Organic farming ^a	
- Passion fruit	Lecture, demonstration
- Rice	Lecture
- Vegetable	Demonstration, participation
2. Use of machinery	Demonstration, training, participation
3. Irrigation system ^b	Demonstration
4. Fruit preservation: passion fruit jam and juice ^a	Demonstration, participation
Nisachon Vineyard	
1. Organic farming, food safety, and bio-fertilize ^a	Demonstration, participation
2. Biological control (Practiced by the Department of Agricultural Extension [DOAE])	Demonstration, participation
3. Use of vetiver (Practiced by DOAE)	Demonstration
Rai Ruen Rom	
1. Organic farming in vegetables and rice ^c	Lecture, demonstration, training, participation
2. Organic compost	Demonstration, training, participation
3. Planting fruits, herbs, vegetables	Demonstration, training, participation
4. Picking various flower species from the farm - "edible arrangements" (butterfly pea and marigold)	Demonstration, participation
5. Selecting eggs from ducks or chickens	Training, participation
Singha Park	
1. Organic farming	Farm tour
2. Picking and brewing tea leaves	Farm tour, demonstration, training, participation
3. Hydroponic vegetables and green house (winter vegetables and herbs in temperature- controlled green house)	Demonstration

Sources of the technologies and practices adopted by agro-tourism sites: ^aDOAE; ^bThe Royal Irrigation Department; ^cThe Thai Chamber of Commerce, Board of Trade of Thailand

and gardening tools that are kept in the storage house. Mt. Doi Kham is the signature scenery that can be seen from Huean Long Kaow (service point).

Another attraction of the farm is its unique accommodation tents called “tupna.” Visitors can order breakfast of their choice or the authentic local food cooked by the owner herself. All the ingredients used for cooking come from the farm. Visitors can dress in local farmer attire and take photos of themselves at the welcome signboard. Tourists may opt to learn the local language, “Lanna,” from the owner’s father. In this simple writing course, tourists can write and embroider their own name on a tote bag that can be brought home as souvenir. The owner or family member(s) can accompany the visitors for a tour and teach them about organic farm management and agricultural practices such as doing different kinds of grafting, using bio-fertilizers, planting and harvesting of passion fruit, and growing of rice and vegetables.

Nisachon Vineyard. Recognized as the only learning center for agro-tourism in Muaeng Na sub-district, Nisachon Vineyard is well-known for its main crop, which is grapes. The site has food processing facilities that manufacture grape jam and wine. These processed foods along with fresh grapes, tomato, cape gooseberry, and vegetables can be bought by visitors at the restaurant, which is also the site’s service point. At the restaurant, visitors are allowed to cook their own food after harvesting the agricultural crops.

Near the restaurant is the biggest pond among the five ponds, which can be a place for relaxation, picture-taking, and fish-feeding. The other ponds are situated along the four accommodation houses, two tents, and a camping area. Farm equipment such as gardening tools, fertilizer hand sprayer, gallons for bio-fertilizer, and a small tractor are kept in a storage house beside the animal pens. Corporate and school conferences as well as family reunions are among the events that can be held at the site. Visitors may wear ethnic attires and take pictures of themselves at the welcome signboard. They can also have an educational tour to learn about organic farming of fruits (i.e., grape, melon, mango) and vegetables (i.e., lettuce, tomato).

Nisachon Vineyard’s agricultural technology and practices such as organic farming and food safety for different fruits and vegetables, bio-fertilizer and biological control, and the use of vetiver in order to prevent soil erosion and maintain humidity were acquired by the owner through workshops from the Chiang Dao District Agricultural Extension Office, Chiang Mai Provincial Agricultural Extension Office. The benefits of vetiver grass were endorsed in the Royal Initiative Project headed by

King Rama 9. Visitors learn these practices by a demonstration led by the owner before doing the practices themselves (except from the use of vetiver grass that is only demonstrated).

Rai Ruen Rom. Vegetable organic farming is the highlight of this site. The main building, which was built by combining modernity and rural life, houses the restaurant, farm shop, agricultural displays, and service point for the visitors. It has food processing facilities that primarily manufacture spices, herbs, cereal, creamer, and tea. At the farm shop, visitors can buy organic soap, shampoo, antibacterial spray, balm, handicrafts, as well as fresh agricultural produce such as tomato, cabbage, mango, strawberry, passion fruit, Italian kale, white mug wort, carrot, beetroot, radish, and lime.

Farm equipment such as gardening tools and tractor are stored in the barn. Man-made ponds are dug for irrigation of the whole site. This site harnesses green energy stored in solar cells. Visitors may change to farmer outfits while having a tour or a short course on planting and harvesting. Other services include a mud spa, baking local pastries, and demonstration on how to make salted eggs, Thai steamed eggs, and agricultural activity such as goat feeding.

The site can also hold large gatherings like family reunions and corporate and school meetings. For the recreational activities, visitors can enjoy biking, all-terrain vehicle, photography, goat feeding, and tie dyeing. The accommodations and the camping area are located at the center of Rai Ruen Rom.

As shown in Table 2, several agricultural technologies and practices are adopted in Rai Ruen Rom. The first experience introduced to site visitors is the preparation of authentic local food. Visitors may request for breakfast where all of the ingredients come from the farm. *kao soi* (Northern Thai noodle curry soup), *laab kua* (spicy pork salad), and *nam prik num* (Northern Thai green chili dip) are examples of food especially cooked and served by the owner herself.

Singha Park. Organic farming and tea leaves picking and brewing are among Singha Park's agricultural practices and technology (Table 2). Thailand's largest agro-tourism site in terms of land area (Rodsom, 2017), Singha Park is surrounded by mountains, with scattered lakes and ponds. It has barns that house the farm equipment and tea factories as tea is the site's main crop. During the farm tour, visitors learn about tissue culture of a certain fungus called *Cordyceps sinensis*, tea brewing, and raising of hydroponic vegetables. Demonstration and training are also conducted for visitors to learn how tea leaves are processed.

Another interesting technology is the greenhouse that shelters winter vegetables and herbs in a temperature-controlled environment. Hydroponics is also being applied to selected vegetables. Singha Park has its own knowledge about agriculture and agro-tourism and hires people who have expertise in these kinds of work.

Moreover, Singha Park has facilities for processing food products such as spices, jam, herb, and jelly. The farm shop sells specialty food and craft products that are all made in the farm. It has also a camping site where visitors can enjoy various activities such as archery, boating/canoeing, biking, ziplining, rock climbing, and adventure rope course.

Special events like family reunions, weddings, corporate, and school meetings can also be held at this site. Likewise, agricultural fairs such as food and craft show, food cooking demonstrations, and flower shows are being organized throughout the year. Seasonal festivals make Singha Park more inviting and popular to visitors, with their tea, hot air balloon, and music festivals. A zoo is also open for viewing and feeding of animals. It has giraffes, zebras, and oxen. Swans and ducks can be fed at the first stop of the farm tour route. After the farm tour, visitors may enjoy tea and desserts at the Cha Thai café. There are restaurants at different places that can professionally accommodate persons with disabilities. Furthermore, this site has its own clinic that can serve not only the visitors but also people in the community.

Strategies in Promoting Local Culture

At Pong In Rak Farm Stay, the first experience introduced to visitors is the preparation of authentic local food (Table 3). To quote Boutaud et al. (2016), “food represents a culture act.” Food has a narrative dimension, which is about “eating, living and meeting” and a figurative dimension, which elevates the experience of eating to observations about the social life such as table manners (Boutaud et al., 2016). Thus, a major way to immerse in one’s culture is by eating local food.

At Pong In Rak Farm, visitors may request for a breakfast where all the ingredients come from the farm. *Kao Soi* (Northern Thai noodle curry soup), *Laab Kua* (spicy pork salad), and *Nam Prik Num* (Northern Thai green chili dip) are examples of the food especially cooked and served by the owner herself. Food service is a key factor in the success of agro-tourism sites because it provides the tourists with immersive experience to the local culture.

Table 3
Strategies in promoting local culture

Local culture	Teaching learning strategies
Pong In Rak Farm Stay	
• Authentic local food	Experiencing local food and learning the ingredients
• <i>Lanna</i> language	Lecture on alphabets and demonstration
• Craft – Tote bag	Demonstration and application (embroidery)
• Traditional clothes	Direct experience by wearing local clothes
Nisachon Vineyard	
• Traditional clothes	Direct experience by wearing local clothes
Rai Ruen Rom	
• Signature food	Cooking and preparation and decoration
• Traditional clothes	Direct experience by wearing local clothes
• Craft (i.e., hand woven cotton zip bag, handmade organic doll and bag with aromatic flower)	Selling products in farm shop
Singha Park	
• Traditional clothes	Showcase in hill tribe village
• Craft	Showcase and selling in hill tribe village
• Indigenous knowledge	Showcase in hill tribe village

An important culture that can be learned by tourists of Pong In Rak Farm is the *Lanna* language or the language in the northern region of Thailand where the farm is located. Visitors are guided by the owner's father in writing their own names using *Lanna* characters. The owner would also assist them to embroider these characters in their tote bags, which they can take home as souvenirs. Traditional farmer clothes and hat can be worn whenever they are doing agricultural activities in the farm. Moreover, the visitors may take photos of themselves wearing the traditional outfits.

As for the culture and tradition in Nisachon Vineyard, the visitors may wear the traditional cloth of the ethnic group called *Lahu* (Table 3). While wearing the traditional outfits, visitors may take pictures of themselves.

Rai Ruen Rom has promoted almost the same culture and traditions as the other agro-tourism sites (Table 3). The food itself, its arrangement, and components are products of integrated farming. Each food is usually served with free seasonal salad leaves and is cooked without monosodium glutamate. If the meal requires oil, only rice bran oil is used. In short, all ingredients are sourced from the farm, providing an authentic local experience of the culture. Rai Ruen Rom's chefs are winners of a television cooking competition. Traditional farmer clothes may be worn by the visitors for the agricultural activities or for taking photos. The craft souvenirs, which they sell to visitors, include a hand-woven cotton zip bag and a handmade organic doll with bag where aromatic flower can be inserted.

Lastly, the culture and tradition being showcased at Singha Park is that of hill tribes consisting of nine ethnic groups namely, *Akha*, *Lahu*, *Lisu*, *Mien*, *Hmong*, *Karen*, *Kamu*, *Taiyai*, and *Lua*. Traditional cloths, necklaces, bracelets, bags, and bonnets are among the crafted products made by weaving and embroidery and can be bought as souvenirs. Aside from the products, visitors may learn about the indigenous knowledge in the Hill Tribe Village. In some rare occasions, folk games and hill tribe foods are featured.

Reasons for Visiting Agro-Tourism Sites

To understand why visitors were enticed to visit the agro-tourism sites, convenience sampling was used to gather data from 53 visitors who were willing to be interviewed. Selected visitors were asked about their personal information (i.e., gender, age, race, career) and their reasons for visiting the site based on the site activities they participated in and whether they were satisfied with these activities or not.

Table 4 shows that most of the respondents were female, middle aged, working, and of Thai descent. While being a convenient sample, the findings indicate that the major clients of agro-tourism sites are Thais and working females. This demographic is true across the different sites. It also indicates that the campaign to visit the agro-tourism sites may be working well as local tourism is actively supported mostly by the working female population. If this trend is true for all other agro-tourism sites in other parts of Thailand, DOT may have to consider a more active campaign program to target foreigners to visit these sites.

Table 4
Profile of visitors in selected agro-tourism sites

Personal information	Pong In Rak Farm stay		Nisachon Vineyard		Rai Ruen Rom		Singha Park		Total	
	No. (n=6)	%	No. (n=4)	%	No. (n=18)	%	No. (n=25)	%	No. (n=53)	%
Gender										
Female	5	83.3	3	75.0	11	61.1	20	80.0	39	73.6
Male	1	16.7	1	25.0	7	38.9	5	20.0	14	26.4
Age										
Below 20	-	-	-	-	-	-	1	4.0	1	1.9
20 – 30	2	33.3	-	-	5	27.8	10	40.0	17	32.1
31 – 40	3	50.0	1	25.0	8	44.4	10	40.0	22	41.5
41 – 50	1	16.7	1	25.0	4	22.2	2	8.0	8	15.1
Above 50	-	-	2	50.0	1	5.6	2	8.0	5	9.4
Race										
Thai	4	66.7	4	100	16	88.9	19	76.0	43	81.1
Foreigner	2	33.3	-	-	2	11.1	6	24.0	10	18.9
Career										
Student	2	33.3	-	-	-	-	3	12.0	5	9.4
Working	4	66.7	3	75.0	18	100	22	88.0	47	88.7
Others	-	-	1	25.0	-	-	-	-	1	1.9

For the agricultural activities participated in by the visitor respondents and their satisfaction with these activities, Table 5 shows that four out of six respondents in Pong In Rak Farm participated in agricultural technology such as organic farming and fruit preservation. The other two visitors opted to skip this part and take part in other activities. All of the respondents joined educational activities on local culture, plants and animals, agricultural practices, and nature. All visitors were satisfied with these activities with the exception of the activity about plants and animals.

In Nisachon Vineyard, three out of four respondents took part in activities on agricultural technology and local culture. However, all of the respondents joined the activities involving plants and animals, agricultural practices, and nature. As for Rai Ruen Rom and Singha Park, all of the respondents took part in all the above-mentioned activities. Furthermore, respondents in Nisachon Vineyard, Rai Ruen Rom, and Singha Park were all satisfied in each activity that they participated in.

Table 5

Participation and satisfaction of visitors in educational activities in selected agro-tourism sites

Educational activity	Pong In Rak Farm stay		Nisachon Vineyard		Rai Ruen Rom		Singha Park	
	No. (n=6)	%	No. (n=4)	%	No. (n=18)	%	No. (n=25)	%
Agricultural technology								
Satisfied	4 ^a	100	3 ^b	100	18	100	25	100
Local culture								
Satisfied	6	100	3 ^b	100	18	100	25	100
Plants and animals								
Satisfied	4	67.7	4	100	18	100	25	100
Dissatisfied	2	33.3						
Agricultural practices								
Satisfied	6	100	4	100	18	100	25	100
Nature								
Satisfied	6	100	4	100	18	100	25	100

Note:

^aFour out of six participated in agricultural technology

^bThree out of four took part in activities on agricultural technology and local culture

Visitors gained knowledge from the agricultural activities that they participated in the agro-tourism sites, and they said that they can apply this knowledge back in their homes. Hall and Jenkins (1998) as cited by Na Songkhla and Somboonsuke (2011) stated that agro-tourism offers an array of tourism activities that enable visitors to acquire new knowledge in agriculture. Visitors also experienced relaxation from the natural environment and derived pleasure from experiencing the local culture; both of these are regarded as strengths of agro-tourism (Na Songkhla & Somboonsuke, 2011).

CONCLUSIONS

Experiential learning by participation in various activities is the underlying strategic principle provided by the agro-tourism sites so that tourists could better appreciate and/or acquire agricultural practices and local culture. In Thailand, agro-tourism is referred to as “green tourism” (Ministry of Tourism and Sports of Thailand, 2017, p. 4) where visitors can explore various agricultural products, traditions, and landscapes while enjoying environment-friendly locations.

The four selected agro-tourism sites utilized a number of common strategies to promote agricultural practices and local cultures. As for the technology and practices, the sites used a couple or combination of strategies such as lecture, demonstration, training, and participation in teaching agricultural topics and methods. Moreover, local/signature foods, handicrafts, and traditional clothes were among the traditions showcased in the sites. Common methods of promotion include experiencing local food and learning the ingredients, selling products in farm shop, wearing local clothes, and demonstrating and applying sewing and embroidery techniques. Some unique traditions shared include the *Lanna* language in Pong In Rak. The Hill Tribe in Singha Park showcased local alphabets through lecture and demonstration, hill tribe displays, and selling of hill tribe products.

The strategies to promote knowledge and skills in agriculture included lectures and demonstration. Participation in agricultural activities such as goat feeding were targeted to promote appreciation of farm life. On the other hand, local culture was promoted through participation in sewing and embroidery techniques, food processing, and learning local languages. Staying at the farm provided more opportunities to learn and appreciate the local culture by enjoying the local cuisine.

Hence, while the economic contribution of agro-tourism is normally highlighted, this paper showed the possibilities of agro-tourism as a major venue to promote agriculture as an enterprise or as a way of life through experiential learning.

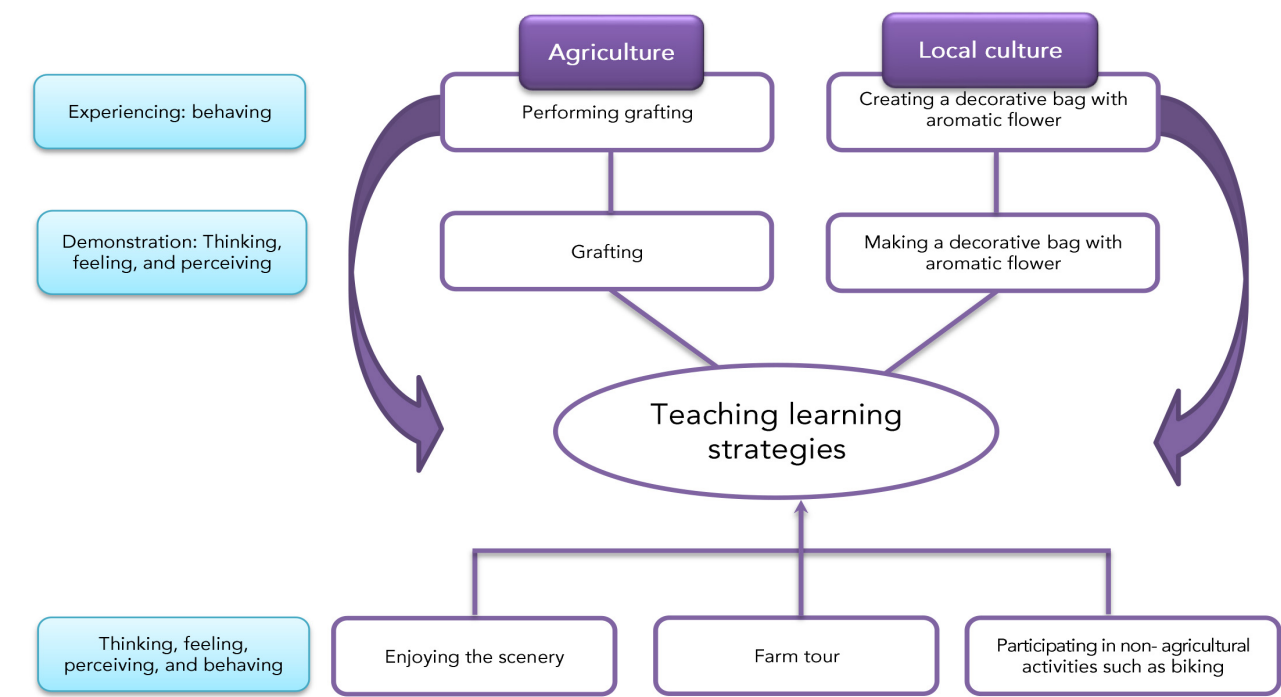
RECOMMENDATIONS

To maximize the potential of learning sessions in agro-tourism, the sites may capitalize on experiential learning theory. John Dewey, in his article *Experience and Education*, stressed the importance of tying up relevant experiences to the learning process (Cahn, 1997). Given that knowledge and experience do not exist in a vacuum, the challenge for educators is to plan for a relevant learning experience that ties up the abstract knowledge and that of the relevant learning experience such that it would lead to growth. Taking off from Dewey, an educational experience therefore, is something which builds on knowledge and experiences of the learners and the provision of an opportunity to analyze the situation and test the learning gained in a situation such that new knowledge is formed.

While the positive effects of experiential learning are well accounted for in the formal setting, there is less documentation of it in informal learning situations. Kolb's *Experiential Learning Theory* (1984 in Leal-Rodríguez & Albort-Morant, 2019) specifies that learning proceeds only when one is able to undergo the processes of thinking, feeling, perceiving, and behaving or acting. Figure 6 illustrates why experiential learning should be maximized to promote agriculture and local culture in agro-tourism.

Agro-tourism provides a unique space for teaching learning strategies as the visitor immediately experiences perceiving, thinking, and feeling once he or she arrives in the site. The visitor is immediately welcomed with scenery and fresh air and offered a range of possibilities to choose from – from the welcome drink to the range of activities for that day. As such, teaching learning strategies enable the learner to integrate what he or she perceives and how he or she feels about the situation, analyze the new experiences, and act on the situation at hand. In this case, agro-tourism provides the prime opportunity not only to promote agriculture and rural life. The agro-tourism areas provide the visitors with the landscape (for example, passion fruit scenery) and the experience itself (grafting) plus the opportunity to act on that experience (perform grafting). This is similar to learning a new aspects of local culture such as making decorative bags with aromatic flower. These kinds of knowledge

Figure 6
Proposed teaching learning strategies in agro-tourism



are likewise transferable to the unique conditions of the person who can experiment on grafting with other crops or making bags with different kinds of materials and flowers.

In terms of methods of facilitating knowledge acquisition, Argote and Fahrenkopf (2016) emphasized the two characteristics of training programs that are critical in transferring knowledge among organizations: demonstrations and opportunities for sharing new knowledge. It is for this reason that agro-tourism areas are considered ideal learning sites for those who want to start engaging in a particular crop (passion fruit) or technology (vermicompost), because of the agricultural system (organic farming), and the prepared demonstration activities by the expert. Visitors come to the place primarily to relax but are mostly open to any learning experience. This openness to learn and experience something new is a positive aspect in learning new knowledge and skills. Agro-tourism as a site and as venue provides the tourist cum learner with the critical elements of experiential learning.

Moreover, experiential learning promotes healthy eating and love for green spaces, which can translate to healthier lifestyles for urban dwellers. Lastly, agricultural extension can further maximize the potentials of agro-tourism by partnering with such sites in promoting not only component technologies, but in stressing the importance of agriculture as a sustainable and profitable venture.

As almost all tourists participated in the various strategies to promote agriculture and culture and reported being satisfied in all the experiential learning activities, it is important to promote these unique aspects of agro-tourism. These can be done in multi-platforms such as the sites' websites and information education and communication materials. The DOT, DOAE, and the universities supporting the agro-tourism sites can work together and assist the agro-tourism sites promote experiential learning as the centerpiece of agro-tourism sites in Thailand.

REFERENCES

- Ammirato, S., & Felicetti, A. M. (2013). The potential of agritourism in revitalizing rural communities: Some empirical results. In L. M., Camarinha-Matos & R. J. Scherer (Eds.) *Collaborative Systems for Reindustrialization* (pp. 489–497). Springer.
- Argote, L., & Fahrenkopf, E. (2016). Knowledge transfer in organizations: The roles of members, tasks, tools, and networks. *Organizational Behavior and Human Decision Processes*, 136, 146–159.

-
- Bennett, A. (2015). *International Encyclopedia of the Social & Behavioral Sciences*. Elsevier.
- Boutaud, J. J., Becuț, A., & Marinescu, A. (2016). Food and culture. Cultural patterns and practices related to food in everyday life. Introduction. *International Review of Social Research*, 6(1), 1–3. <https://doi.org/10.1515/irsr-2016-0001>
- Busby, G., & Rendle, S. (2000). The transition from tourism on farms to farm tourism. *Tourism Management*, 21(6), 635–642. [https://doi.org/10.1016/S0261-5177\(00\)00011-X](https://doi.org/10.1016/S0261-5177(00)00011-X)
- Cahn, S. M. (1977). *New studies in the philosophy of John Dewey*. The University Press of New England.
- 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>
- Chatterjee, S., & Prasad, D. M. V. (2019). The evolution of agri-tourism practices in India: Some success stories. *Madridge Journal of Agriculture and Environmental Sciences*, 1(1), 19–25. <https://doi.org/10.18689/mjaes-1000104>
- Choenkwan, S., Promkhambut, A., Hayao, F., & Rambo, A. T. (2016). Does agrotourism benefit mountain farmers? A case study in Phu Ruea District, Northeast Thailand. *Mountain Research and Development*, 36(2), 162–172. <https://doi.org/10.1659/MRD-JOURNAL-D-15-00111.1>
- Deutsche Gesellschaft für Technische Zusammenarbeit. (2005). Agrotourism and agricultural diversity. http://hubrural.org/IMG/pdf/gtz_agrotourismus_eng.pdf
- Fahmi, Z., Hamzah, A., Muhammad, M., Yassin, S. M., Samah, B. A., D Silva, J. L., & Shaffril, H. A. M. (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. <https://doi.org/10.5539/ass.v9n2p203>
- Google Maps. (n.d.). *Map of northern Thailand*. <https://goo.gl/maps/cX7jnqi81zdEocfx7>
- Hamzah, A., Yassin, S. M., Samah, B. A., D'silva, J. L., Tiraiyaei, N., Shaffril, H. M., & Uli, J. (2012). Socio-economic impact potential of agrotourism activities on Desa Wawasan Nelayan community living in Peninsular Malaysia. *African Journal of Agricultural Research*, 7(32), 4581–4588. <https://doi.org/10.5897/AJAR11.295>
- Homnan, S. (2004). *Potential to develop agrotourism in satellite villages of the Huai Hong Khrai Royal Development Study Center*. Chiang Mai University.
- Ibrahim, Y., & Razzaq, A. R. A. (2010). Homestay program and rural community development in Malaysia. *Journal of Ritsumeikan Social Sciences and Humanities*, 2(1), 7–24.

-
- Joshi, P. V., & Bhujbal, M. B. (2012). Agro-tourism a specialized rural tourism: Innovative product of rural market. *International Journal of Business & Management Tomorrow*, 2(1), 1–12.
- Kongkaew, J. (2015, August 7). 'Rai Ruen Rom', the green business of the heir 'SAT'. *Bangkokbiznews*. <https://www.bangkokbiznews.com/news/detail/658635>
- Kurnianto, B. T., Sugiyanto, Hidayat, K., & Sukesu, K. (2013). Agrotourism development strategies based on institutional at Wonorejo Reservoir, Tulungagung, East Java, Indonesia. *Journal of Environment and Earth Science*, 3(8), 11–17.
- Leal-Rodríguez, A. L., & Albort-Morant, G. (2019). Promoting innovative experiential learning practices to improve academic performance: Empirical evidence from a Spanish Business School. *Journal of Innovation & Knowledge*, 4(2), 97–103.
- Magdato Jr., F. V. (2015). *Farm tourism practice of providers in selected areas in Mindanao, Philippines* [Unpublished doctoral dissertation]. University of the Philippines Los Baños.
- Mahaliyanaarachchi, R. (2015). *Agri tourism farm & farm stay*. Sabaragamuwa University of Sri Lanka.
- Mansor, N., Rashid, K. M., Mohamad, Z., & Abdullah, Z. (2015). Agro tourism potential in Malaysia. *International Academic Research Journal of Business and Technology*, 1(2), 37–44. <https://doi.org/10.12691/aees-9-10-1>
- Ministry of Tourism and Sports of Thailand. (2017). *Strategies for promoting green tourism*.
- Na Songkhla, T., & Somboonsuk, B. (2011). Interaction between agrotourism and local agricultural resources management: A case of Changklang Agrotourism, Nakornsrithammarat province. *Agricultural Knowledge Base*, 3, 444–457.
- Pandey, H., & Pandey, P. R. (2011). Socio-economic development through agro- tourism: A case study of Bhaktapur, Nepal. *The Journal of Agriculture and Environment*, 12, 59–66. <https://doi.org/10.3126/aej.v12i0.7564>
- Phillip, S., Hunter, C., & Blackstock, K. (2010). A typology for defining agritourism. *Tourism Management*, 31(6), 754–758. <https://doi.org/10.1016/j.tourman.2009.08.001>
- Rodsom, S. (2017, December 28). *Get to know Singha Park, the largest agricultural tourist destination in Thailand*. <https://www.timeout.com/bangkok/th/things-to-do/>
- Seaton, J. X., & Schwier, R. A. (2014). An exploratory case study of online instructors: Factors associated with instructor engagement. *International Journal of E-Learning & Distance Education*, 29(1), 1–16. <http://ijede.ca/index.php/jde/article/view/870/1536>

- Stanovčić, T., Peković, S., Vukčević, J., & Perović, D. (2018). Going entrepreneurial: Agro-tourism and rural development in Northern Montenegro. *Business Systems Research*, 9(1), 107–117. <https://doi.org/10.2478/bsrj-2018-0009>
- 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>
- Tourism Authority of Thailand. (2013). *Agro-tourism: Green travel in Thailand*. https://www.academia.edu/35058722/Agro_tourism_Green_Travel_in_Thailand
- United Nations Thailand. (2020, December 2). *Thai agricultural sector: From problems to solutions*. <https://thailand.un.org/en/103307-thai-agricultural-sector-problems-solutions>
- Wicks, B. E., & Merrett, C. D. (2003). Agritourism: An economic opportunity for Illinois. *Rural Research Report*, 14(9), 1–8.
- Wongsuwan, P., Tonnang, W., & Sriboonruang, S. (2007). *Development and management for tourism on sufficient agricultural mode in the Area of Southern Isan*. The Thailand Research Fund.
- Yang, Z., Cai, J., & Sliuzas, R. (2010). Agro-tourism enterprises as a form of multi-functional urban agriculture for peri-urban development in China. *Habitat International*, 34(4), 374–385. <https://doi.org/10.1016/j.habitatint.2009.11.002>