

# การพัฒนาการท่องเที่ยวเชิงเกษตรอินทรีย์ ในจังหวัดเชียงใหม่

## ORGANIC AGRITOURISM DEVELOPMENT IN CHIANG MAI PROVINCE

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## บทคัดย่อ

จุดมุ่งหมายของการวิจัยครั้งนี้ เพื่อศึกษาและอธิบายถึงสถานการณ์การท่องเที่ยวเชิงเกษตรอินทรีย์ในจังหวัดเชียงใหม่ และศึกษากลยุทธ์และแนวทางการพัฒนาการท่องเที่ยวเชิงเกษตรอินทรีย์ในจังหวัดเชียงใหม่ โดยใช้กระบวนการวิเคราะห์สถานการณ์ภายในและภายนอกและเครื่องมือสำหรับการสร้างกลยุทธ์ใหม่จากสภาพแวดล้อมและสถานการณ์ปัจจุบัน ทั้งนี้ได้ศึกษาข้อมูลจากผู้นำชุมชน ผู้จัดการ เจ้าของธุรกิจ และผู้ที่เกี่ยวข้องกับการท่องเที่ยวเชิงเกษตรอินทรีย์ในพื้นที่จังหวัดเชียงใหม่ จำนวนทั้งสิ้น 280 คน ข้อมูลได้รวบรวมในเดือนตุลาคม 2561 – กันยายน 2562 ทั้งนี้ได้รวบรวมข้อมูลจากหลากหลายวิธีการ เช่น การสัมภาษณ์ การอภิปรายกลุ่ม การสังเกตจากคุณผู้วิจัย และการเปิดเวทีชาวบ้าน เพื่อนำข้อมูลมาวิเคราะห์ ผลการศึกษา ทำให้ทราบว่า การจัดการท่องเที่ยวเชิงเกษตรอินทรีย์ในจังหวัดเชียงใหม่ ประกอบด้วยมิติด้านการจัดการที่รวมไปถึงการก่อตั้ง ลักษณะการดำเนินงาน การมีส่วนร่วมกับชุมชนและจุดเด่นของธุรกิจ มิติด้านการตลาดควรให้ความสำคัญถึงผลิตภัณฑ์และช่องทางการจัดจำหน่าย และมิติด้านการจัดการท่องเที่ยวเชิงเกษตรอินทรีย์บนพื้นฐานทรัพยากรท้องถิ่น ซึ่งการท่องเที่ยวเชิงเกษตรอินทรีย์เปิดโอกาสให้เกษตรกรสร้างรายได้จากการผลิตภัณฑ์ทางการเกษตร มีกิจกรรมใหม่หรือผลผลิตทางการเกษตรในการจำหน่ายและเพิ่มมูลค่าทางสินค้าได้มากยิ่งขึ้น เกิดจ้างงานจากการจัดกิจกรรมการท่องเที่ยว ตลอดจนทำให้เศรษฐกิจของชุมชนมีการหมุนเวียน และช่วยกระตุ้นให้เกิดการกระจายรายได้เพิ่ม ผลการศึกษาสามารถนำไปใช้สำหรับการวางแผน และกำหนดกลยุทธ์ให้แก่หน่วยงานและผู้ที่มีส่วนเกี่ยวข้องกับการจัดการท่องเที่ยวเชิงเกษตรอินทรีย์ของจังหวัดเชียงใหม่ต่อไป

**คำสำคัญ:** การท่องเที่ยวเชิงเกษตรอินทรีย์ การท่องเที่ยวเชิงเกษตร การวิเคราะห์สภาพแวดล้อม

## Abstract

The objectives of this research were to study and explain the situation of organic agricultural tourism in Chiang Mai Province, Thailand and examine the strategies and guidelines for developing organic agricultural tourism in Chiang Mai Province by applying the analysis process of the internal and external situations, and the tools for creating new strategies from the current environment and situation. The data were collected from October 2018 to September 2019 via an interview, focus groups, observation, and forums from 280 community leaders, managers, business owners, and relevant people to organic agricultural tourism in Chiang Mai Province. The research results indicated that the components of organic agricultural tourism management in Chiang Mai Province included the management dimension that involved the establishment, operations, participation with the community, and strengths of the business, the marketing dimension that investigated the products and place, and management based on the local resources. It was found that organic agricultural tourism gave the agriculturists an opportunity to generate income from the agricultural products, create new activities or products to distribute, and add value to the products. As a result, employment inclined from the tourism activities, which activated the community economy and income generation. The application of the research results could be beneficial for planning and setting up the strategies for the authorities and the people related to organic agricultural tourism in Chiang Mai Province.

**Keywords:** Organic Agritourism, Agritourism, SWOT Analysis

## 1. Introduction

Nowadays, tourism has become one of the most dynamically growing sectors of the economy and provides a fundamental direction for rural development. It also helps reduce unemployment in rural areas and can be a source of income for the rural population (Miczyńska-Kowalska, 2017). The very interesting question is how can the aspect of innovation be reconciled with the aspect of the local traditions with regard to the needs of sustainable tourism. The values of the sustainable tourism and agro-tourism concepts include the natural environment, traditions, folklore, and culture. Due to the global transformation, the preferences of individuals are changing, and people aim to increase the quality of their life and leisure. As a result, service providers are introducing an innovation policy. Furthermore, innovation in agritourism farms can now involve the farm management process, marketing, and a wide range of available products. As a consequence, the problem of the production rate of agriculture during the economic crisis and the difficult situation of farmers has caused them to look for new sources of income.

Agritourism seems to be an effective solution. Tourists from the city are increasingly interested in the agritourism opportunities offered by the local people, especially farmers. Hence, agro-tourism is a type of leisure which takes place in rural agricultural areas and is based on accommodation facilities and recreational activities related to a farm or an equivalent area and its natural, production, and service environment (Drzewiecki, 2002) Rural tourism is also limited to offering accommodation services in rural areas and does not involve tourists taking part in the farm work. Rural tourism is defined as a form of leisure in rural areas involving nature, the landscape, cultural heritage and buildings, which is arranged on a scale that does not harm the environment and local community, and which bears all the hallmarks of sustainable tourism (Rak, Mironczuk, & Piechowicz, 2007). Organic techniques are used for nature-focused industries, such as organic agricultural products, organic farming villages, organic farming, and organic agritourism activities that have recently grown rapidly (Shen et al., 2020). Agritourism is now becoming more popular and acceptable in Thailand. This is because Thai agriculture comes in many forms and has a hidden attraction that can receive more attention from tourists (Department of Tourism, 2014). The Department of Agricultural Extension in Thailand has announced a new policy to promote agritourism as an alternative

way. For example, not only to receive knowledge from agriculturists directly, but also learn about the way of life, the local culture, and various agricultural technologies in order to distribute income directly to agriculturists and to strengthen the grassroots economy of Thailand. Chiang Mai province has set goals for the development of the area according to the guidelines "City of Life and Prosperity" to be a city that provides happiness and valuable life to residents and visitors as a world-class livable and tourist city.

In addition, agritourism requires accommodation and a specific scope of services. Rural tourism also involves the construction and development of technical, economic, and social infrastructure, and is therefore a broader concept. Moreover, agritourism and rural tourism provide communes with growth opportunities. Therefore, agricultural innovation is used to describe any sort of innovations toward sustainable development that aims to reduce the environmental burdens (Cheng, Yang, & Sheu, 2014; Rennings, 2000). Farm stay operators often exhibit tendencies to present eco-innovativeness. They find a way to produce an eco-friendly product for their customers while maintaining their financial mobility. Eco-innovation can thus be achieved by implementing technological interventions or making organizational changes to deliver their operations in eco-friendly ways (Horbach, Rammer, & Rennings, 2012). In short, eco-innovativeness enables a firm to achieve its goal in sustainable practices (Thongma, Lin, Leelapattana, & Cho, 2017).

### **Statement of the Problems**

Thailand has rapidly adopted all kinds of tourism into the tourism industry since 1995, and is doing very well in the sense of acceptability of all stakeholders and community development. Sustainable tourism development meets the needs of the present tourists and host regions, while protecting and enhancing opportunities for the future. This is envisaged as leading to the management of all resources in such a way that the economic, social and esthetic needs can be fulfilled, while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems (World Trade Organization, 2002). Thus, it can be seen that agritourism is an important factor in the development of rural areas. It is also an important policy in the socio-economic development of the country. It has also had an impact on the development of rural areas, which is important in the

socio-economic policy of the European Union countries (Broccardo, Culasso, & Truant, 2017; Ciolac, Adamov, Iancu, Popescu, Lile, Rujescu, & Marin, 2019). Hence, the development of Thailand's agritourism needs to be applied from the new theory of agriculture of His Majesty King Bhumibol Adulyadej The Great. This consisted of one form of sustainable agricultural development to create organic agriculture tourism that could lead to sustainable tourism management (จีรนันท์ เข็มขันธ์, 2561 for raising the agricultural development in four major areas: 1) Cost reduction in the production process, 2) quality enhancement production standards and product standards, 3) risk reduction in agriculture, and 4) management and transmission of information technology knowledge. However, the communities that have focused on the development of agritourism have still lacked proficient management skills and the need to gain more knowledge in terms of applying the local resources to create the tourism activities (สุกานดา นาคະปັກສິນ, อารີຍ່ ນັຍພິນິຈ, ອົງພລ ພຣະມສາຂາ ດນ ສກລນຄຣ, ແລະ ກັທຽງພ່ງໝໍ ແກຣີກສຸກລ, 2560). Furthermore, Choo and Jarmal (2009) proposed the concept of eco-organic farm tourism and suggested that this novel concept could create a balance between sustainable agriculture, local development, health and well-being, learning, and sociocultural and environmental protection.

In other countries, there are also numerous studies of organic agriculture tourism in many aspects (Choo & Jamal, 2009; Privitera, 2010; Shen et al., 2020; Tchouamou et al., 2020). In Thailand, many scholars have also conducted studies of agritourism (จีรนันท์ เข็มขันธ์, 2561; Kruntakapakorn, Sitthikun, & Leelapattana, 2020; Samrah & Prachuap, 2020), but very few studies on organic agro-tourism (สุกานดา นาคະປັກສິນ, อາຮີຍ່ ນັຍພິນິຈ, ອົງພລ ພຣະມສາຂາ ດນ ສກລນຄຣ, ແລະ ກັທຽງພ່ງໝໍ ແກຣີກສຸກລ, 2560). Therefore, the main purpose of this study focused on organic agritourism in Chiang Mai province that could be called the City of Safe Agriculture or the Northern Food Valley with its diversity of nature and culture and to promote value-added tourism that would connect nature, culture, health, and the local economy by focusing on promoting, raising standards, and creating innovations to add value to tourism based on the participation from all sectors. Some scholars have studied agricultural tourism in Thailand (Khermkhan & Mankeb, 2018; Doloh & Thongsri, 2019) and the potential development of agriculture tourism in Chiang Mai Province (Kruntakapakorn et al., 2020) and organic agriculture tourism in

Roi Et and Sarasin Provinces (สุกานดา นาคะปักชิน, 2560). Moreover, there were also studies conducted on organic agriculture tourism at the national and regional levels leading to the suburban area development, income generation, and environmental conservation in communities (Wacher, 2006; Choo & Jamal, 2009; Privitera, 2009; Privitera, 2010; Shen et al., 2020; Tchouamou Njoya & Nikitas, 2020; Xue, Chang & Shen, 2020; Shen, Chang & Liu, 2020). Ritson and Oughton (2007) stated that organic agriculture was the cultural evolution that initiated the environmentalist culture. The model of organic agriculture is similar to the traditional agritourism enterprises (Kuo & Chiu, 2006); it is the integration of strategies to organize the tourism activities in rural areas. Italy piloted the idea in order to promote the country's tourism economy (Privitera, 2010). In Thailand, Chiang Mai is a well-known tourism province in the northern region for both Thai and international tourists. In addition, the tourists and consumers have many concerns about health and the quality of life found in the local culture. Several studies have illustrated that most scholars emphasized agritourism in Chiang Mai Province but did not examine organic agricultural tourism management. Therefore, the aim of this research is to study more about the organic agricultural tourism management in Chiang Mai Province and to leverage the results for the planning and setting of the organic agricultural tourism management strategies for the relevant agencies and personnel to develop the organic agricultural tourism in Chiang Mai Province. Moreover, the results will provide the primary information for scholars and those people who are interested in organic agriculture tourism management development in Chiang Mai Province.

### **Objectives of the Study**

- 1) Investigating the situation of organic agritourism management in Chiang Mai
- 2) Presenting the strategies and guidelines for the development of organic agritourism in Chiangmai by using SWOT and TOWS

## 2. Literature Review

### 2.1 Agritourism

Agritourism is also an extension of ecological tourism that encourages tourists to experience agricultural life as part of a tourist experience. In its intrinsic sense, it is defined as rural tourism conducted on working farms in which the tourists experience physical agricultural activities first-hand (Phillip et al., 2010). Agritourism includes activities, such as milking a cow, harvesting a crop, pick-your-own food, feeding animals, among others. Moreover, agritourism often includes pedagogical aims giving the opportunity to gain familiarity with farming and nature. In economic terms, agritourism has been defined as rural enterprises that combine an agricultural work environment with a commercial tourism environment (Weaver & Fennell, 1997). Thus, agritourism is an important option for one-day tourism, short stays, or transit tourism. Furthermore, the ecological characteristics of the location define the type of activities that can be implemented. Therefore, instead of single niches for the agritourism industry, agritourism involves multiple micro niche markets that complement other sources of tourism (Dubois & Schmitz, 2013). This includes different markets, such as business agritourism, fishing agritourism, therapeutic agritourism, and sustainable agriculture that are mostly represented in urban farming and aquaponics; all of which make it more attractive to agritourists. Additionally, agritourism is a form of sustainable tourism development and multi-activity offered by farmers and agritourism enterprises in rural areas. Labels such as agritourism, farm-based tourism, and rural tourism are often used interchangeably with agritourism and each other (Sharpley, 2002; Sharpley & Vass, 2006) but some have been used explicitly to denote similar but distinct concepts (Fleischer & Pizam, 1997). A comprehensive literature review has revealed several labels and definitions for agritourism based on a variety of characteristics. Agritourism typology has been proposed by identifying key characteristics of agritourism in a working farm, contact with agricultural activities, and the authenticity of the tourist's agricultural experiences. However, for the purpose of consistency, the term 'agritourism' will be used throughout this study to refer to the range of related labels, concepts, and products discussed in the literature overall. Agritourism is thus described in this study as a combination of agricultural tourism and products that encourages short- or long-term visitors to farms or rural areas for the purpose of relaxation,

enjoyment, education, and/or involvement in the activities of agricultural production and farming life.

## **2.2 Sustainable tourism development**

The interest in sustainable development related to tourism is logical given that this is one industry that has the environment as its selling point. In order to extend the discussion about what is actually meant by Sustainable Tourism Development (STD), some writers place the literature that defines STD within two categories (Godfrey, 1996), while others place them along a continuum starting from very weak sustainability to very strong sustainability (Hunter, 1997; Brookfield, 1991). Godfrey (1996) points out that while a number of definitions exist, the key objectives and rationale underpinning these many different terms are similar and generally can be based on the product. Owing to its origins in the general concept of sustainable development, STD can be thought of as the meeting of the needs of tourists and host regions, while protecting and enhancing the opportunities for future generations. However, the concept of sustainable tourism as a planning and management tool creates an ongoing controversy. On the one hand, it appeals to a recognized need to limit and control tourism, which, on the other hand, may threaten the sustained use of limited resources (Butler, 1991; Wheeller, 1993; Cater, 1993).

## **2.3 Organic agritourism**

Organic agriculture is a cultural evolution with origins in an environmentalist culture (Privitera, 2009). Organic agriculture and agritourism are closely linked, and there are no doubt that gastronomic and natural tourism has a considerable role in the future development of rural areas (Privitera, 2010). Hence, organic agriculture tourism is a form of tourism that combines travel with the balanced development of the environment. It achieves the objectives of environmental education through touristic experiences.

### 3. Methodology

This research was conducted in Chiang Mai Province, Thailand. Data were collected using semi-structure interview and group discussions. The data collected was analyzed by SWOT analysis and TOWS. The results of the analysis of this research data are presented in the form of tables and presented in a narrative. The research stages are included 1) identify strengths and weaknesses from the internal environment and 2) identify opportunities and threats from the external environment. The 280 respondents of this research as all leaders, managers, owners, and members of agrotourism activities in Chiang Mai Province.

This qualitative research collected primary and secondary data. The secondary data were collected from the textbooks, articles, and studies related to organic agriculture tourism, and the primary data were collected from the entrepreneurs and the staff from the government and private sectors involved with the organic agriculture tourism promotion in Chiang Mai Province. Fifty informants, which included the entrepreneurs in Chiang Mai Province from the private and the public sectors who met the criteria of being the owner of a business or a person concerned with organic agriculture tourism or being a knowledgeable person in organic agriculture and tourism in Chiang Mai Province, provided the information about organic agriculture tourism via the in-depth interviews. Moreover, the in-depth interviews were also conducted with another group of 80 informants, which included scholars, people from the government and private sectors, and the public, in order to compare the differences in efficiency regarding organic agriculture tourism management so as to determine the appropriate organic agriculture tourism management model for Chiang Mai Province.

In addition, group discussions, with three groups of 50 people per group selected based on their experience in the organic agriculture tourism and knowledge about tourism, or those who attended the training related to the agriculture or organic agriculture tourism at least one time, were also conducted. The researcher applied purposive sampling and obtained 150 samples. The total number was 280 informants.

#### 4. Findings

##### 4.1 Summary of organic agriculture tourism in Chiang Mai Province

Chiang Mai is the second-largest province of Thailand. It consists of 25 districts. The agricultural area occupies 2,032,500 rai, which is the area for rice growing, fruits, standing timbers, vegetables, field crops, flowering plants, garden trees, and local fruits and vegetables. All of these are considered the crucial resources for agriculture tourism. Further, the Chiang Mai Organic Agenda, a treaty and MOU, was arranged to drive Chiang Mai toward becoming the Organic Capital of Thailand and Organic Hub of Asia. It will be a vital spatial strength for organic agriculture tourism in Chiang Mai Province.

According to the results of the analysis based on the data obtained from the interviews, the results related to the management that would upgrade organic agriculture tourism in Chiang Mai Province could be summarized and classified into the following key aspects.

**A. Management dimension-** the management process for lift the organic agritourism in management dimension can focused on 3 aspects as follows: 1) the establishment; from the results has shown that the organic agritourism has developed from the farming activities of the family. 2) the operational characteristic; it this an incubator to increase capacity for SMEs & Start up and its organic farm operation. 3) local participation; in the local participation in management dimension also can describes as follows, it is a place for distribution of processed organic products for farmers to sell their products without renting fee and also a source of technology knowledge transfer to farmers who are interested in applying technology in their farm. The activities are supported from government sectors and there are several tourism activities attract to the tourists, such as, Thai cooking class from local products or native herbs, farm stay activities, homestay activities, etc. 4) Highlight of the business; it is the model community for smart agriculture that combines the information technology (IT) with the uniqueness of Lanny way also applied the new innovation in smart agriculture or precision technology for rice cultivation. This farm also guarantee by the certificate of organic farming standard certifies and basic organic agriculture standards from the International Federation of Organic Movement or IFOAM. There is a center of organic seed collection, and this can also the research bank for business study.

**B. Marketing dimension-** in the marketing dimension of organic agritourism in Chiang Mai can focused on 2 aspects and there are products identity and uniqueness themselves as follows: 1) Product; and 2) channel of distribution. In the product aspects there are the real practice activities with the basic need for tourism such as the accommodation, farm-stay, homestay, organic agriculture products, processed agricultural goods for sale and the mud house for learning the traditional way of life of local people. In the channel of distribution, that is the center to sale the organic agricultural products and its can be in online marker nowadays.

**C. Organic agritourism management based on local resources -** Chiang Mai organic agritourism management based on local resources dimension is focused on the organic agritourism patterns or typology. There are so many variety activities in the organic agritourism such as animal farm, cooking school, farming activities, rice planting, fruit picking, etc. in each tourism sites.

#### **4.2 SWOT and TOWS analysis of organic agriculture tourism in Chiang Mai**

##### **4.2.1 SWOT Analysis**

When analyzing the strengths, weaknesses, opportunities, and threats of organic agriculture tourism in Chiang Mai province and applying a TOWS Matrix to create the continual strategies, it exhibited strategies entrepreneurs of organic agriculture tourism, and relevant agencies should implement. The strategies are for developing organic agriculture tourism management and marketing to move toward and upgrade organic and high-value tourism in Chiang Mai province. The SWOT analysis results are shown in Table 1.

**Table 1** Summary of SWOT Analysis of Organic Agriculture-Tourism in Chiang Mai Province

Strengths (S)	Weakness (W)
<p><b>S1-</b> the model of organic agriculture tourism business that is operating to transfer knowledge to the interested people.</p> <p><b>S2-</b> IT system is implemented in the community based on the Lanna way of life.</p> <p><b>S3-</b> The mainstay is knowledgeable and expert in organic agriculture tourism.</p> <p><b>S4-</b> Organic agriculture farms located throughout Chiang Mai province.</p> <p><b>S5-</b> the organic agriculture tourism business model that serves inclusively in Chiang Mai province.</p> <p><b>S6-</b> the resources of local seeds.</p> <p><b>S7-</b> the products that show the community's uniqueness that meets the standard of Organic Thailand and the International Federation of Organic Movement (IFOAM).</p> <p><b>S8-</b> the organic agriculture learning resources and activities.</p> <p><b>S9-</b> The private sector is very efficient in being the resource to collect and distribute the organic products in the community.</p> <p><b>S10-</b> Organic agriculture sites offer accommodation and farm-stay.</p>	<p><b>W1-</b> Organic agriculture tourism in Chiang Mai province is not promoted as the primary tourist attraction.</p> <p><b>W2-</b> The activities in Chiang Mai are organized separately between tourism and organic agriculture. Therefore, there is no clarity on the target group.</p> <p><b>W3-</b> There is no central online information resource in Chiang Mai province for organic agriculture tourism.</p>

Strengths (S)	Weakness (W)
<p><b>S11-</b> There are many organic agriculture tourism activities organized based on the diverse communities.</p> <p><b>S12-</b> Organic agriculture tourism model is developed based on the traditional careers, so the strengths, wisdom, and local cultures are maintained.</p>	
Opportunities (O)	Threats (T)
<p><b>O1-</b> There are educational institutes that are experts in organic agriculture in the province.</p> <p><b>O2-</b> Thailand has the policy to promote high-value tourism.</p> <p><b>O3-</b> Tourists and consumers are increasingly interested in health issues.</p> <p><b>O4-</b> There are many types of alternative tourism in Chiang Mai.</p> <p><b>O5-</b> Chiang Mai is a well-known tourist province for Thai and foreign tourists.</p> <p><b>O6-</b> The consumers prefer to access online information.</p>	<p><b>T1-</b> The agriculturists lack an opportunity to access funds to gain technology to apply to organic agriculture.</p> <p><b>T2-</b> Some agriculturists lack knowledge about tourism in their communities.</p> <p><b>T3-</b> There is a transport limitation in some areas.</p>

From Table 1, the 12 strengths and the 3 weaknesses are internal factors, while external factors comprise the 6 opportunities and the 3 threats. It appears that the management of agro-tourism in Chiangmai has strength because the original project has been operated and it has now been developed from the existing career base. The result is a stronger operation. The original business applied innovation and technology to respond to the demands of the current tourists and consumers. It was ready to transfer knowledge to whom it was interested. The business has its standardized products at domestic and international levels. For weakness, agro-tourism in Chiangmai has not been promoted as the major tourism type. Chiangmai's central online agro-tourism information has not been installed to serve interested tourists or units that want to study. The information was scattered among the business groups and new tourists could not access it. As for the opportunity, Thailand has the policy to promote high-value tourism and Chiangmai is already well-known as a popular city among Thai and foreign tourists. In addition, its education institutes are well-prepared to promote and elevate agro-tourism, for example, the training of farmers to learn organic agriculture and tourism, the academic learning center about organic agriculture, and the acceptable sources to standardize products or agricultural outputs for farmers and entrepreneurs. Therefore, these are the main factors in the development and elevation of tourism. For threats, the use of technology or innovation to improve agro-tourism and to develop production process, the farmers still encounter the problem of accessing funds, the tourism knowledge to extend their career, and transportation to access the location.

#### 4.2.2 TOWS Analysis

The strategy for agro-tourism development in Chiangmai could be divided into 4 strategies: SO, ST, SW, and WT. The SWOT analysis results are shown in Table 2.

**Table 2** Summary of TOWS analysis results to set the organic agriculture tourism strategies

SO: Aggressive Strategies	WO: Turnaround Strategies
<ol style="list-style-type: none"> <li>1. Upgrade organic agriculture tourism that implements the innovations toward high-value tourism (S1, S2, O2, O3).</li> <li>2. Create organic agriculture tourism and promote Lanna culture online (S3, S4, S7, S8, S9, O4, O5, O6).</li> <li>3. Promote the organic products and organic agriculture tourism learning resources certified by educational institutes to ensure the consumers and tourists accurate information (S5, S6, O1).</li> </ol>	<ol style="list-style-type: none"> <li>1. Coordinate with educational institutes to promote the organic agriculture sites at the academic conferences and study trips (W1, O1, O2, O3).</li> <li>2. Create a central information center for organic agriculture tourism online and in various languages (W2, W3, O1, O5, O6).</li> </ol>
ST: Diversification Strategies	WT: Defensive Strategies
<ol style="list-style-type: none"> <li>1. Produce an innovator in organic agriculture tourism in the community by learning from the successful organic agriculture sites (S1, S2, T1, T2).</li> <li>2. Highlight the strengths of each region to set the perception and value of organic agriculture tourism in Chiang Mai province (S8, T3).</li> </ol>	<ol style="list-style-type: none"> <li>1. Present the selected products to specific customer groups (W1, T1).</li> <li>2. Enhance the agriculturists and new generation to have tourism potential and implement innovations and technologies (W2, W3, T2, T3).</li> </ol>

According to findings presented in table 2, **SO: Aggressive Strategies** divide into three strategies: 1) The strategy to improve agro-tourism by applying innovation in the operation to increase its value, the example of “Oon Valley Farmstay, Lanna Style” that is in Oon Tai Sub-district, San Kamphaeng District, Chiangmai, is the original smart agricultural community that combines IT with Lanna lifestyle. The application of technology and innovation in the tourism business is, another example, “Dutch Farm” becoming a tourist spot where people study the diversity of animals. With this system, “I BeaconsW” the technology indicates a location and sends it to the smartphone directly as communication to children and adults. Furthermore, Oon IT Valley is an institute to train apprentice agriculturists to practice Unmanned Aerial Vehicle (UAV for Agriculture) to enhance basic knowledge for agriculturists who are interested in technology. 2) The strategy to manage the online agro-tourism based on Lanna culture is to promote information access for the customer-targeted tourists and visitors and give accurate information because Chiangmai province has an outstanding tradition and local culture. 3) The strategy to develop agricultural products to international standards where educational institutes certify high-valued agro-tourism, to boost the confidence of consumers and tourists with high purchasing power, and to increase the opportunity to expand the market.

**ST: Diversification Strategies** divides into 2 strategies as follows: 1. To create the agro-tourism innovation in the local area by learning from the successful agro-tourism project. 2. To highlight the outstanding of each area to create the perception and value of the agro-tourism of Chiangmai.

**WO: Turnaround Strategies divides into 2 strategies as follows:** 1) The promotion of agro-tourism in academic activities by collaborating with educational institutes. 2) To provide holistic education through online information media about the agro-tourism of Chiangmai. The information could be published in as many types, such as virtual agro-tourism and online tourism experiences.

**ST: Defensive Strategies divides into 2 strategies as follows:** 1) To present the product to more specific target groups due to the price of the organic agricultural products are quite high compared with general products. In consequence, the entrepreneurs should analyze and make a market plan to discover their specific group of customers to precisely make the public relation with other units. 2) To

develop the agriculturalists and the new generation to have the competence in tourism and can apply innovation and technology as currently, technology is the primary factor that influences consumers' and tourists' decisions.

As a result, from the strengths to the opportunities and the elevation of the agro-tourism in Chiangmai that is highly competent, the entrepreneurs and the related units should apply aggressive strategies by using technology and innovation in the business operation that is based on the Lanna culture to make it as high-valued tourism and the identity of the community.

## 5. Summary of the findings

The exciting aspects of the research on "Organic Agritourism Development in Chiang Mai Province" are listed below.

1. The general condition of organic agritourism, in **management dimension** terms, illustrates that business owners have developed their inherited family farms into organic agritourism. For this reason, it relates to the agricultural way of life. The business operation model is in line with the study results of Ward (Ward, 1997). The latter stated that the family's business successor should start their role in childhood to construct the interest and gain experience and knowledge before taking the entire responsibility. Business is a tool to upgrade the family's well-being, generate jobs, and earn a living (Viriyakulkij et al., 2009). Later, traditional agriculture has upgraded to organic farming, focusing on the environment and better quality of life. It is consistent with Sangsuriyachan (2010), who examined the changes in the agriculturist's way of life after attending the training on sufficiency economy philosophy and discovered that organic agriculture was achievable, toxin-free, good for themselves and consumers, and made them proud to restore the land. Moreover, technologies and innovations are implemented in agriculture to create uniqueness and modernity and set up the source of learning for the interested people. It corresponds with Klangharad et al. (2017). They studied the factors of success of the agricultural garden of city people. They found that success is based on the learning from the entrepreneur's experience in the needs of the city people. As for a case study, Fresh Ville Farm, agricultural technology of the new generation, implemented an automatic control box to control the temperature to become an intelligent mushroom farm. As a result, the mushroom culture is possible in all seasons.

**2. Marketing dimension** Organic farming and processed agricultural products are distributed online and at the physical shops. Further, the practical agricultural activities are designed for the tourists to learn and experiment to gain new experiences. The study by Skowronek, Tucki, Huijbens, & Jotdzwik (2018) indicated that the key factors attracting the tourists to participate in tourism included life-experience construction via activities. Moreover, Sungarksa et al. (2017) discovered that agritourism highlights safe agriculture and promotes organic agritourism. It was a uniqueness that required the design and attention to the perception and expectation of the tourists.

### **3. Organic agritourism management based on local resources**

Regarding organic agritourism management in Chiang Mai, research results show that the local resources are processed into the products and activities to attract tourists. It includes the upstream, the harvesting activity, and the midstream, that is, to organize the activities using the harvested products and downstream, which the tourists consume the harvested products via the cooking activity. It is a "From Farm to Table" concept, an innovative approach to learning activities via the DIY. It is consistent with the agritourism supply chain management that requires the management from the upstream, midstream, to downstream for the continuity and high efficiency, cost reduction, and increasing the tourist satisfaction that would lead to the sustainable competitiveness. Zhang, Song and Huang (2009) and Loureiro (2014) said that the tourists enjoyed the sight-seeing and participating in the community activities, such as making wine, fruit harvesting, and handicraft.

### **4. Strategies**

TOWS (TOWS Analysis) results show that the entrepreneurs should apply "SO: Aggressive Strategies," which design the Lanna culture-based tourism activities by using the spatial strengths of Chiang Mai, the agricultural region with the biodiversity of the agricultural products. Meanwhile, the design should fit the tourist's demand. It corresponds with Xue et al. (2020), who illustrated that the tourists were pleased to visit the natural places that freshened them for good health and were appropriate for a comfortable life.

## 6. Conclusions and Recommendations

### Conclusion

The study results of the area or agricultural area development to be the organic agritourism indicated the following steps of the development; the survey of the agricultural sources, providing knowledge about tourism management, and tourism management during the 12 months. In addition, many Thai and foreign bachelor, master, and doctoral students in the tourism management program participated in the pilot project. Visited the agritourism sites and met with the three stakeholder groups, entrepreneurs from the government and state enterprise sector, the private sector, and the public in a focus group via the interview and brainstormed the idea of agritourism sites development in Chiang Mai.

However, the interview results indicate that the management, marketing, and organic agriculture are based on local resources. Moreover, the local agritourism entrepreneurs overlooked the service for the elderly and disabled people. Because they think agritourism is for the tourists who can travel alone or the group of teenagers and adults-only, the consideration of tourist tendency in Thailand or around the world should focus on the elderly and disabled people. In addition, entrepreneurs should consider tourist safety because the routes to the tourist sites and within the area are in the mountain. Furthermore, regarding tourism management, the teenagers should be constructed and developed to become the communicators for the local nature and culture because the communication, knowledge, and wisdom transferred from the philosophers, villagers, or elderly within the agritourism site to the tourists are the weak point.

### Recommendations

Research results present the organic agricultural site's opinions for agritourism site development and the potential of organic agritourism site management in Chiang Mai. The survey results with all stakeholders reflect that the potential of the tourist sites and tourist sites management in Chiang Mai needs improvement to upgrade their quality to impress the tourists. The crucial point is the sustainability of the organic agritourism management in the area to become a well-known site to Thai and foreign tourists. Therefore, the following recommendations are proposed.

1. The entrepreneurs from the government, state enterprise, private, and public sectors should be aware of and understand the three key indicators that are the components of agritourism management. First, the production indicator involves a conservative agricultural activities model integrating with the local culture and traditional agriculture technology that is well integrated with the new agricultural technology. Also, that prevents the natural resources and environmental destruction in the area, the unique agricultural products that are distinctive from other areas, and the processed agriculture products as souvenirs. Second, the physical and environmental indicators comprise the agricultural plot's nature and beauty. Where the plants and flowers are classified and arranged in a beautiful garden, the safe and convenient routes and transport for the elderly and disabled people and the variety of agritourism activities, which the mixed agriculture integrating with organic farming would be potential. Moreover, the "quality service" impresses the tourists. Thus, training and knowledge are needed to build up the proficiency of the employees and members for the professional service. Third, the social indicator comprises the traditional agriculture of the tribe or Lanna agricultural style, creating an exciting story to affect the tourists, demonstrating the uncomplicated way of life. This lifestyle is based on the sufficiency economy philosophy of King Rama IX. Therefore, it adds more interest to the tourists to visit and learn the techniques, methods, and management substantially to adapt to their daily routine. However, the necessary factor is the collaboration of all sectors, particularly the local agriculturists, to be willing to upgrade the area to a tourist site because they must spend time welcoming tourists and handle tourism following the government or private advice sector. Without the collaboration, the possibility of developing the agricultural area into a tourist site is very low.

2. The executives of the government/state enterprise, private sector, and the community leaders in Chiang Mai who are concerned with agricultural area development to the agritourism sites at the national and international level should consider the four fundamental qualities of the agricultural resources that are the key components to facilitate the efficient agritourism sites, which includes

3. Have the attractions for tourists to fulfill their demands, such as the beautiful nature, agricultural activities, agricultural products, etcetera.

4. The convenient transport and access. Currently, the roads in Chiang Mai are macadamized roads. However, the safety system should be improved to serve the tourists. The PAO, SAO, or the Royal Project Centers in Chiang Mai should monitor and promote efficient and safe vehicles for the tourists if they request.

5. The tourist service center should be increased. The local police station is the only place that provides the service to the tourists. The tourist service center should be developed to meet the international standard in the future because there are increasingly foreign tourists visiting the area, especially those who come with no tour guide. Hence, they can inquire or study the manual and maps at the service center.

The area's capacity which the government executives, private, and public sector should seriously consider and determine the measures and the appropriate tourist capacity; Since most of the Chiang Mai areas are the national park and conservative forests, which are the origins of the Mae Sa and Mae Ping Rivers, a conflict issue between development and conservation is addressed. Therefore, the number of tourists should be appropriate to the area and not destroy the natural resources and cultures of the tribes. Moreover, rules and regulations should be determined clearly and strictly with fair and substantial consequences. It would be a factor that promotes Chiang Mai to become a sustainable agritourism site in the future.

### **Recommendation for Future Research**

1. The limitation to this research is the budget and research timeframe. Thus, the study was conducted in Chiang Mai Province only. Consequently, research results might explain or describe the specific area and cannot be assumed for all Thailand. Therefore, further research should expand the research area to other parts of Thailand by using the data and results of this research as the fundamental data.

2. The perception and expectations of the tourist on the organic agritourism activities or products should be studied, and the data applied to develop and upgrade organic agritourism in Chiang Mai.

3. The guidelines for assembling the organic agritourism business group and the local educational institutions should be examined to develop product certification for specific customer groups of organic agritourism.

## Bibliography

จีรนันท์ เชิมขันธ์. (2561). มุมมองของการพัฒนาภาคการท่องเที่ยวเชิงเกษตรในประเทศไทย. *วารสารเกษตรพระจอมเกล้า*, 36(2), 162-167.

สุกานดา นาคบังษิณ, อารีย์ นัยพินิจ, ธงพล พรหมสาชา ณ ศกลนคร, และ ภัทรพงษ์ เกริกสกุล. (2560). รูปแบบการพัฒนาการท่องเที่ยววิถีเกษตรอินทรีย์ในกลุ่มจังหวัดร้อยแก่นสารสินธุ์. *วารสาร มจธ ลัษณะศาสตร์ปริทรรศน์*, 6(1), 209-219. ลีบคัน จาก <https://so03.tci-thaijo.org/index.php/jssr/article/view/245585/166130>

Broccardo, L., Culasso, F., & Truant, E. (2017). Unlocking value creation using an agritourism business model. *Sustainability*, 9, 1618.

Brookfield, H. (1991). Environmental sustainability with development: What prospects for a research agenda?. In O. Stokke (Ed.), *Sustainable Development*. London: Frank Cass.

Busby, G., & Rendle, S. (2000). The transition from tourism on farms to farm. *Tourism Management*, 21(6), 635-642. DOI:10.1016/S0261-5177(00)00011-X

Butler, R. W. (1991). Tourism, environment, and sustainable development. *Environmental Conservation*, 18(3), 201–209.

Cater, E. (1993). Ecotourism in the third world: Problems for sustainable tourism development. *Tourism Management*, 14(2), 85-90.

Cheng, C. C. J., Yang, C. I., & Sheu, C. (2014). The link between eco-innovation and business performance: A Taiwanese industry context. *Journal of Cleaner Production*, 64, 81-90.

Choo, H., & Jamal, T. (2009). Tourism on organic farms in South Korea: A new form of ecotourism? *Journal of Sustainable Tourism*, 17, 431–454.

Ciolac, R., Adamov, T., Iancu, T., Popescu, G., Lile, R., Rujescu, C., & Marin, D. (2019). Agritourism: A sustainable development factor for improving the 'health' of rural settlements. Case study Apuseni mountains area. *Sustainability*, 11(5), 1467.

Clarke, J. (1996). Farm accommodation and the communication mix. *Tourism Management*, 17(8), 611-616.

Clough, M. (1997, 11 June). Profiting from farm tourism. *Western Morning News*.

Cropper, M. L., Leland, B. D., & McConnell, K. E. (1998). *On the choice of functional*.

Department of Tourism. (2014). Thailand agritourism attraction standard handbook. Retrieved April 16, 2019, from [https://thaits.org/tts\\_pr/wp-content/uploads/2016/09/คู่มือการประเมิน-แหล่งท่องเที่ยวเชิงเกษตร.pdf](https://thaits.org/tts_pr/wp-content/uploads/2016/09/คู่มือการประเมิน-แหล่งท่องเที่ยวเชิงเกษตร.pdf)

Drzewiecki, M. (2002). Podstawy agroturystyki, Ośrodek Postępu Organizacyjnego, Bydgoszcz.

Dubois, C., & Schmitz, S. (2013). What is the position of agritourism on the Walloon tourist market?. *European Countryside*, 5(4), 295–307.

Fleischer, A. (1996). *The rural vacationers: Follow-up study*. Israel, Jerusalem.

Fleischer, A., & Felsenstein, D. (2000). Support for small-scale rural tourism: Does it make a difference?. *Annals of Tourism Research*, 27(4), 1007–1024.

Fleischer, A., & Pizam, A. (1997). Rural tourism in Israel. *Tourism Management*, 18(6), 367-372.

Godfrey, K. (1996). Towards sustainability: Tourism in the Republic of Cyprus. In L. C. Harrison and W. Husbands (Eds.), *Practicing Responsible Tourism: International Case Studies in Tourism Planning, Policy and Development*, Wiley.

Horbach, J., Rammer, C., & Rennings, K. (2012). Determinants of eco-innovations by type of environmental impact: The role of regulatory push/pull, technology push and market pull. *Ecological Economics*, 78, 112-122.

Hunter, C. (1997). Sustainable tourism as an adaptive paradigm. *Annals of Tourism Research*, 24(4), 850-867.

Khermkhan, J., & Mankeb, P. (2018). The agricultural tourism management in family business: Case study of Rayong province in Thailand. *International Journal of Agricultural Technology*, 14(7), 1327-1334.

Klangrahad, C., Nakhorn, P., & Rungrueng, K. (2017). The success factors of urban agriculture. In *the Proceeding of The 4<sup>th</sup> National Conference on Public Affairs Management: Public Affairs Management Under Thailand 4.0*. (pp 811-826).

Kruntakapakorn, K., Sitthikun, S., & Leelapattana, W. (2020). Developing the potential of agricultural community in Huay Sai Sub-district Maerim district Chiangmai province. *Journal of modern management science*, 13(2), 29-44.

Kuo, N. W., & Chiu, Y.T. (2006). The assessment of agritourism policy based on SEA combination with HIA. *Land use policy* 23, 560–570.

Loureiro, S. M. C. (2014). The role of the rural tourism experience economy in place attachment and behavioral intentions. *International Journal of Hospitality Management*, 40, 1-9.

Miczyńska-Kowalska, M. (2017). Innovation in agritourism as perceived by students of University of Life Sciences in Lublin. *Acta Innovations*, 24, 53-64.

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

Privitera, D. (2009). Factors of development of competitiveness: The case of organic-agritourism. In *European Association of Agricultural Economists, 113th Seminar, December 9-11, 2009*, Belgrade, Serbia.

Privitera, D. (2010). The importance of organic agriculture in rural tourism. *Applied Studies in Agribusiness and Commerce*, 4, 59–64.

Rak A. M., Mirończuk, A., & Piechowicz, B. (2007). Finansowanie turystyki wiejskiej z unijnych funduszy strukturalnych, [w:] G. A. Ciepiela, J. Sosnowski, Agroturystyka. moda czy potrzeba?, Wyd. Akademii Podlaskiej, Siedlce.

Rennings, K. (2000). Redefining innovation: Eco-innovation research and the contribution from ecological economics. *Ecological Economics*, 32(2), 319-332.

Ritson, C., & Oughton, E. (2007). Food consumers and organic agriculture. In *Understanding Consumers of Food Products*, L. Frewer and H. van Trijp (Eds.), 254–272. Boca Raton, FL: CRC Press.

Samrah, D., & Prachuap T. (2020). Evaluation of agritourism potentials in Tanyong Pao community, Tha Kamcham sub-district, Nong chik district, Pattani province. *Humanities and Social Sciences*, 37, 80-111.

Sangsuriyachan, T. (2010). Changes to farmers' lifestyles after attending Ratchathani Asoke's sufficiency economy training program. *KKU Research Journal*. 15(11),1088-1100.

Sangsuriyayachan, T. (2010). Changes to famers' lifestyles after attending Ratchathani Asoke's sufficiency economy training program. *KKU Research Journal (Graduate Studies)*, 15(11), 1088-1100.

Sharpley, R. (2002). Rural tourism and the challenge of tourism diversification: The case of Cyprus. *Tourism Management*, 23, 233-244.

Sharpley, R., & Vass, A. (2006). Tourism, farming and diversification: An attitudinal study. *Tourism Management*, 27(5), 1040-1052.

Shen, C. C., Chang, Y. R., & Liu, D. J. (2020). Sustainable development of an organic agriculture village to explore the influential effect of brand equity from the perspective of landscape resources. *Sustainability*, 12, 7416.

Shen, C. C., Liu, D. J., & Tseng, T. A. (2020). Establishing an organic agricultural tourism attachment model by integrating the means-end chain method and fuzzy aggregation operator. *Journal of Outdoor Recreation and Tourism*, 33, 67-114.

Skowronek, E., Tucki, A., Huijbens, E., & Jmazwik, M. (2018). What is the tourist landscape? Aspects and features of the concept. *Acta geographica Slovenica*, 58, 73-85.

Sungrugsa, N., Plomelersee, S., & Tungtavonsakul, N. (2017). The development of useful knowledge set linked to creative tourism. *Veridian E-Journal*, 10(2), 2143-2160.

Tchouamou Njoya, E., & Nikitas, A. (2020). Assessing agriculture-tourism linkages in Senegal: A structure path analysis. *GeoJournal*, 85, 1469-1486.

Thongma, W., Lin, Y. T., Leelapattana, W., & Cho, C. C. (2017). Environmental education and perceived eco-innovativeness: A farm visitor study. *Advances in Hospitality and Leisure*, 13, 99-110.

Viriyakulkit, N., Sirivanasandha, R., & Viriyarungsarit, P. (2009). *Family business succession. Money and banking Thailand*. Bangkok.

Wacher, C. (2006). *The development of agri-tourism on organic farms in new EU countries – Poland, Estonia and Slovenia*. Winston Churchill Memorial Trust. Retrieved from <http://orgprints.org/10860/1/winstonchurchill.pdf>

Weaver, D. B., & Fennell, D. (1997). The vacation farm sector in Saskatchewan: A profile of operations. *Tourism Management*, 18, 357-365.

Wheeler, B. (1993). Sustaining the ego. *Journal of Sustainable Tourism*, 1(2), 121-129. DOI:10.1080/09669589309450710

World Trade Organization. (2002). *Asia Pacific Ministerial Conference on sustainable development in ecotourism, Male, Maldives, 11-13 Feb. 2002, Final Report*. Author.

Xue, L. L., Chang, Y. R., & Shen, C. C. (2020). The sustainable development of organic agriculture tourism: The role of consumer landscape and pro-environment behavior. *Sustainability*, 12(15), 6264-6269.

Zhang, X., Song, H., & Huang, G.Q. (2009) Tourism supply chain management: A new research agenda. *Tourism Management*, 30, 345-358. <http://dx.doi.org/10.1016/j.tourman.2008.12.010>