

Monitoring of the Performance of the Agro-Safety Tourism Management Research Project for Economic Value Added in the Route of Ing River Basin After the COVID-19 Pandemic

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Abstract

The aim of this research was to monitor the Agro-Safety Tourism Management Research Project to create economic value in the Route of the Ing River Basin during and following the COVID-19 pandemic. This qualitative research used in-depth interviews in eight agro-safety tourism communities along the Route of the Ing River Basin with entrepreneurs involved in accommodation, tourism sales, agricultural learning centers, and health tourism. Content and data analysis was conducted using basic statistics. The results indicate that the sample of entrepreneurs and people related with agro-safety tourism were mostly male, aged 41–50 years, married, have an education lower than a bachelor's degree or a bachelor's degree equally, and have an occupation related with agricultural tourism. Additionally, most offer agro-safety tourism activities with the business model of a community enterprise having division of labor, and people in agencies and in communities participating in the administration with support from related agencies and consultants.

Keywords: *Monitoring, Agro-Safety Tourism Management, Post Covid-19 Pandemic, Route of the Ing River Basin, Economic Value Added.*

Introduction

Agro-safety tourism to create economic value in the Route of the Ing River Basin consists of nine communities in both the area of Phayao province, including the communities of Ban San Sali, Charoen Rat subdistrict, Mae Chai district; Ban Tun Tai, Ban Tun subdistrict, Mueang Phayao district; Ban San Pa Pao, Dok Khamtai subdistrict, Dok Khamtai district; Ban Mae Ing San Klang, Mae Ing subdistrict, Phum Khamyao district; Ban Wiang Lo, Lo subdistrict, Chun district; and Ban Pueai Piang, Yuan subdistrict, Chiang Kham district; as well as within the area of Chiang Rai province, with the communities of Ban Non Sombun, Ngio subdistrict, Thoeng district; Ban Huai Sak, Yang Hom subdistrict, Khun Tan district; and Ban Din, Sathan subdistrict, Chiang Khong district. These are the important agro-safety tourism communities of the Ing River basin and are the tourist attractions that create revenue for communities in Phayao province and Chiang Rai province.

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According to Somchan et al. (2019) and Somchan & Pakdeepinit (2014), agro-safety tourism management that increases value from the tourism activities should provide activities that allow tourists to learn about the links between the agricultural practices of communities and the social context, culture, traditions, and history of the communities as well as activities that facilitate tourists learning about the link between conducting agro-safety and the geography, climate, and environment of the area. Also, it was summarized that administration of agro-safety tourism groups in communities should include the creation of a concrete workplan for tourism in order to generate support and development with regard to the attractiveness of the touristic places in communities. Notable tourism activities in communities and the links with the network of other agro-safety tourism communities include public facilities in tourism places, both basic and higher level public utilities, accommodation services at tourism places in communities, the provision of safety for tourists, public relations and marketing for touristic places in communities, establishment of rules, regulations and/or agreements of agro-safety tourist attractions as well as the development of a system for interpretation within tourist attractions and the creation of the network in the management of agro-safety tourist attractions, demonstration points, and agro-safety tourism. This will ensure safety in tourist destinations and development of public relations media for agro-safety tourism (Suleman & Rahman, 2020; Suleman & Mohamed, 2019). Allowing agro-safety tourism guides to be local people from within the communities will build the strength of the communities with training organized to develop and enhance the skills of the agro-safety tour guides. It is also necessary to promote tourism that has quality, organize learning points in order to allow tourists to try cooking together with communities by preparing food made from the local plants, vegetables, and fruit safely/serve healthy food items to tourists, create boards, make brochures and interpretative signage in the area in order to provide convenience to tourists, organize souvenir shops in communities that have agro-safety products to sell to tourists such as OTOP agricultural products, processed agricultural products, souvenirs, etc., and organize tour vehicles for agro-safety tourism in these communities that were studied before the COVID-19 pandemic occurred.

Lapointe (2020), Prideaux et al. (2020), Babii & Nadeem (2021), and the Communicable Disease Academic Development Group (2021) stated that COVID-19 began in the year 2020, when the first patient in Thailand was identified on 13 January. Subsequently, the Ministry of Public Health issued an announcement on 1 March 2020 stating that COVID-19 is a dangerous contagious disease under the Communicable Diseases Act 2015, and the prime minister announced a state of emergency in every area of Thailand on 20 March 2020. Moreover, there were other measures continuously implemented, such as requiring a letter of permission to enter or leave provinces, registration when entering provinces, areas with maximum and strict controls, and compliance with the measures of DMHTT that consisted of D: Social Distancing - maintain a distance of 1–2 meters and avoid crowded places; M: Mask Wearing - wear a cloth mask or face mask at all times; H: Hand washing - wash hands often with water and soap or alcohol gel; T: Testing – monitor temperatures and test for COVID-19 infection; T: Thai Cha Na - scan the Thai Cha Na app before entering or leaving public places every time; if traveling from a high-risk area, notify the village health volunteer officer and quarantine at one's residence for a period of 14 days. Compliance with the Provincial Communicable Disease Committee's strict announcement affected the tourism industry, as it stated that tourists, both Thais and foreign visitors, were not allowed to travel, which led to impacts on agro-safety tourism. However, the government of Thailand made another announcement on 1 October 2022 declaring COVID-19 to be an endemic disease and reduced the various measures in an effort to allow Thai tourism as well as other economic activities to start to recover and various other activities to be conducted.

Since the year 2020 to the present, communities along the Route of the Ing River Basin that participate in this research project have all been impacted by the situation caused by the spread of COVID-19. This is in line with Praditsangthong et al. (2022), who adopted

Gulick's management concept of "POSDCORB", which entails 1) Planning, 2) Organizing, 3) Staffing, 4) Directing, 5) Coordinating, 6) Reporting and 7) Budgeting, to use in organizing their own horticulture in order to provide efficiency and effectiveness in reducing problems in business operations and create strength for entrepreneurs to be prepared for competition and easily start a business, including the implementation of monitoring and evaluation. Therefore, the research team has been able to achieve the objective of monitoring agro-safety tourism management in order to create economic value in the Route of the Ing River Basin during and following the outbreak of COVID-19 regarding the kinds of management to apply and the suggested improvements that are necessary that can be used as a database for supporting tourism and as guidelines in formulating business operations strategies during the occurrence of the crisis resulting from the pandemic.

Literature review

1. Agro Tourism concept

Agro tourism is the activity of traveling to places that are tourist attractions, communities, and other areas that integrate agricultural activities so that they become a tourist spot that has various types of organized services consisting of the things that cause tourists to visit (Attractions), the facilities that provide convenience (Amenities), the ability to easily enter and exit tourist attractions (Access), things for tourists to do (Activities), and safe places to stay (Accommodation) (Henderson, 2009). This will allow tourists to be able to come to visit, experience and stay in these places, for example the organization of tourism routes with guides, organization of places for demonstrations or caring for domesticated animals on farms, places organized to sell agricultural products and souvenirs that come from the agricultural work that is being done, etc. Moreover, these operations must not be in contradiction with the conservation of nature and the environment and are a type of tourism that has the aim of learning and understanding local traditions and ways of life, including agricultural methods through new experiences of agriculture from the local wisdom and the lifestyles of the local people in these areas (Ana, 2017; Daugstad & Kirchengast, 2013; Sasu & Epuran, 2016; Zoto et al., 2013; Suleman et al., 2023; Suleman et al., 2023; Suleman et al., 2021). This aligns with the present trends of awareness about agriculture that takes into account the impacts on environmental conditions and dangers to human life. There must be development of a system for production that is chemical-free as well as agricultural practices that have a system for production that uses specified amounts of chemicals, which is agriculture known as "agro-safety". Srisa-at (2006) mentions that the concept of agro-safety tourism is characterized by the use of agricultural resources that reduces chemicals in the production processes and results in safety for consumers as well.

2. Monitoring as an agro-safety tourism management concept

Monitoring is an important tool in the identification of problems that occur in projects, and it also provides the guidelines that can be used to solve those problems. The results obtained from the analysis will be used in improvement, amendment, expansion or termination of operations, resulting in cost-effectiveness in the conducting of various types of work (Praditsangthong et al., 2022; Suleman, Mohamed & Ahmmed, 2020).

Monitoring and evaluation refers to the processes of regular measurement and monitoring of performance of a workplan or various projects on an ongoing basis in order to evaluate the potential ability to perform work activities, develop a workplan, or complete projects in accordance with the mission and the goals and objectives that have been determined. Monitoring and assessment of results have similar work processes that go hand in hand and are thus referred to as monitoring & evaluation, which has great importance in helping to know whether the projects or activities that are being conducted have achieved

the objectives and also the degree of efficiency that they possess. The results from monitoring & evaluation provide data that indicate success, strengths, weaknesses and guidelines in the amendment and improvement of the operations of activities and enhance the workplan management for activities and projects to have even higher efficiency, in which the workplan management for activities and projects will consist of Planning, Implementation, Control and Evaluation, which all have equal importance. If there is a lack of any part or any part lacks efficiency, it will have an impact on the overall efficiency of the workplan management for activities and projects (Phak Uthai, 2019; Praditsangthong et al., 2022).

3. Monitoring tourism activity as an agro-safety tourism management tool

Many authors have highlighted the need to measure the performance of the agro-safety tourism of destinations and businesses, which is performed to develop monitoring strategies that can improve the management of these tourist destinations (Antolini & Grassini, 2020; Dias et al., 2023; Gasparini & Mariotti, 2021; Magliulo, 2014; Miller & Torres-Delgado, 2023; Torres-Delgado & Saarinen, 2014; Varra et al., 2012). Monitoring agro-safety tourism activity consists of collecting statistical information about the actual impact of tourism on regions, which will contribute to better management of tourism businesses and of agro-safety tourism destinations (Bertocchi et al., 2021; Ivars-Baidal et al., 2021; Miller & Torres-Delgado, 2023; Moniche & Gallego, 2022; Torres-Delgado et al., 2023; Torres-Delgado & Saarinen, 2014). Since one of the main objectives of destinations today is to promote their sustainability, monitoring the impacts of tourism has become a fundamental factor in destination management (Antolini & Grassini, 2020; Dias et al., 2023; Gasparini & Mariotti, 2021; Magliulo, 2014; Miller & Torres-Delgado, 2023; Torres-Delgado & Saarinen, 2014; Varra et al., 2012). The performance of tourism and its sustainability are measured using indicators, which are “. . . a measure of the existence of some issue or phenomenon of interest, used to describe an aspect of society, macro-societal activity or geographical area, or to point to changes in these factors” (Font et al., 2021). Indicators will therefore allow: 1. monitoring of tourism’s sectoral performance; 2. measurement of the progress and development of strategies and plans based on data specific to the reality of tourism; and 3. the sharing of knowledge of tourism performance among all stakeholders (Font et al. 2021).

To promote the sustainable development of tourism, indicators should cover the three pillars of sustainability (the environment, the economy, and sociocultural issues), according to the Sustainable Development Goals (SDGs) (Rasoolimanesh et al., 2020), so as to generate specific and valuable knowledge for local stakeholders and decision makers with regard to tourism impacts, product quality, etc. (Bertocchi et al., 2021; Dias et al., 2018; Dias et al., 2023; Font et al., 2021; Gasparini & Mariotti, 2021; Miller & Torres-Delgado, 2023; Torres-Delgado & Saarinen, 2014). In addition, local decision makers will be able to adapt their future strategies based on this specific knowledge, allowing them to plan and make evidence-based decisions that promote sustainable tourism development (Bertocchi et al., 2021; Font et al., 2021; Foronda-Robles et al., 2023; Miller & Torres-Delgado, 2023; Torres-Delgado et al., 2023). Monitoring tourism activities will also have a positive impact on destination competitiveness by identifying trends in tourism demand and allowing destinations to position themselves accordingly (Font et al., 2021; Foronda-Robles et al., 2023; Gasparini & Mariotti, 2021; Moniche & Gallego, 2022). Therefore, monitoring tourism is key to the efficient management of a destination and its image, but most importantly to promote sustainable tourism development (Bertocchi et al., 2021; Butler, 1999; Dias et al., 2023; Gasparini & Mariotti, 2021; Miller & Torres-Delgado, 2023; Miller & Twining-Ward, 2005; Moniche & Gallego, 2022; Rasoolimanesh et al., 2020; Torres-Delgado et al., 2023; Torres-Delgado & Saarinen, 2014).

Research Methodology

Qualitative research using data collection from the in-depth interviews

1. The key informants were a total of nine communities, namely the communities of Ban San Sali, Charoen Rat subdistrict, Mae Chai district, Phayao province; Ban Tun Tai, Ban Tun subdistrict, Mueang Phayao district, Phayao province; Ban San Pa Pao, Dok Khamtai subdistrict, Dok Khamtai district, Phayao province; Ban Mae Ing San Klang, Mae Ing subdistrict, Phum Khamyao district, Phayao province; Ban Wiang Lo, Lo subdistrict, Chun district, Phayao province; Ban Pueai Piang, Yuan subdistrict, Chiang Kham district, Phayao province; Ban Non Sombun, Ngio subdistrict, Thoeng district, Chiang Rai province; Ban Huai Sak, Yang Hom subdistrict, Khun Tan district, Chiang Rai province; and Ban Din, Sathan subdistrict, Chiang Khong district, Chiang Rai province, which were chosen by specific sampling.

2. The creation of the research tool started from the draft of the in-depth interview questions and then, the interview form was created and presented to experts in order to consider the suitability and accuracy of the use of language and the coverage of the research content. Improvement and amendment of the interview form based on the recommendations of the experts was carried out and then, the interview was presented to content specialists for measurement and evaluation of the results by considering the content validity and finding the index of item-objective congruence (IOC) coefficients between the questions. The consistency of each item with the definition of specific terms was considered using the IOC, which should have a value of 0.60 and up. Thus, the content specialists and measurement and evaluation of the results by the three experts found the consistency at 0.60-1.00. Moreover, a request was submitted to the Human Ethics Unit in order to request a certificate of human ethics for the interview form that was used for data collection with the designated sample group.

3. In the data collection, the researchers conducted the process as follows:

3.1 Primary Information: 3.1.1 Checking of the interview form during the data collection and following the data collection in the field. On this basis, the data collection was conducted between 1 November 2022 to 31 October 2023.

3.1.2 Compiling of the data and testing of the accuracy to prepare for the coding of the responses to the interview by numbering the interview items in accordance with the various categories.

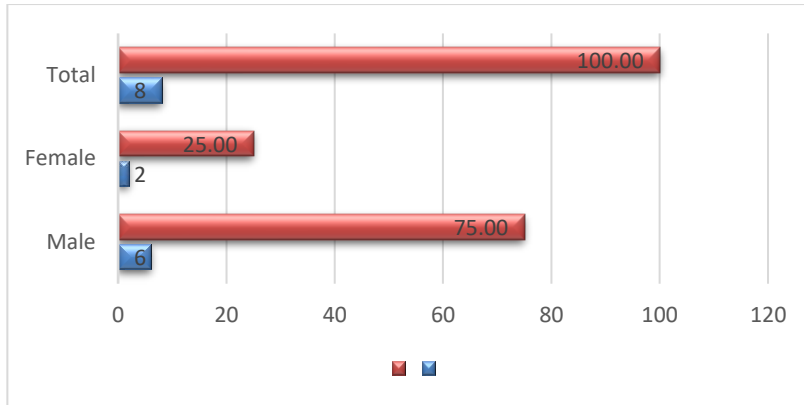
3.1.3 Use of a computer program to assist with the data analysis.

3.1.4 Data analysis was conducted by statistical methods with a computer software package. 3.2. The secondary data was compiled from the theoretical concepts and the results of related research work.

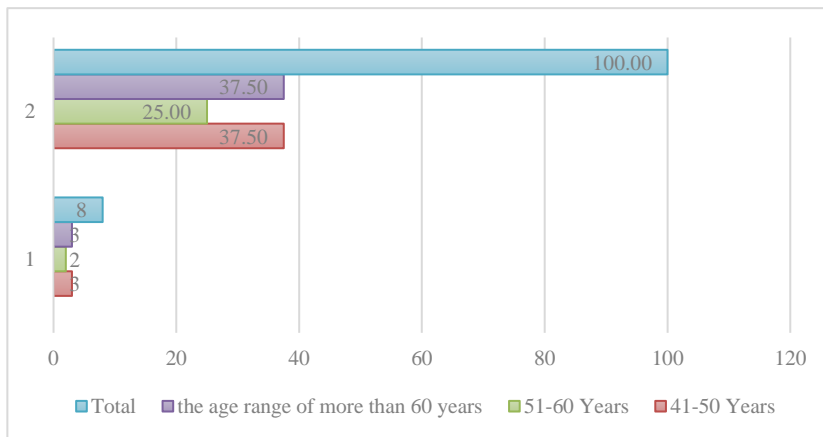
4. Descriptive analysis was conducted in order to provide knowledge regarding demographic and management characteristics by presentation in the form of basic statistics, namely frequency, percentage and content analysis.

Results

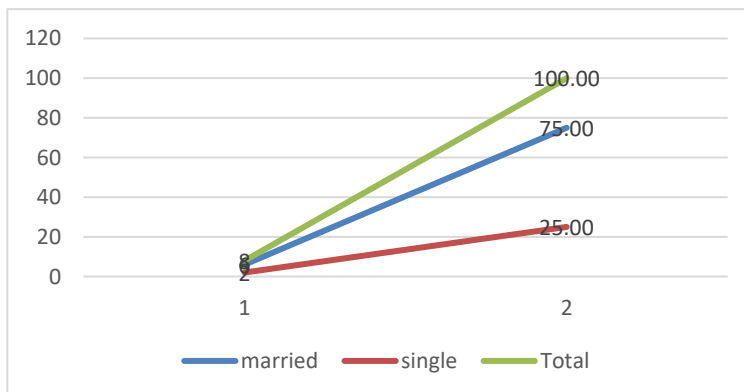
Part 1 Data analysis of demographics of the sample of agro-safety tourism entrepreneurs



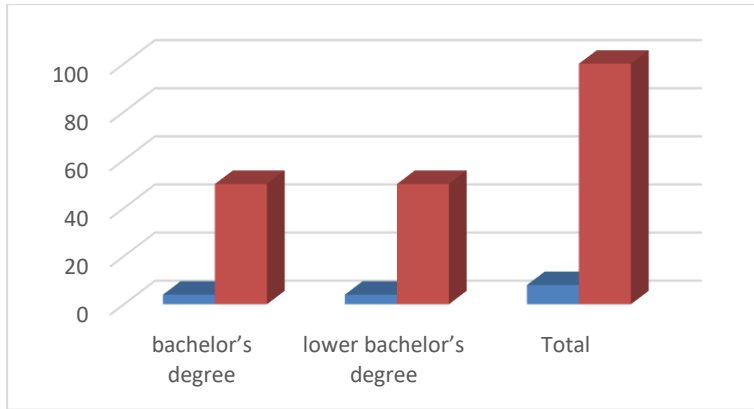
Sex - It was found that most of the sample were male with a total of 6 people (75.00%), and females included a total of 2 people (25.00%).



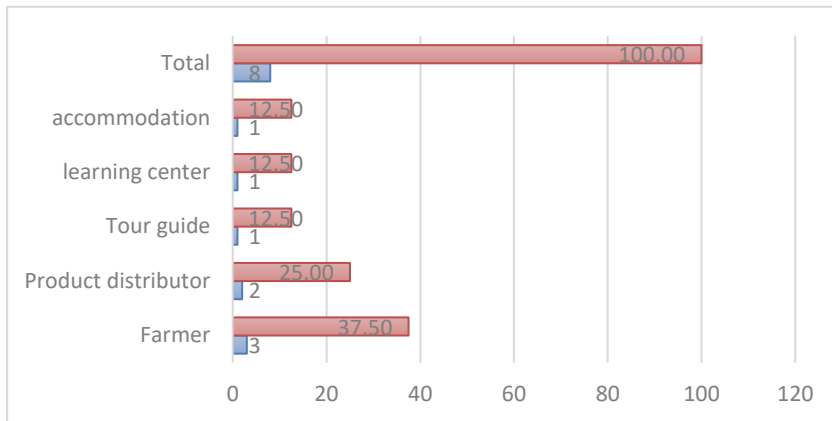
Age - It was found that most were aged 41–50 years with a total of 3 people (37.50%) and those aged more than 60 years with a total of 3 people (37.50%). This was followed by those aged 51–60 years, comprising 2 people (25.00%).



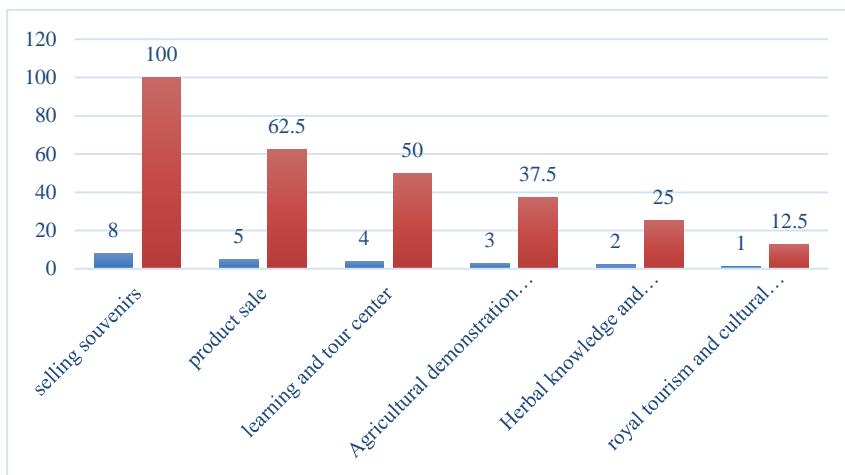
Marital status - It was found that most of the sample are married, with a total of 6 people (75.00%), and unmarried/single included a total of 2 people (25.00%).



Education level - It was found that a total of 4 people (50.00%) have a degree lower than a bachelor's degree and a total of 4 people (50.00%) have a bachelor's degree.



Occupation - It was found that most have an occupation related with agricultural tourism as farmers with a total of 3 people (37.50%), followed by product distributors with a total of 2 people (25.00%), and tour guide, learning center, and accommodation with each category having 1 person (12.50%).



Selling souvenirs – The overwhelming majority of the sample are involved with the sale of souvenirs with a total of all 8 people (100.00%), followed in order by selling products with a total of 5 people (62.50%), having learning centers and guided tours with a total of 4 people (50.00%), demonstration of agriculture practices and accommodation having a total of 3 people (37.50%), having expertise in herbs and being a producer of herbs having a total of 2 people (25.00%), and expertise in royal tourism and cultural knowledge with a total of 1 person (12.50%).

Part 2 Monitoring agro-safety tourism management for economic value added in the Route of the Ing River Basin during and following the COVID-19 pandemic.

The findings regarding the sample of entrepreneurs or people related with agro-safety tourism management in the operation of agro-safety tourism were as follows.

2.1 Having a type of business operations in agro-safety tourism by establishing a community enterprise was applicable to 5 people (62.50%), followed in order by sole proprietorship with a total of 2 people (25.00%), and limited liability company with 1 person (12.50%).

2.2 Having a management model of operation of agro-safety tourism with a division of labor in management included 6 people (75.00%), and management by a single person had a total of 2 people (25.00%).

2.3 Having a management model with participation of people in agencies and not having the participation of people in agencies in the administration each had a total of 4 people (50.00%).

2.4 Having a management model with the participation of people in communities had a total of 5 people (62.50%), and not having participation in administration from the people in communities totaled 3 people (37.50%).

2.5 Having a management model that has support from related agencies had 6 people (75.00%), and the management model that did not receive support from the related agencies included a total of 2 people (25.00%).

2.6 Having a management model that has a consultant in work operations included a total of 5 people (62.50%), and not having a consultant in work operations comprised 3 people (37.50%).

2.7 Having a financial management model in which there is the recording of financial transactions every time included 1 person (12.50%), and have the recording of financial transactions occasionally amounted to 7 people (87.50%).

2.8 Having the management model of marketing that has self-promotion of tourism included a total of 3 people (37.50%), and not having public relations for tourism had a total of 6 people (75.00%).

2.9 Having the marketing management model that has a system for online marketing and not having a system for online marketing each had a total of 4 people (50.00%).

Part 3 Research results from the in-depth interviews

3.1 During the COVID-19 pandemic

From the in-depth interviews of the sample of entrepreneurs or people related with agro-safety tourism located in eight communities that participated in the Agro-Safety Tourism Management Research Project for economic value added in the Route of the Ing River Basin in fiscal year 2019, which consist of nine communities in Phayao province and Chiang Rai province, namely Mae Chai district, Mueang Phayao district, Dok Khamtai district, Phum Khamyao district, Chun district, Chiang Kham district, Thoeng district, Khun Tan district, and Chiang Khong district, it can be summarized that during the occurrence of the COVID-19 pandemic there were impacts that caused there to be no tourism activities, resulting in a loss of revenue from tourism. However, entrepreneurs have made efforts to gain additional knowledge in order to increase tourism activities and products and participate in the activities of government agencies that will generate revenue from the activities and have the sale of goods through an online system. Regarding tourism activities that are impacted the most, the highest were tourism activities that are in the categories of accommodation and guided tours and sightseeing activities. Tourism activities in which there is the sale of products have been less affected

because of the introduction of a system for online marketing to assist with distribution, and there are also government agencies that assist with the distribution of goods. Apart from that, there are also some communities that conduct proactive marketing of their own by introducing products through closer contact with the consumers.

3.2 Following the opening of the country (End of the COVID-19 pandemic)

From the in-depth interviews, it was found that entrepreneurs or people related with agro-safety tourism located in the nine communities must conduct improvement of the tourist attractions of their own in order to accommodate tourists, develop products that match the needs of tourists, conduct more online marketing, strive to create relationships with local communities that are better than previously in order to have sources in the distribution of products and raw materials used in production as well as strive to participate with communities more and facilitate government agencies to assist with conducting the promotion of tourism.

From the data, it can be summarized that the most important thing is that when there are unexpected events, such as the outbreak of COVID-19, entrepreneurs and people related with agro-safety tourism should have a backup plan for support in management, and the most important thing in the management of agro-safety tourism will require cooperation from the people in communities and financial management and effective marketing. Lastly, each community should have products that strongly highlight their own uniqueness, such as Ban San Sali has crab sauce, Ban Wiang Lo has sarapee flowers, etc.

Summary

Demographic data

Entrepreneurs or people related with agro-safety tourism in the sample were mostly male, aged 41–50 years, married, equally have a degree lower than a bachelor's degree or have a bachelor's degree, and have an occupation related with agricultural tourism mostly involving agro-safety tourism activities.

Operational management of agro-safety tourism

Most business operations for agro-safety tourism have established community enterprises as the management model of operations with a division of labor in management. Having the management model with participation of people in agencies and not having participation in administration were found equally. Moreover, there is also the management model with participation of people in communities, the management model with support from the related agencies, the management model with a consultant in work operations, the financial management model that has occasional recording of financial transactions, and the marketing management model that does not have their own public relations for tourism. Finally, having the marketing management model with a system for online marketing and not having a system for online marketing were each equally represented.

Summary of data from the in-depth interviews

During the outbreak of COVID-19

From the in-depth interviews with entrepreneurs or people related with agro-safety tourism located in eight communities, it can be summarized that during the occurrence of the COVID-19 pandemic, there were impacts that caused tourism activities to not be conducted and revenue to not be collected from tourism. However, entrepreneurs have made an effort to seek additional knowledge in order to increase tourism activities and products and participate in the activities of government agencies that will result in revenue from the activities and the sale of products through an online system. The tourism activities that receive the highest impacts are tourism activities that are in the

category of accommodation and guided tours. As for the activities of sightseeing that include the sale of products, they are impacted and affected less because of the application of a system for online marketing to assist with sales, and there are also government agencies to facilitate the distribution of products. In addition, several communities conduct proactive marketing by the introduction of products of their own by getting closer to consumers.

Following the opening of the country (End of the outbreak of the COVID-19).

From the in-depth interviews, it was found that the entrepreneurs and people related with agro-safety tourism located in the nine communities must conduct improvement of tourist attractions of their own in order to support tourism, develop products that match the needs of tourists, increase the conducting of online marketing, make an effort to create relationships with local communities that are better than before in order to eventually have sources for the distribution of products and raw materials used in production as well as make an effort to participate with communities more frequently. Additionally, they need to have government agencies to assist with conducting the promotion of tourism.

From the data, it can be summarized that the most important thing is that when unexpected events such as the COVID-19 pandemic occur, entrepreneurs and people involved in agro-safety tourism should have a backup plan and the support in management. In addition, the most important thing in management of agro-safety tourism is that it requires collaboration from the people in communities as well as effective marketing and financial management. Finally, each community should have products that are unique highlights of their own, for example Ban San Sali has crab sauce, Ban Wiang Lo has sarapee flowers, etc.

Discussion and Conclusions

From the in-depth interviews, it was found that entrepreneurs and people related with agro-safety tourism mostly have a business management model that involves community enterprises that must have operations with a clear division of labor, which will help make management more efficient. This is in accordance with Tracey et al. (2005) who stated that the emergence of a new form of organization – community enterprises – provides an alternative mechanism for corporations to behave in socially responsible ways. Community enterprises apply their generation of income through trading to finance their social goals. They also include democratic governance structures which allow members of the community or constituency they serve to participate in the management of the organization. Power relations are transformed because partners are seen as sources of valuable assets, knowledge and expertise, rather than recipients of patronage or charity. This is in agreement with study of Pacharachotisuthi (2018), in which it was found that modern service strategy consists of innovations in providing services, improvement of services, processes and managed services, and competitive advantages consisting of the creation of differences in costs, leadership, rapid response, and the targeting of niche markets.

Administration that applies the management model with the participation of people in agencies and the management model having the participation of people in the communities will make the operations of agro-tourism activities survive. This is in accordance with Somchan & Pakdeepinit (2014), who summarized that the activities that make tourists learn about the link between agricultural practices of communities within the social context of the culture, traditions, and history of communities are activities that make tourists able to learn about the link between conducting agro-safety with the geography, climate and the environment of the area, and the assignment of duties is appropriate with the work position and ability in management guidance.

Management that applies the financial management model is an important factor that will make businesses achieve success in their operations. This is in accordance with Haron et al. (2015), who investigated the role of cash flow information for decision making as the role of financial management on the performance of small enterprises. The results showed a significant positive influence of the extent of cash flow information from cash flow statements, cash ratio analysis, cash budgets, inventory and bank balances used for financing and investment decision making on profitability performance, but not on growth performance. On the other hand, the extent of cash flow information from accounts receivable and accounts payable have shown insignificant influences on growth performance and resulted in negative impacts on profitability and performance. The study revealed some key factors of cash flow information applicable to the performance of small businesses.

Management that has a marketing management model is the factor that will help agro-safety tourism experience success and develop new products that respond to tourists, which aligns with the study by Henderson (2009), cited in Clarke (1996 a, b), and the Office of Tourism Development, Department of Tourism, Ministry of Tourism and Sports (2018: online), which summarized that agro-tourism, which is tourism that is focused on learning about agricultural methods, will require organization including various types of services that consist of places to visit (Attractions), facilities that provide convenience (Amenities), easy entry and exiting of tourist attractions (Access), things for tourists to do (Activities), and secure places to stay (Accommodation) in order to allow tourists to be able to come to visit, experience or stay at these place, for example organization of tourism routes led by guides, organization of places for demonstrations or caring for domesticated animals on farms, having places organized to sell agricultural products and souvenirs that come from the agricultural work that is done, etc. However, the operation of that work must not be incompatible with the conservation of nature and the environment. Furthermore, this type of tourism should have the target of learning and understanding traditions, ways of life, and agricultural methods through new experiences in agriculture that result from the local wisdom and lifestyle of people in these local areas and should have an agro-safety tourism model that adds value from the tourism activities and increases value from the processing of products.

These results agree with Lubis et al. (2022), who studied the development of rice field agro tourism in Pasar Melintang Village, with the primary strategy recommended being a diversification strategy, namely by adding both relevant and unrelated tourism products to attract consumers or tourists. This alternative strategy uses a Strengths-Threats (ST) strategy, which consists of five approaches, namely: 1. encouraging active collaboration between village community elements and the Deli Serdang Regency government in developing a model for developing rice field agro tourism in Pasar Melintang Village, by adding agro tourism products such as freshwater fish cultivation and fishing ponds near rice fields, 2. adding tourism products that are not related to rice field agro-tourism such as photo booths, Deli Serdang souvenir corners in the rice field tourism areas, children's playgrounds outside the rice fields, cheap markets selling rice, corn, and secondary crops that come from rice fields and are sold outside the tourist areas, 3. maximizing the beauty and characteristics of agricultural education in the rice fields of Pasar Melintang Village, 4. developing an affordable pricing strategy for the community, and 5. submitting a budget proposal for the development of rice field tourism in Pasar Melintang Village.

Therefore, related agencies should have operational plans that will help entrepreneurs and people related with agro-safety tourism located in these nine communities in financial management and marketing create sustainable tourism in their role as entrepreneurs. They should have learning that is complete and self-development in order to support these changes, and people in communities should be encouraged to participate more than they currently do in order to conduct agro-safety tourism sustainably.

The formation of the creative village space – human capital development through the development of agro tourism – is based on improving the digital literacy of the rural population, skills development of specialists in the field of information, and creative communication technologies and creative thinking development. The rural tourism market is one of the largest and most dynamic markets in the world, based on the development of the ecological component of agro tourism. That is why it is necessary to diversify the creative digital technologies in the tourism industry in rural areas, as tourism is a sufficiently stable and significant contributor to state economic income. The World Travel and Tourism Council (WTTC) predicts that in 2024 with the ecological component of agro tourism development following the COVID-19 pandemic, tourism revenues will be approximately USD 298,000,000, and the official analysts forecast that tourism revenues will grow by 3.3% in the next decade.

According to the WTTC, tourism in the EU will occupy 23% of the nations' leading industries. For further development of agro tourism, creative digital technologies in the tourism business should be updated and reformatted to be competitive even after COVID-19. For this purpose, it is necessary to: mitigate the socio-economic impacts of the crisis on rural employment that occurred during the COVID-19 pandemic, support the development of domestic and regional agro tourism, diversify the use of creative technologies in agro tourism to improve competitiveness and its resource efficiency, strengthen coordination and partnerships to make agro tourism a sustainable development factor, promote employment preservation in the agro tourism sector as a result of the economic and social impacts of COVID-19, promote confidence building through protection and safety in all types of tourism activities, and promote social partnership between the state, business and civil society.

Limitations

The conducting of this current research had limitations in data collection, namely that the community of San Pa Phao, Dok Khamtai subdistrict, Dok Khamtai district was not able to conduct the data collection due to the possibility of the dissolution of the business and entrepreneurs. Also, all nine communities were required to apply modifications to their business operations models in order to survive as a result of the crisis caused by the spread of COVID-19.

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References

- Ana, M.-I. (2017). Ecotourism, agro-tourism, rural tourism in the European Union. *Cactus Tourism Journal* 15(2), pp.6-14.
- Antolini, F. & Grassini, L. (2020). Issues in Tourism Statistics: A Critical Review. *Social Indicators Research* 150, pp.1021–42.
- Babii, A. & Nadeem, S. (2021). Tourism in a Post-Pandemic World. *IMF COUNTRY FOCUS*.
- Bertocchi, D., Camatti, N., Salmasi, L. & Borg, J. V. D. (2021). Assessing the tourism sustainability of EU regions at the NUTS-2 level with a composite and regionalised indicator. *Journal of Sustainable Tourism* 31, pp.1738–55.
- Communicable Disease Academic Development Group (2021). COVID-19 disease. Retrieved on December 13, 2023. Retrieved from <https://ddc.moph.go.th/uploads/files/2017420210820025238.pdf>
- Daugstad, K. & Kirchengast, C., (2013). Authenticity and the Pseudo-Backstage of Agri-Tourism. *Annals of Tourism Research*, 43, pp.170-91

- Dias, Francisco Teixeira Pinto, Sara Maria Rodrigues Góis, and Gonçalo Nuno de Castro Oliveira Gomes. (2023). Tourism Monitoring as a Strategic Tool for Tourism Management: The Perceptions of Entrepreneurs from Centro de Portugal. *Administrative Sciences* 13: 205. <https://doi.org/10.3390/admsci13090205>
- Font, X., Torres-Delgado, A., Crabolu, G., Martinez, J.P., Kantebacher, J. & Miller, G. (2021). The impact of sustainable tourism indicators on destination competitiveness: The European Tourism Indicator System. *Journal of Sustainable Tourism* 31, pp.1608–30.
- Foronda-Robles, C., Galindo-Pérez-de-Azpillaga, L. & Fernández-Tabales, A. (2023). Progress and stakes in sustainable tourism: Indicators for smart coastal destinations. *Journal of Sustainable Tourism* 31, pp.1518–37.
- Gasparini, M. L., & Mariotti, A. (2021). Sustainable tourism indicators as policy making tools: Lessons from ETIS implementation at destination level. *Journal of Sustainable Tourism* 31, pp.1719–37.
- Haron, N., Yahya, S. & Haron, H. (2015). Cash flow information and small enterprises' performance. *Organizational Innovation Strategies*. Graduate School of Business (GSB), Universiti Sains Malaysia. The 2015 International Conference on Organizational Innovation. August 4-6, 2015 in Yogyakarta. Indonesia.
- Henderson, J. (2009). Agro-tourism in unlikely destination: a study of Singapore. Retrieved on 3 March 2018. Available on <https://www.aspx>
- Ivars-Baidal, Josep A., J. Fernando Vera-Rebollo, José Perles-Ribes, Francisco Femenia-Serra, and Marco A. Celdrán-Bernabeu. (2021). Sustainable tourism indicators: What's new within the smart city/destination approach? *Journal of Sustainable Tourism* 31, pp.1556–82.
- Lapointe, D. (2020). Reconnecting tourism after COVID-19: The paradox of alterity in tourism areas. *Tourism Geographies* 22, pp.633–38.
- Lubis, A. ; Lubis, N. W., Apriliya, I. & Hadi, W. P. (2022). Marketing strategy for paid rice agro-tourism in the village market transfer. *Jurnal Ekonomi*, Volume 11(3), pp.1394-1402.
- Magliulo, A. (2014). A Model for the sustainable competitiveness of tourism destinations. *European Journal of Tourism, Hospitality and Recreation* 2, pp.7–26.
- Miller, G., & Torres-Delgado, A. (2023). Measuring sustainable tourism: A state of the art review of sustainable tourism indicators. *Journal of Sustainable Tourism* 31, pp.1483–96.
- Moniche, A. & Gallego, I. (2022). Benefits of policy actor embeddedness for sustainable tourism indicators' design: The case of Andalusia. *Journal of Sustainable Tourism* 31, pp.1–20.
- Pacharachotisuthi, P. (2018). Entrepreneurial Business Characteristics Affecting Modern Service Strategies and Competitive Advantages in Tourism Business. *Veridian E-Journal, Silpakorn University*, 11(3), pp.849-865.
- Phak Uthai, T. (2019). Project monitoring and evaluation manual. (academic document). Bangkok: Livestock Promotion and Development Division, Department of Livestock Development, Ministry of Agriculture and Cooperatives.
- Praditsangthong, P., Submahachok, P., & Seisawatwanit, P. (2022). The Management of agricultural tourism with the POSDCORB concept 4(1), pp.173-186.
- Prideaux, B., Thompson, M. & Pabel, A. (2020). Lessons from COVID-19 can prepare global tourism for the economic transformation needed to combat climate change. *Tourism Geographies* 22, pp.667–78.
- Rasoolimanesh, S.M., Ramakrishna, S., Hall, C.M., Esfandiar, K., & Seyfi, S. (2020). A systematic scoping review of sustainable tourism indicators in relation to the sustainable development goals. *Journal of Sustainable Tourism* 31, pp.1497–517.
- Sasu, K.A. & Epuran, G., (2016). An overview of the new trends in rural tourism. *Bulletin of the Transilvania University of Braşov*, December.
- Somchan, S. & Pakdeepinit, P. (2014). Agro-Safety Tourism Development in The Ing River Basin, Phayao Province. National Research Council of Thailand (NRCT), complete report, Phayao: University of Phayao.

- Somchan, S., Theppanya, P., Tangjaijaroenap, N., Panyarien, S. & Muenwongthep, T. (2019). *Agro-Safety Tourism Management for Value Added to Economy in The Route of Ing River Basin (Phayao and Chiang Rai) (Phase 1)*. Complete report Research and innovation project to transfer technology to grassroots communities, Office of the Higher Education Commission. Chiang Mai: Ministry of Higher Education, Science, Research, and Innovation.
- Srisa-at, A. (2006). *Organic farming, safe food series*. Samut Sakhon : Dok Khun
- Suleman, D., & binti Ab Rehman, F. (2020). Transgender Issues in Indian Society from the Viewpoint of Arundhati Roy's Novel, *The Ministry of Utmost Happiness*. *South Asian Journal of Social Sciences and Humanities*, 1(3), 159-172.
- Suleman, D., & Mohamed, A. H. (2019). Examining the Women Issues and Child Abuse as Mirrored by Arundhati Roy's *The God of Small Things*. *Indonesian Journal of Cultural and Community Development*, 3, 10-21070.
- Suleman, D., Kashif, A., Gul, S., Hamid, S., & Yunus, A. (2023). Navigating Shadows: The Impact of Social Stigma on the Mental Health of the Transgender Community in South Asia. *Migration Letters*, 21(1), 167–181.
- Suleman, D., Kashif, A., Tilwani, S. A., & Rabeea, L. K. (2023). Impacts of Unjust Traditional Practices on Unhappy Marriage Life: An Empirical Assessment of the Social Context in the Kurdish Region. *Kurdish Studies*, 11(1), 145-160.
- Suleman, D., Mehmood, W., Iqbal, F., & Ashraf, M. U. (2021). Covid-19 Suicidal Cases in India in the Light of Poverty: Upcoming Challenges for India in Terms of Economy. *Review of International Geographical Education Online*, 11(10), 2108-2118.
- Suleman, D., Mohamed, A. H., & Ahmmed, M. F. (2020). Political and Gender issues in Arundhati Roy's " *The Ministry of Utmost Happiness*". *Indonesian Journal of Cultural and Community Development*, 5, 10-21070.
- Torres-Delgado, A. & Saarinen, J. (2014). Using indicators to assess sustainable tourism development: A review. *Tourism Geographies* 16, pp.31–47.
- Tracey, P., Phillips, N. & Haugh, H. (2005). Beyond Philanthropy: Community Enterprise as a Basis for Corporate Citizenship. *Journal of Business Ethics*, 58, pp.327–344. DOI 10.1007/s10551-004-6944-x
- Zoto, S., Qirici, E. & Polena, E., 2013. Agrotourism – A Sustainable Development for Rural Area of Korca. *European Academic Research*, I(2), pp.209-23.