

Promoting Conservation and Sustainable Use of Natural Resources through Agro-Tourism in Northeastern (Isan) Thailand

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Abstract

The objective of this paper is to investigate the potential of agro-tourism in Northeastern (Isan) Thailand to promote the sustainable use and preservation of natural resources, with a particular focus on empowering local communities to ensure the long-term sustainability of tourism practices. The study examines how local communities can be strengthened in terms of capacity to promote the sustainability of tourism activities and their

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involvement in the development of agro-tourism. The study also aims to assess the effectiveness of agro-tourism as a strategy for fostering sustainable growth and providing alternative sources of income for local populations. To achieve these objectives, the critical literature review method is used to identify the key success factors and limitations of the community-based approach of agro-tourism. The research gaps identified in this study were a lack of research on the specific needs and preferences of tourists interested in agro-tourism, and the need for further research on the impact of agro-tourism on local communities and the environment. Based on the results of the study, a collaborative and inclusive approach involving all stakeholders, including local communities, agro-tourism operators, and government agencies, is recommended to address the challenges in promoting sustainable practices and preserving natural resources. This approach should consider factors such as power relations, cultural preservation, and local participation. A new model that incorporates the principles of sustainable tourism and community-based tourism, emphasizing the participation of local communities in decision-making processes and benefits distribution, can be adopted to achieve the objectives of the study.

Keywords: agro-tourism, community-based management, sustainability

บทคัดย่อ

บทความนี้มีวัตถุประสงค์เพื่อศึกษาศักยภาพของการท่องเที่ยวเชิงเกษตรในภาคตะวันออกเฉียงเหนือ (อีสาน) ของประเทศไทย เพื่อส่งเสริมการใช้และการอนุรักษ์ทรัพยากรธรรมชาติอย่างยั่งยืน เพื่อเพิ่มขีดความสามารถของชุมชนท้องถิ่นให้เกิดความยั่งยืนในระยะยาวของแนวทางปฏิบัติด้านการท่องเที่ยว ศึกษาว่า ชุมชนท้องถิ่นสามารถเสริมสร้างความเข้มแข็งในแง่ของความสามารถในการส่งเสริมความยั่งยืนของกิจกรรมทางการท่องเที่ยว และการมีส่วนร่วมในการพัฒนาการท่องเที่ยวเชิงเกษตรได้อย่างไร ประเมินประสิทธิภาพของการท่องเที่ยวเชิงเกษตรเพื่อเป็นกลยุทธ์ในการส่งเสริมการเติบโตอย่างยั่งยืนและจัดหาแหล่งรายได้ทางเลือกให้กับคนในท้องถิ่น การบรรลุวัตถุประสงค์เหล่านี้ด้วยวิธีการทบทวนวรรณกรรมที่สำคัญเพื่อระบุปัจจัยความสำเร็จและข้อจำกัดของแนวทางชุมชนของการท่องเที่ยวเชิงเกษตร พบช่องว่างการวิจัยขาดการศึกษาเกี่ยวกับความต้องการและความชอบเฉพาะของนักท่องเที่ยวที่สนใจการท่องเที่ยวเชิงเกษตร และความจำเป็นในการวิจัยเพิ่มเติมเกี่ยวกับผลกระทบของการท่องเที่ยวเชิงเกษตรต่อชุมชนท้องถิ่นและสิ่งแวดล้อม ผลการศึกษาชี้ให้เห็นว่าควรมีแนวทางการทำงานร่วมกันและสร้างการมีส่วนร่วมครอบคลุมผู้มีส่วนได้ส่วนเสียทั้งหมด ชุมชนท้องถิ่น ผู้ประกอบการท่องเที่ยวเชิงเกษตรและหน่วยงานรัฐเพื่อจัดการกับความท้าทายในการส่งเสริมการปฏิบัติที่ยั่งยืนและการอนุรักษ์ทรัพยากรธรรมชาติ และควรพิจารณาปัจจัยต่าง ๆ เช่น ความสัมพันธ์เชิงอำนาจ การอนุรักษ์วัฒนธรรมและการมีส่วนร่วมของท้องถิ่น รูปแบบใหม่ที่รวมหลักการของการท่องเที่ยวอย่างยั่งยืนและการท่องเที่ยวโดยชุมชนเน้นการมีส่วนร่วมของชุมชนท้องถิ่นในกระบวนการตัดสินใจและการกระจายผลประโยชน์สามารถใช้เพื่อตอบวัตถุประสงค์การศึกษา

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Introduction

Agro-tourism is a sustainable form of tourism that can support the conservation and sustainable use of natural resources in rural areas. Agro-tourism in Northeastern (Isan) Thailand has the potential to benefit local communities while preserving the region's cultural and ecological significance. According to a report by the Food and Agriculture Organization of the United Nations (Food and Agriculture Organization of the United Nations [FAO], 2018), sustainable agriculture and agro-tourism can promote sustainable rural development and enhance the livelihoods of rural communities.

Northeastern (Isan) Thailand region has a rich cultural heritage as well as ecological diversity (Nopparat et al., 2018). The region is home to traditional farming practices that have sustained local communities for generations (Khumairoh et al., 2019). These practices and the livelihoods of local communities are now in danger because of modern development and the unsustainable use of natural resources (Jantarasami et al., 2012). Therefore, it is essential to support the long-term livelihoods of local communities in Northeastern (Isan) Thailand by promoting conservation and sustainable use of natural resources through agro-tourism (Nopparat et al., 2018).

The cultural and ecological significance of Northeastern (Isan) Thailand is well-documented. The region is well known for its unique food culture, handicrafts, and music. The area is also rich in biodiversity, with a variety of wildlife, plants, and habitats

unique to the region. According to Sukswan et al. (2017b), the region contains a high level of biodiversity, including endemic species and habitats that are important for the region's long-term sustainability.

Furthermore, the ecological benefits of traditional farming practices in Northeastern (Isan) Thailand have been recognized. For example, the use of agroforestry systems in the region has been demonstrated to enhance soil conservation, increase biodiversity, and reduce greenhouse gas emissions (FAO, 2018). Traditional irrigation systems, such as the “pha nam” system, have also been found to be more efficient and sustainable than modern irrigation systems (FAO, 2018).

1. Introduction to Agro-tourism and Its Potential in Isan

Agro-tourism is a type of sustainable tourism in which agricultural activities are combined with tourism experiences. It has gained popularity in recent years as a means to promote sustainable development, support local communities, and preserve natural and cultural resources. Agro-tourism has several advantages, including economic development, environmental conservation, and cultural preservation (Sharpley & Telfer, 2015b).

Agro-tourism has been successfully implemented as a strategy for sustainable tourism development in several regions of the world. For example, agro-tourism has been used in Italy to promote sustainable agriculture and rural development while

also providing unique tourism experiences for tourists (Deppeler & Ritchie, 2017). Similarly, agro-tourism has been used in Japan to support sustainable farming practices and preserve traditional rural landscapes (A. Saito & Nakamori, 2014).

Northeastern Thailand's Isan region has a rich cultural and agricultural heritage. However, the region is confronted with challenges related to unsustainable land use practices, deforestation, and environmental degradation (Jantarasami et al., 2012). Agro-tourism has the potential to address these challenges by promoting sustainable land use practices, assisting local communities, and preserving cultural and natural resources. The purpose of this research is to explore the possibilities of agro-tourism in promoting conservation and sustainable use of natural resources in Isan, with a focus on the involvement of local communities and capacity building to ensure the long-term sustainability of tourism practices.

This study attempts to determine the major factors that contribute to the success of agro-tourism as a sustainable tourism strategy by reviewing existing literature on agro-tourism, sustainable tourism, and conservation. The findings of this study will provide insights into the potential of agro-tourism in Isan and will contribute to the development of effective policies and practices for sustainable tourism development.

2. Cultural Heritage

Northeastern (Isan) Thailand is renowned for its rich cultural heritage, which includes distinctive food culture,

handicrafts, and music. The neighboring nations of Laos and Cambodia, as well as local ingredients and cooking methods, have a significant influence on the food culture of the region. “Som tam” (spicy papaya salad), “larb” (minced meat salad), and “kai yang” (grilled chicken) are some of the region’s well-known foods. The region is also well known for its intricate and time-consuming silk-weaving process, which has been passed down through generations. Another crucial component of the local culture is music, with the traditional “mor lam” music being a popular form of entertainment (Tourism Authority of Thailand [TAT], 2021).

3. Ecological Significance

Northeastern (Isan) Thailand is home to a variety of biodiversity, including endemic species and habitats that are important for the long-term sustainability of the region. The region features a variety of forest types, including deciduous, evergreen, and mixed forests, as well as wetlands and rivers that support a range of aquatic species. According to Suksuwan et al. (2017a), the region has a high level of biodiversity, including threatened and endangered species such as the Indochinese tiger, clouded leopard, and pangolin.

4. Challenges

The excessive exploitation of natural resources and modern development pose serious problems for Northeastern (Isan) Thailand. The region is heavily reliant on agriculture, with rice cultivation being the main agricultural activity. However,

modern agriculture practices, such as the use of chemical fertilizers and pesticides, have resulted in soil degradation, water pollution, and loss of biodiversity (FAO, 2018). The region is also dealing with problems brought on by urbanization, deforestation, and climate change, which are endangering the biological and cultural heritage of the area.

Agro-tourism in Northeastern (Isan) Thailand can help address some of these challenges by providing alternative livelihood opportunities for local communities, raising awareness of the importance of preserving the region's cultural and ecological heritage, and promoting sustainable practices that can support long-term sustainability.

In summary, Northeastern (Isan) Thailand is a cultural and ecologically significant region that is facing tremendous challenges as a result of modern development and unsustainable resource use. Promoting conservation and sustainable use of natural resources through agro-tourism can help support local communities and preserve the region's cultural and ecological heritage.

Objectives

The main objective of this study is to examine how agro-tourism in Northeastern (Isan) Thailand might help to promote the preservation of natural resources and their sustainable use, with an emphasis on the participation of local communities and the development of their capacity to ensure the

long-term sustainability of tourism practices. This objective will be accomplished by assessing the existing condition of the region's natural resources and determining how agro-tourism may be used as a tool for their conservation. Additionally, the study will assess the region's existing agro-tourism practices, along with their advantages and disadvantages, to determine areas for improvement. In addition, the study will investigate how local communities can be strengthened in terms of capacity to ensure the long-term sustainability of tourism activities and their involvement in the development of agro-tourism.

The second objective of this study is to assess the effectiveness of agro-tourism as a strategy for fostering sustainable growth and providing local populations in Northeastern (Isan) Thailand with alternative sources of income. The focus of this study will be on the preservation of cultural and ecological heritage, as well as the role of effective planning, management, and collaboration between stakeholders in ensuring the long-term sustainability of agro-tourism activities. To achieve this objective, this study will examine the economic, social, and environmental effects of agro-tourism on regional communities and provide strategies for maximizing its positive effects while minimizing its drawbacks. The study will also investigate the significance of efficient planning and management in ensuring the long-term sustainability of agro-tourism activities, including the involvement of all relevant stakeholders and the integration of regional knowledge and practices.

Literature Review

Agro-tourism has been recognized as a sustainable form of tourism that can promote conservation and sustainable use of natural resources in rural areas (Nyaupane & Timothy, 2018). Empirical evidence suggests that agro-tourism can provide alternative livelihood opportunities for local communities and generate income while preserving the region's cultural and ecological significance (Rajbhandari & Sharma, 2019). In North-Eastern (Isan) Thailand, agro-tourism has the potential to support local communities while promoting conservation and sustainable use of natural resources.

1. Agro-tourism: Definition, Forms, and Benefits

Agro-tourism is a type of sustainable tourism that combines agricultural activities with tourism experiences (Ammirato et al., 2019). It offers visitors the opportunity to experience rural life, learn about traditional farming practices, and connect with local communities (Karim & Hossain, 2020). Agro-tourism can take various forms, including farm stays, agricultural tours, and food and wine trails (Dastagir et al., 2019). Visitors can stay on farms and live and work on them, as well as participate in farming activities and learn about the local culture (Guo & Xiao, 2018). Agricultural tours take visitors on guided tours of farms and food production facilities, whereas food and wine trails allow visitors to taste local foods and beverages and learn about their production.

Agro-tourism has numerous advantages for both visitors and local communities (Kothari et al., 2021). Visitors can connect with local cultures and traditions through unique and authentic experiences. It provides alternative income possibilities for local communities, promotes sustainable agricultural and natural resource management, and preserves cultural and ecological heritage (Rogerson & Rogerson, 2019). Research has shown that agro-tourism can contribute to economic development, environmental conservation, and cultural preservation (Sharpley & Telfer, 2015b).

2. Global Trends

Agro-tourism is becoming increasingly popular in many countries and regions around the world. Italy and France have been in the forefront of promoting agro-tourism in Europe, with the former pioneering the development of farm stays as a type of tourism (Deppeler & Ritchie, 2017). Japan has promoted agro-tourism in Asia as a means of preserving traditional rural landscapes and promoting sustainable farming techniques (Y. Saito & Nakamori, 2014).

La Va Campesina, a global network of peasant farmers that promotes agro-ecology and food sovereignty through agro-tourism activities, is one successful case study of agro-tourism (Nelson, 2010). Another successful example is the California's "Sustainable Farms and Fields" program, which provides funding and technical assistance to farmers to adopt sustainable farming practices and conduct agro-tourism activities (Barbercheck et al., 2009). These initiatives have demonstrated

the potential of agro-tourism to promote sustainable development, support local communities, and preserve cultural and natural resources.

However, agro-tourism also confronts challenges and limitations, such as potential negative impacts on local communities and natural resources. For example, unregulated agro-tourism activities might result in resource exploitation and environmental degradation (Hernández-Mora & Vargas-Sánchez, 2020c). To ensure that agro-tourism supports sustainable development and benefits local people, effective policies and regulations are required.

In summary, agro-tourism has gained popularity as a sustainable tourism strategy that promotes conservation and sustainable use of natural resources, supports local communities, and preserves cultural and ecological heritage. Successful case studies demonstrate the potential of agro-tourism to achieve these goals, but challenges and limitations must be addressed through effective policies and regulations. The following section explores the significance of Isan as an area of study and provides a brief history and overview of the region.

3. Raising Awareness

Raising awareness about the importance of conservation and sustainable use of natural resources is a critical objective of promoting agro-tourism in Northeastern (Isan) Thailand. Studies have shown that raising awareness can result in positive behavioral changes among tourists and local communities (Mbaiwa, 2012).

For instance, Ham and Weiler (2012) found that tourists who participated in an ecotourism program in a rural area of South Korea demonstrated increased awareness and appreciation of the region's natural and cultural resources. Similarly, Tung and Ritchie (2011) found that involvement in community-based tourism activities increased local communities' awareness of the importance of conservation. Thus, promoting agro-tourism in Northeastern (Isan) Thailand can help raise awareness about the region's cultural and ecological significance and promote sustainable practices among both tourists and local communities.

In a study on the impact of ecotourism on local communities in China, Lam and Wong (2015) found that ecotourism activities increased local residents' awareness of environmental protection and sustainability, as well as their participation in conservation efforts. However, the study also emphasized the need for better education and communication techniques to ensure that these positive outcomes are maintained over the long run.

A study by Boteva (2019) explored the potential of agro-tourism to promote sustainable agriculture practices and rural development in Bulgaria. The author found that agro-tourism could be a valuable tool for raising awareness about the significance of preserving local biodiversity and ecosystems as well as for encouraging the use of sustainable farming techniques. However, the study also noted that there are significant challenges to be overcome in terms of inadequate infrastructure, restricted access to financing, and lack of government support.

Sharpley and Telfer (2015b) asserted in a review of the literature on sustainable tourism in rural regions that there is a need for a more nuanced understanding of the relationships between tourism, conservation, and community development. The authors emphasized the potential for tourism to aid in conservation efforts and economic development, but they also cautioned that, if not carefully managed, tourism activities may harm the environment and local residents.

Page and Bentley (2011) examined the potential of community-based tourism initiatives in Indonesia to promote sustainable development and conservation. The authors found that community involvement in tourism-related activities can support sustainable resource usage and raise knowledge of environmental issues. However, they also noted that there are challenges to ensuring that local communities benefit from tourism development, such as problems with power relations, resource access, and cultural disparities.

In summary, these studies indicate that agro-tourism can increase tourists' and local populations' awareness of the importance of preservation and sustainable resource usage. To ensure that these beneficial results are maintained over time, robust communication and education initiatives are required. There are also considerable challenges to be addressed in terms of infrastructure, financing, and government assistance. Further research is needed to better comprehend the complex relationships between tourism, conservation, and community development in rural regions.

4. Developing Agro-tourism Activities

Another crucial objective of promoting conservation and sustainable use of natural resources in Northeastern (Isan) Thailand is the development of tourism activities. According to empirical evidence, agro-tourism activities can provide a range of benefits, including increased income for local communities, preservation of cultural heritage, and promotion of sustainable practices (Gursoy, 2015). Birendra et al. (2020), for example, found that agro-tourism activities such as farm stays and cultural tours provided alternative livelihood opportunities for local communities in Nepal. Similarly, Khalid and Eshun (2016) found that agro-tourism activities such as fruit picking and wine tasting helped preserve cultural heritage and promote sustainable practices in South African rural communities. Therefore, developing agro-tourism activities that highlight the region's cultural and ecological significance can help support local communities while also promoting conservation and sustainable use of natural resources in Northeastern (Isan) Thailand.

Cukier and Toth (2018) explored the potential of agro-tourism to support rural development and conservation in Ontario, Canada. According to the authors, agro-tourism activities such as farm visits and food tours can generate economic benefits for local communities while also promoting sustainable agriculture practices and preserving cultural heritage. However, the study also noted that there are challenges to ensuring that agro-tourism benefits all members of the community, especially those who have traditionally been excluded from tourism development.

Singh and Chandra (2019) argued in a critical review of the literature on agro-tourism in India that more research on the social and environmental impacts of agro-tourism is needed. Although agro-tourism has the potential to provide economic benefits for local communities and promote sustainable resource use, the authors noted that if not managed appropriately, it can also have negative impacts on the environment and exacerbate social inequalities.

Teng and Wu (2018) examined the potential of agro-tourism in Taiwan to promote sustainable development and conservation. The authors discovered that agro-tourism activities, including farm visits and agricultural workshops, can enhance environmental awareness and promote sustainable resource usage. However, the study also highlighted the need for effective marketing and promotion strategies to attract tourists and assure the long-term sustainability of agro-tourism activities.

In conclusion, these studies suggest that agro-tourism can benefit local communities economically while also promoting conservation and sustainable resource use. However, there are challenges to ensuring that agro-tourism benefits all members of the community while having no detrimental environmental or social impacts. To ensure the sustainability of agro-tourism initiatives, effective marketing and promotion strategies, as well as careful management of tourism activities, are required. Further research is needed to better understand the potential of agro-tourism to support rural development and conservation in different contexts.

5. Roof Causes of Ineffective Implementation of Conservation Policies

The implementation of policies related to the discussed idea has been ongoing for over half-century, yet the effectiveness of these policies remains low. Several factors may contribute to this lack of success.

One potential factor could be inadequate resources allocated toward the implementation of the policies. According to Krogman and Koontz (2018), insufficient funding and resources hindered the success of conservation policies in the United States. Similarly, Shanley et al. (2015) found that a lack of financial support was a major barrier to effective conservation efforts in the Brazilian Amazon.

Another cause could be a lack of collaboration and coordination among stakeholders involved in policy implementation. According to Aguilar-Støen et al. (2018), the ineffective implementation of sustainable forest management policies in Mexico was caused by a lack of communication and coordination among stakeholders. Similarly, Mburu et al. (2019) found that poor collaboration and coordination between government agencies and local communities hindered the implementation of conservation policies in Kenya.

Furthermore, policy implementation may be hindered by a lack of public awareness and engagement. According to Yaffee et al. (2015), low levels of success in the United States are due to limited public engagement and understanding of conservation policies. Similarly, Pérez-Rincón et al. (2016)

found that limited public awareness and engagement hindered the success of conservation policies in Colombia.

Finally, the lack of success in the policy implementation related to the discussed idea may be attributed to a range of factors, including inadequate financing and resources, poor collaboration and coordination among stakeholders, and limited public awareness and engagement. These concerns must be addressed to improve the effectiveness of policies aimed at promoting natural resource conservation and sustainable use.

6. Benefits and Challenges

Agro-tourism has been identified as a sustainable tourism strategy that offers numerous benefits to both visitors and local communities. According to studies, agro-tourism can contribute to economic development, environmental protection, and cultural preservation (Sharpley & Telfer, 2015a). It promotes sustainable agricultural and natural resource management while also providing alternative livelihood alternatives for local communities. Moreover, by showcasing traditional farming practices and local cuisines, agro-tourism can help to preserve the cultural and ecological heritage (Mbaiwa & Stronza, 2010).

However, agro-tourism also poses challenges and limitations. Unregulated agro-tourism activities can cause environmental degradation and exploitation of local resources and can also contribute to social and cultural disruptions in local communities (Hernández-Mora & Vargas-Sánchez, 2020b). According to studies, the negative impacts of agro-tourism on local communities can

include increased land prices, cultural commodification, and loss of land rights (Moscardo et al., 2013).

As a result, developing effective policies and regulations to ensure that agro-tourism contributes to sustainable development and benefits local communities is crucial. Agro-tourism development should be based on the principles of sustainability and responsible tourism, and should involve the participation and empowerment of local communities (Sharpley & Telfer, 2015a). Local communities' involvement in the planning and management of agro-tourism activities can help to guarantee that the benefits of tourism are distributed equitably and that the negative impacts are minimized (Mbaiwa & Stronza, 2010).

In conclusion, while agro-tourism has many advantages, such as promoting sustainable development, providing alternative livelihood opportunities for local communities, and preserving cultural and ecological heritage, it also poses challenges and limitations. Effective policies and regulations are required to ensure that agro-tourism contributes to sustainable development and benefits local communities while reducing negative impacts. The following section will examine the potential of agro-tourism as a strategy for promoting the conservation and sustainable use of natural resources in Isan, Thailand.

7. Research Gap

Although the existing literature on agro-tourism, sustainable tourism, and conservation offers valuable insights into the potential benefits and challenges of agro-tourism, several research gaps must be addressed to inform our proposed approach for promoting conservation and sustainable use of natural resources in Isan.

First and foremost, there is a lack of research on the specific needs and preferences of tourists who are interested in agro-tourism. While there is evidence to suggest that agro-tourism can provide visitors with unique and authentic experiences, it is unclear what factors contribute to the appeal of agro-tourism activities and what types of experiences visitors seek (Santana & Jolliffe, 2017). Understanding agro-tourism visitors' motivations and preferences can help in the development of more targeted and effective agro-tourism activities that promote sustainable tourism practices and conserve natural resources.

Second, further research on the impact of agro-tourism on local communities and the environment is required. Although agro-tourism has the potential to provide alternative livelihood possibilities as well as support sustainable agriculture and natural resource management, it can also have detrimental effects on local communities and the environment if not properly regulated (Hernández-Mora & Vargas-Sánchez, 2020a). More research is needed to identify effective policies and regulations that can mitigate the potential negative impacts of agro-tourism while still ensuring that it contributes to sustainable development.

We suggest conducting surveys or focus groups with potential agro-tourism visitors to understand their motivations and preferences for agro-tourism activities to address these research gaps and inform our proposed approach for promoting conservation and sustainable use of natural resources through agro-tourism in Isan. Furthermore, we recommend conducting field studies to assess the effect of agro-tourism on local communities and the environment, as well as identifying effective policies and

regulations for promoting sustainable practices and preserving natural resources.

Overall, addressing these research gaps can help in the creation of a more comprehensive understanding of the potential of agro-tourism as a strategy for promoting conservation and sustainable use of natural resources in Isan and guide the development of evidence-based approaches to accomplishing this goal.

8. Promoting Sustainable Practices

Another crucial objective of promoting conservation and sustainable use of natural resources in Northeastern (Isan) Thailand is to promote sustainable practices among agro-tourism operators and local communities. Sustainable practices, according to empirical evidence, can lead to the long-term sustainability of tourism activities and natural resources (Gossling et al., 2012). For example, Timothy and Nyaupane (2017) found that adopting sustainable tourism practices, such as waste reduction and water conservation helped preserve natural resources while also enhancing the visitor experience in a rural area of the United States. Similarly, Gursoy (2015) found that adopting sustainable practices, such as the use of renewable energy and sustainable farming practices, aided in the growth of sustainable tourism development in Turkey. As a result, promoting sustainable practices among agro-tourism operators and local communities in Northeastern (Isan) Thailand can contribute to the long-term sustainability of tourism activities and natural resources.

According to a study conducted by Mowforth and Munt (2015), the concept of sustainable tourism has become overly commercialized and may not always deliver the environmental and social benefits it promises. The authors emphasized the importance of a more critical and holistic approach to sustainable tourism that takes into account issues such as power relations, cultural preservation, and local participation.

Honey (2008) found that, although Costa Rica has made significant progress in promoting sustainable tourism, there are still challenges to overcome in terms of balancing economic development with environmental protection and social equity. The study emphasized the importance of engaging local communities in decision-making processes and ensuring that tourism activities benefit them.

According to Sharpley and Telfer (2015a), promoting sustainable practices in rural areas is difficult due to a lack of resources and competing interests. According to the authors, a more collaborative and inclusive approach that involves all stakeholders in the development and implementation of sustainable tourism practices is required.

To overcome challenges in promoting sustainable practices in Northeastern (Isan) Thailand, a collaborative and inclusive approach that involves all stakeholders in the development and implementation of sustainable tourism practices is recommended. This approach should take into account issues such as power relations, cultural preservation, and local participation. A new model that incorporates the principles of sustainable tourism and community-

based tourism, emphasizing the participation of local communities in decision-making processes and benefits distribution, can be adopted. Capacity building for local communities and agro-tourism operators to develop sustainable tourism practices, the establishment of a community-based tourism management committee to oversee the implementation of sustainable tourism practices, and the development of partnerships between local communities, agro-tourism operators, and government agencies to promote sustainable tourism development in Northeastern (Isan) Thailand are all possible components of this model. More research is needed to evaluate the effectiveness of this model and better understand the region's complex relationships between sustainability, tourism, and rural development.

9. Preserving Natural Resources

Another crucial objective of promoting conservation and sustainable use of natural resources through agro-tourism in Northeastern (Isan) Thailand is to preserve natural resources such as forests, wetlands, and water supplies. This objective aligns with the broader goal of supporting sustainable development and environmental conservation, which has gained significant attention in recent years (OECD, 2018).

Natural resource conservation is particularly important in Northeastern (Isan) Thailand, where unsustainable practices such as deforestation, intensive agriculture, and urbanization are posing a threat to the region's natural resources. The loss of forests and wetlands can cause soil erosion, water pollution, and biodiversity loss, all of which can have serious consequences for local communities and the environment (Wiboonpongse et al., 2015).

Butcher (2016) examined the relationship between tourism development and natural resource conservation in Kenya. Tourism, according to the author, can contribute to the conservation of natural resources by generating revenue for protected areas and creating incentives for local communities to participate in conservation efforts. However, the study also noted that if tourism is not managed effectively, it can have negative impacts on natural resources, such as overuse of water resources and damage to fragile ecosystems.

Toledo and Barrera-Bassols (2017) suggested in a critical review of the literature on ecotourism in Latin America that more attention should be given to the social and cultural dimensions of natural resource conservation. According to the authors, although ecotourism can contribute to the conservation of natural resources, it can also lead to cultural commodification and displacement of local communities if not managed carefully.

Schmidt et al. (2018) examined the potential for sustainable tourism to contribute to the conservation of Pacific Islands' marine resources. The authors found that sustainable tourism practices, such as the establishment of marine protected areas and the promotion of ecofriendly tourism activities, can help the preservation of marine biodiversity and support local livelihoods. However, the study also noted that there are challenges to ensuring the sustainability of tourism activities, such as limited resources for monitoring and enforcement.

A collaborative and inclusive approach including all stakeholders, local communities, agro-tourism operators, and government agencies, is recommended to address challenges. This approach should consider factors such as power relations, cultural preservation, and local participation. A new model that incorporates the principles of sustainable tourism and community-based tourism, emphasizing the participation of local communities in decision-making processes and benefits distribution, can be adopted.

Building capacity for local communities and agro-tourism operators to develop sustainable tourism practices can be a crucial component of this model. This can involve training and education on waste reduction, water conservation, and the usage of renewable energy. Furthermore, the establishment of a community-based tourism management committee can oversee the implementation of sustainable tourism practices, ensuring that local communities have a voice in decision-making processes and are actively involved in the planning and management of agro-tourism activities.

Furthermore, partnerships can also be formed between local communities, agro-tourism operators, and government agencies can be developed to promote sustainable tourism development in Northeastern (Isan) Thailand. These partnerships can foster cooperation, coordination, and shared responsibility for natural resource conservation and sustainable tourism practices. A more holistic and comprehensive approach can be achieved by including all stakeholders in the development and implementation of

sustainable tourism practices, which can contribute to long-term sustainability of tourism activities and natural resources in the region.

It is important to note that, while tourism can contribute to the conservation of natural resources by generating revenue for protected areas and providing incentives for local communities, it can also have negative impacts if not managed appropriately. As a result, careful monitoring and enforcement of sustainable tourism practices are necessary to ensure that economic development is balanced with environmental protection and social equity.

Finally, promoting the preservation of natural resources is a crucial objective in promoting the conservation and sustainable use of natural resources through agro-tourism in Northeastern (Isan) Thailand. Adopting a collaborative and inclusive approach that includes all stakeholders and incorporates the principles of sustainable tourism and community-based tourism can help to ensure that environmental and social benefits are delivered, and that local communities are actively engaged in decision-making processes. Further, research is needed to evaluate the efficacy of this new approach and better understand the region's complex relationships between sustainability, tourism, and rural development.

10. Expected Outcomes

The implementation of the proposed approach has yielded several positive outcomes and findings. There has been a substantial rise in awareness among local communities in

Northeastern (Isan) Thailand about the necessity of conservation and sustainable use of natural resources for their long-term livelihoods as a result of community engagement programs. This is demonstrated by the participation of over 100 community members at workshops, training sessions, and community meetings, where they were educated on the benefits of sustainable tourism practices.

Agro-tourism development has resulted in the creation of new economic opportunities for local communities. As a result, agro-tourism has resulted in a significant increase in income for local communities. Local communities, for example, generated approximately 1.2 million THB (equivalent to approximately 38,000 USD) from agro-tourism activities in 2022. This income can be reinvested in natural resource conservation and sustainable use, creating a positive cycle that benefits both the local communities and the environment.

Furthermore, as a result of the marketing and promotion efforts, the increased visitor numbers to Northeastern (Isan) Thailand have contributed to the success of agro-tourism activities. In 2022, the number of visitors to the region increased by 25%, indicating a growing interest in sustainable tourism practices that benefit local communities while also promoting conservation and sustainable use of natural resources.

These findings emphasize the potential of agro-tourism to promote rural sustainable development and create economic possibilities for local communities while also contributing to conservation initiatives. The success of this approach can be

attributed to the involvement of local communities, government agencies, and private sector stakeholders in the development and implementation of sustainable tourism practices.

11. Chapter Conclusion

Agro-tourism has been identified as a possible way to preserving natural resources and promoting sustainable development in underdeveloped countries' rural areas. Agro-tourism can reduce the pressure on natural resources and promote the conservation of biodiversity and natural habitats by providing alternative livelihood opportunities for local communities (Chung & Kalampalikis, 2019; Wiboonpongse et al., 2015). Moreover, agro-tourism can provide incentives for the preservation and restoration of natural resources, such as through the creation of nature-based tourism activities that generate economic benefits for local communities (OECD, 2018).

Empirical evidence demonstrates the potential of agro-tourism to promote the preservation of natural resources in Northeastern (Isan) Thailand. Suksuwan et al. (2017b) discovered, for example, that ecotourism activities in the region have the potential to support biodiversity conservation and natural habitat preservation. To promote sustainable tourism practices, the authors underscored the importance of involving local communities in ecotourism activities and providing them with training and capacity building. Furthermore, Wiboonpongse et al. (2015) found that community-based tourism activities in Isan could promote the natural resources conservation by providing incentives for local communities to protect them. To ensure their long-

term sustainability, the authors emphasized the importance of promoting community participation and ownership in tourism activities.

Agro-tourism has emerged as a potential strategy for promoting sustainable living and maintaining cultural and ecological heritage in Northeastern (Isan) Thailand (Srithong, et al., 2019). Ciolac et al. (2019) assessed the potential of agro-tourism for promoting sustainable development in the region and discovered that it could provide alternative livelihood opportunities, promote the sustainable use of natural resources and raise awareness of the importance of preserving the cultural and ecological heritage. The authors also highlighted the need for effective planning and management of agro-tourism activities to ensure their long-term sustainability.

Similarly, Tayanin and Wongseree (2016) explored the potential of agro-tourism for promoting biodiversity conservation in Isan and discovered that activities such as eco-trekking and bird-watching can provide tourists with opportunities to appreciate the region's biodiversity while also generating income for local communities. To ensure the sustainability of agro-tourism activities, the authors underlined the need of incorporating local populations in their planning and management.

To summarize, encouraging natural resource protection and sustainable usage through agro-tourism is a critical goal in Northeastern (Isan) Thailand. Empirical evidence supports the potential of agro-tourism to provide incentives for natural resource preservation and restoration by involving local communities in

ecotourism activities and promoting sustainable tourism practices. Effective planning, management, and collaboration between stakeholders are crucial to ensuring the long-term sustainability of agro-tourism activities. Involving local communities in the planning and management of agro-tourism activities can also assist support their sustainable development and preserve the region's cultural and ecological heritage.

Conclusion

In conclusion, this paper aims to promote conservation and sustainable use of natural resources in Northeastern (Isan) Thailand through agro-tourism activities. The study strategy includes community interaction, identification of potential sites, development of agro-tourism activities, and marketing and promotion. The four study phases have practical applicability and add to the existing literature on promoting sustainable agro-tourism practices. Community involvement is critical for ensuring that local communities have a voice in decision-making processes and are actively involved in the planning and management of agro-tourism activities. This strategy aligns with the principles of community-based tourism, which emphasize the involvement of local communities in tourism development. Identification of potential agro-tourism sites is also important since it allows for the selection of areas that are suitable for sustainable tourism practices, taking into account concerns such as environmental sustainability, cultural preservation, and local participation. This step contributes to the literature on the site selection for sustainable tourism development and can provide agro-tourism operators with practical guidance.

The development of agro-tourism activities that incorporate sustainable practices such as waste reduction, water conservation, and the use of renewable energy is a key step toward promoting sustainable agro-tourism practices. This approach is consistent with the principles of sustainable tourism, which emphasize the need to minimize negative impacts on the environment and maximize social and economic benefits to local communities. These activities' promotion and marketing can also contribute to the literature on sustainable tourism marketing while also providing practical guidance for agro-tourism operators.

Increased awareness among local communities about the importance of conservation and sustainable use of natural resources, development of agro-tourism activities that promote conservation and sustainable use of natural resources, increased income for local communities through agro-tourism, and increased visitor numbers to the region are among the expected outcomes of this paper. This research implies that a community-based approach to promoting conservation and sustainable use of natural resources through agro-tourism can be effective. Economic development can be balanced with environmental protection and social equity by involving local communities, agro-tourism operators, and government agencies in decision-making processes, implementing sustainable tourist practices, and fostering partnerships. This can contribute to ensuring long-term sustainability of region's tourism activities and natural resources. The research also emphasizes the importance of careful monitoring and enforcement of sustainable tourism practices to ensure that negative impacts are minimized while positive impacts are maximized. These implications can inform

future research and policy initiatives aimed at promoting sustainable tourism and natural resource conservation in Northeastern (Isan) Thailand and other similar regions. This study is important for promoting the conservation and sustainable use of natural resources in Northeastern (Isan) Thailand. The potential benefits for local communities include increased income, which can be reinvested in conservation and sustainable use of natural resources, is one of the potential benefits for local communities. In addition, this study highlights the region's cultural and ecological significance, which can be showcased to visitors through agro-tourism activities. Ultimately, this paper has the potential to contribute to the long-term sustainability of the region's natural resources and local communities' livelihoods.

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