

CHAPTER 1 INTRODUCTION

1.1. Background

According to the UNWTO World Tourism Barometer, international tourism had recovered to 88% of its pre-pandemic volume by the end of 2023. Data from the same source shows that the Asia-Pacific region saw tourist arrivals reach approximately 65% of pre-pandemic levels, following the reopening of many destinations throughout the year. Recovery varied across subregions, with South Asia reaching 87% of its 2019 figures, while North-East Asia lagged behind at around 55%. As of 2024, the global tourism sector remains at about 82% of its pre-pandemic benchmark. (*International Tourism to Reach Pre-Pandemic Levels in 2024*, 2024) So it means this has not even surpassed pre-pandemic conditions. It is certainly a threat for the sustainability of tourism. To address these challenges, evaluate the sustainability of tourism practices are essential.

To evaluate the sustainability of tourism practices, the Global Sustainable Tourism Council (GSTC) Destination Criteria indicators provide an approach for evaluating tourism destinations. The GSTC Destination Criteria measures four critical areas: sustainable management, socioeconomic benefits, cultural heritage, and environmental impact, helping destinations to assess and enhance their sustainability. Using the GSTC Destination Criteria to evaluate tourism sustainability can identify practices that reduce negative impacts, ensure long-term viability, and promote the welfare of local communities. (Global Sustainable Tourism Council, 2019) For examples, a study used GSTC Destination Criteria as a survey to evaluate sustainable tourism in Pemo Village and analyze the management carried out by managers in promoting tourism as well as the supporting and inhibiting factors in developing tourism. (Wolo et al., 2022) In that research there's no certain explanation about what condition is like to be for each of the categories on each indicator. Another study used GSTC Destination Criteria only to see how far the sustainable development of the tourism village based on these criteria. By this gap, this research will

use GSTC Destination Criteria as a base to be developed into a checklist that can be calculated, qualitative description, and tourism activities mapping so that the result can be clearer to show how sustainable the tourism places are and what are the strategies that can improve the sustainability of tourism.

Popular tourist destinations often suffer from overtourism, where excessive numbers of tourists result in environmental degradation, pollution, and habitat destruction. Examples include the loss of native vegetation, disruption of wildlife habitats, and increased carbon emissions from tourist transportation. (Koens et al., 2018) The world faces a major challenge in reducing carbon emissions. Ecotourism is the answer because this kind of tourism is one of sustainable tourism in action, this tourism promote low-carbon transportation, energy efficiency, and other environmentally friendly practices. (Nikolova & Hens, 2020) Within sustainable tourism, ecotourism is specifically focused on environmental conservation, local community involvement, and education. (*Ecotourism and Protected Areas* | *UN Tourism*, n.d.) However, even with these goals, ecotourism can encounter challenges like overtourism, habitat degradation, and community strain if not properly managed. (Koens et al., 2018) This study emphasizes ecotourism's potential while addressing the need for effective sustainability strategies.

Based on GSTC principles, which emphasize sustainable management, environmental conservation, cultural preservation, and socioeconomic benefits, this study explores two case studies that align with these criteria. Pancoh Tourism Village in Indonesia demonstrates community-driven ecotourism as a recovery strategy after the Merapi eruption, integrating conservation with local involvement. Similarly, Zhentoushan Agriculture Leisure Area in Taiwan adopts sustainable agricultural practices to promote biodiversity and environmental education. Both destinations have similar geographic condition, which located near mountain and river, also have many fruit gardens and rice fields. Both destinations exemplify efforts to balance tourism growth with sustainability.

Firstly, Pancoh Tourism Village in Indonesia, established as an ecotourism destination in 2012 following the Merapi eruption, with support from LPTP and Gadjah

Mada University. Initial struggles with leadership led to community distrust, but after 2014, a new management approach improved community involvement and revitalized tourism efforts, underscoring the importance of local engagement in sustainable tourism. (Endiyanti & Sarwadi, 2021)

The Zhentoushan Agricultural Leisure Area, also known as Zhenshan, is a scenic and culturally rich destination in Yilan, Taiwan. Dubbed “Huaguoshan” or “The Mountain of Flowers and Fruits,” the area is celebrated for its diverse seasonal produce, including kumquats, guavas, persimmons, and mulberries. Its natural beauty is complemented by attractions like Leigongpi and the Alancheng natural springs. The leisure area encompasses three villages, Zhenshan, Tongle, and Toufen. The community collaboration drives sustainable development and tourism initiatives. Zhenshan offers unique visitor experiences, including year-round fruit picking, DIY activities like straw broom crafting, and locally sourced meals featuring Yilan’s signature ingredients, such as kumquats and Sanxing green onions. Its role as Taiwan’s leading kumquat producer, accounting for 90% of national production, underlines its agricultural significance. (*Zhentoushan Leisure Agricultural Zone | Gogo-TaiwanFarm*, n.d.) Other highlights include rare carnivorous plant farms and beautifully landscaped courtyards, showcasing a seamless blend of environmental stewardship and rural charm. (*Zhentoushan Agricultural Leisure Area | Taiwan Leisure Farms Development Association*, n.d.)

This study will compare Pancoh Tourism Village and Zhentoushan Agriculture Leisure Area using checklist that is developed from the GSTC Destination Criteria indicators and activities mapping to assess their sustainability practices, aiming to identify strategies that other tourism destinations can be widely applied to address the sustainability challenges of ecotourism.

1.2. Significance and Authenticity of the Research

a. Previous Research Scheme

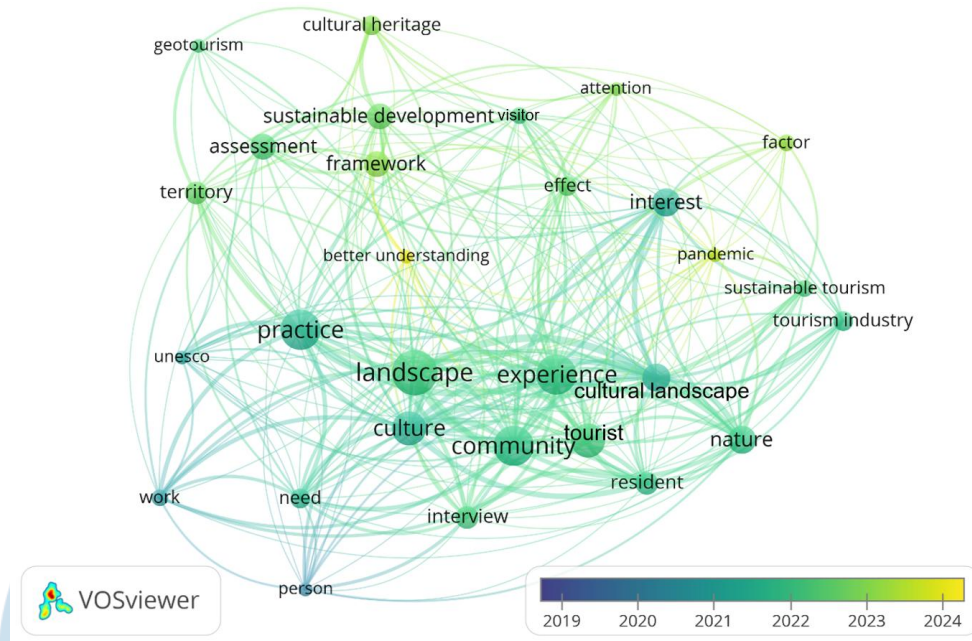


Figure 1. 1 Previous Researches Scheme
Source: Author's Analysis, 2024

This scheme visualizes the association of frequently occurring words (at least 5x occurrences) from 56 open journals that are considered relevant (with the keywords "cultural landscape", "sustainable tourism" and "village") with the research topic from Science Direct, Taylor and Francis, Springer, Research Gate, and Google (at least the last 5 years of publication). It can be seen that previous research has focused a lot on landscape, community, experience, practice, and culture. (Figure 1. 1) Therefore, this study attempts to focus on identifying tourism sustainability strategies which are also seen in the chart which are still little or rarely discussed.

b. Originality

From the analysis of previous research schemes, there is still little discussion about sustainable tourism, even though the discussion is quite connected to other keywords. Meanwhile, this study focuses on assessing the sustainability of ecotourism in Zhentoushan Agriculture Leisure Area and Pancoh Ecotourism Villages based on the GSTC Destination Criteria indicators and finding sustainable tourism strategies in the tourist destinations.

1.3. Research Questions

- 1.3.1. How many indicators of the four sustainability sections based on GSTC Destination Criteria are achieved by Pancoh Ecotourism Village and Zhentoushan Agriculture Leisure Area?
- 1.3.2. What strategies may be implemented to improve the sustainability of ecotourism based on the GSTC Destination Criteria indicators?

1.4. Research Objectives

This study aims to determine the level of sustainability of two ecotourists, which are Pancoh Ecotourism Village and Zhentoushan Agriculture Leisure Area, and what strategies can be applied for each other to improve the sustainability of tourism based on the GSTC Destination Criteria indicators.

1.5. Methods

This study uses a mixed method by utilizing direct observation, surveys, and interviews to be able to measure based on GSTC Destination Criteria and get direct exposure related to problems and strategies from each ecotourism for further analysis. The data will be measured with the GSTC Destination Criteria indicator. Comparative analysis will reveal patterns and differences as well as similarities, characteristics and strategies of each ecotourism case.

1.6. Scope of Research

a. Spatial Scope

The spatial scope of this study is limited to selected ecotourism cases, including Zhentoushan Agriculture Leisure Area and Pancoh Ecotourism Village.

b. Substantial Scope

The substantial scope of this research focuses on the level of sustainability of ecotourism in Zhentoushan Agriculture Leisure Area and Pancoh Ecotourism Village along with their sustainable tourism strategies that can be applied to each other.

c. Temporal Scope

The temporal scope of this research was carried out for 1 year (May 2024 – July 2025) with the time of checklist data collection from July & November 2024 in Pancoh Ecotourism Village and January 2024 in Zhentoushan Agriculture Leisure Area.

1.7. Research Flow and Workplan

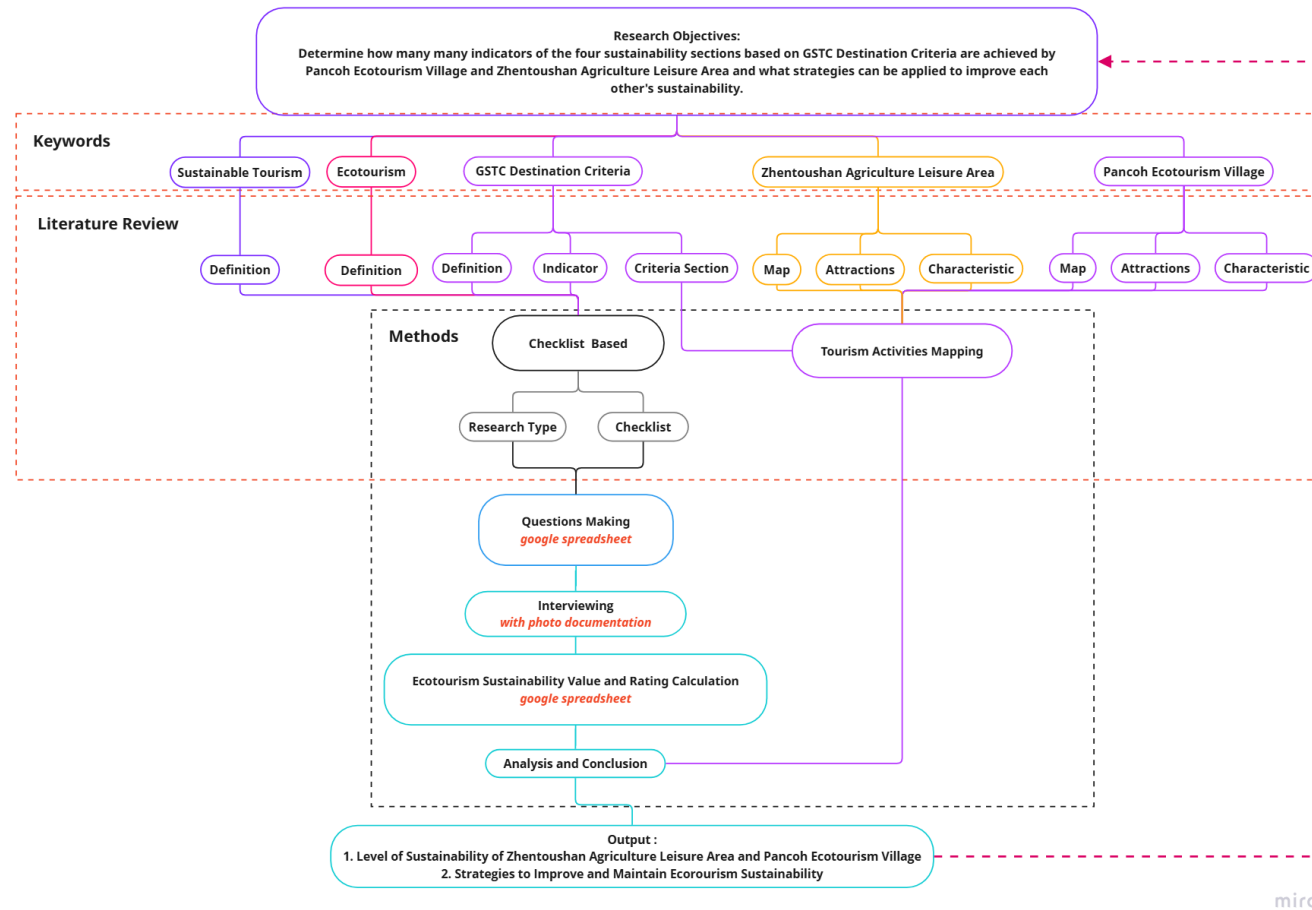


Figure 1. 2 Research Flowchart
Source: Author's Analysis, 2024

From the flowchart above, here is the workplan table to explain this research progress and plan which already done at the certain time. (Figure 1. 2 and Table 1. 1)

Table 1. 1 Research Workplan

Year	Month	Activities
2024	May	Make structure/ brief of chapter 1-3. Search issues and problem for research background. Search previous relevant researches.
	June	Developing research structure from chapter 1 and 2. Decide the main issue. Search and decide study case/ research location. Making literature review table and scheme to find research gap. Decide CASBEE and GSTC as alternative/choice methods for research.
	July	Try first alternative base method (GSTC) in Pancoh Ecotourism Village by interview and observation.
	August	Try second alternative base method (CASBEE) in Pancoh Ecotourism Village by online interview.
	September	Comparing CASBEE and GSTC as base methods. Collect data by online interview. Specify case study in Taiwan from a township to a destination area.
	October	Decide GSTC as a base method. Develop GSTC indicators into checklist. Try to fill the checklist with Pancoh Ecotourism Village data.
	November	Fix the main issue from background in chapter 1. Fix the previous research scheme. Rearrange the literature reviews based on previous table in chapter 1 as keywords into chapter 2. Mapping tourist attractions based on online interview.
	December	Develop the checklist to checklist by combine some indicators. Try to plan how to apply the checklist to places in Zhentoushan Agriculture Leisure Area. Try to plan the analysis from the existing data.
2025	January	Thesis plan review Fixing chapter 1-3 based on the review Collect observation data in Zhentoushan Agriculture Leisure Area
	February	Collect observation data in Zhentoushan Agriculture Leisure Area Interview with local enterprise in Zhentoushan Analyze data and make discussion
	March	Fixing chapter 3 based on the review Interview with local hotel owner, farmer, and temple caretaker in Zhentoushan Processing data Make and submit journal paper for conference. Make discussion and conclusion
	April	Make discussion and conclusion

		Poster Conference
May		Making Chapter 4 and 5. Make journal base on research report.
June		Finishing research paper. Submit Journal's Draft. Master's thesis final review-UAJY and NIU.

