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Analysis of the Development of Strawberry Plantation Agrotourism In Berastagi, Karo Regency Based On Visitors Satisfaction

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Abstract

Indonesia, as an agricultural nation, has significant potential for the cultivation of sub-tropical crops such as strawberries. Agrowisata in Berastagi, Karo District, offers a blend of tourism, education, and leisure, particularly focusing on strawberries. This agro-environmental development integrates community welfare, rural culture, open spaces, and tourist facilities like lodging and transportation. Agrowisata's success relies on its structural system, encompassing tourist attractions, amenities, marketing, and visitor experiences. Factors such as location, transportation, and visitor demographics like age, gender, and education also influence customer satisfaction. Research conducted at Berastagi Strawberry Farm involved randomly selected visitors and employed questionnaires to collect data. Using SWOT analysis, the study identified barriers to strawberry farming, such as geographic constraints, economic challenges, competition, production costs, and external factors like natural disasters. Strategies for developing agrowisata include improving facilities, enhancing services, brand promotion, product diversification, and collaborating with travel agents. However, challenges such as remote locations and high operational costs remain significant. The study recommends improving infrastructure, addressing visitor needs, and intensifying marketing efforts. Further research with a larger respondent pool is needed to refine strategies and strengthen agrowisata's potential as a sustainable tourism model.

Keywords: Agrotourism; Strawberry; SWOT Analysis

1. Introduction

Indonesia is an agricultural nation with a wide range of biological and natural resources. One of the sub-tropical fruit items with the most potential for development in Indonesia is strawberries. One kind of tourism is agritourism. In order to increase knowledge, comprehension, experience, and leisure, agritourism, also known as agricultural tourism, is a collection of traveler journeys that make use of agricultural sites or fields in various systems and scales, from the start of production to the receipt of agricultural products [1]. The vivid red color and delicious flavor of strawberries make them an attractive crop with significant economic value. Due to their versatility as a sub-tropical fruit that can be made into syrup, jam, sweets, juice, and extra raw materials for ice cream production, strawberries present a significant market opportunity [2].

Imports still supply the domestic strawberry market. New Zealand, Australia, the United States, Canada, Japan, China, the Netherlands, and Switzerland are among the nations that supply Indonesia with strawberries. Strawberries are not only imported by Indonesia, but they are also exported to nearby nations like Brunei Darussalam, Malaysia, and Singapore. In Berastagi, agriculture has a significant impact and is strongly tied to the travel and tourism industry. Karo Regency has a district called Berastagi. A vast range of agricultural goods, including fruits and vegetables, particularly strawberries, are produced in Berastagi. There is a strawberry harvesting excursion in Berastagi offered by the tourism destination Karo. Berastagi has long been renowned for its chilly air and scenic surroundings. The town of Berastagi's strawberry picking tourism industry bolsters the area's natural beauty. Because of the great level of interest in strawberries, strawberry agro-tourism is highly profitable and bustling with tourists. The growth of the strawberry raw material industry is highly strategic due to the high profitability of this agricultural sector; yet, in Berastagi, farmer human resources remain inadequate, resulting in a very modest business scale.

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2. Literature Review

2.1. Agrotourism

Agritourism is the planning of visits to agricultural projects, plantations, nurseries, and other locations where groups of tourists can go for sightseeing or educational purposes, taking in the vibrant colors of newly planted vegetation and the verdant nurseries of a variety of crops and vegetables surrounding the plantations they visit [3]. The definition's main emphasis is on tourist trips made in rural areas. In order to increase knowledge, comprehension, experience, and leisure in agriculture, agritourism, also known as agricultural tourism, is a collection of travel-related tourist activities that make use of the agricultural sector or location from the start of production until agricultural products are obtained in various systems and scales [1]. The definition's main emphasis is on tourism-related activities conducted in rural areas.

The same concept is emphasized in the two definitions above: agritourism is defined as a type of tourism that makes use of agricultural areas. Therefore, as many tourism activities require agricultural products, it can be concluded that an increase in the number of visitors visiting agricultural areas will spur the growth of the agricultural sector and provide farmers with additional revenue.

2.2. Agritourism Development

Every location's agritourism development is an integrated process that includes the growth of rural communities, typical open spaces, village settlements, culture, and agricultural activities, as well as tourist support services like lodging, communication, and transportation. Agritourism growth consistently demonstrates an attempt to enhance farming communities' quality of life by making the best use of their current capabilities [4]. According to [5], efforts to develop agritourism divide the fundamental ideas into five groups:

- a. The purpose of agritourism as a tourist attraction is to serve as a platform for interactions between local organizations and visitors from diverse sociocultural backgrounds who are driven to learn about, value, and take pleasure in the outcomes of local farming in particular areas.
- b. The structural framework of agritourism, which is composed of subsystems for tourist attractions, infrastructure and facilities for tourism, promotion and lighting for tourism, and visitors.
- c. The goal of the agritourism village development plan is strategic, pertaining to the ability of people living in rural regions to be independent. It is viewed as a more essential component of community development because of its orientation toward the community. As a result, the growth of agritourism now involves both cultural development, which includes both development and preservation, as well as economic development. In line with the natural process of village evolution, all agritourism development programs ought to serve as catalysts, innovators, and dynamists for the expansion and development of rural communities. Furthermore, any projects that use funding sources and natural resources need to benefit all parties involved.
- d. The subsystem of tourist attractions, tourism infrastructure and facilities, transportation, promotion, and the number of visitors are all impacted differently by the location of agritourism. Agritourism may be found inside a city, on its outskirts, or outside of it. One aspect of the setting that draws visitors who are partially from the city is its location outside of the city or in the countryside.
- e. The norm and value systems that are in place in a certain area have an impact on the spatial arrangement of that area. Thus, the spatial arrangement should be considered in the agritourism development program in accordance with the conditions and requirements of the local community.

2.3. Visitor Satisfaction

A person's sense of contentment, joy, and relief that results from using a good or service to obtain a service is known as satisfaction [6]. The gap between perceived performance and expectations determines the degree of satisfaction. The customer will be extremely disappointed if the performance falls short of their expectations. The customer will be extremely delighted if the performance meets their expectations. In the meanwhile, clients will be quite happy if performance meets or beyond their expectations. Consumer expectations can be influenced by information from multiple media sources, remarks made by family, prior experiences, and promises. client satisfaction results in extended client loyalty, less price sensitivity, and positive reviews for the business.

A person's degree of satisfaction is determined by how well they feel their perceived performance or outcomes compare to their expectations [7]. Thus, the outcome of the interplay between expectations and experiences following the use of the offered services is either pleasure or discontent. Achieving complete client happiness is a difficult task. From this definition, it can be inferred that contentment is a pleasurable emotion experienced by satisfied people when their expectations and the actuality of the services they receive align. Age, gender, occupation, education, religion, ethnicity, income, family type, marital status, geography, and social class are all crucial demographic factors to comprehend clients. Variations in age will also lead to variations in taste. After purchasing and using a product, a consumer's overall attitude toward the thing or service is known as consumer satisfaction.

The consumption and use of goods and services by customers, as well as their experience in assessing overall performance, are the aspects that impact their level of contentment or discontent.

2.4. Visitor Satisfaction Measurement

Companies employ four techniques, to ascertain the degree of client satisfaction [8]:

1. **Grievances and Suggestion Process** Every customer-focused business must give its clients the chance to voice their ideas, grievances, critiques, and complaints in a simple and convenient manner. Frequently utilized media can include websites, comment cards, unique toll-free phone numbers, suggestion boxes, and more. This approach may give the business insightful suggestions or thoughts.
2. **Mystery shopping, or "ghost shopping,"** Several ghost shoppers, or mysterious shoppers, can be hired to play or pretend to be potential buyers of the company's and competitors' items in order to gain an idea of customer satisfaction. The enigmatic shoppers will be required to pay close attention to and evaluate how the business and its rivals fulfill particular customer requests, respond to inquiries from customers, and address any grievances. This is done in order to evaluate how well firm employees are performing.
3. **Analysis of Lost Customers** The business makes every effort to get in touch with clients who have stopped purchasing from them or who have moved suppliers in order to learn more about the reasons behind their actions and to implement corrective measures.
4. **Customer Satisfaction Surveys:** Most research on customer satisfaction is done through surveys, which can be sent via mail, phone, email, the internet, or in-person interviews. By using surveys, the business can get direct input from its clientele and create a favorable picture of its attention to detail.

3. Research Method

3.1. Selecting a Research Location

The Strawberry Plantation in Berastagi, Karo Regency, served as the site of this study. The Strawberry Plantation, which is a popular tourist destination for strawberry picking agrotourism in Berastagi, Karo Regency, was taken into consideration when choosing the research venue.

3.2. Selection of Recipients

Respondents who visited the Berastagi pick-your-own plantation made up the study's population. The respondents were selected at random.

3.3. Method of Data Collection

A questionnaire is the tool used to collect the data. The questionnaire is a method of gathering data that consists of a series of inquiries.

3.4. Method of Data Analysis

We will process and analyze the data that has been gathered. The development of strawberry agrotourism in Berastagi is assessed using SWOT analysis. In management or an organization, SWOT analysis is a type of analysis that methodically aids in the creation of a mature plan to accomplish goals that have both short- and long-term objectives.

SWOT acronyms include:

- S = Strengths.
- W = Weaknesses.
- O = Opportunities.
- T = Threats.

3.5. SWOT Analysis Explanation

- **Strength (S) analysis** examines the circumstances, situations, or strengths that an organization or business is now experiencing. In this study, it is necessary for any firm or organization to evaluate its advantages and disadvantages in relation to its rivals. For instance, if the business excels in technology, it might use this advantage to service market niches where higher standards for quality and technology are necessary.
- **Weaknesses (W)** is the analysis of the circumstances, events, or weak points that now characterize an organization or business. It is a method of examining organizational or company flaws that pose a significant threat to their ability to grow and succeed.

- Opportunity (O) analysis is the study of circumstances, possibilities, or opportunities that exist outside of a business or organization and present prospects for future organizational growth. This approach involves searching for chances or innovations that will enable a business or organization to grow in the future.
- Threats (T), or threat analysis, is a method of examining the difficulties or dangers that an organization or corporation must confront in order to address the different types of adverse environmental conditions that result in setbacks. Should the issue not be promptly addressed, it will eventually become an obstacle for the concerned firm, both now and in the future.

Table 1. SWOT Analysis

<div>Eksternal</div> <div>Internal</div>	O (Opportunity) Identify opportunity factors	T (Threats) Identify threat factors
S Kekuatan (Strength) Identification of strength factors	SO STRATEGY Leverage potential to seize opportunities	ST STRATEGY Utilize potential to deal with threats
W (Weakness) Identification of weakness factors	WO STRATEGY Overcoming weaknesses to seize opportunities	WT STRATEGY Minimize weaknesses to defend against threats

4. Results and Discussion

4.1. Satisfaction with Agritourism Products

The percentage of respondents based on the category of satisfaction with facilities and fresh fruit products in detail can be seen in Figure 1.

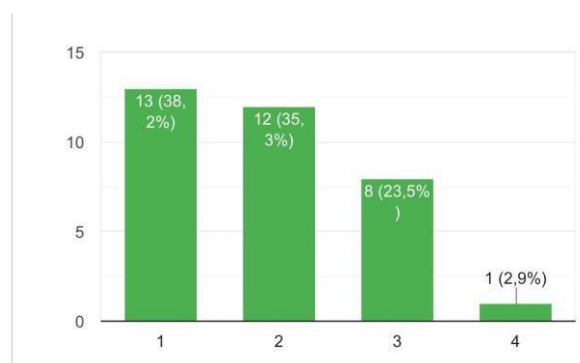


Figure 1. Percentage of Respondents by Category of Satisfaction with Facilities and Fresh Fruit Products

Figure 1 shows that, regarding the facilities and fresh fruit products at the strawberry plantation in Berastagi, 38.2% of respondents were extremely satisfied, 35.3% of respondents were satisfied, 24.5% of respondents were less satisfied, and 2.9% of respondents were dissatisfied.

Respondents' perceptions of the entrance ticket to Strawberry Stop in detail can be seen in Figure 2.

According to Figure 2, the majority of respondents more than 90% said that the cost of entry to the strawberry plantation tourist attraction is reasonable, indicating that the cost of admission is not a barrier for them. This indicates that respondents' spending amounts are consistent with their level of pleasure throughout their visits.

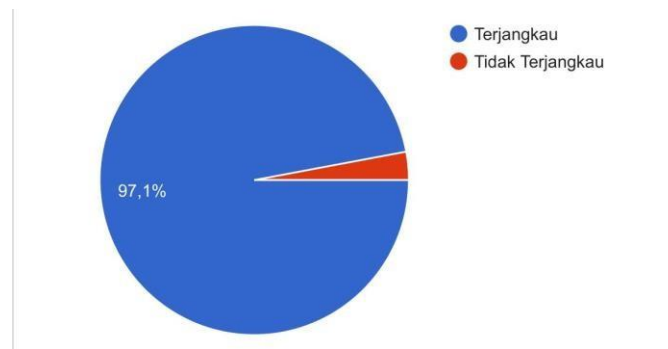


Figure 2. Respondents' Perception of Entrance Ticket

The percentage of Strawberry Fruit Quantity to Price in detail can be seen in Figure 3.

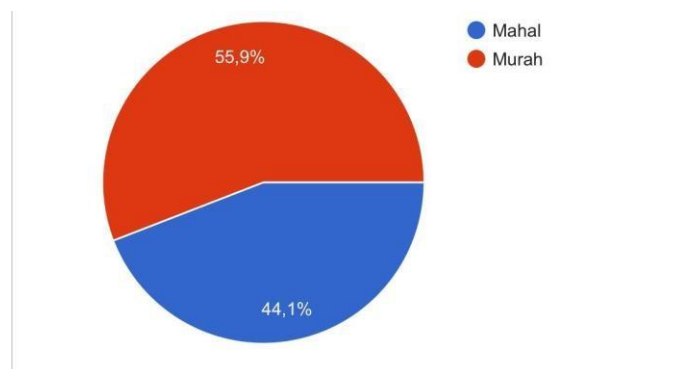


Figure 3. Respondents' Perception of the Price of Strawberry Fruit

Figure 3 shows that 44.1% of respondents disagree with the income statement and claim that harvesting strawberries at popular tourist destinations is inexpensive.

The percentage of the number of respondents to the location of Strawberry Agrotourism in detail can be seen in Figure 4.

Figure 4 illustrates the stunning setting and easy accessibility of the Berastagi strawberry plantation agritourism site for both domestic and foreign visitors.

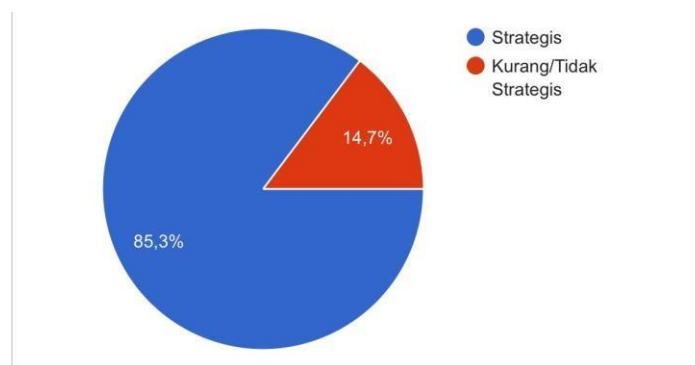


Figure 4. Percentage of the Number of Respondents to the Location of Strawberry Agrotourism

4.2. Strawberry Agrotourism Development Strategy

Based on the results of the analysis, it can be formulated with the SWOT Matrix shown in table 2.

4.3. Strawberry Agrotourism Development Strategy

The strawberry agrowisata experienced the following developmental challenges, according to the results of the swot analysis:

Table 2. SWOT Matrix for Strawberry Agrotourism Development

<p>IFAS</p> <p>EFAS</p>	<p>Strengths</p> <ol style="list-style-type: none"> 1. All of the facilities are offered. 2. There are sufficient infrastructure to support strawberry agrowisata and reasonably priced tickets. 3. A lot of people are interested in strawberry agrotourism. 	<p>Weakness</p> <ol style="list-style-type: none"> 1. Fruit price is quite expensive.
<p>Opportunity</p> <ol style="list-style-type: none"> 1. Berastagi is a popular tourist destination. 	<p>SO STRATEGY</p> <ol style="list-style-type: none"> 1. Make the most of all the facilities offered by the Agrowisata Strawberry. 2. Enhance the tourist destinations in strawberries' services. 3. Increase the number of times that hotels and airports receive deals. 	<p>WO STRATEGY</p> <ol style="list-style-type: none"> 1. Distribute the processed strawberry goods so that guests can savor the grown strawberries' processed goods. 2. Make the most of the available area and make it as visually appealing as you can when acquiring amenities to avoid harming the environment because the position is on the edge of the road and to draw in visitors who have never been there before or who have already
<p>Threats</p> <ol style="list-style-type: none"> 1. Natural calamities 2. The creation of fresh tourism destinations. 	<p>ST STRATEGY</p> <ol style="list-style-type: none"> 1. Offering tour packages at various price points to enable everyone, from the poorest to the richest, to take advantage of the strawberry tourism attractions. 2. Provide technology and knowledge about natural catastrophes to optimize the facilities in order to prevent disasters. 	<p>WO STRATEGY</p> <p>enhancing SDM quality by providing training on managing natural disasters.</p>

- Because the strawberry tourist attraction is situated in a hilly area with a lot of precipitation, flooding during the rainy season is a possibility.
- People's economic circumstances have a significant impact on travel activities; the depreciation of the rupee in relation to the US dollar has led to a decline in people's financial situation as the cost of basic necessities has increased.
- The proliferation of strawberry-themed tourism destinations in Berastagi has had a significant impact on both domestic and international travelers' interests. Their focus will be diverted to the other strawberry location. It poses a risk to strawberry views.
- The majority of responders to the surveys given to both local and foreign tourists to Agrowisata depart from areas other than Berastagi.
- Agrowisata strawberries stop in the production process through multiple stages, from cultivation and care to

marketing, which incurs optional costs even in inclement weather or when pests appear on strawberry seedlings, causing issues that result in losses for farmers and driving up strawberry prices.

5. Conclusion

The conclusion of this study highlights that the development of strawberry-based agrotourism in Berastagi holds significant potential to enhance local community welfare and attract tourists. Proposed strategies include improving facilities, marketing tourist destinations, diversifying products, and collaborating with travel agencies to enhance human resource quality. However, challenges such as remote locations, high operational costs, natural disasters, and competition from new tourist destinations must be addressed. This agrotourism development can provide balanced economic, social, and environmental benefits if managed effectively. Government and community support are crucial to optimizing this potential while boosting Berastagi's appeal as a model of sustainable tourism.

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