



## Development of Sustainable Agrotourism at Sein Farm (Sekemala Integrated Farm) Bandung City

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**Abstract**—Tourism development in Ujungberung District, Bandung City is directed towards the theme of agrotourism, which is realized in the Sein Farm (Sekemala Integrated Farm). Sein Farm is a program from the Bandung City Food and Agriculture Security Service (DKPP) in the form of integrating agriculture on urban land which is a superior program as well as a means of agricultural educational tourism. Activities at Sein Farm include seeding, breeding and processing waste from activities, which is reprocessed into fertilizer for the nursery. Plant and livestock seeds resulting from activities at Sein Farm will then be distributed free of charge to the community around Sein Farm and Bandung City. We then analyzed the concept of integrated and sustainable agriculture in the form of tourist attraction analysis, social, economic and environmental analysis and SWOT analysis, the results of which were future strategic planning at the Sein Farm location.

**Keywords:** agrotourism; development strategy; sustainable

### 1. Introduction

Pasanggrahan Subdistrict is one of the Villages in Ujungberung District which has the largest rice field with an area of 64 Ha out of 97 Ha of rice fields in Ujungberung District (Ujungberung District in Figures 2022). Apart from that, in Cisurupan Village, Cibiru District, there is also 14 hectares of perennial rice fields (PPID Bandung City 2018). Based on the Bandung City Regional Tourism Development Master Plan for 2012-2025, the Pasanggrahan Subdistrict is included in the location for developing agricultural-based secondary tourism attractions. This secondary tourist attraction complements the primary attraction of the Pasanggrahan arts and culture area while supporting the Ujungberung Traditional Cultural Tourism Area in accordance with the Bandung City RIPPADA. In September 2020, the Bandung City Food Security and Agriculture Service inaugurated Sein Farm as a tourist attraction as well as an agricultural education facility. Geographically, Sein Farm is located in Pasanggrahan Village, Ujung Berung District and Cisurupan Village, Cibiru

District, Bandung City. Sein Farm functions to support urban farming activities and is in line with one of the Bandung City Government programs, namely Buruan Sae. One of the goals of this program is to involve the community in creating urban farming in the environment around residents' homes. Sein Farm has an area of 4 Ha consisting of rice fields, livestock pens, gardens and a biofloc pond. Sein Farm carries an integrated farming concept that utilizes Sein Farm products as feed ingredients.

Reporting from [iotstudio.labs.telkomuniversity.ac.id](http://iotstudio.labs.telkomuniversity.ac.id), there are several problems in the development of Sein Farm, the first is that due to the Covid-19 pandemic, outreach and educational activities are limited. Second, there is no information system that is integrated and scaled relatively low marketing. In 2021, quoted from [bandungbermobil.id](http://bandungbermobil.id), Lilis Wiheri as Chair of RW 08, Pasanggrahan Subdistrict, stated that the impact of agrotourism development in This area results in a reduction in rice fields so that agricultural productivity is also reduced. Even though there was no loss, the selling price fell because the capital spent was the same as the harvest obtained. Therefore, in order to study the

various problems that occur related to agrotourism at Sein Farm, it is necessary to conduct a study regarding the development of sustainable agrotourism at Sein Farm, Bandung City. The development of agrotourism is focused on sustainable aspects to see how agricultural-based tourism activities can be oriented towards social welfare, economic benefits and environmental sustainability while not forgetting existing local wisdom.

## 2. Method

This research is based on the results of interviews with SEIN FARM administrators, DKPP (Food Security and Agriculture Service) employees and direct site surveys. This research uses a qualitative descriptive approach to explain sustainable agrotourism at SEIN FARM. The qualitative descriptive approach according to (J. Moleong, 2005) is a research approach where the data is words, pictures and not numbers. This data can be obtained from interviews, field notes, photos, video tapes, personal documentation, notes, or memos and other documentation. In determining the research sampling using the purposive sampling method, namely research respondents were determined according to their field of expertise. In this research, the respondents were the Bandaung Village SEIN FARM Manager, namely Mr. Dedi and Mr. Rudi. Data from surveys and interviews were analyzed using the tourist attraction analysis method, social economic and environmental analysis and SWOT analysis. Tourist Attraction Analysis is used to describe the components of tourist attractions which consist of something to see, something to do, something to buy, and something to remember. Apart from these components, tourist attraction analysis also explains the external and internal factors that influence each component of the tourist attraction (Suryana, 2017). Socioeconomic and Environmental Analysis is an analytical technique used to analyze a situation objectively to get a picture and examine existing phenomena (Salim, 2019). SWOT analysis is an analysis technique for identifying strengths, weaknesses, opportunities and threats to determine systematically identifying factors and comparing external and internal factors (Rangkuti, 2004).

## 3. Result and Discussion

### *Sein Farm Overview*

Sein Farm, which has existed since 2016 and

started to develop into agrotourism since 2020, is an integrated agricultural innovation in the city of Bandung. Sein Farm is an acronym for Sekelama Integrated Farming, Sekemala is the exact location where Sein Farm was built. Based on the website <https://buruansae.bandung.go.id/> the Sekemala location in the Pasanggrahan sub-district is very suitable to be developed and become a sustainable agro-tourism location in the city of Bandung because this area is the location of eternal rice fields owned by the city of Bandung. Sein Farm, which is a form of integrated farming, is a sustainable village farming concept that integrates nurseries, culture development, agricultural products and waste from agricultural and livestock activities. Agricultural activities at Sein Farm include rice fields on perennial land, fruit and vegetable plantations, vegetable hydroponics, fisheries (catfish), animal husbandry (goats and chickens). All supplies of seeds, agricultural equipment and management staff come from the Bandung City Food and Agriculture Security Service (DKPP). From the plantation and livestock products at Sein Farm, most of them are distributed to the communities around Sein Farm and Bandung City for free through activities and the Buruan SAE community in Bandung City and the results that are not distributed to the community are used as broodstock to produce new seeds. Through Sein Farm, the City of Bandung directly applies the concept of urban and sustainable agriculture for food and agricultural security in the City of Bandung.

### Tourist Attraction Analysis

The following is an explanation regarding the characteristics of tourist attractions, namely something to see, something to do, something to buy and something to remember at Sein Farm; 1. Something to see, in this tourist spot there must be tourist attractions and attractions that are different from what other areas have. The area must have a special and unique attraction.

2. Something to do, apart from seeing a lot of things to do at tourist attractions, recreation or amusement facilities must also be provided that can make tourists feel at home longer in the place.

3. Something to buy, at the tourist spot there must be facilities for shopping, especially souvenir items and folk crafts as souvenirs for tourists.

4. Something to remember, this tourist spot has its own uniqueness so that it can be remembered by tourists and creates a desire for tourists to visit again. Something to remember also means assessing the potential of an object based on the attractiveness

**Table 1.** Tourist Attraction Analysis






Characteristics of Tourist Attractions	Analysis	Photo
Something To See	View of rice fields	
	The eternal rice fields owned by the Bandung City government and the community are one of the interesting photo spots for visitors who want to see the beauty of the rice fields from the top of SEIN FARM	
	Selfies and taking photos Visitors can take photos of all the objects and activities at Sein Farm, be it views of rice fields, gardens or livestock in cages. Enjoy views of rice fields and gardens	
Something To Do	The beauty of the rice fields at Sein Farm, the uniqueness of plantations and hydroponics are something that visitors to Sein Farm can enjoy	
	See cattle drums Sein Farm is an agrotourism that not only provides beauty but visitors who enter can interact with the farm animals in the drums at Sein Farm	
	Learn about hydroponics, fruit and vegetable plantations, and also about livestock Sein Farm also provides education to visitors who enter so that they not only see but also gain knowledge about agriculture and animal husbandry at Sein Farm	
Something To Buy	Seed distribution Distribution of seeds from Sein Farm to the community around Sein Farm and Bandung City, which is a program from DKPP, for free every month. This can happen because Sein Farm receives funds directly from the Bandung City Government	
Something To Remember	Experience agriculture-based tourism in the sub-district area, see green views and gain new insights about agriculture and animal husbandry at Sein Farm	

Figure 1: Photo of a view of the rice fields in Sein Farm (Sumber : <https://buruansae.bandung.go.id/>)

Gambar 2 : Photo Spot Location at Sein Farm

Gambar 4 : Goat livestock pen at Sein Farm

Gambar 5 : Hydroponic at Sein farm (Sumber : Survey pribadi)

Gambar 6 : 1 month old chicken seeds ready to be distributed to the public  
(Source: Personal survey)

of a tourist attraction that can be remembered long after the visit is finished.

#### *Social, Economic and Environmental Analysis*

This analysis explains the relationship between Sein Farm as a sustainable agrotourism concept and the community around the Sein Farm location and Bandung City. Based on the results of surveys and direct interviews with Sein Farm administrators, objective results regarding the social, economic and environmental conditions at the Sein Farm location and its surroundings were obtained.

##### **Social Analysis**

Based on the results of interviews with Sein Farm administrators Pak Dedi and Pak Rudi, the social activities of the community around the Sein Farm location are quite good compared to the activities taking place at Sein Farm. These social activities include meetings which are often held by Buruan SAE every 5-6 weeks, arts and cultural activities which are held every 3 months at Sein Farm and its surroundings, and educational activities in the form of study tours or study tours to Sein Farm by students elementary schools and junior high schools in the form of agricultural education tourism

##### **Economic**

Based on the results of interviews with Sein Farm administrators Mr. Dedi and Mr. Rudi, the economy around the Sein Farm location is quite good. Based on the results of the interview, this can happen because there is a program to provide free seeds to the surrounding community which has an impact on community food security, through Hurry

SAE and DKPP also held training for the local community, the end result of which was that the community was able to breed the seeds provided by Sein Farm and this program has started running, and will continue in the future to provide a positive impact on the community. The opening of Sein Farm as an agricultural-based tourist attraction or agrotourism, has an economic impact on the surrounding community with people opening stalls and food stalls around the Sein Farm location, thus providing an income impact on the local community economy.

##### **Environmental Analysis**

Based on the results of interviews with Sein Farm administrators Pak Dedi and Pak Rudi and the initial aim of establishing Sein Farm, namely an integrated agricultural mode, the environmental impact is minimized to a minimum, especially waste resulting from agricultural and livestock activities. The waste products from these activities are not disposed of freely into the surrounding environment but are processed and reused. One form of utilization is that agricultural and livestock waste is processed into compost which is used as a natural fertilizer for agricultural activities at Sein Farm.

#### *SWOT Analysis*

SWOT analysis is used to help determine the potential and problems at the study location. In this SWOT analysis, internal and external factor analysis is carried out. Internal analysis is intended to identify strengths and weaknesses, while external analysis is intended to identify opportunities and threats. The method used to develop strategic factors in developing sustainable agrotourism is using the SWOT matrix. This matrix can clearly illustrate how the external opportunities and threats

**Table 2.** SWOT Matrix for Sustainable Agrotourism Development at Sein Farm, Bandung City

		<b>Internal</b>	
		<b><u>Strenght</u></b>	<b><u>Weakness</u></b>
		Providing free food plant and livestock seeds to the community Providing training and educational tours on agricultural and livestock cultivation to the community	The Bandung City Government is the only source of budget and funding for Sein Farm operations Accessibility to Sein Farm is not yet integrated with public transportation
<b>External</b>	<b><u>Opportunity</u></b>	<b><u>Strategy S-O</u></b> Create economic opportunities for the local community when Sein Farm is opened commercially Overcoming the problem of food availability for consumption	<b><u>Strategy W-O</u></b> Increase income from tourists when Sein Farm is opened commercially Integration and provision of public transportation modes to get to the Sein Farm location
	<b><u>Threads</u></b>	<b><u>Strategy S-T</u></b> Hold CHSE Certification before Sein Farm opens commercially Coordinate between Sein Farm Management and the Covid-19 Task Force to support tourism activities at Sein Farm	<b><u>Strategy W-T</u></b> Increase the efficiency of budget plans in Sein Farm operations Coordinate between Sein Farm Management, the Transportation Service and the Covid-19 Task Force to increase accessibility to Sein Farm

faced can be adjusted to the internal strengths and weaknesses it has. The following is a SWOT matrix for sustainable agrotourism development at Sein Farm, Bandung City.

Based on the SWOT analysis, the strategy for developing Sustainable Agrotourism at Sein Farm, Bandung City is as follows:

Hold CHSE Certification before Sein Farm opens commercially.

Procurement of CHSE (Cleanliness, Health, Safety, Environment Sustainability) certification aims to provide guarantees of cleanliness, health, safety and comfort to tourists or guests who wish to visit. CHSE is a form of response and adaptation to the Covid-19 pandemic by remaining active and productive without ignoring health protocols.

Coordinate between Sein Farm Management and the Covid-19 Task Force to support tourism activities at Sein Farm.

Following up on CHSE certification, tourism activities at Sein Farm also continue to pay attention to health protocols. Some actions that can be taken are online ticket ordering, cashless payments, using careprotection, etc.

Integration and provision of public transportation modes to get to the Sein Farm location.

The closest public transportation to get to Sein Farm is only via public transportation which takes the route Jl. A. H. Nasution (about 2-3 km from Sein Farm). The integration and provision of public transportation aims to increase accessibility for tourists who want to visit but do not use private vehicles. Procurement of public transportation can be in the form of motorbike taxis from local communities or shuttle cars when demand is higher.

Coordinate between Sein Farm Management, the Transportation Service and the Covid-19 Task Force to increase accessibility to Sein Farm.

In line with point number 4, procurement of public transportation modes also continues to pay attention to health protocols. The implementation of health protocols for providing public transportation can include motorbike taxi or shuttle car drivers who have been vaccinated with at least 2 doses, the position of the passenger seat in the shuttle car, etc.

Create economic opportunities for the local community when Sein Farm is opened commercially.

Local people can carry out trade and service activities around the Sein Farm location for tourists, such as setting up food court stands, souvenirs, etc. Apart from that, Sein Farm can be a platform for local communities to sell various products from household businesses.

Increase income from tourists when Sein Farm is opened commercially.

With the income from tourists when visiting

Sein Farm, they will be able to increase PAD (Regional Original Income) either through entrance ticket fees, parking, etc. Apart from that, increasing income can be used as capital for operational activities and developing Sein Farm as an Agrotourism.

Increase the efficiency of budget plans in Sein Farm operations.

The Covid-19 pandemic has resulted in the government refocusing the budget to pay more attention to dealing with Covid-19. The efficiency of the budget plan has a different focus from reviewing developments in Covid-19. With the decline in the positive trend of Covid-19 and the increase in vaccination rates, this could have an impact on budget plans and is expected to provide a boost to the development of Sein Farm Agrotourism in Bandung City.

Overcoming the problem of food availability for consumption.

Sein Farm is an innovation, especially for the food sector, because Sein Farm, which has an integrated urban farming concept, aims to overcome the inequality of food problems in the city of Bandung. Sein Farm utilizes land through gardening to meet the food needs of the community.

#### 4. Conclusion

Sein Farm is a form of innovation from the Bandung City DKPP which promotes agricultural integration in sub-districts, which is the right step to maintain food security in the City of Bandung as well as creating a synergy between the community and government to carry out sustainable development in the area

Sein Farm is also an agricultural education-based tourism platform that applies the concept of sustainable tourism

Based on the SWOT analysis, 8 sustainable agrotourism development strategies were obtained at Sein Farm, Bandung City. Synergy between stakeholders is the key to developing sustainable agrotourism at Sein Farm, Bandung City.

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