



UDC 332

## STUDY OF AGROTOURISM POTENTIAL DEVELOPMENT IN DRYLAND AREAS OF SATONDA LAKE ISLAND, DOMPU REGENCY, INDONESIA

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### ABSTRACT

This research aims to analyze information regarding the suitability of agrotourism development and the potential for agrotourism development in the surrounding dry land area of Lake Satonda Island, Dompu Regency, conducted in 2023 with the research location determined through purposive sampling, namely in the Pekat District as part of the dry land of Lake Satonda Island, the location for agrotourism development. The respondents used were 115 farmers selected from 4 out of 12 villages/sub-districts determined purposively, and each farmer was allocated for an interview to obtain information related to dry land farming. Then, data were collected through interviews, recording, and direct observation with previously prepared questionnaires and in-depth interviews to analyze the potential for agrotourism development. To determine its potential, it is known to have various total values both in Natural Open Space Agrotourism (ARTA) and Artificial Open Space Agrotourism (ARTB). In terms of attraction, ARTA showed 45 farmers, or 39.13% with a mode of 14 categorized as not good, while ARTB showed 29 farmers, or 25.21% with a mode of 14 categorized as not good. Furthermore, in terms of facilities, ARTA showed 78 farmers, or 67.82% with a mode of 10 categorized as not good, while ARTB showed 35 farmers, or 30.43% with a mode of 11 categorized as not good. Additionally, in terms of infrastructure, ARTA showed 21 farmers, or 18.26% with a mode of 16 categorized as good, while ARTB showed 44 farmers, or 38.26% with a mode of 8 categorized as not good. Lastly, in terms of hospitality, ARTA showed 68 farmers, or 28.69% with a mode of 14 categorized as not very good, while ARTB showed 30 farmers, or 26.08% with a mode of 9 categorized as not very good. This resulted in the potential for agrotourism development based on the suitability of agrotourism development with a value of 30 points out of a total of 40 points, with a weight percentage of 73.5% out of 100%, and the obtained TSI value was 64.29. Then, the significance value p-value obtained was 11.985a, and the chi-square value obtained was 1.000. Since the significance value is  $1.000 > 0.05$ , the null hypothesis is rejected ( $H_1$  is accepted), which means that there is a significant relationship between the artificial open space agrotourism to be developed and the suitability of agrotourism development at the research location in Dompu Regency.

### KEY WORDS

Agrotourism, development, potential, suitability.

The development of agrotourism is an effort towards utilizing the potential of agricultural tourism attractions. According to Citriadin (2020), attractions are seen as a new idea and create an understanding among communities not only to engage in farming in dry land areas but also to combine the potential in the tourism sector, creating opportunities for agricultural-based agrotourism development that is currently viral in today's era. With such innovation, changes the perspective of agricultural stakeholders in dryland areas to become more advanced and provides room for improving prosperity with opportunities associated with regional development prospects (Asniana, 2021).

The West Nusa Tenggara region, as one of the areas with potential for tourism improvement, is also supported by the establishment of proposals as Halal Tourism Destinations and Special Economic Zones (SEZs), with the construction of the MotoGP Circuit by the central government officially inaugurated in 2022. Every opportunity created with the support of local governments and agricultural areas on Sumbawa Island, which is



known in many aspects both domestically and internationally, creates a better development potential for the community, especially those involved in the agricultural sector. Revolutionizing agriculture with tourism-based agricultural development can help increase community welfare.

The potential for tourism development is not only limited to the central NTB region but also extends to remote villages that potentially have tourism attractions, in particular. The head of the NTB Tourism Office, H.L. Moh. Faozal (2019), stated that there are 99 villages designated as tourist villages according to the Governor's Decree spread across 10 districts/cities (Marini, 2023).

Dompu Regency has become regency with a relatively rapid growth rate in tourism development based on the improvement of quality and standards in various sectors, following regional autonomy regulations. This has led to significant growth for new businesses developed by the community. In terms of advancing the tourism sector and implementing new strategies to promote tourism, 17 tourist attractions need to be developed, whether on a national, international, or local scale (NTB Department of Culture and Tourism, 2019).

According to data from the NTB Department of Tourism in 2013, the annual tourist arrival rate reached 6,000 visitors from abroad. The tourism location of Lakey Beach and Satonda Island is an additional destination from the travel route starting from Komodo Island as the main destination, then continuing to other routes such as Moyo Island and surrounding attractions on Sumbawa Island (NTB Department of Culture and Tourism, 2019).

Of these 17 tourist attractions, the government's priority for international-scale tourism includes Mount Tambora, Lakey Beach, and Satonda Island, while national-scale tourism includes Doro Ncanga Tourism. As for local tourism, it includes Wadu Jao Beach, Ngapa, Madaprama Tourism, Ria Beach Tourism, and others. Surveys will be conducted on some of these local tourist attractions to determine priorities for their development, whether through existing facilities and infrastructure or other supporting aspects based on dry land agriculture. As a form of advanced development in the tourism sector that positively impacts regional development, the local community around the tourism sites, and economic growth, it creates attractive opportunities and generates employment and SME absorption. Based on data from the Dompu Regency Tourism Office in 2015, the recorded tourist arrivals to tourism destinations in the Dompu Regency reached 113,587 people in 2015, indicating a significant increase (Dompu Regency Central Statistics Agency, 2015).

The activities of the national and regional governments mentioned above indicate significant opportunities for the NTB region itself to enhance agriculture-based educational tourism, as demonstrated by the example of strawberry cultivation in the Gunung Rinjani Geopark area. The NTB region has immense potential due to its location surrounded by three volcanoes and its strong cultural heritage with rich traditions and numerous accolades received by the West Nusa Tenggara Province. Furthermore, West Nusa Tenggara Province comprises two main islands, namely Lombok and Sumbawa, with additional smaller islands that also have tourism potential, such as the recently popular Kenawa Island in West Sumbawa Regency, the Mata Jitu and Diwu Mba'i waterfalls on Moyo Island, Satonda Island in Dompu Regency, and many more (NTB Department of Culture and Tourism, 2019).

Lake Satonda Island encompasses small islands, coastal areas, and the sea, with attractions primarily focused on natural tourism. This area has potential for agronomic development based on the concept of agrotourism. However, the main problem is the lack of data and information regarding the suitability of agrotourism development and the potential for agrotourism development in the dry land areas around Lake Satonda Island in Dompu Regency.

## **METHODS OF RESEARCH**

This research was conducted in 2023 using a survey method, where information was collected from a portion of the population to represent the views of the entire population. The research location was determined using purposive sampling, specifically in the Pekat District,



Dompu Regency, as part of the dry land area of Lake Satonda Island, chosen as the agrotourism location. Primary data were obtained from 115 farmers selected from 4 out of 12 villages/urban areas, deliberately chosen, and allocated as respondents using a proportional random sampling method from each farmer for each interview point conducted to gather information related to dry land agrotourism farming. Data collection techniques included interviews, recording, and direct observation using pre-prepared questionnaires and in-depth interviews to analyze the potential for agrotourism development.

The hypothesis for the chi-square test between the relationship between knowledge and the head of the family's perception of food diversification is as follows:

- H0:  $X = 0$ ; there is no significant relationship between tourism suitability and the potential for agrotourism development in artificial open spaces.
- H1:  $X \neq 0$ ; there is a significant relationship between tourism suitability and the potential for agrotourism development in artificial open spaces.

## RESULTS AND DISCUSSION

Dompu Regency is one of the 8 regencies under the administration of the West Nusa Tenggara (NTB) province. In Dompu, there are several well-known tourist attractions such as Mount Tambora, Satonda Island, Doroncanga Savanna, and Lakey Beach. Lakey Beach is often used as a location for international surfing competitions, while Doroncanga Savanna is a unique savanna that resembles Africa, earning it the nickname "Africa van Sumbawa." Dompu is renowned for wild horse milk and honey production. Additionally, Dompu is known as a producer of corn, cattle, and buffalo, supplying various regions for consumption and industrial purposes. Dompu is also recognized for its rich biodiversity, including Timor deer ("maju ndere kala"). The agricultural sector, especially food crops, remains a determinant of economic growth for the community in Dompu Regency. The contribution of the agricultural sector to the formation of the Gross Regional Domestic Product (GRDP) of Dompu Regency for the period 2021-2022, released by the NTB Province in 2022, reached 39.93 percent (Dompu Regency Department of Agriculture and Plantation, 2023).

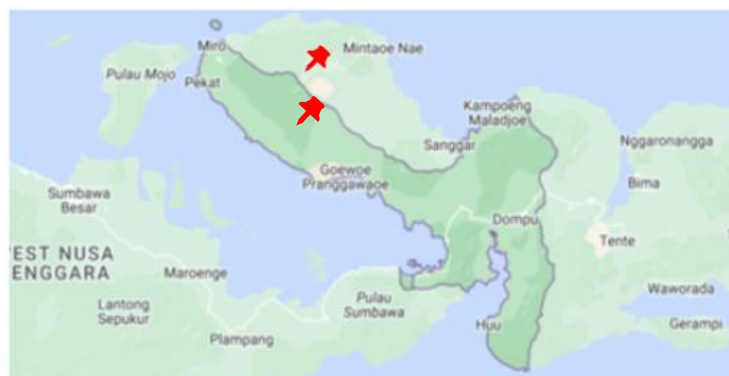


Figure 1 – Research location in the Pekat sub-district area, Dompu Regency

The agricultural sector contributing to the formation of Dompu Regency's GRDP includes agriculture, fisheries, animal husbandry, and forestry. However, the food crop sector, including maize, rice, peanuts, and other horticultural crops, makes a significant contribution. Moreover, the agricultural sector's contribution of 39.93 percent is far above that of other sectors such as trade, mining, and other sectors. In the NTB province itself, the agricultural sector's contribution is only 22.42 percent. The agricultural sector's contribution in Dompu Regency ranks second with the largest agricultural sector contribution in NTB after Bima Regency, which contributes 43.18 percent. The importance of the agricultural sector is evident in the prioritization of key commodities such as corn, porang, rice, cattle, and fish (JARA PASAKA) as the government's flagship commodities. Despite the limitations, the government continues to pay attention to agricultural commodities, aiming to improve the



welfare of the people of Dompu. Value addition to the agricultural sector is also being pursued by the regional government (Pemda) through industrialization programs. It is hoped that value addition to agricultural commodities will also impact the stability of agricultural commodity prices.

In the research activities conducted in 2023, a discussion was obtained outlining the potential of each village, along with the results and findings related to the potential of each village aimed at enhancing the role of the surrounding community in those locations. Based on the determination of the research locations, 4 villages with optimal utilization of dry land locations were identified, namely: 1) Kadindi Village, 2) Calabai Village, 3) Sorinomo Village, and 4) Nangamiro Village.

The area around Kadindi Village is surrounded by mountains such as Mount Tambora to the east and Mount Kadindi to the south. The agricultural and plantation sectors are the main sources of employment for most of the residents of Kadindi Village. Various types of food crops and plantations are cultivated here, including rice, corn, tubers, legumes, vegetables, chili peppers, tobacco, guava, bananas, cocoa, and coconuts. Despite the significant potential of Kadindi Village in the agricultural sector, the interest of its youth in engaging in this sector is lacking. They prefer to leave the village, even going abroad, to seek employment. However, the role of youth is highly anticipated in improving the agricultural system to make it better.

Calabai Village is located within the Tambora Mountain National Park area, tasked with conserving natural resources effectively. Apart from agriculture and plantation aspects, Calabai Village innovates by developing village tourism while preserving coral reefs and marine biota. This commitment is enshrined in Village Regulation No. 4 of 2013 concerning Coral Reef Conservation and Turtle Hatchery. Calabai Village's innovation can fulfill ecological and economic missions: coral reef richness can be preserved, communities can improve their family's economy, and the village government can gain additional Village Original Revenue (PADes).

Sorinomo Village, as one of the villages focusing on agriculture, is currently prioritizing sugar cane and corn as its main crops, becoming the prima donna of the district and holding potential in the tourism sector. The well-known tourist attraction in this village is the White Swallow Waterfall. The charm offered by this new tourist destination has only recently been discovered by both local and international tourists. Although this new tourist destination requires a 2-kilometer trek on foot to reach, it presents an opportunity as a great tourist spot for promotion and infrastructure development.

Nangamiro Village also has very attractive tourism potential, especially its coral reefs and proximity to Satonda Island. Besides tourism objects, the surrounding area is dotted with cashews and coffee plantations and focuses on environmental conservation, which is always visually pleasing.

As a general overview of the research location, the surrounding communities are capable of developing the agricultural sector, so the surrounding communities are chosen as research respondents. The characteristics of the respondents include age, education level, income, number of dependents, address/village, and gender.

The characteristics of farmers are indicators that show their way of thinking and physical abilities in farming. Farmers in Indonesia tend to be older and conservative in responding to changes in innovation and technology. Younger farmers tend to adopt innovations more quickly, even though they may lack experience (Kartasapoetra, 1994).

Education is one of the factors that influence a person's way of thinking. The research results indicate that 46% of farmers are aged between 26-35 years old. Most of these farmers are from the second generation and continue their parents' farming activities. This age group is still considered productive and has the potential to develop agrotourism businesses. Farmers of productive age are more likely to easily accept innovations and improve their farming practices.

A higher level of education will assist in receiving information, making decisions, and adopting technology and innovations, especially those related to the development of self-picking orange agrotourism. The majority of education levels are high school graduates,



accounting for 42.61%. It can be said that farmers have a fairly good level of education. Farmers with higher levels of education tend to think more rationally compared to those with lower education levels. According to Rotinsolu et al. (2014), the lack of educated labor has an impact on the slow growth and development of the economy because education is crucial and influential in productivity. Education makes people quicker and more prepared to face changes.

Table 1 – Distribution of Respondents Based on Indicators and Assessment Aspects of Agrotourism Development Potential in the Dry Land Area of Satonda Lake Island

No.	Explain	Total (People)	Percentage (%)
1.	Age (Years)		
1.	26-35	53	46,08
2.	36-45	38	33,04
3.	46-55	22	19,13
4.	>55	2	1,75
Total		115	100,00
2.	Level of Education		
a.	TS	6	5,22
b.	Elementary School	28	24,34
c.	Junior High School	26	22,61
d.	Senior High School	49	42,61
e.	Bachelor	6	5,22
Total		115	100,00
3.	Income (Rp/season)		
a.	< UMP (14,4 million)	42	36,52
b.	> UMP (14,4 million)	73	63,48
Total		115	100,00
4.	Number of Family Member		
a.	0-2	4	3,48
b.	3-4	81	70,43
c.	5-6	29	25,22
d.	>6	1	0,87
Total		115	100,00
5.	Address or Village		
a.	Calabai	34	29,57
b.	Nangamiro	17	14,78
c.	Sorinomo	39	33,91
d.	Kadindi	25	21,74
Total		115	100,00
6.	Genre		
a.	Male	110	95,65
b.	Female	5	4,35
Total		115	100,00

Source: Processed primary data, 2023.

Furqan (2022) states that human resources in strawberry agrotourism consists of 6 people with an average final education level at the high school level, and this education level forms a progressive mindset even though none of them have backgrounds in business or tourism majors. Natural resources are quite good, with clean water sources, cool air, and suburban land. Capital resources are still limited, coming only from the personal funds of business owners. Knowledge and technology resources have not been able to utilize the internet as a promotional tool and technology utilization in tourism areas is still limited. Infrastructure resources at the tourist location are quite complete, where the Strawberry farm has parking lots, ticket counters, toilets, places of worship (Musholla), agrotourism icons, cafes/restaurants, and garbage bins.

The household income of farmers has an average income categorized as moderate to high, above Rp. 15,176,696.85, with a percentage of 63.48%, and 36.52% of farmer households are in the low-income category. This is also supported by the Central Statistics Agency (2021), which states that low-income groups are in the range of ≤ Rp. 1,500,000, middle-income groups are in the range of > Rp. 1,500,000 to Rp. 2,500,000, high-income



groups are in the range of > Rp. 2,500,000 to Rp. 3,500,000, and very high-income groups are in the range of Rp. > Rp. 3,500,000.

The average range of the number of family members of respondents is in the range of 3-4 people, accounting for 70.43% of the total range of family dependents of respondent families. This means that the farmer respondent families are in the middle-income category. Based on data from the Central Statistics Agency (2017), the size of the family's burden is determined by the number of family members being supported. Small families have 1-2 dependents, middle-income families have 3-4 dependents, and large families have >5 dependents. This means that the more family members there are, the heavier the burden that must be borne. Conversely, the fewer family members there are, the lighter the burden and considerations in providing nutritional intake for the supported family members.

Based on the research results, the farmer's area is an agrotourism location with several available aspects such as the availability of public transportation, which is a significant reason for visitors to come and visit, as well as the availability of roads in good condition and the proximity of Agrotourism to public roads.

Based on the research results, the gender of the respondents can indicate that the respondents' efforts to increase income are also acknowledged by women, both as heads of households and as sources of information. In this study, the participation of women was 4.35%, while men accounted for 95.65%. This is because household heads believe in using personal experience as a form of measurement and assessment of basic information related to understanding new ideas for household heads. The participation of women brings about empowerment in the agricultural sector and provides diverse perspectives.

Women's perspectives have a basis and consideration, in line with Hayati's view (2020), which states that there has been an increase in the social abilities of participants, as evidenced by the establishment of KWT Mekar Indah as a place for learning, collaborating, and developing group efforts. Similarly, there has been an increase in managerial skills among participants, as evidenced by their ability to plan and evaluate group activities for the improvement of subsequent group planning. The increase in technical skills of participants is shown by their ability to propagate and plant vegetables in backyard gardens, maintain fish in cages and communal ponds, and provide varied and nutritious meals. Furthermore, there has also been an increase in knowledge about the benefits of consuming varied and nutritious foods for each individual since in the womb.

Looking at the characteristics of farmers, if they implement this agrotourism concept, the development opportunities for this concept are quite significant. The productive age of farmers and their mature experience in farming enable them to adopt and implement innovations in the development of agrotourism-based farming.

In this study, the potential for agrotourism development is determined based on 2 (two) indicators, namely: 1) Suitability of Natural Open Space Agrotourism (ARTA), 2) Suitability of Artificial Open Space Agrotourism (ARTB). Both indicators have 4 aspects that are specifically discussed, namely: a) Attraction Aspect, b) Facility Aspect, c) Infrastructure Aspect, d) Hospitality Aspect.

The overall research results show that the potential of ARTA and ARTB is categorized as not potential (not good), meaning that the condition of agriculture around the dry land area of Pulau Danau Satonda is considered not suitable for development into agrotourism.

Table 1 – Distribution of Respondents Based on Indicators and Assessment Aspects of the Potential for Agricultural Development in the Dry Land Area of Lake Satonda Island

No.	Potential Aspects of Agrotourism Development	Potential Indicators for Agrotourism Development			
		Suitability of Natural Open Space Agrotourism		Suitability of Artificial Open Space Agrotourism	
		Mode	Category	Mode	Category
1	Attractions	14	Not good	14	Not good
2	Facility	10	Not good	11	Not good
3	Infrastructure	16	Good	8	Not good
4	Hospitality	14	Not good	9	Not good
Total		54	Not good	Not good	Not good

Source: Primary data processed, 2023.



The ARTA indicator shows the number 54 which means that the assessment location for the potential development of agrotourism is in the category of less good, while in ARTB, it shows the number 32 which means that the assessment location for the potential development of agrotourism is in the category not good.

Therefore, it can be interpreted that the respondents' views indicate that the potential for agrotourism development is not suitable and it can be concluded that it is not potentially developed into agrotourism.

The suitability of natural open space agrotourism is activities carried out directly by the farming community without altering the design/shape of agricultural areas. The calculation of natural open space agrotourism can be seen as follows:

Table 2 – Distribution of Respondents on the Suitability of Natural Open Space Agrotourism in Dompu Regency

No.	Indicators of Suitability of Agrotourism Potential	Distribution of Respondents			Category
		$\Sigma$	%	Total Mode	
1	Attractions	45	39,13	14	Not good
2	Facility	78	67,82	10	Not good
3	Infrastructure	21	18,26	16	Good
4	Hospitality	33	28,69	14	Not good
Suitability of Natural Open Space Agrotourism (ARTA)				54	Not good

Source: Primary data processed, 2023.

In terms of attraction, it shows 45 farmers or 39.13% with a mode of 14 categorized as not good. Then, in terms of facilities, it shows 78 farmers or 67.82% with a mode of 10 categorized as not good. Furthermore, in terms of infrastructure, it shows 21 farmers or 18.26% with a mode of 16 categorized as good, and hospitality shows 68 farmers or 28.69% with a mode of 14 categorized as less good. Thus, based on the accumulation of mode aspects, the value obtained is 54 categorized as less good.

The results displayed indicate the value of each question that is accumulated into a decision by matching the reasons for choosing that answer. Every respondent who was given a questionnaire answered not well assuming that the application of the concept of suitability of natural open space agrotourism would have negative impacts on the continuous farming activities. Respondents believe that farming locations have the potential to be developed into agrotourism with the concept of natural open space, but there is still doubt based on the lack of adaptation to new things, which leads to the sustainability of the development of this potential. Each aspect has setbacks understood by some respondents; in terms of attraction, it is deemed sufficient and they do not want significant changes. Then, facilities are only considered to be added for areas near Pulau Danau Satonda and road access only. Infrastructure is considered adequate, but if added with road access, it will increase the attraction for incoming tourists. Hospitality is still lacking because they are more interested in socializing in their work environment to create opportunities for success. It will be difficult for other activities due to the use of the local language in communication and lack of understanding. The low level of knowledge among farmers is also a reason for not being able to see opportunities for the development of agrotourism. Then, from the overall mode calculated from the assessment, 2 respondents rated very good in terms of attraction and facilities, while the rest were categorized as not good and less good (Appendix 7).

According to the views of Djuwendah (2023) and Rasmikayati (2023), the analysis obtained from the Rap-Agro-ecotourism for agrotourism in West Java using the MDS method, the multidimensional sustainability index is 57.07, which falls into the range of 51-57 and is considered "fairly sustainable."

The suitability of artificial open space agrotourism is agrotourism activities designed in specific areas, with agrotourism space planning created in a modern form to increase public interest and have selling value for tourists. The calculation of artificial open space agrotourism can be seen as follows:



Table 3 – Distribution of Respondents on the Suitability of Artificial Open Space Agrotourism in Dompu Regency

No.	Indicators of Suitability of Agrotourism Potential	Distribution of Respondents			Category
		Σ	%	Total Mode	
1	Attractions	29	25,21	14	Not good
2	Facility	35	30,43	11	Not good
3	Infrastructure	44	38,26	8	Not good
4	Hospitality	30	26,08	9	Not good
Suitability of Artificial Open Space Agrotourism (ARTB)				32	Not good

Source: Primary data processed, 2023.

In terms of attraction, it shows 29 farmers or 25.21% with a mode of 14 categorized as not good. Then, in terms of facilities, it shows 35 farmers or 30.43% with a mode of 11 categorized as not good. Furthermore, in terms of infrastructure, it shows 44 farmers, or 38.26% with a mode of 8 categorized as not good, and hospitality shows 30 farmers or 26.08% with a mode of 9 categorized as less good. Thus, based on the accumulation of mode aspects, the value obtained is 32 categorized as not good.

The results indicate the reasons provided by respondents in general. In terms of attraction, respondents explain that altering nature, either entirely or slightly, is quite challenging because they strive to preserve nature as a potential that can help sustainability. Many respondents still see this effort as a form of environmental degradation reduction. Then, in terms of facilities, the focus is on respondents' views that locations far apart make it difficult to receive information about facilities. For example, facilities for consumption, such as restaurants that do not provide dining areas, do not match the expectations of local tourists. Additionally, the distance from the tourist spots is another concern. In terms of infrastructure, respondents express an opinion that developing infrastructure only in locations close to tourist spots is not fair. There is a desire to receive subsidies for infrastructure improvements, which becomes a significant consideration. Hospitality is still lacking due to a static understanding, but if there are activities that can enhance hospitality levels, such as conscious local tourism socialization, it can change respondents' mindset in utilizing local tourism potential, especially by utilizing nature properly as artificial open space agrotourism.

These results are not aligned with the views of Ratri (2021), who states that with higher knowledge exploration, religious culture (hospitality) will improve. This result indicates that to improve the reputation culture of religious tourism destinations, knowledge exploration must be enhanced. Knowledge exploration conducted by tourist destinations will build structures, routines, rules, and norms that help and limit behaviors that differentiate members of one organization from another and are used as collective perceptions and assessments of the reputation of tourism destinations.

Agrotourism has two models, namely natural open-space agrotourism and artificial open-space agrotourism. To examine the relationship between these two models, testing was conducted on the basic aspects of each model.

Table 4 – Relationship Between Natural Open Space Agrotourism (ARTA) and Artificial Open Space Agrotourism (ARTB) in Dompu District

No.	Indicators of the relationship between ARTA and ARTB	Value	df	Asymp. Sig. (2-sided)
1.	Attractions	11.568	4	0.021
2.	Facility	10.870	4	0,028
3.	Infrastructure	10.956	9	0,279
4.	Hospitality	3.675	6	0,721

Source: Primary data processed, 2023.

It is known that the significance value (p-value) is 6.624, and the resulting significance value is compared with the significance level  $\alpha$  (0.05). It can be seen that 2 indicators exceed the t-table and 2 that do not.

Thus, when viewed separately or partially, each aspect of this agrotourism model, namely attraction, and facilities, has a relationship between natural open space agrotourism





and artificial open space agrotourism. The significance results are  $< 5\%$  significance level, namely  $0.021 < 0.05$  for the attraction aspect, and  $0.028 < 0.05$  for the facilities aspect. Meanwhile, in terms of infrastructure and hospitality, with the significance results  $> 5\%$  significance level, namely  $0.279 < 0.05$  and  $0.721 < 0.05$ , which means there is no relationship between natural open space agrotourism and artificial open space agrotourism.

This means that the relationship between natural open space agrotourism and artificial open space agrotourism has 2 aspects that are related, namely attraction and facilities. Thus, in the attraction aspect, ARTA can influence similar changes in ARTB, and similarly with facilities. However, the other two aspects that are not related, such as infrastructure and hospitality, mean that if the hospitality aspect in ARTA experiences positive changes, it will not affect the hospitality aspect in ARTB.

This is also in line with Karyadi's (2022) perspective on community service activities in efforts to increase the value of strawberries with the concept of natural open space agrotourism becoming economically processed food running smoothly and without significant obstacles. The success indicators are seen from the participation of invited participants in processing local food materials, namely strawberries. In addition, support from stakeholders is also significant in this community service activity. The stakeholders of Sembalun Bumbung village support this community service activity and facilitate skills provision.

Ecosystem suitability aims to obtain an overview of the direction of agrotourism potential development while maintaining the natural conditions based on existing variables.

Table 5 – Suitability Test for Agrotourism Development (TSI)

No.	Total value	Total Value Weight (%)	Result TSI
1.	30	73.5	64,29

Source: Primary data processed, 2023.

Based on the results above, it shows an overall score of 30 out of 40 total points, with a percentage weight of 73.5% out of 100%, and the obtained TSI result is 64.29. These overall results indicate a good value for the potential suitability of agrotourism development. The overall indicators of agrotourism development as conveyed by the farmers indicate a good determination of the potential in the agrotourism areas in the Pekat District of Dompu Regency.

According to Nuraini's (2022) perspective, based on these calculation results, the classification class values are obtained as follows: very potential with values of 3.49-3.65, potential with values of 3.32-3.48, and less potential with values of 3.15-3.31. The highest value obtained is 3.65 and the lowest value is 3.15. The variation of values obtained is more dominant towards the highest value, so the average value indicates that Satarara Agrowista is considered to be highly potential.

Agrotourism activities covering 4 aspects as a way and step of measurement in determining agrotourism must have potential. Thus, the understanding of agrotourism potential is tourism that utilizes agricultural objects as a new style in utilizing more modern agriculture. Therefore, this calculation aims to determine the results of the views expressed by the farmers, with the calculation results as follows:

Table 6 – Potential Test for Agrotourism Development in Dompu Regency

	Value	df	Asymp. sig. (2-sided)
Pearson chi-square	11.985 <sup>a</sup>	34	1.000
Likelihood ratio	9.814	34	1.000
Linear-by-linear association	2.386	1	0.122
N	115		

Source: Primary data processed, 2023.

It is known that the significance p-value is 11.985a and the chi-square value is 1.000. Because the significance value of  $1.000 > 0.05$ , the null hypothesis is rejected (H1 accepted),



which means that there is a significant relationship between artificial agrotourism and the suitability of agrotourism development in Dompu Regency.

This aligns with Utomo's (2023) view, which reveals that Panca Agung Village in Bulungan Regency, North Kalimantan Province, has outperformed other villages (Setulang Village, Selisun Village, Kinjau Village) because it has been selected for agrotourism development based on local wisdom. Panca Agung Village not only has beautiful natural scenery and high potential for agricultural resources but also has human resources predominantly working as farmers and plantation workers who understand the importance and benefits of agrotourism. The community in Panca Agung Village respects noble values such as cooperation, tolerance, altruism, and religiosity. All of these values are components of local wisdom. The government can support and facilitate innovation to improve the village economy through the development of agrotourism based on local wisdom in North Kalimantan, Indonesia. Baihaqi's (2022) perspective on agrotourism development involves launching a program that builds and improves road access to tourist destinations, which in turn will make tourists feel comfortable and satisfied during their journey to the destination. More specifically, the current research serves as a basis for further research that will construct a model for the development and management of agrotourism villages.

## **CONCLUSION**

The potential for agrotourism development is known to have varied total scores both in Natural Open-Space Agrotourism (ARTA) and Artificial Open-Space Agrotourism (ARTB). In terms of attraction, ARTA shows 45 farmers, or 39.13% with a mode of 14 categorized as not good, while ARTB shows 29 farmers, or 25.21% with a mode of 14 categorized as not good. Furthermore, in terms of facilities, ARTA shows 78 farmers, or 67.82% with a mode of 10 categorized as not good, while ARTB shows 35 farmers, or 30.43% with a mode of 11 categorized as not good. Additionally, in terms of infrastructure, ARTA shows 21 farmers, or 18.26% with a mode of 16 categorized as good, while ARTB shows 44 farmers, or 38.26% with a mode of 8 categorized as not good. Finally, in terms of hospitality, ARTA shows 68 farmers or 28.69% with a mode of 14 categorized as less good, while ARTB shows 30 farmers or 26.08% with a mode of 9 categorized as less good. Furthermore, the suitability of agrotourism development has an overall score of 30 out of 40 total points, with a percentage weight of 73.5% out of 100%, and a resulting TSI of 64.29. Additionally, the significance p-value is 11.985a and the chi-square value is 1.000. Since the significance value of 1.000 > 0.05, the null hypothesis is rejected (H1 accepted), indicating a significant relationship between the desired development of artificial agrotourism and the suitability of agrotourism development at the research site in Dompu Regency. It is hoped that stakeholders in tourism will be aware and assist in improving the potential of the area, whether through workshops, training, or guidance for the sustainable development of the location.

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