

Farmer's perception on agrotourism development of kemuning lor village

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ABSTRACT

Rembangan is an agrotourism location that is visited by many tourists. Rembangan is part of Kemuning Lor Village, Arjasa Subdistrict managed by the Jember regional government. Rembangan agrotourism focuses on people's farming in low-temperature areas, livestock and cow's milk producers. The increasing exploration of agriculture and other people's businesses, will have an impact on the sustainability of Rembangan as agrotourism. Agrotourism sourced from the exploration and empowerment of resources and local communities will tend to exist and be sustainable to make agrotourism in Kemuning Village as a tourist icon needs to be done agrotourism development there. Therefore, it is necessary to do devotion to find out how the perception of farmers and the level of participation of farmers if agrotourism development is carried out there. The Population is all farmers in Kemuning Lor Village. The determination of the sample was done using a sampling cluster of 50 farmers of Kemuning Lor village. The methods of activities are literature studies, location observation, unstructured interviews, training, and the creation of learning and socialization instruments. The results of the civil services activities show that the perception of farmers is positive in the development of agrotourism. Has a positive influence on the level of participation of farmers in the development of agrotourism in Kemuning Lor Village. The community is willing and committed to assistance and monitoring and evaluation in the development of agrotourism together with the entire agrotourism circle community. The development of agrotourism must be in collaborated among stakeholders as one of the sources of income.

KEYWORDS

Perception;
Participation;
Farmers;
Agrotourism



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1. Introduction

Rembangan tourism is a mountain tourism in Kemuning Lor village, and is at an altitude of 650 meters (2130 ft) above sea level so it is often referred to as the peak of the city of Jember. On this tour there are restaurants, hotels, swimming pools and a relaxing gazebo surrounded by cool natural scenery. This tourism is under supervision of the Jember Regency government. Jember Regency Government wants to develop agrotourism by making or adding an agrotourism located in the development itself or Kemuning Lor village. Where later in this village or this rembangan tourism can be used as an icon of Jember tourism by the Jember Regency government. As a tourist location, Rembangan is quite a lot visited by tourists. As a tourist, the form of tourism that masterminds the process, activities and views of agrotourism agriculture is understood as the next level of business farm, and has the potential to contribute welfare to the community. Research on agro-tourism is used as a reference in this community service. Public goods in rural areas as drivers of endogenous income: Developing a framework for the assessment of country landscapes researched by Czyżewski [1]. Using a SWOT analysis to support biodiversity and sustainable tourism in Caguanes National Park, Cuba was studied by Navarro-Martínez [2]. The occurrence of *Coxiella burnetii* in Polish dairy cattle based on serological tests and PCR was investigated by Szymańska-Czerwińska [3]. Comparative Study on the Performance of Information Literacy Skills of Agricultural

Science Students researched by Bartol [4]. Assessing many goods and services derived from livestock on a national gradient was studied by Ryschawy [5].

The rural gentrification of the ancient city of Assos (Behramkale) in Turkey was investigated by Gocer [6]. The significance of nutrient flow through subsea groundwater discharges in Puck Bay, southern Baltic Sea was investigated by Szymczycha [7]. Strategic instruments or social institutions: The myth of rationalized universities in stakeholder perceptions of higher education reform in Poland was investigated by Shaw [8]. Environmental management best practices: Towards social innovation researched by Batle [9]. Quality of Accommodation Services – The Memetic Approach was researched by Stepaniuk [10]. The resilience of French organic dairy farms and supply chains to the Covid-19 pandemic was investigated by [11]. The attractiveness of the polar regions as quiet zones was investigated by Mamzer [12]. Soil organic carbon stock on the Island of Majorca: Temporal changes in agricultural soil over the last 10 years studied by Rodríguez Martín [13]. Econometric analysis of income, productivity and diversification among smallholder farmers in Brazil was investigated by Herrera [14]. Factors influencing the prevalence and abundance of *A. perfoliata* infection in horses from southeastern Poland were investigated by Tomczuk [15].

Use of island landscape character assessment and participatory spatial SWOT analysis in strategic planning and sustainable development of small islands. The case of Gavdos was researched by Gkoltsiou [16]. Heritage in the making: Rural heritage and its mnemeiosis on the Greek island of Naxos was researched by Lekakis [17]. The potential of olive oil tourism in promoting quality local food products: A case study in the Extremadura region, Spain, researched by Folgado-Fernández [18]. The participatory approach to developing sustainability indicators for dehesa agroforestry farming was researched by Escribano [19]. Can Geographical Indications Modernize Indonesian and Vietnamese Agriculture? Analyzing Central and Local Government Roles and Producer Strategies was researched by Durand [20]. Revisiting the relationship between diversification and insurance: Differences between on- and off-farm strategies was researched by Knapp [21]. Using a model-based fungicide program to effectively control Botrytis fruit rot and Anthracnose in Middle Atlantic strawberry fields and co-managing the strawberry sap weevil (*Stelidota geminata*) was researched by Swett [22]. Introducing olive oil tourism as a special interest tourism was researched by Pulido-Fernández [23]. Can multifunctional livelihoods including recreational ecosystem services (RES) and non-timber forest products (NTFPs) sustain forest biodiversity in the Brazilian Amazon was studied by Carvalho Ribeiro [24]. Trust and formal contracts: complement or substitute? A study of tourism collaboration in Poland was researched by Czernek [25].

Agroecological education for food sovereignty: Insights from the formal and informal spheres in Brazil and Spain researched by Rivera-Ferre [26]. The effect of environmental gradients, habitat continuity, and spatial structure on the species richness of vascular plants in semi-natural grasslands was investigated by [27]. The human ability to interpret alpaca body language was investigated by Kapustka [28]. The trajectory of livestock intensification in the past led to diverse social and environmental services investigated by [29]. Enabling circularity in the grain production system with new technologies and policies was researched by Basso [30]. The discursive placement of actors in a gold mining conflict in Northern Greece: The calculus of risk, subjectivity, and place is investigated by [31]. Estimating the value of a monumental olive tree: Designing a tool using multi-criteria decision making researched by Kabassi [32]. Suburban agriculture as serene sustainability: Challenging urban development discourse in Sogamoso, Colombia researched by [33]. The methodological proposal for the identification of tourist routes in a particular area through the clustering technique was investigated by Duarte-Duarte [34]. PEWI: An interactive web-based ecosystem service model for a wide audience was researched by Chennault [35].

Agrotourism Rembangan has people's agricultural activities located in high-altitude areas with low temperatures that are suitable for the conditions of some commodities and cattle farm. This condition has

a reciprocal impact on the economy of the community. Rural economic activities supported by the power and role of the community will contribute to the sustainability and contingency of agrotourism as an economic effort. The development of agrotourism rembangan is carried out with the addition of tourism destinations which corresponds to the potential of the village. The addition of destinations include flower gardens with the addition of photo spots of trees and flowers that are formed very interestingly, education and practices ranging from planting to coffee processing, as well as education and practices about rice planting there will also be tourist huts with interesting photo spots. Of all these destinations, there will be products that can be purchased by tourists in each of these destinations, such as flower products, coffee and souvenirs typical of Jember, especially typical of Kemuning Lor Village. The location of this destination will be spread in the village of Kemuning Lor. To visit this destination later it is included in the agrotourism education package which in which there will be tour guides and vehicles to go to each of these tourism destinations.

Kemuning Lor Village Arjasa Subdistrict is an agrarian village that has a fairly prospective natural potential for the economic development of the village area. As a favorite tourist buffer area, as well as an area that has natural tourism potential, Kemuning Lor Village has potential as well as several problems. Geographically Kemuning Lor village has quite fertile agricultural characterized by several variations of highland vegetable farming namely food crops, horticulture, and ornamental plants. In addition, there is a coffee plantation that produces one of the most favored coffees in Jember. Based on data on regional revenues that jember regency tourism from 2008 to 2012, amounted to 551,414,188 to 1,536,612,500. However, agrotourism located in the village of Kemuning Lor village can be categorized as a village with several problems related to welfare. The problem is still low socio-economic conditions of the community in the form of high poverty, high unemployment, low degrees of health and low public purchasing power. This condition is associated with the perception of the community and how community participation in developing Rembangan agrotourism.

Perception is the way people view the world. Perception is needed to find out farmers' views on agrotourism development in Kemuning Lor Village. The more positive one's view of agro-tourism, the easier it will be for farmers to agree on agro-tourism development and participate in it. The contribution of this community service is to make the views of Kemuning Lor village farmers regarding agro-tourism quite good, as can be seen from the previously existing agro-tourism. Farmers assess the development of agrotourism can help the economy in Kemuning Lor Village. Participation is participating in carrying out all activities. Participation itself aims to determine the level of farmers' willingness to participate in this development so that the agro-tourism in Kemuning Lor Village which will be developed can be achieved and implemented properly. With the participation of the community in the development of agro-tourism, it can develop a sense of belonging to maintain the existence of tourist attractions. The participation of farmers themselves is less in the agro-tourism that already exists in Kemuning Lor Village. Currently, many agree and support the existence of agro-tourism, but their participation in its development is still lacking. Community and farmer participation in an activity can be influenced by several factors, namely socio-economic status factors, socio-cultural factors, and environmental factors. In this regard, the purpose of this civil service activity is to find out how farmers perceive the level of participation in agrotourism development in Kemuning Lor Village, Arjasa District, Jember Regency, so that efforts can be made to strengthen strategies in the community participation.

2. Method

This service program focuses on increasing capacity to landowners for agriculture and other farmers to increase participation in agrotourism development. This civil services activity is carried out in the village of Kemuning Lor. The implementation of community service activities is carried out by several methods at once, namely literature studies, observation and location surveys, unstructured interviews, training by

combining lecture and discussion methods, demonstrations, practices, and mentoring and consultation. The survey was conducted on 50 members of the farming group. So in this Devotion the sample taken is as many as 50 people or farmers who are in Kemuning Lor Village, which is taken by representatives from 4 groups of farmers who have complete data from each hamlet in Kemuning Lor Village. The distribution of many samples from each representative of the farmer group by means of proportionate stratified random sampling. The number of members of the representative sample of each peasant group is:

$$\text{Adil Makmur Farmer} : \frac{345}{877} \times 50 = 20$$

$$\text{Harapan Jaya Farmer} : \frac{204}{877} \times 50 = 11$$

$$\text{Makmur 2 Farmer} : \frac{53}{877} \times 50 = 3$$

$$\text{Pelita Jaya Farmer} : \frac{275}{877} \times 50 = 16$$

So, the sample was taken from each farmer group as many as 20 farmers from the Adil Makmur farming group, 11 farmers from the Harapan Jaya farming group, 3 farmers from the Makmur 2 farming group, and farmers from the Pelita Jaya farming group. In sampling, it is taken from farmers who are registered as members of the farming group in each hamlet. Unstructured interviews were conducted to dig up information related to the existence and development of the Rembangan tourist village. In the advanced stages of unstructured interviews, training by combining lecture and discussion methods, demonstrations, practices, and mentoring and consultations is carried out with the 6 partners.

3. Results and Discussion

3.1. Community Conditions

Kemuning Lor village is a village with good natural potential for economic development. The economy in this village still relies on the agricultural sector be it with food providers, raw materials products, increased village income, community, and so forth. The superior economic potential in Kemuning Lor Village comes from agriculture, plantations, forestry by producing several products including: Rice, Avocado, Corn, Coffee, Peanuts, Ketela Tree, Dragon Fruit, Rambutan, Durian, Petai, Ginger, Sengon Laut, and Mahogany Wood. Overall, people's livelihoods are farming and breeding. In detail, the work data of Kemuning Lor villagers is summarized are shown in Table 1.

Table 1. Population employment data

No	Employment	Sum
1	Pegawai Negeri Sipil	23
2	TNI/Polri	1
3	Pertanian dan Buruh Tani	3.563
4	Industri Pengolahan	22
5	Konstsi / Bangunan	325
6	Perdagangan, Rumah Makan, Jasa	269
7	Transportasi	43
8	Perbengkelan	14
9	Buruh Pabrik dan Perkebunan	236
10	Karyawan Swasta	68
11	Bekerja Ke Luar Negeri	39
12	Lain-lain	576
	Total	5.177

Farmers in Kemuning Lor have been formed for quite a long time. Currently there is a combination of farming groups (Gapoktan). Gapoktan located in Kemuning Lor Village itself is named Gapoktan Makmur which is chaired by Mr. Moekri. Gapoktan Makmur has been established since the 90s with the number of 8 farming groups in it. This Gapoktan was initially inactive, but with time this Gapoktan began to be reactivated. Groups of farmers who are members of Gapoktan Makmur among others are outlined in the [Table 2](#).

Table 2. List of kemuning lor village farmers group

No	Name of Peasant Group	Dusun	Name of Leader
1	Makmur 2	Krajan	Toha
2	Adil Makmur	Kepan Kebon	Intahe
3	Makmur 1	Darungan	So/Sadin
4	Bina Usaha	Darungan	Misto
5	Harapan Jaya	Darungan	Toriman
6	Harapan Baru	Rayap	Tosin
7	Rembangan Jaya	Rayap	Abdullah
8	Pelita Jaya	Rayap	Romlah

3.2. Description of Respondents

This civil services activity is done by distributing questionnaires and interviews directly to farmers in Kemuning Lor Village. Respondents were taken as many as 50 farmers who were members of the Kemuning Lor village farming group. Each group of farmers from the village representatives was taken as many as 20 farmers Adil Makmur, 11 farmers Harapan Jaya, 3 farmers Makmur 2, and 16 farmers Pelita Jaya. Here is the data from each respondent of the villages, most of the farmers were men. Women's farming groups have not yet formed to their full potential. Its role and activities are still dominated by many male peasant groups. Respondents' data by gender is shown in [Table 3](#).

Table 3. Respondent data by gender

Gender	Sum (Person)
Male	28
Female	22
Total	50

As is the case in other locations farmers of Kemuning Lor village are dominated by less productive age groups. In the village farmers Kemuning Lor, the peasant group aged over 48 years. Most of the young people are less interested in farming. The details of the age of the farmers are shown in the [Table 4](#).

Table 4. Respondent data by age

Age	Sum (person)
21-30 tahun	5
31-40 tahun	6
41-50 tahun	19
51-60 tahun	12
61-70 tahun	6
71-80 tahun	1
81-90 tahun	1
Total	50

Most of the farming groups are in kepan kepan kebon. While the hamlet of Krajan community groups that seek agriculture are relatively smaller. The proportion of farmers of each hamlet can be described as follows [Table 5](#).

Table 5. Respondent data by address

Hamlet	Sum (person)
Rayap	16
Kepang Kebon	20
Darungan	11
Krajan	3
Total	50

3.3. Farmer's Perception

Descriptive analysis is done by summing and describing or explaining an object, condition, and so forth obtained from the results of the questionnaire. To do this test, the interval is done first to get the average answer from the respondent. Based on the response assessment answer related to Farmer Perception on Agrotourism Development farmers can be shown in the following Table 6.

Table 6. Descriptive analysis of perception

Item	Indicator	Average Per-Item Value	Category
1	The interconnectedness of farming experience and understanding of agrotourism and its consequences on farming	4,04	High
2	Understanding that Agrotourism can help meet the needs of members of farming groups	3,78	High
3	Farmers and institutional groups have support on the development of agrotourism	4,02	High

Based on the calculations above obtained the results that the average score of the questionnaire on the perception variable of 3.95 located in the class 3.40 - 4.19. This means that the perception of farmers towards the development of agrotourism is high and most farmers in Kemuning Lor Village who entered as respondents agreed with the existence of an agrowisata in Kemuning Lor Village provided that there is land that can be used and support from the government (i.e., the village government and the head of the farmer group). Kemuning Lor Village there is already a tour that is a tour of Rembangan. Farmers has opinion, with an agrotourism can introduce the village itself to everyone, increase and advance farmers, increase job openings, and increase income for the community.

Indicators on the perception related to the experience of farmers obtained a yield of 4.04 with a high category, according to farmers the experience possessed during farming ranging from small to the present can affect their knowledge of agrotourism development. In the current needs indicator has a value of 3.78 with a high category, according to the view of farmers with an agrotourism in Kemuning Lor village can help meet the needs of farmers examples in financial needs, the existence of agrotourism according to farmers will be able to help increase income. With agrotourism can help farmers' finances to meet daily needs shown in Fig. 1. The figure shows that indicators of the environmental situation have a value of 4.02 with a high category, this means farmers who support the existence of agrotourism. In this indicator can be seen with the previous agrotourism, land as agrotourism, and the government and farmers groups that are always active and supportive for the progress of the village. The environment in Kemuning Lor Village is mostly in the form of rice fields, has natural beauty or extraordinary scenery, and various crop

commodities, therefore in the opinion of farmers this can be used as natural tourism and tourism selling agricultural processed products.



Fig. 1. Kemuning lor village with agrotourism potential

Overall, the perception of farmers in the development of agrotourism in Kemuning Lor village is quite positive shown in [Fig. 2](#). The figure shows that farming experience provides an interaction impact that increases the knowledge that farming has prospects to be brought to the recreative business and generate additional income. The experience of farming also hints at the need for the fulfillment of the activities of farmers groups with the existence of an agrotourism that is growing. The development of agriculture developed towards agrotourism needs support from every element of the community and local institutions. The institution is both formal and informal institution. Formal institutions are village and sub-district government institutions. Informal institutions are social institutions that already exist in Kemuning Lor both religious and institutionalized habits.



Fig. 2. Servant team discussion preparation for analysis of potential village problems

4. Conclusion

Perception is the way farmers look at the surrounding conditions. The perception of farmers on the existence of agrotourism and tourist visits to Kemuning Lor Village is very good. Farmers have a positive perception of the development of agrotourism. A positive perception is an excellent initial capital in the

participation of agrotourism development. The needs of developing the behavior of villagers require formal institutional support of the village in order to provide reinforcement to the motivation and cooperation and collaboration of all elements of villagers in the development of homestays and agrotourism as a whole in Kemuning Lor village.

Author Contribution

This service program focuses on increasing capacity to landowners for agriculture and other farmers to increase participation in agrotourism development.

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Conflict of Interest

The authors declare no conflict of interest.

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