ANALYSIS OF THE POTENTIAL FOR DEVELOPING COFFEE PLANTATION-BASED EDUCATIONAL TOURISM IN AMADANOM VILLAGE :

Analysis of the potential for developing educational tourism based on coffee plantations in Amandanom village

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***Abstract* — A geographic information system (GIS) is an information system that aims to process data into spatial information, or has the ability to manage geographic information. The use of GIS and remote sensing in processing spatial data can be used to clarify the spatial conditions of an area. The spatial conditions of an area can be used as a tool for land use planning. The aim of this research is to map land use in Amdanom Village, analyze the distribution pattern of coffee plantations in Amadanom Village, in order to determine its potential as an educational tourist attraction. The data used in this research is primary data in the form of land use patterns obtained from observations at the research location and interviews with local residents and secondary data in the form of population data and mapping data originating from related agencies such as BPS and Shp. The data analysis method used in this research is spatial analysis to determine land use and distribution of coffee plantations in Amadanom Village, while to determine the potential of coffee plantations to be used as educational tourism objects, SWOT analysis will be used. This spatial analysis is important to carry out in order to determine the potential that Amadanom Village has to be developed into an educational tourism village. Based on the results of the analysis, Amadanom Village has quite promising potential to be used as an educational tourist attraction, this is because of its strategic location and extensive coffee plantations.**

**Keywords : Spatial Analysis; Coffee Plantations,; Regional Development,; Tourism Village,; Educational Tourism**

ABSTRACT

Geographic information system (GIS) is an information system that aims to process data into spatial information, or has the ability to manage geographic information. The use of GIS and remote sensing in spatial data processing can be used to clarify the spatial conditions of an area. The spatial conditions of an area can be used as a tool for land use. The purpose of this study is to map land use in the village. Amdanom, analyzing the distribution pattern of coffee plantations in Amadanom Village, in order to determine its potential as an educational tourist attraction. The data used in this study is primary data . which is in the form of land use patterns obtained from the results observations at research locations and interviews with residents local and secondary data in the form of population data and data mapping originating from related agencies such as BPS and Shp . The data analysis method used in this study is spatial analysis to determine land use and distribution coffee plantation in Amadanom Village, while to find out The potential of coffee plantations to be used as tourist attractions education will use SWOT analysis. This spatial analysis is important to be carried out in order to find out the potential possessed by the Village Amadanom to be developed into an educational tourism village Based on the results of the analysis, Amadanom Village has great potential. quite promising to be used as an educational tourist attraction, this This is because of the strategic location and extensive coffee plantations .

**Keywords** : Spatial Analysis; Coffee Plantation; Regional Development; Tourism Village; Educational Tourism

1. Introduction
   1. *Background*

The background of our research is to find out the problems and objectives of the research. The introduction contains several components including the research context, the importance and need for the research to be carried out, a summary of theoretical studies related to the research material, and the objectives of the research and their significance. There should be no sub-chapters in the introduction. Before the objectives and after the literature review, the author must state a gap analysis or novelty statement to show why this manuscript is important and what unique ideas can be compared to previous suggestions from other researchers. Avoid plagiarism by paraphrasing from references Geographic information systems (GIS) are information systems that aim to be able to process data into spatial information, or have the ability to manage geographic information. For example: data identified according to its location in a database. The use of GIS and remote sensing in spatial data processing can be used to clarify the spatial conditions of an area (Munir) in (Prihartini & Surgani Firdania, 2023).

The spatial condition of an area can be used as a tool for land use. Land use itself is very important for the government, so that the government can find out the lands used by the community. So that both the central government and local governments will be able to find out the most potential income in each region.

The results obtained from the use of Geographic Information Systems in geo-governance studies, and analyzing regional administrative maps and the data merging process can be used as a solution for the development process in land use management in each region (Agustini & Suyudi, 2022). Land use in Amadanom Village is divided into residential land, agriculture, plantations, forests, housing, and industrial buildings. Land use in Amadanom Village is dominated by agricultural land because the community is dominated by farmers so that in each hamlet there are many agricultural lands. The protected areas in Amadanom Village include river boundaries, irrigation boundaries, spring boundaries, and green open spaces, while the cultivation areas in Amadanom Village consist of production forest areas, residential areas, education and tourism areas, and agricultural areas (Dinanti et al., 2020).

The village of Amadanom itself is one of the villages located in Dampit District, Malang Regency. This village has an area of 681.56 Ha with a height of 600 meters above sea level. Amadanom Village has a population of 6920 souls, with the livelihoods of the village community as farmers and ranchers. The land use in Amadanom Village is dominated by plantations with a total area of 407.17 Ha, with the largest commodity being coffee plantations, which is 254.28 Ha (Dinanti et al., 2020). Seeing these conditions, the people of Amadanom Village developed an agro-tourism-based tourist attraction that was conceptualized with an ecotourism model. This ecotourism is called Amadanom Coffee Plantation Ecotourism which shows its potential in terms of coffee processing for tourists. This ecotourism offers views of coffee plantations and educational places as a place for people to learn about coffee processing directly (Utami & Bayu, 2022).

* 1. *Method*

This study aims to determine the potential of Amadanom Village as a tourist village. The location of this research was conducted in Esa Amadanom, This study uses a descriptive research type using a qualitative approach, the research target is Amadanom villagers, data collection techniques through interviews, observation and documentation. The data analysis method used in this study is spatial analysis to determine land use and the distribution of coffee plantations in Amadanom Village. Dampit coffee has begun to be widely known, but has problems in regeneration for the sustainability of its management. This dampit coffee still needs to be developed further. The location of the research was carried out in Amadanom Village.

1. RESULTS AND DISCUSSION

Dampit coffee has begun to be widely known, but has problems in regeneration for the sustainability of its management. Dampit coffee still needs to be developed further. The location of the research was carried out in Amadanom village which is geographically located in Dampit sub-district, Malang regency. The area of Amadanom village is 611.40 hectares with the use of rice fields of 196.0 ha, dry land of 415.40 ha. The coordinates of Amadanom village are at 112.4743 east longitude and 8.1254 south latitude. The height of the village of amandanom seen from its topography is 450 meters above sea level (masl) with a temperature of around 24 degrees - 27 degrees Celsius. The boundaries of the village of Amadanom with the surrounding villages are as follows:

1. To the north: Jambangan Village
2. To the east: Tirtoyudo Village
3. To the south: Bumirejo Village
4. In the west: Dampit Village. The village community has several livelihoods and the most dominant livelihood is farming.

Amadanom village has 1963 families with a total population of 6621 people, divided into 3293 men and 3,328 women. The majority of the population's work is as farmers or farm laborers.

Amadanom Village is located in Dampit District, which topographically is located at the foot of Mount Semeru with an altitude of 200 meters to 600 meters above sea level (masl). This altitude is very suitable for plantation cultivation such as coffee and cassava, for agricultural cultivation it is suitable for rice and corn plants. The further north the topography of Amadanom Village is higher, while the further south the lower the topography. The slope of Amadanom Village is classified into five classifications, namely, at a slope of 0-8%, 8-15%, 15-35%, 35-40%, and more than 40%. The slope of Amadanom Village is on average 30%. This states that the slope of Amadanom Village is classified as undulating.

Land use in Amadanom Village is divided into residential land, agriculture, plantations, forests, housing, and industrial buildings. Land use in Amadanom Village is dominated by agricultural land because the community is dominated by farmers so that in each hamlet there are many agricultural lands. The protected areas in Amadanom Village include river boundaries, irrigation boundaries, spring boundaries, and green open spaces, while the cultivation areas in Amadanom Village consist of production forest areas, residential areas, education and tourism areas, and agricultural areas. The following is the area of land use in Amadanom Village. Figure 1. Explains the analysis of the spatial pattern of Amadanom Village.

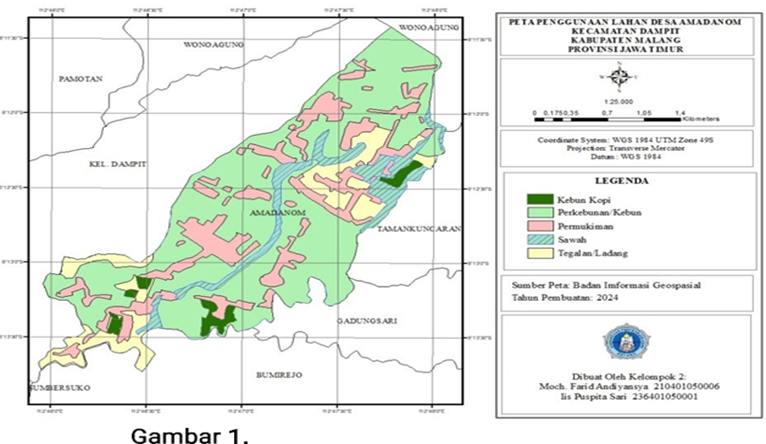


Figure 1. Explaining the analysis of the spatial planning pattern of Amadanom village.

The area of land use in Amadanom village will be explained in table 2.1. Here is table 2.1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  |
|  |
| River Boundary |  | 119.89 | 17.59% |
| Irrigation Boundary |  | 3.83 | 0.56% |  |
| Watershed boundary |  | 12.14 | 1.78% |  |
| RTH | | 3.82 | 0.56% |
| Production Forest | | 49.22 | 7.22% |
| Settlement | | 80.26 | 11.78% |
| Education | | 2.55 | 0.37% |
| Tourist | | 2.68 | 0.39% |
| Agriculture/plantation | | 407.17 | 59.74% |

Based on Table 2.1 , it can be seen that land use with the largest percentage of land area is agriculture. This is because most of the population's livelihoods are farmers and plantation farmers, in addition, in each resident's house there is agricultural and plantation land that is larger than their housing. The least land use is educational land, due to the limited number of educational facilities in Amadanom Village. Coffee is one of the commodities whose production results are unstable due to less supportive geological conditions, diseases that attack plants, and low commodity selling prices. The limited coffee processing tools and locations only in the South Amadanom Coffee Ecotourism have caused the amount of coffee processing production to be less than optimal. The majority of problems lead to one root problem, namely that institutions in the village have not carried out extension programs on the problems faced by the people of Amadanom Village.

The results of plantation production are mostly sold to middlemen in raw and semi-finished form so that the income received by farmers still tends to be small. Based on these conditions, a processing industry is needed. with training and provision of capital so as to increase farmers' income.

So with the existence of this in the village of Amadanom, it is necessary to develop the village of Amadanom as a tourist area to increase the income of the people of the village of Amadanom. Actually, this Dampit coffee has been widely known, but the problem is that product diversification has not emerged, coffee plantations that are still only considered as production land have not been utilized optimally, there is no touch of more varied development and the severance of the regeneration of Dampit coffee farmers. In fact, the existence of coffee has transformed into an identity. The term ngopi has become a symbol of social solidarity that negates differences in class, race, ethnicity, religion and culture. Hilly village topography coupled with a supportive climate, makes Amadanom Village a prima donna for robusta coffee plants. However, this potential has not been supported by the commitment of the younger generation in continuing the regeneration process so that the potential of the robusta coffee plantation continues to exist and even becomes more expansive. Not a few of them are more choosing to become migrant workers even abroad. Furthermore, the details of the distribution profile of the livelihoods of the Amadanom village community in 2020 (971 people) .

Table 2.1 Annual coffee production table

|  |  |
| --- | --- |
| Year | Amount |
| 2018 | 5.2 tons |
| 2019 | 7. 4 tons |
| 2020 | 8.0 tons |
| Total | 20.6 tons |

Based on the table above, it can be concluded that the annual production of Diamadanom coffee has increased, therefore it is good to be developed as ecotourism.

1. CONCLUSION

The conclusion of this study is to increase the income of local residents by establishing a coffee plantation agrotourism in Amadanom Village, Dampit District, Malang Regency, as follows: (a) Based on the results of the discussion and evaluation, it can be concluded that this research activity can help local residents improve the quality of the coffee products produced; (b) It is important to integrate the potential of robusta coffee with the eco-tourism site of the Coffee Plantation in Amadanom Village, especially in increasing the potential that exists around Amadanom Village as a tourist village.

Reference

The template will number the citations sequentially in parentheses [1]. Sentence punctuation follows the parentheses [2]. Refer only to the reference number, as in [3]—do not use “Ref.[3]” or “reference [3]” except at the beginning of a sentence: “Reference [3] is the first…”

Number footnotes separately in superscript. Place the actual footnote at the bottom of the column in which it is cited. Do not include footnotes in the reference list. Use capital letters for table footnotes.

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