



## Original Article

### Implementation of Plant Cultivation Through Social Forestry in An Effort to Reduce the Climate Crisis in Dusun Jepang of Bojonegoro

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#### Abstract:

This research was conducted in the Dusun Jepang of Margomulyo Village, Bojonegoro Regency through village development activities from the National Development University "Veteran" East Java. The research carried out by the author is a form of development for the residents of Dusun Jepang and at the same time preserving the natural environment in the village. The aim of this research is to reduce the climate crisis in Dusun Jepang so that residents living in the village can plant plants without worrying about the plants dying due to temperatures that are too hot. This research was carried out through interviews and field observations. In addition, the author documents the results of observations as data. The village has few residents and large areas of land. The author plants plants and carries out outreach about Social Forestry in an effort to improve the welfare of the residents and environment in the village.



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**Keywords:** Community Service, Land Cultivation, Social Forestry, Tourism

#### Introduction

Indonesia is famous for its vast and culturally rich country. This is one of the advantages of Indonesia because it has a rich culture that has been passed down from generation to generation, so that technology has developed and made it easier for people to perpetuate traditions and culture. This can be seen from one of the cultural tourism villages located in Margomulyo Village, Bojonegoro. Samin Traditional Village or what people know as Samin community community which has a tradition from a figure named Mbah Harjo Kadi Surosentiko. Samin traditional village has a generational tradition that is still being carried out until now, it has become an attraction for the community of Samin followers who live in the area of the Japanese village, Margomulyo village. Dusun Jepang or The Japanese hamlet area is in the forest and is a modern village. The village development location that the author observed was a forest area with arid soil.

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And then Sutrisno is the fourth generation of Kadi Surosentiko family tree, he is also the one who teaches samín teachings to the community and immigrants who visit to research the culture of the samín community. Based on observations made by the author, apart from the culture which has advantages, the land owned by the residents here is very large. The land in this Japanese hamlet is barren land and the majority of residents who work are farmers. The crops harvested by residents include corn and cassava. However, the land here is dominated by corn and almost all Japanese hamlet residents have land to grow corn. According to data from the Bojonegoro sub-district office, the area of Margomulyo Village is 12.08 Km<sup>2</sup>. This is one of the advantages for the area to be used as a tourist attraction or used as a potential for sustainable natural tourism with natural conditions that are still beautiful. Apart from that, residents who live in the village also work in their own area to support each other's economy.

According to [Republic of Indonesia Law No. 10 of 2009 concerning Tourism](#), tourism is an integral form of national development and is carried out systematically and planned. In this scientific paper, the author raises the topic of social forestry to the Japanese Hamlet community to further advance the tourism environment that has grown in Indonesia. This can also be a source of income for people living in the area. This location in the Japanese Village has the potential to become a natural tourist attraction that is not mixed with human hands. Apart from that, the authenticity and beauty of the Japanese Village is still very natural because there are still many that have not been revitalized. In developing a sustainable tourism sector, the author aims to prioritize empowering nature and achieving the welfare of the Japanese hamlet community, Margomulyo village. This also takes into account the natural, social and cultural conditions of society.

## Methods

According to the UNIKOM journal, observation is a tool for collecting data by observing and recording data systematically. The author collected data for approximately one month to observe the location of the Bojonegoro Japanese Village. This activity was carried out through Non-Thematic KKN from the UPN Veteran East Java Tourism study program. The data required by the author was observed directly at the location in Japanese Hamlet. The things that the author observed at the location were infrastructure, the welfare of the people in Japanese Hamlet, the advantages of the Japanese Hamlet location, and the potential of the region. According to the UNIKOM journal, the interview method is a method of collecting data and is carried out with a direct question and answer session with the informant. The author has conducted observations and question and answer sessions with managers from the Japanese Hamlet, as well as from the RT/RW or the person in charge of the forest location in the village. The aim of the interview is to collect accurate and relevant information from the manager directly. Apart from that, so that students can establish good relationships with the community around the Japanese Hamlet, the author also collected some information from residents who work on the village's farming land.

Quoted from the UNIKOM journal, the documentation method is a method of collecting data by observing inanimate objects and non-human origin. But it comes from inanimate objects such as cameras, photos, documents and statistical materials. In the documentation method, the author collected data from the Japanese Hamlet of Bojonegoro. The data that has been collected by the author is photographs during KKN activities, unwritten interviews with informants, and statistical material such as plants that will be planted in the Japanese Hamlet field.

## Results

### General description of the Samin Traditional Village, Margomulyo Village

Samin Traditional Village, which is located in the Japanese Hamlet of Margomulyo Village, Bojonegoro, is a traditional village that has become historical for the Indonesian people. One of the figures known as an Indonesian hero who succeeded in driving out the Dutch army was Samin Surosentiko. In his struggle to expel the Dutch army, he taught his followers "sedulur sikep" which means brothers sikep. Bambang Sutrisno is the fourth generation of Samin descendants who still teaches Samin teachings to this day. This tradition is passed down from generation to generation of Samin and taught to followers of Samin or Saminism teachings. Samin teachings first spread in the Blora area and the fourth generation of samin descendants live in Margomulyo Village, Bojonegoro Regency. He is the son of Mbah Harjo who is also the successor of the samin tradition.

### Situation and Obstacle Analysis

#### Regional Observation Analysis Result

The tourist destination location that the writer observed was in Margomulyo Village and this location consisted of residents' houses, rice fields, large forests and large empty areas. The author has combed the forest around Japanese Hamlet and the location is surrounded by the Solo River. The location of Japanese Hamlet is a place with arid land. Based on the results of the author's research regarding the natural environment in Japanese Hamlet, not many plants can grow in the area because the place is barren and too hot. Apart from that, based on the results of interviews with the manager or person in charge of the Japanese Dusun forestry, several plants which are usually planted in arid areas cannot grow well because the location is too dry and hot. As a result, the residents who live in the village work on their own land because the village is located in the forest. This also causes a lack of education about the natural environment because residents have only done the same things for years in a row. The rice fields in the village get water from the river which flows into the rice fields. However, there are still several rice fields that have not been irrigated so residents have to carry water and draw water from wells. Considering the vast area of the Japanese Hamlet, it would be a shame if residents did not receive education about the climate crisis and how to care for nature. This could be a benefit for residents to improve the economy and environment in Japanese Hamlet. Quoted from [Zamfir and Corbos \(2015\)](#), with sustainable tourism, all resources can be managed to maintain cultural integrity, meet needs, biodiversity, ecological dimensions and system life. This can be interpreted as sustainable tourism is a form of tourism that takes into account current and future conditions and impacts. Apart from that, sustainable tourism is also able to meet the needs of tourists, industry, local communities and the environmental community.

### Problem Analysis

The author considers the implementation of social forestry to the community in the Japanese Hamlet because there are several benefits for the community and the natural environment. These benefits are long term and will continue to grow if maintained properly. Bearing in mind that in 2023, Bojonegoro will once be the hottest place in East Java according to the BMKG Meteorology of Tuban Regency. The hot temperature reached 36.4 degrees in October 2023 and became the hottest area compared to other regions in East Java. This can trigger soil fertility and plant growth if not handled properly.

### Solutions to the Impact of the Climate Crisis in Japanese Villages

Reporting from the forest protection page, there are benefits to planting trees, namely being able to control temperature. Considering that the temperature in Bojonegoro is so hot that several crops have failed to harvest, the residents in the village have run out of ideas for harvesting. Apart from that, another benefit of being able to control temperature is maintaining soil fertility levels. Although residents can still use compost and drum fertilizer, considering the large area of land in the village, there will not be enough fertilizer for harvesting. By planting plants, the benefits for residents will be greater than just using compost and it will save energy and help preserve the earth with this solution.

### Results of Socialization and Implementation of Social Forestry and Green Tourism

#### Interview Results with Key Informants

Based on an interview with Mr. Bambang Sutrisno, so that the harvest continues to run well and the results are maximum, he provided a solution for residents to carry out crop rotation. According to the Buleleng Regency agricultural office, crop rotation is a way of cultivating crops by rotating more than one different crop at different times. The crops that were successfully harvested in Japanese Hamlet were corn and cassava. However, what dominates the harvest of residents in Japanese Hamlet is corn. According to Mr. Bambang Sutrisno, he had tried a lot of fruit to plant in the Japanese Hamlet land but not many plants grew and survived because the temperature was too hot and the area was too arid. In the end, the crop that is always successful in harvesting is corn. At this point, the author raises green tourism to reforest the Japanese Hamlet field area. The reason the author uses green tourism actions in this area is because of the large amount of land that can be used to reduce the climate crisis and utilize natural resources so that people are more prosperous. Apart from that, the author also hopes that by increasing citizens' motivation to maximize the planting of new plants, the climate crisis can be reduced so that citizens can plant plants without worrying about them dying.

### Benefits of Implementing Social Forestry in Dusun Jepang

Social forestry or social forestry is forestry which has the aim of generating a flow of benefits from production and recreation for the community (Westoby, 1968). The author's strategy in implementing social forestry outreach to residents is: 1) The author's series of efforts to optimize organizations such as youth organizations and increase human resource capacity; 2) Helping the community in managing business growth and development in the Japanese Hamlet forest area through organizations or partnerships that are responsible for the natural environmental area of Japanese Hamlet; 3) Helping the economic welfare of the people in Japanese Hamlet; 4) Reducing the climate crisis as a green effort; 5) Utilizing the agricultural potential in Japanese Hamlet.

### Results of Socialization with Key Informants

The author has created a series of targets, objectives and material that will be conveyed during outreach to residents there. The aim of this outreach is to give ideas to the community for planting plants as a form of real social forestry action by considering the plants to be planted, as well as providing opportunities for residents in Japanese Hamlet to participate in preserving the environment in the Japanese Hamlet forest. In the presentation that the author conveyed to Pak Sadi as the head of RT Dusun Japan, that there was a lot of potential and benefits from the village. Initially, the author chose

to convey this to the residents through Mr. RT because on that day he said that all the residents were busy harvesting morning until evening. The material the author conveys is: 1) Meaning of Social Forestry; 2) The author's reasons for raising the topic of Social Forestry; 3) The author's aim is to plant and cultivate plants; 4) Benefits of implementing Social Forestry.

Data obtained from interviews

According to the results of interviews with managers from Japanese Hamlet regarding environmental management and the economic welfare of residents in the village, the residents living in the village earn from their own harvests with incomes that are less than sufficient according to Mr. Sadi. So this encourages the author to improve the quality of management of the village by collaborating with the Dusun Jepang youth organization. The managers of the Japanese Hamlet forests and fields are as follows: 1) Sutrisno; 2) Said as the head of the Japanese Dusun RT; 3) Japanese Hamlet Youth Organization Apart from that, based on the results of interviews conducted with Sutrisno, the plants and fruit that were successfully harvested were as follows,

Table 1. Plants and Fruit

Plants and Fruit	Succeed	Failed
Curcuma		
Corn		
Cassava		
Mango		
Longan		
Ginger		

Planting Plants in a Japanese Hamlet Field

The author has asked Mr. Bambang Sutrisno about the reasons why the forestry service has not taken over the Japanese Hamlet forest to inaugurate it as a forest protected by the forestry service. This is because Mr. Bambang still wants to prosper the economy of the residents of Dusun Japan by providing land and utilizing all the natural environment in the village. According to an interview with Mr Bambang, if the forest in the village is formalized by the forestry service, it is necessary to share the profits generated by the residents. Apart from that, there are fields that have not yet been inaugurated by the local government as campground tourist attractions because they are still in the trial and development stage so the campgrounds are still open for free. The campground has been used three times, namely by one of the schools in East Java for scout activities and is also usually used by residents for cultural activities or for the benefit of the village. The condition of the campground in the village is still not optimal because it is still under construction. Apart from that, the infrastructure of the campground is also not perfect, it still has to be traversed by rocks on the entrance road and also the edge of the field has not been provided with barriers so there is a risk of accidents. At this point, the author provides solutions for managers and the community to plant other plants that will thrive in the area. Apart from that, the author also planted plants as a form of effort to reduce the climate crisis and invited Pak Sidi as the RT from the village to encourage this action to the community and managers. After conducting

observations and interviews, the author planted guava and ginger plants. The aim of planting these two plants is to cultivate plants in larger quantities, in addition to carrying out planting trials on land in different locations from the land usually used by farmers. This has been approved by the management and the RT to carry out planting in the specified location. The results of the implementation of socialization to the RT Heads made residents and managers better preserve the nature around the village by planting plants as an action for cultivating plants in an effort to reduce the climate crisis. Apart from that, residents can enjoy the ginger harvest which will always grow because the ginger plant is a plant that is suitable for planting in arid areas. In the final stage, the researcher gave all the ginger and guava plants that had been planted to residents and managers as a form of assistance and the author also hopes that the plants grown can help support the economy of the residents of Japanese Hamlet, Margomulyo Village, Bojonegoro Regency.

### **Conclusion**

Samin Village Traditional Village is a tourist destination containing a community of people who still adhere to Samin teachings. Samin is a figure who has made a contribution to Indonesia because he succeeded in expelling the Dutch during the colonial period. This figure is named Surosentiko Samin, he always teaches all followers of Samin's teachings to always be honest in all situations. Surosentiko Samin has a successor named Bambang Sutrisno who is the fourth generation of the Samin family. He lives in Japanese Hamlet, Margomulyo Village, Bojonegoro Regency and has a family. However, this cannot be separated from the samin family culture which has been passed down from generation to generation and still continues today. In this research, the author develops the environmental and natural welfare aspects of Japanese Hamlet. The author has observed areas in Japanese Hamlet with the help of the village manager or host. According to the research results that the author has analyzed, the village has a large area of land and the majority of residents work as farmers. However, due to the arid and hot conditions of the land and area, residents can only farm a few crops. The crops that were successfully harvested were corn and cassava so residents will continue to harvest these crops because achieving success in the harvest is absolute. The author chose socialization regarding social forestry to be applied to managers and residents so that residents become more educated and encouraged to try new things in reducing the climate crisis which has an impact on the fertility of the village's land. The author provides outreach regarding solutions to minimize the climate crisis and also plants new plants that have been tested with the possibility of a successful harvest. So the author planted ginger and guava plants to provide new opportunities for residents to harvest. Apart from that, to minimize the climate crisis occurring in the village, the aim of planting plants is to improve soil temperature so that it can change soil fertility for the better.

### **Suggestion**

Based on the conclusions above regarding the results of the author's research for a month, the government still receives little attention from the village even though it is already in the developing stage. The advice that the author can give in the research that the author conducted is that the government intervenes to provide solutions for residents who cannot find permanent work in remote villages. Apart from that, implementing justice for residents living in each village not to take too much profit if

there is collaboration between village managers and the forestry government.

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