

TOURISM VILLAGE DEVELOPMENT IN THE VEGETABLE IRRIGATION PIPE INSTALLATION PROGRAM OF KRPL VILLAGE, SANANKERTO VILLAGE, MALANG

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Abstract - *The discussion of this research is about improving the welfare of the KRPL village which is the goal to be achieved together. Given the opportunity for KRPL villagers to build the village according to their potential by prioritizing the participation of KRPL villagers. The establishment of the KRPL village is an initiative of Mr. Sutris by providing vegetable seeds to all KRPL village residents to be planted in front of the house using neatly arranged polybags. This study aims to determine the level of community awareness and participation in preserving the environment in KRPL village and the main challenges faced by KRPL village in carrying out environmentally friendly practices. Researchers used a qualitative research approach with descriptive methods. The data used in this research are in the form of interviews and documentation directly obtained in the field.*

Keywords: *Tourism Village, KRPL Village, Pipe Installation, Economy*

1. INTRODUCTION

Education is the most important thing in life in society because education is a learning process about knowledge and skills that can be done anywhere. Basically, education (SISDIKNAS Law No.20 of 2003) is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves and society.

One of the levels of education pursued is college or university. Higher education is a continuation of secondary education organized to prepare students to become members of society who have academic and professional abilities that can apply, develop, and create science, technology, and art (Law 2 of 1989, article 16, paragraph (1)) (EduChannel, 2022). According to Raillon in Syarbaini (2009: 24), universities are a means of controlling society while maintaining academic freedom, especially from interference by the authorities. Universities are also the main agents of reform in the life of the state, as in the process of forming the new order government in the 1970s where the real role played by lecturers and students in their own ways contributed greatly to the new order government (EduChannel, 2022).

One of the visions of all universities, especially in Indonesia, is the Tri Dharma of Higher Education. The Tri Dharma of Higher Education is an integral part of the student movement, these ideal values are reflected in education, service, and research (Kompasiana, 2021). Campus academics are able to utilize Science and Technology to advance the welfare of society and educate the nation's life by going directly to areas and communities that need intervention such as *KKN* or *Kuliah Kerja Nyata*. Community Service Program (KKN) is a form of community service carried out by a group of college students. This activity is also one of the compulsory courses that must be taken by students. KKN program is carried out in the short semester, namely in semester 6 for undergraduate students for approximately 45 days. KKN activity is carried out so that students can contribute and socialize with the community.

Sustainable Food Home Area or Kawasan Rumah Pangan Lestari (KRPL) is implemented through the movement of utilizing yards or vacant land around the home environment, with an empty yard which can later be planted with several plants, namely various types of vegetables, fruits, or types of family plants (toga) and can also be used as livestock land (Oka, I., Darmawan, Dwi., Astiti, 2016). This KRPL program cannot be done individually, starting from the planning and implementation process of KRPL must be done in groups, therefore the importance of the community and the government. After successfully carrying out the KRPL activity process, it is necessary to carry out an evaluation and improvement process accompanied by a field mobilizer or extension agent. The purpose of this KRPL is to the utilization of home yards to meet the nutritional needs of community food, improve community expertise in planting various types of fruits, vegetables, or various types of toga that exist, raise livestock and fish, process household waste into compost, maximizing the preservation of food plants for the future of the community, and to achieve family welfare through a productive economy and can produce a green environment independently.

The utilization of the yard must be arranged by paying attention to aesthetics so

that a beautiful and comfortable home environment is obtained. Yard land is utilized not only in front of the house but also in the yard land on the side or back of the house. On yard land, various food sources of carbohydrates, protein, vitamins, and minerals can be developed, which can be obtained from vegetable and fruit crops, small poultry/ruminants, and/or fish. Plant cultivation techniques can be carried out using land media, polybags, viticulture, or hydroponics, according to the potential of the available yard land, both in terms of area and soil characteristics. The types of plants cultivated must be diverse, adapted, and regulated to the needs of each household in one area. Optimizing the use of used goods for planting media. Yard products are prioritized for family consumption if excess can be sold to increase family income.

Based on the explanation that has been described above, this research aims to know, understand, and explain the urgency of the tourism potential of Kampung KRPL in Sanankerto Village which can be formulated as follows: 1). What is the level of public awareness and participation in preserving the environment in the KRPL village? 2). What are the main challenges faced by the KRPL village in carrying out the practices of growing several types of vegetables?

2. METHODS

a) Methodology

This research uses descriptive qualitative research methods. Descriptive qualitative research method is a research method whose data is in the form of words both oral and written, or in the form of pictures, and not numbers. This method was chosen because this research leads to a description of the phenomena in the field. The implementation method carried out by Real Work Lecture students in Sanankerto Village in the form of community service is designed to involve the community in the Rolas Village area, This activity focuses on installing pipes in the Sustainable Food Home Area (KRPL). The partners of this activity are residents of Sanankerto Village, Malang Regency consisting of the Head of RT 12, vegetable cultivation business actors, and all elements of the KRPL village community. The pipe installation activity in the entire KRPL area in Sanankerto Village was carried out from the problem of water that could not reach the vegetable cultivation area in front of the houses of all KRPL villagers, where the pipes only flowed into the back house area of the residents so that the use of water was very ineffective considering the many daily needs that require water.

b) Data Collection Techniques

1) Interview

The interview is a data collection technique by communicating with informants verbally. In this research, the interview in question is an unstructured interview. Unstructured interviews are interviews conducted using guidelines in the form of outlines of the problems to be asked. This technique was chosen because researchers want to conduct interviews that flow, not rigid until they get the data needed. The interview was conducted directly by the KKN group with the head of the RT who also took care of the KRPL village in Sanankerto Village named Mr. Sutris, which was conducted directly at his residence.

2) Documentation

Documentation is a data collection technique with sources in the form of

documents. either in writing, pictures, or videos. Documentation plays a role in supporting information obtained from interviews with informants. The KKN group also took some documentation taken directly using media gadgets in the field as one of the real evidence of activities in the KRPL village.

c) Data Validity Test

The data validity test in this study used triangulation techniques. The triangulation technique is a data validity test technique by checking data from several sources. In this study, the triangulation technique was carried out by checking the data obtained from interviews and documentation.

d) Place and Time of Research

This research was conducted in the KRPL village (Sustainable Food Home Area) known as Kampung Rolas which is located in RT 12 Sanankerto Village, Turen District, Malang Regency, East Java. This research was conducted in July - August 2023.

3. RESULTS & DISCUSSION

This discussion is based on the results of observations made by KKN students in Sanankerto Village, which is located in Turen District, Malang Regency, East Java, for approximately 45 days. The KKN group saw that there was a KRPL (Sustainable Food Home Area) village located in RT 12 or it could also be called Kampung Rolas. KRPL is one of the villages in Sanankerto Village with great tourism potential. This village is chaired by the Head of the RT in the village Mr. Sutris. KRPL village is a village where residents utilize their yards to be used as gardens that are arranged in such a way as to plant a variety of existing plants such as chilies, lettuce, cabbage, and many more.



Figure 1. Vegetable plants in resident's yards

This KRPL program is an effort by the government and the Ministry of Agriculture to improve food security and family nutrition. Therefore, researchers raised this KRPL theme, because KRPL directly supports three strategic programs, namely the poverty alleviation program, where residents get a fairly significant additional income. In the

tourism sector, KRPL can be developed in such a way. Then in the environmental program, namely making settlements beautiful, clean, and green. With KRPL, it will be able to increase food security in an area in the face of a health crisis and environmental changes. Then through KRPL, the community can also be involved in production and marketing which will be able to improve their livelihoods and reduce poverty levels.



Figure 2. Installation of pipeline in KRPL Village of Sanankerto Village

Arrangement and Management of Sustainable Food Home Area (KRPL) is a form of integration of a set of yards to meet the food supply of households and other community groups. In order for this activity to provide benefits to the beauty of the environment, it needs to be structured. Structuring the area environment is needed to organize KRPL in order to form a beautiful and comfortable environment, and become an attraction for others to replicate. A good arrangement makes a beautiful and pleasant environment. The design for the arrangement of plants in the area environment is compiled jointly by all KRPL villagers by taking into account the aesthetics and interests of residents.

In structuring the area, it is also necessary to consider the following points:

1. The crops cultivated are vegetable crops, such as cabbage, chili, eggplant, cauliflower, lettuce, leeks, and mustard greens, which are in accordance with the characteristics of the local land, commonly consumed and preferred by the local community, and use fertilizers and pesticides that are safe for the environment and health.
2. In cultivating crops, it is also necessary to apply a crop rotation system. Crop rotation is planting crops in rotation in a field. The purpose of crop rotation is to increase crop production, utilize vacant lands, enrich the variety of plants so that there is not only one type of plant, improve soil fertility, and minimize the risk of crop failure. In addition, it is useful so that vegetables produced in the garden/yard can continue to be available in a sustainable manner.

In Sanankerto Village, the KRPL program is carried out as an initial step to

strengthen food security, starting from home yards and on various roadsides around the village. Almost all land up to the roadside of the KRPL village is filled with various types of vegetables. Besides being able to be used for daily needs, it can also increase the income of KRPL villagers who grow various vegetables in the KRPL program. Encouraging the development of KRPL villages can also contribute to efforts to improve food security, environmental sustainability, and the welfare of KRPL villagers.



Figure 3. Installation of pipeline in KRPL Village of Sanankerto Village

People in the KRPL village buy their own plant seeds and plant them in polybag media one by one and in sequence so that when the plants have grown, they will look very neat and beautiful. These plants will also be sold to various existing markets or as requested by consumers. Not only that, this village is also a center for koi fish cultivation which is also located in front of residents' homes to be used as an investment. However, there are obstacles in the irrigation system in this KRPL village that still have to be considered again, especially in irrigating koi fish and vegetable livestock. From these findings, the KKN 111 Sanankerto Village group designed a work program to add water pipes to the KRPL village to support the development of a tourism village program that can meet the water needs in this KRPL village.



Figure4. Installation of pipeline in KRPL Village of Sanankerto Village

At the beginning of the survey with Mr. Sutris as the head of RT 12 KRPL village, the KKN group asked several questions related to everything related to KRPL itself, such as the beginning of the formation of the KRPL village in Sanankerto Village, the obstacles faced by KRPL village residents related to cultivation, and the sustainability of the KRPL village itself. At the beginning of the formation of this KRPL, Mr. Sutris initiated it by giving vegetable seeds to all RT 12 residents to be planted in front of the house using polybags that were neatly arranged. Mr. Sutris also said that he gave the vegetable seeds in the amount of one small plastic per house, and then he directed the residents to plant in front of their respective yards. The peak was in 2021 when the Ministry of Tourism and Creative Economy, Sandiaga Uno, visited the village to review tourism in the Indonesian region. The residents, especially in the KRPL village area, flocked to innovate to beautify the KRPL area such as adding pipes in their planting, making a terraced base from bamboo to put the plants, hanging pots, and decorating the area planted with vegetables.



Figure 5. Visit to the house of Mr. Sutris, the head of RT 12

However, over time, fewer and fewer residents are consistent with growing vegetables so from the beginning, the percentage of residents who cultivate vegetables is 100%, currently leaving only 30%, where there are many obstacles faced by residents, such as water distribution that cannot reach directly the area in front of the house planted with vegetables, the low selling price of vegetables, the lack of sales branding, and the lack of consistency of support from the village. So there is no enthusiasm from residents to do maximum cultivation which can be an additional or even become the main livelihood of residents. Mr. Sutris also explained that all residents in the village used to plant in front of their respective houses, but over time only a few houses carried out the planting activities consistently due to the many obstacles faced.

After a long consultation with Mr. Sutris, the KKN group took the solution by installing pipes to drain the entire KRPL area with a total of 120 seeds equivalent to 480 meters. Before installing the pipe, the KKN group conducted socialization first with KRPL residents, where the socialization was carried out after *tahlilan* and *yasinan* activities at the house of one of the residents, seeing the response of the very enthusiastic residents, the KKN group was then very eager to immediately install the pipe by involving the KRPL villagers themselves together.



Figure 6. Installation of pipeline in KRPL Village of Sanankerto Village

As a result, after the pipe installation carried out in the KRPL village was able to provide a consistent water supply, the pipe irrigation system would provide a consistent water supply to the vegetables planted so as to increase plant growth and productivity. On the other hand, the return of enthusiasm and enthusiasm of the KRPL village residents was also seen because of the installation of the pipe for them to be more active in planting and caring for vegetables in front of their respective yards, residents seemed to have a sense of satisfaction because it could make it easier for them to care for existing vegetable plants because they had better access to irrigation. This can also increase the productivity of residents so that they can later market more various types of vegetables to markets around the Sanankerto Village area. However, it is also important to remember that installing irrigation pipes also presents challenges, such as maintenance costs and the technical understanding required. Therefore, good communication between the government, village officials, service providers, and community awareness is essential to ensure the continued success of this program and address potential problems that may arise in the future.

4. CONCLUSION

The results of observations made by the KKN student group were in collaboration with Kampung KRPL as one of the KKN flagship work programs. KRPL Village is one of the tourist attractions in Sanankerto Village, Turen District, Malang Regency, East Java. KRPL Village is located in Rolas Village or RT 12 in Sanankerto Village. KRPL is a form of integration of a set of yards to fulfill food supply and also for means of income for the surrounding community. The head of RT 12, Mr. Sutris, invited his community to buy plant seeds and vegetables to cultivate KRPL. These plant seeds are then applied using polybag media and arranged neatly by the surrounding community. There are many types of vegetable plants in the KRPL Village, such as cabbage, chili, eggplant, cauliflower, lettuce, spring onions, and mustard greens.

Over time, the consistency of the community to grow vegetables has decreased. This is due to the lack of irrigation sources in KRPL Village which are uneven. Therefore, after consulting with the head of RT 12, the KKN student group provided assistance in the

form of pipes which were then installed throughout the KRPL Village area with local residents. The pipes installed to drain the entire KRPL area amounted to 120 seeds equivalent to 480 meters. The assistance also received approval from the head of RT 12, Mr. Sutris. Finally, through the enthusiasm of the community to get help from KKN students, the pipes were installed in all areas of the KRPL village with the help of KKN student groups. The pipe installation program has produced a result where it can irrigate every vegetable plant in the entire KRPL village area evenly, the enthusiasm of the residents has also increased again to be able to care for and grow vegetables in front of their yard. On the one hand, the productivity of existing plants has also increased so that it can produce a larger harvest, and increase the income of residents around the KRPL village by marketing their vegetable products to markets in the area around Sanankerto Village and requests from consumers.

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