

Optimizing the Local Potential of Bananas into High-Value Products through Entrepreneurship Training to Encourage Economic Independence of Gedangan Village, Malang

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Abstract:

Gedangan Village, which is located in Gedangan District, Malang Regency, is one of the villages that has superior potential, namely bananas, but unfortunately this potential has not been utilized optimally by the people in the village. The majority of local people use bananas just for consumption, even until the bananas rot because they are not processed properly. The lack of knowledge of the local community about processing bananas into high-value products is the main problem in this village. The purpose of this service is to provide education and entrepreneurship training regarding the processing of bananas into flour which can be used as various innovative products that are beneficial for the economic independence of the people of Gedangan Village. The implementation methods used include the planning, implementation, and evaluation stages of activities. The result of this service activity is in the form of increasing community knowledge and skills in making flour from bananas and processing it into innovative products that have selling value. The innovative products produced can have the opportunity to become new MSMEs in Gedangan Village, namely banana muffins, banana peanut cookies, coconut cookies, and cakes one. In addition, this training provides knowledge to the public in terms of calculating the cost of production, selling price, and profits obtained from the four innovative products of banana flour raw materials produced.

Keywords: Gedangan Village, Entrepreneurship, Banana, Innovative Products.

INTRODUCTION

Indonesia is an agrarian country that has the potential for natural wealth advantages that can be used as foodstuffs, one of which is bananas (Susanto et al.,

2020). Banana production in Indonesia, which is quite significant in 2020, reached 8.16 tons (BPS, 2018). This high production makes Indonesia the second country in Southeast Asia that exports the most bananas (Badrie, 2020). Based on data from the Central Statistics Agency (BPS) in 2020, it is stated that East Java is one of the provinces in Indonesia that produces the most bananas up to 2.6 million tons. One of the largest banana production centers in East Java is located in Malang Regency which can supply 42.35% of the total banana production in East Java. Based on data from the Ministry of Agriculture in 2017, the average banana production in Malang Regency reached 5.4 million tons. Malang Regency has one of the sub-districts which is the largest banana production center and is the largest contributor of bananas located in Gedangan District (BPS, 2016).

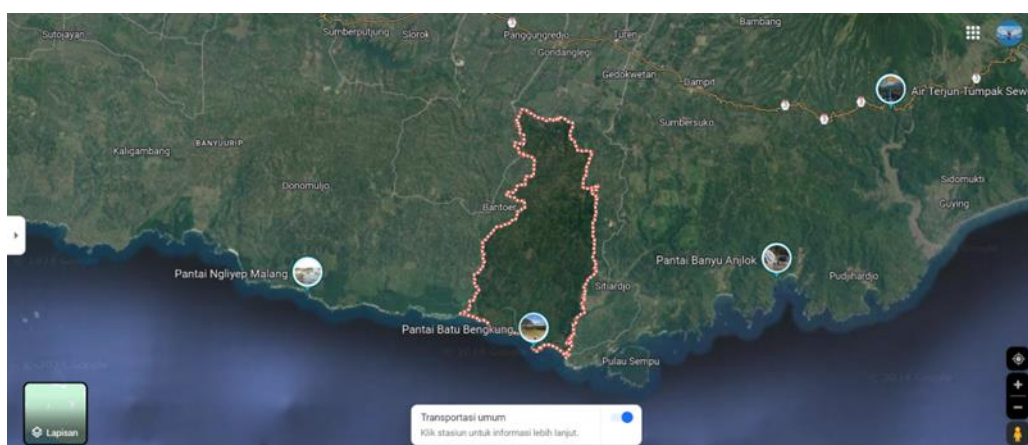


Figure 1. Location of Gedangan Village, Malang Regency
(Source: <https://maps.app.goo.gl/WAk7M7rrdYNmKsUg7>)

Gedangan Village is one of the villages that has the potential for banana excellence located in Gedangan District, Malang Regency, East Java. Based on the results of observations made by the service team of the State University of Malang in 2023, it was found that the majority of the people of Gedangan Village make a living as banana farmers. However, it is very unfortunate that when the banana harvest experiences *over supply*, the local community has not been maximized in utilizing the potential of the banana. This has an impact on the number of bananas that are rotten and only processed into fried bananas that have less economic value.

Looking at the potential, the banana fruit has a starch content of 61.3-76.5 g/100 g dry weight and content and a content of 6.3-15.5 g/100 g dry weight (Susanti et al., 2021). In addition, bananas contain various vitamins such as vitamin A, vitamin C, and minerals such as calcium, phosphorus, and iron and have fairly high levels of carbohydrates (Oktavianita et al., 20220). According to research, Malik et al (2022) stated that the high carbohydrate content in bananas ranks fourth after wheat, rice, and corn which can be used as staples instead of rice. This indicates that bananas, which are the superior local potential of Gedangan Village, can be used as a business product to encourage community economic independence.

The economy of local communities can be improved by maximizing the use of

bananas as a local potential which of course requires synergy from several related parties (Paramita et al., 2018). Parties involved in the regional economy are banana farmers as the main producers, local communities as economic business actors, and local governments as regulators (Sadapotto & Hasan, 2020). The wheels of this economy can rotate well which has an impact on improving the welfare of the local community if this superior local potential is managed optimally.

Based on the observation results of the service team of the State University of Malang, it was found that 65% of the people in Gedangan Village do not have basic knowledge about banana flour processing. In addition, 70% of the people in Gedangan Village do not know anything about the process of making flour from bananas. In fact, if bananas can be processed into business products that can be diversified automatically, it will improve the economy of the people of the Gedangan area. The lack of knowledge of the people of Gedangan Village in processing bananas into flour and confusion in processing them are one of the obstacles faced by the community. Therefore, the State University of Malang service team held a training on making flour from bananas and its processing techniques into innovative products that have selling value in Gedangan Village.

METHOD

Tools and Materials

The tools used in this community service include steamers, knives, cutting boards, baking sheets, ovens, grinders, flour strainers, scales, basins, stoves, packaging tools. The ingredients used include banana flour, clean water, sugar, salt, grated coconut, peanuts, baking powder.

Implementation Procedure

This community service program was carried out in Gedangan Village, Gedangan District, Malang Regency, East Java. This service team was carried out by students from the departments of chemistry, engineering, literature, and resource persons from culinary lecturers at the State University of Malang. Participants in this training are the women of the Gedangan Village PKK Mobilization Team. The implementation method used in this service includes the stages of planning, implementation, and evaluation of activities which are described and briefly described in Figure 1 as follow

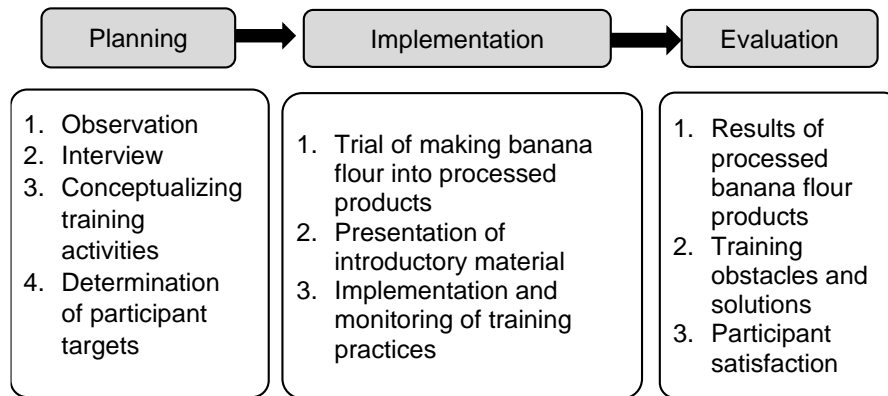


Figure 2. Activity Implementation Method
(Source: Processed by the Author, 2023)

1) Planning stage

At this stage, observations were carried out in Gedangan Village and interviews with several resource persons such as village officials, PKK women, and MSME actors in Gedangan Village. In addition, a preliminary analysis was carried out and the needs of the community regarding the use of bananas as local potential through the dissemination of questionnaires. After that, a discussion was held by all members of the service team regarding solutions to the problem of lack of community knowledge in managing bananas as local potential in the village. Therefore, the State University of Malang service team held a training with the educational concept of processing bananas into products with selling value. After the training concept is formed, the next step is to determine the target participants, namely the women of the Gedangan Village PKK Mobilization Team.

2) Implementation stage

This stage begins with a trial of making flour from bananas and processing the flour into innovative products that have a selling value. This trial was carried out by students with resource lecturers at the Culinary Laboratory of the State University of Malang. After the test product is successfully produced, then training activities can take place. This training activity began with the delivery of introductory material related to the potential of bananas as flour and processing them as raw materials for innovative products. Furthermore, practical training was carried out on processing flour from bananas and processing techniques into products that were monitored by students and culinary lecturers. The products produced from this training are in the form of banana muffins, coconut cookies, banana peanut cookies, and cakes one.

3) Activity evaluation stage

The final stage of this activity is the evaluation stage. In this stage, an

evaluation was carried out on four processed banana flour products resulting from the training. Then, identify obstacles during the training and solutions that can be used for further training can be even better. To find out the success of this training, participant satisfaction analysis was carried out by distributing questionnaires, later the results of this questionnaire can be used as an evaluation for the next training activity.

RESULTS AND DISCUSSION

Gedangan Village is one of the villages in Malang Regency that has the potential to excel in natural resources as a production center, one of which is bananas (BPS, 2020). Based on the observation results of the community service team through the dissemination of questionnaires regarding preliminary analysis and community needs related to the use of bananas as a superior local potential, it was found that 65% of the people in Gedangan Village do not have basic knowledge about banana flour processing and as many as 70% of people in Gedangan Village do not know at all about the process of making flour from bananas. In addition, interviews were conducted with several village officials, PKK women, and MSME actors in Gedangan Village, the majority of the speakers stated that the majority of the village people have a livelihood as banana farmers, but unfortunately the bananas produced are only consumed directly or used as fried bananas and even rot because they have not been used optimally. Based on the results of observations and interviews, it was found that the problem was the lack of public knowledge related to the processing of bananas into products with selling value, so that it had an impact on the utilization of bananas as a superior local potential that has not been maximized.

Seeing the problems that exist in Gedangan Village, the State University of Malang service team conducted a trial in processing bananas into flour as the main raw material to replace flour from wheat which is mostly exported from outside. The trial was carried out at the Culinary Laboratory of the State University of Malang. After a trial, it was found that the most suitable banana to be used as banana flour was the temple banana. In addition to being suitable as a raw material for making flour, this temple banana has abundant availability, especially in Gedangan Village. Then, the processing of banana flour produced into several innovative products, namely *banana muffins*, *coconut cookies*, *banana peanut cookies*, and cakes one. After the trial of banana flour processing products is successful, it is ready to be used as training for the people of Gedangan Village.



Figure 3. Trial of processed banana flour products
(Source: Author's Documentation, 2023)

The training on making banana flour and its processing techniques into innovative products with selling value was held on July 21, 2023 at the Gedangan Village Hall, Gedangan District, Malang Regency, East Java. This training activity was attended by the women of the PKK Mobilization Team and resource persons from culinary lecturers at the State University of Malang, namely Dra. Wiwik Wahyuni, M.Pd along with two student assistants from the culinary department. This training activity began with the delivery of introductory material that discussed the potential of bananas and techniques for processing them into a good quality product.



Figure 4. Presentation of introductory material by resource persons
(Source: Author's Documentation, 2023)

After the delivery of introductory material, the resource person and the service team provided assistance for practical training on making innovative products with selling value from banana flour raw materials. This activity was divided into four groups of PKK women, each of which made a different processed product. Recipes for processed products, ingredients, and tools to be used in the training have been provided by the service team. This training provides education related to product processing techniques from banana flour raw materials in order to produce products of good quality and have a good taste.



Figure 5. Product making training practices carried out by PKK women
(Source: Author's Documentation, 2023)

The products produced from each group of PKK women are in the form of *banana muffins*, *coconut cookies*, *banana peanut cookies*, and *cakes one*. These

four products have the potential to be used as business opportunities for PKK women in Gedangan Village. This training aims to provide education and training on processing banana flour into a product with selling value in order to improve the economy of the people of Gedangan Village. Here are some sample testimonials obtained from several service participants who attended the training, including:

"This training activity can open our insights into the superior potential of bananas, starting from the content contained in them to the processing techniques into products that can be used as businesses". Participant 1

"We are very enthusiastic about this training, because it gives us a new knowledge and skills on how to process it regarding raw materials to replace flour by utilizing the abundance of bananas in Gedangan Village". Participant 2

In addition to holding practical training on making processed products from banana flour, service participants were also given knowledge education about the calculation of Cost of Production (COGS), selling prices, and profits obtained from the four products as a result of the training. So that it can provide an overview of business opportunities that can be run by service participants. The results of the four products are *banana muffins*, *coconut cookies*, *banana peanut cookies*, and cakes one, as follows:



Figure 6. *Banana muffin products*
(Source: Author's Documentation, 2023)



Figure 7. *Coconut cookies products*
(Source: Author's Documentation, 2023)



Figure 8. *Banana peanut cookies products*
(Source: Author's Documentation, 2023)



Figure 9. *One cake product*
(Source: Author's Documentation, 2023)

"We are very happy with participating in this training, we can find out interesting banana processing and packaging techniques to become business products that are in demand and can be developed to improve the economy" Participant 3.

This training activity has a positive impact on the community in Gedangan Village, Gedangan District, Malang Regency, both socially and economically. The people who participated in this training activity were satisfied because they could increase their knowledge related to banana processing techniques into high-selling value products. The level of satisfaction of participants with this training is explained in Figure 10.

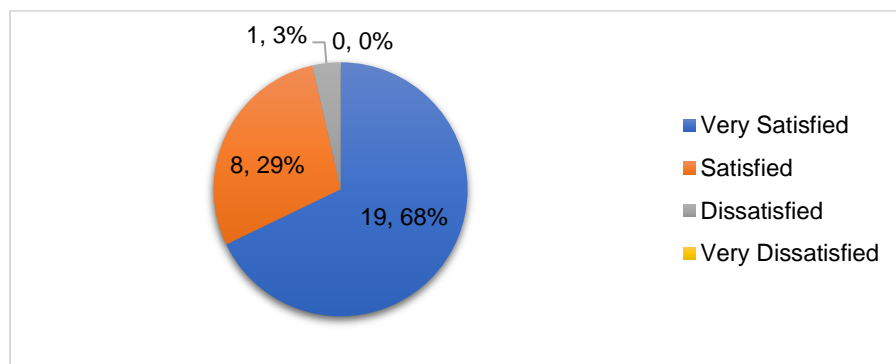


Figure 10. Satisfaction Level of Entrepreneurship Training Participants
(Source: Processed by Author, 2023)

The benefits obtained from this community service activity include:

1. Providing knowledge and insight to the community about the content and potential of bananas in Gedangan Village which can be used as new business opportunities.
2. Increasing public knowledge in processing bananas into raw materials for making flour.
3. Improving the skills of the people of Gedangan Village in processing bananas into innovative products that have selling value and good quality.
4. Providing an overview to the public about the Cost of Production (COGS), selling prices, and profits obtained from the four products resulting from the training.
5. Maximizing the utilization of the abundance of banana potential in Gedangan Village in order to improve the community's economy.



Figure 11. Packaged training products
(Source: Author's Documentation, 2023)

CONCLUSION

The existence of this service activity in the form of entrepreneurial training in making flour from bananas and processing techniques into innovative products with high selling value can open up new business opportunities so that it can encourage regional economic independence. Thus, this service activity is very beneficial to the community and needs follow-up. So that the suggestion for the next service is to hold training in marketing typical products of Gedangan Village by utilizing technology to expand market reach.

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