

Conference Paper

## Diversification of Processed Onion Products as the Iconic Product in Darurejo Village, Jombang Regency

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### ABSTRACT

Darurejo Village, Plandaan District, Jombang is an onion horticulture area where the highest productivity level is in the Jombang Regency of 3990 kw and 38 kw/ha. However, the onion sales are not optimal so farmers often experience losses. Therefore, we service activities regarding the processing and management to enhance the effectiveness. Coinciding with the COVID-19 pandemic and the enactment of the government's decision to Implement Emergency Community Activity Restrictions (ECAR) the implementation of counseling is carried out online. The online activity was carried out through the WhatsApp Group, on Saturday, July 31, 2021, from 11.00-14.00 WIB, which was attended by 25 village cadres. This outreach activity was carried out by providing 2 materials, including basic knowledge of onion and the resulting products such as fried onion, onion *baceman*, and onion powder which have great potential to be widely sold, and the introduction of automatic peeling machines to increase the quantity and quality of productions through online and offline meeting on August 28, 2021. It is hoped that the community will be able to process and manage the onion shallot potential products.

*Keywords: Iconic product, onion, technology, automatic onion peeler machine, community*

### Introduction

Horticultural commodities have a high potential to be developed due to revealing economic value and high market demand. However, the handling of horticultural commodities is still not optimal even though the business potential in the area is quite high. To date, there are 323 varieties consisting of 80 varieties of vegetables, 60 varieties, 117 floriculture commodities, and 66 varieties of biopharmaceutical plants (Department of Agriculture of East Java Province, 2014). During its development, 40 national superior commodities were determined, including onion shallots.

Based on data from the Agriculture Service of East Java Province (2014), Jombang Regency is included in the onion shallot horticulture area where the productivity level is quite high so it has the potential to be developed. Shallots as one of the leading commodities have been widely used as kitchen ingredients or food seasonings as well as ingredients for traditional medicines. According to data from the Central Statistics Agency (2018), Plandaan District is the highest shallot-producing area in the Jombang Regency with a production level of 3990 kw and productivity of 38 kw/ha. This value is much higher than the level of production in other sub-districts such as Ploso (1634 kw) and Mojowarno (1178 kw). However, until now the handling of

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this shallot commodity is still not optimal. This is based on the low selling price and the absence of processed products that can increase the economic value of the community.

The high value of onion shallots production is not in line with the income of the people in Darurejo Village. It showed the urgency for holding the implementation of technology activity. The activity aims to implement science and technology for the community, namely to process shallots so that it will increase economic value and can be used as an iconic product in Darurejo Village, Jombang Regency. Iconic products are important to improve the marketing performance of processed shallot products.

This community service activity is carried out by providing socialization and training to residents in Darurejo Village on how to improve product quality, sales, and marketing of processed shallot products. Good management and processing are expected to be one of the sources to increase family income and improve the economy of the villagers. This is in line with the Minister of Home Affairs Regulation Number 113 of 2014 concerning Village Financial Management which states the need for good village financial management to improve the economy and prosperity of villagers.

### Material and Methods

The method of implementing the Community Service program through the Science and Technology Application for the Community scheme was carried out using several approaches. The chosen approach was adjusted to the output targets described in the previous section. The implementation method was designed to overcome partner problems, namely the absence of optimal handling of onion shallot production in Darurejo Village, Jombang Regency. The design of the method for implementing the PIKAT activity was divided into two stages, namely training in the manufacture of processed shallot products and product marketing assistance which are detailed in Table 1.

Table 1. The implementation method

No	Program	Implementation Method		
		Implementation Process	Partner Participation	Evaluation of the Implementation
1	Socialization and education about some processed onion shallot products.	Provide presentations on various kinds of processed onion shallot products in the form of interactive presentations.	The partners will read and listen to the materials via WhatsApp Group (Online Session), conduct questions and answers, and have discussions about the materials.	The questionnaire aims to ensure partners understand and master the material presented. In addition, the questionnaire also functions as a function of controlling partner satisfaction with the implementation of activities.

*To be continued*

2	Application of appropriate technology (AAT) in onion processing.	Demonstration of the application of the onion peeler automatic machine and slicer machine in making processed onion shallot products efficiently.	The partners will listen to the demonstration of the AAT tool to practice using the AAT tool accompanied by a team of lecturers.	Trial operation of the AAT tool in the form of a peeler and onion slicer machine by partners.
3	Assistance in the processing of onion shallots.	The practice of training in the manufacture of processed shallot products in the form of fried onions, onion flour, pickles, and pasta.	The partners will practice making processed onion shallot products in the form of fried onions, onion flour, pickles, and pasta.	Processed red onion products produced independently by partners.

### Results and Discussion

The implementation of community service was carried out through 3 stages, namely 1) survey, 2) counseling and 3) the practice of using an automatic onion peeler machine. The purpose of the survey was to find out the potential problems of Darurejo villagers related to the management and processing of shallots. The survey results show that the residents of Darurejo village are currently still not optimizing shallots to increase their economic value. The shallots harvested are only sold in raw form, while the lower quality shallots are simply thrown away. Therefore, it is very important to conduct counseling with residents to open up insights related to improving the quality of processed shallots which have longer quality and durability.



Figure 1. The community of application of appropriate technology surveyed in Darurejo, Plandaan, Jombang

Coinciding with the COVID-19 pandemic and the enactment of the government's decision to Implement Emergency Community Activity Restrictions (PPKM), the implementation of counseling is carried out online which is appropriate in its effectiveness, namely Whatsapp Group, on Saturday, July 31, 2021, at 11.00-14.00 WIB. This is because people don't understand enough about using zoom or google meet. The theme used in the counseling is "Automatic Shallot Peeler

Machine for Fried Shallots Production, an Iconic Product in Darurejo Village" as shown in Figure 2.

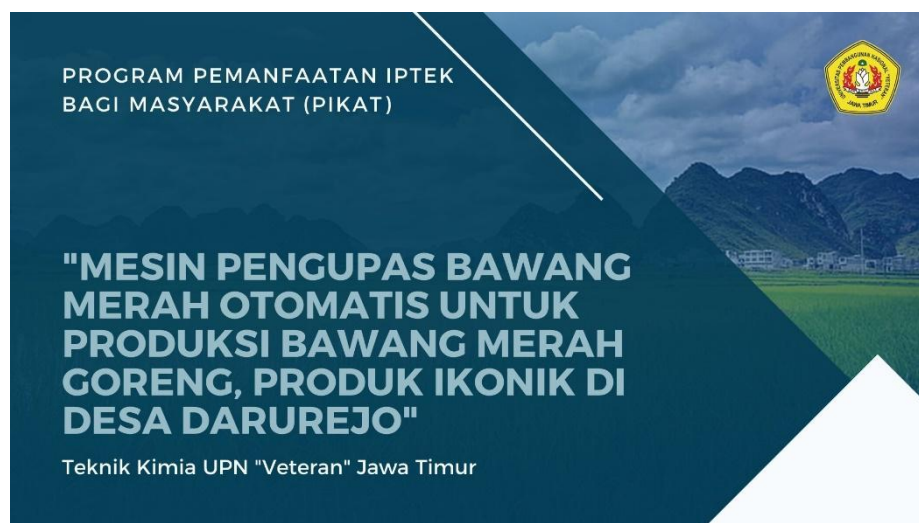


Figure 2. Opening slide on online counseling

The online counseling was attended by 25 women from Darurejo Village Cadres and carried out in two directions to increase community understanding for mutual discussions as documented in Figure 3.

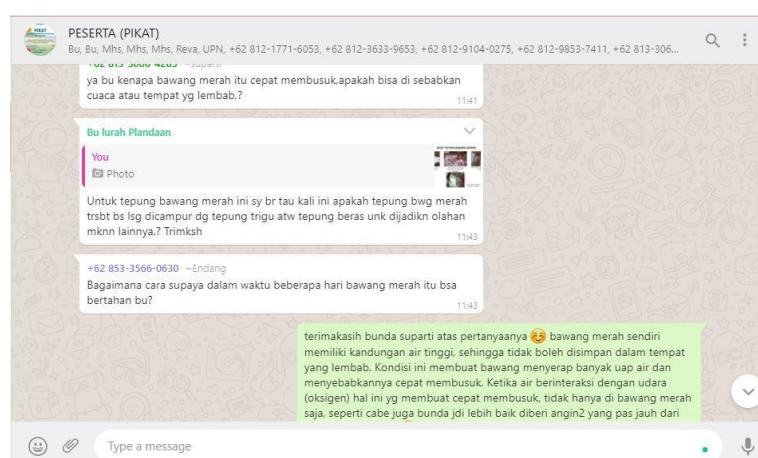


Figure 3. Online Training Documentation, On July 31, 2021, via WhatsApp Group

This outreach activity was carried out by providing two materials, including basic knowledge of shallots and the resulting products such as fried shallots, shallot baceman, and shallot powder which have great potential to be widely sold, and the introduction of automatic peeling machines to increase the quantity and quality of production. For each material, two-way active discussion sessions are held to support public understanding of the material presented. The online counseling program did not reduce the enthusiasm of the residents in receiving materials and practicing directly from homes such as the Crispy Fried Onions that were successfully made by Mrs. Suparti, Mrs. Ira Wati, and Mrs. Sri Sukemi (Figure 4).

The offline meeting was successfully held on August 28, 2021, which involved a team and residents of Darurejo village with a total of no more than 20 people attending with strict health protocols. The offline implementation aims to improve residents' understanding of the use and

maintenance of automatic onion peelers. Figure 5 shows the enthusiasm of the residents towards the use of the tools. The automatic onion peeler that has been provided has a capacity of 3 kg in a single peel with the help of water to soak all the shallots. Then the machine rotates for the stripping step which takes 15 minutes. Some of the results of discussions with residents are 1) it is necessary to soak the shallots first to shorten the stripping time and optimize the yield of stripping and 2) the need for large electrical power makes residents only able to use tools by utilizing electricity at the village hall.



Figure 5. Documentation of face-to-face training in Darurejo village, Jombang

## Conclusion

Based on the results of the community service program activities using science and technology for the community, it can be concluded that the online counseling on improving the processing and management of onion shallots as well as the introduction of automatic shallot peeling machines can increase partners' insight in the application and improvement of processed shallots other than fried red onions. Partners are also committed to implementing and improving the quality and quantity of fried shallot production using an automatic peeler. In addition, procurement of the main production equipment, production support equipment, posters, and modules can increase the shallot processing capacity.

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