



Empowerment of Housewives and Marketing Strategies in the Development of Various Citrus Fruit Processed Businesses in Catur Village, Kintamani, Bali

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ABSTRACT

The activities of the Assisted Village Empowerment Program, which are carried out in Catur Village, Kintamani, and Bangli-Bali, aim to increase the knowledge and skills of groups of housewives in managing the results of citrus fruit products into various processed citrus fruits that have economic value. The Housewives Group has become a leader in citrus fruit management at the household level. The methods used include observation, counseling, education, and direct practice. Based on the results, 100% of the Housewives Group can use tools for the product manufacturing process to produce various processed citrus fruits that have economic value and quality. The group of housewives in Catur Village, after receiving socialization and training, is committed to producing citrus fruits and making various processed citrus fruits into products that have economic value and quality.

INTRODUCTION

As an agricultural country, Indonesia has great potential in the Agricultural sector. The potential is spread across every area. The dispersed natural resources in the villages are one of the driving factors in improving national economic development. This is because Indonesia adopted a people's economic system that is expected to be able to support the economy on a national scale, even in times of crisis (Rusmini, Muhammad Syarofi, Siti Nur Baiti, M. by Huda, 2023).

The village of Chatur Kecamatan Kintamani Kabupaten Bangli is the largest orange fruit producer in the Bangli district, as shown in Figure 1. The orange fruit in the Chess Village has excellent quality; it tastes sweet and fresh. Even the Chess Village orange can compete to penetrate the national market. Orange fruit is one of the fruits we often find in Indonesia. Towards the end of the orange season, many of us find merchants who sell oranges on the streets or in other public places at affordable prices. Few people are interested in buying it. (Fetra Venny Riza et al., 2023).



Picture 1. Location of Desa Catur, Kintamani, Bangli, Bali

Orange plants that grow in Indoseia (siam/keprok, nipis, purut, pomelo/Bali, and lemon) are a commodity of horticultural agriculture with a competitive advantage that can be developed through business and marketing. (Prayuginingsih & Oktarina, 2014). Things that determine competitive advantage are technology, productivity, cost, and industry structure. (Prayuginingsih & Oktarina, 2014).

The orange fruit, which belongs to the citrus genus of the family Rutaceae, is famous for its refreshing aroma, its ability to ease thirst, and the fact that it provides sufficient vitamin C. (Ahmad et al., 2023). Siamese orange production in Indonesia in 2021 will be 2,401,064 tons, with a productivity of 36.87 tons/Ha and a harvest area of 66,301 Ha. Meanwhile, the production of siam orange and keprok in the Southern Sulawesi province in 2021 was 9,315 tons, with a productivity of 13,64 tons/ha and a harvest area of 712 ha (Statistik, 2021).

Efforts to promote a competitive advantage over the local orange can strengthen the economy of the people in Indonesia through the innovation of cultivation technologies (including innovations in productivity, quality, input, and cost), the setting of market structure and industrial structure, and the state

of local demand for orange. (Abidin, 2022). Technology, along with capital and competent human beings, is needed to improve society's business, post-harvest handling, and orange processing to facilitate work and develop efficiency and productivity. (Prayuginingsih & Oktarina, 2014).

As one of the types of horticultural plants in Indonesia, oranges have several functions: they can prepare nutritional filling and vitamins for the community, improve the currency of the country, open the field of employment, increase the income of farmers, and prepare cool and comfortable environmental conditions (Permatasari, P., Zain, K. M., Rusdiyana, E., Firgiyanto, R., Hanum, F., Ramdan, E. P., Septiana, Hasbullah, U. H. A., and Arsi, 2021). Horticulture plants are one of the agricultural commodities that has the opportunity to be developed so that it becomes an outstanding product that can improve the welfare of farmers in Indonesia. (Angelita, 2022).

Community dedication is an activity that aims to make a positive contribution to the community by optimizing the potential that exists in the surrounding environment. One example of community service activities that can be done is by inviting society to use waste as a useful basic material for production. (Samadikun et al., 2023).

The executives focused on dedication activities for the use of Siamese oranges and strawberries in Chatur Village to raise the potential of this orange to become an economic solution for the community of Chatur. The main objective of this empowerment is to raise the economic growth of the community through the use of Siamese oranges and arachnids, which are processed into various types of products that have a high selling value.

LITERATURE REVIEW

Siamese oranges are one of the fruits that have a fairly good antioxidant content. With a good level of maturity in the Siamese orange fruit, the level of antioxidants that the fruit has will be good. Antioxidants are compounds found in almost all types of fruits, including Siamese oranges. Antioxidants are one of the compounds produced by the body and have the utility of helping protect cells from damage caused by molecules that are indicated as harmful or called free radicals. Free radicals are one of the triggers for DNA damage and other important structures within cells. (Kusumawardani et al., 2018).

An emulsion that gives good results in terms of increased attractiveness and retention with organoleptic test measurements, vitamin C levels, and water levels is a mixture of palmitic acid, stearate, and oleate emulsions. Based on the results of organoleptic tests, vitamin C levels, and water levels, mixed emulsion treatments (palmitic acid, stearate, and oleate) yielded better results compared to the treatment of brogdex wax emulsions. The emulsion coating on the surface of the fruit functions to cover the pores or stomachs so that it reduces the rate of breathing and can delay the process of fruit maturity as well as improve the flash and cover wounds or scratches on the skin surface that affect the visitor. The treatment of mixed emulsions (palmitic acid, stearate, and oleate) can be recommended in the post-harvest handling process compared with brogdex wax emulsification. So that the post-harvest processing can be stored longer

and does not reduce the economic value of the product (Ni Luh Putu Putri et al., 2023).

Peanut orange has a sweet-acid taste, its skin is easily peeled, the skin color is yellow-green, and it has about 12–15 seeds per fruit. Currently, the criteria for orange fruit favored by consumers in the global market are orange fruits that have few or no seeds (seedless), are easy to peel, and have an attractive color. (Karyanti et al., 2015). Pomegranates contain vitamin C, alkaloids, polyphenols, flavonoids, pectins, kumarins, saponins, and oil of asterisk. The content of vitamin C in the orange skin is not predicted to be much inferior to the content of its own orange fruit. The beneficial substances contained in the orange skin, one of which is aspirin oil and vitamin C (Amperawati et al., 2019). Lower vitamin C intake causes symptoms of vitamin C deficiency, such as bleeding on gums and skin, numbness, and the effects of bone development. The vitamin C requirement for adults is about 90 mg, and for children and infants it is 45 mg. (Nurjanah et al., 2016). The most abundant sources of vitamin C are fruits, especially various types of oranges, lemons, bananas, apples, and red seeds, and vegetables such as broccoli, spinach, carrots, asparagus, and rye. The content of vitamin C, especially in oranges, is 40–60 mg/100 g (Kesehatan, 2013).

METHODOLOGY

This Community Partnership Program will be implemented with partners such as the Housewives in Chatur Village, Kintamani District, Bangli District, Bali Province, with the method of implementation of PKM Manufacturing activities of various kinds of processing of Fruit Jeruk planned with:

Observation

Preliminary observations are carried out to find out the level of knowledge of partners, environmental conditions, and consent processes. Coordination with partners to determine the time, place, and materials required by partners. This dedicated activity uses training and technical guidance approaches to enhance the ability to manufacture processed products from orange fruits. (Laily et al., 2023).

Counseling/Education

Disclosure is one of the forms of educational activity that can help improve the knowledge of society. According to previous reports, dissemination activities can significantly increase the level of public knowledge. Several previous studies have also demonstrated that discernment can enhance public knowledge in various fields, such as food processing and production management. (Helmi et al., 2018). Therefore, important dissemination activities are carried out to increase public awareness about the range of food processing and the right technology for processing food. Education becomes essential to open insights and enhance the knowledge of participants, not only about the variety of food products but also the tricks of the right food processing technology. (Pangestika et al., 2021).

Direct practice

After the lecture and dissertation, activities continued with field practice on the anecdotal processing of orange fruits. As for the activities carried out in direct practice, namely: the preparation of tools and materials for processed fruits of orange, the production of processed fruit products, the labeling and packaging of products processed with oranges, and the marketing of products,

RESEARCH RESULT

Implementation of activities carried out on Wednesday, July 12, 2023, with the title "Powering Home Mothers and Marketing Strategies in the Development of Anecdotal Property of Corn Fruit in Chatur Village, Kintamani, Bali". Demonstration to provide an understanding of Precise Use Technology (TTG) for the process of processed orange fruit production and training on processes for processed fruit production, providing knowledge about product packaging, labeling, marketing, and entrepreneurship. The participants who followed this activity were a total of 10 people from the Housewives, Chess Village, Kintamani Prefecture, Bangli District, Bali. The PKM team also donates tools and materials to make economically valuable composite products. The results of the activity are shown in Table 1.

Table of 1. Results of activity (Output)

No.	Type of activity	Achieved output
1	Appropriate Use of Technology (TTG) in the manufacture of anecdotaly processed orange fruits	100% of the partner of the household of the village of Chatur can use the tool for the process of making anecdotaly processed orange fruit so that it produces economically valuable products
2	Education on how to use orange fruit production	100% of household partners of the village of Chatur understand the utilization of the output of orange fruit production in the effort to produce anecdotal orange products
3	Training to improve skills in the production of quality processed orange fruits	100% Partner of the household of the village of Catur is skilled in the utilization of post-harvest production as a quality orange fruit-processed product

This public service activity has been published in the electronic mass media. The implementation of this activity involved 2 lecturers from the Food Science and Technology Program of the Faculty of Agriculture, University of Warmadewa, and 1 lecturer from the Management Studies Program, School of

Economics and Business, University. The performance and results of processed products can be seen in Figure 2.



Picture 2. Processing of citrus fruits



Picture 3. Citrus ingredients used for the manufacture of various processed citrus fruit products



Picture 4. Counseling of the Unwar PKM Team to the Head of the Housewives Group in Catur Village, Kintamani District, Bangli Regency, Bali

DISCUSSION

The results of the community's dedication activities proved that the provision of advice and interviews in the form of lectures can increase the participants' knowledge about the process of processing orange fruit into processed products with high economic value. 100% of the partners in the group of Mother Households of the Village of Chatur are skilled in the use of post-harvest production as a quality orange processed fruit product.

From the activities of dedication to this society, the results are obtained, namely: The group of households of the village of Catur, after knowing and understanding the importance of the production process, believe that this activity will be able to increase the quantity and quality of the output of production so that the hope of the products of processed fruit of this orange can be further developed. In addition, it applied the transfer of science from the College to the Partner of the Group of Mother Households of the Chess Village in managing the business, which became better and was growing. This accompanying activity is perceived to be quite effective and efficient because its impact can be felt directly by partners who initially do not know how to

become aware of and easily understand the importance of changing the production process and product marketing strategy. (Edi Wibowo, 2018).

CONCLUSIONS AND RECOMMENDATIONS

The service to the community has gone well. The group of households in the village of Chess Village, Kintamani, has been able to independently implement the processing of orange fruits. 100% of our partners know how to transform processed orange fruits into quality products. The community, especially the group of households in the village of Catur, Kintamani, needs to consistently process the processed fruits of orange so that it can produce products with high economic value to support the ecology.

ADVANCED RESEARCH

The strategy for the next goal is to provide training on the preparation and submission of permits in the Health Service (P-IRT).

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