

EMPOWERING THE HOUSEHOLD BUSINESS THROUGH IMPROVING THE QUALITY OF THE PRODUCT IN PINTUSONA SAMOSIR SUB-DISTRICT

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ABSTRACT

This Community Service Program has been implemented well. Partners of this activity are Artiar Bakery, Pintusona Village and Martauli Elisabet Household Business in Pinsona Village, Pangururan District, Samosir Regency, North Sumatra Province. The purpose of this PKM is to solve several problems faced by partners. In this service activity the implementation team tries to create a creative and innovative idea to provide added value to the cassava chip household business through improving product quality, namely by providing counseling and training on the application of science and technology. One of them is by changing the way of production by using modern equipment so that production capacity increases. Marketing of cassava chips with safe and attractive packaging so as to increase the selling price and expand the marketing area through online marketing. With this PKM activity it can improve partners' lives financially and partner products can be accepted in the market so that they can compete with similar products in the market.

Keywords: Household Business, Cassava Chips, Pangururan

INTRODUCTION

A. Situation Analysis

Cassava is one type of tuber that contains carbohydrates. Several cities in Indonesia make cassava their staple food [1]. Cassava contains various important nutrients for the body. In 100 grams of boiled cassava, there are 112 calories of which 98 percent comes from carbohydrates and the rest comes from protein and fat. In the same dose, cassava also contains fiber and several vitamins and minerals [1]. Cassava is a root crop in the tropics and is an increasingly cheap source of food calories in the world [2].

Today the agribusiness sector is indeed a new prima donna for the people of Indonesia as a business field that provides encouraging prospects. This field does not only cover matters related to agriculture before harvest, but is even more developed in the industrial processing of agricultural products (post-harvest). One of the processing of cassava is used as a snack, namely cassava chips. The purpose of processing cassava is to increase the durability of cassava so that it is suitable for consumption and utilize cassava to obtain a high selling value in the market [3]. Cassava chips are snacks made from thin slices of cassava tubers, fried, given certain spices or just salt. In the manufacture of cassava, it is peeled, washed, then thinly sliced. The cassava slices are then immersed in a salt water solution. Then the cassava is fried in hot oil. After draining the cassava chips can be immediately packed [4]. The opportunity for the cassava chips business itself has a bright prospect if it is managed properly, because it is usually easily

available in stalls, shops and supermarkets. The price is affordable as well as better quality with a crunchy and savory taste. In addition, cassava chips can be used as souvenirs [5]. Based on the results of research on the cassava chips business, it shows that the cassava chips business requires a market development strategy to develop its business [6]. Promotional strategies can be done by introducing and communicating products through cooperation with minimarkets [6]. The consumers of cassava chips are very concerned about the packaging, brand and price factors [6]. Kelurahan Pintusona Kec. Pangururan, Samosir Regency is one of the tourist areas on Lake Toba. one of the residents opened a business as a household business producing cassava chips which are generally made or worked at home as a home industry. This household business has been running for years. The tool used to slice cassava is still using the traditional way, namely by manually grated cassava. To get thin pieces of cassava chips, a mechanical device or an efficient machine has not been used in the manufacturing process, so the quality and quantity of the product produced cannot be maximized. The disadvantage of manual driving for cassava cutters is that the production takes longer,

Efforts to develop home industries are one of the government's policies to tackle the economic and social problems facing Indonesia at this time. The limited ability to market causes many small industrial products, although of high quality, are not well known and unable to penetrate the market. Another consequence that many small entrepreneurs suffer is that they are tricked by the traders who control the distribution chain, so that prices are pressed as low as possible and payments are often delayed [7]. Snack food business is a household scale business that has a very good opportunity now and in the future [8]. Market demand for snacks continues to flow. Seeing snack lovers, not only children, but also teenagers, adults, and the elderly. So snack food entrepreneurs are often flooded with customers. Therefore, the solution that needs to be offered to partners is to design and build a cassava cutting machine. A machine that functions to cut cassava with the specifications of a cassava cutting machine, namely: a thickness of 1 - 2 mm, where the cutting method is in a horizontal direction which is driven by using an electric motor with $\frac{1}{4}$ Hp power and transmitted by two pulleys, each measuring 3 inches and 10 inches. which will transmit the power that rotates the shaft that will cut the blade. This cassava cutting machine cuts cassava with a maximum diameter of 55 mm, and is assumed to work with a machine capacity of 50 kg / hour. In addition, to improve the quality of processed products, it is necessary to make packaging that is more attractive. Providing training in marketing management, making online bookkeeping and marketing, and making new flavors of cassava chips. Based on this, it is necessary to carry out this service with the title 'PKM Empowerment of Cassava Chips Household Businesses Through Product Quality Improvement and Marketing Management in Pintusona Village, Pangururan District, Samosir Regency, North Sumatra'.

B. Partner Problems

Based on the author's observations, partner problems are production problems and marketing management and production quality. Partners use raw materials from cassava, in processing light meals per day it can reach 200 kg. The equipment used to process snacks is adequate, but for manual cutting of cassava.

These snacks are packaged in plastic packaging with weight or package contents and the selling price varies. The weight of 10 gr, 50 gr, 250 gr is sold at a price of IDR 500, -, IDR 1,000 and IDR 5,000, respectively. The results of this snack business are favored by the community because of their delicious taste and affordable prices, especially for children. The marketing system is still limited, only deposited in stalls, sold in traditional markets, and sold to collectors. The existence of this partner is actually very beneficial for the surrounding community because it can absorb a workforce of around 4-10 people. Workers in this small business group are freelancers or daily workers with a daily salary of IDR 10,000 per person. Based on the partners' conditions, the partner's problem is the need for appropriate technology, namely the cassava cutting machine and the manufacture of cassava chips labeling is getting better, using appropriate technology that is simple, cheap and easy to do. Marketing management implemented by partners is still very simple, so it is very sensitive to existing business competition, because there are many household businesses with similar business fields. For this reason, tertiary institutions need to provide assistance to partners in order to survive and develop to progress from time to time. Likewise, increasing the skills of human resources is absolutely necessary in improving the performance of these partners. The existence of this partner is very beneficial for local residents in absorbing labor so that it can increase community income.

C. Priority Issues of Partners

Based on direct observation and interviews with partners, they stated the problem was in cutting cassava chips to make it faster and with more capacity. The partner does not yet have a cassava cutting machine, and the marketing management is still doing care for the nearest small shops or elementary schools. Based on this, this is what must be handled so that this business can develop more. Seeing the problems faced by partners and the limitations of the implementation team, it is necessary to prioritize the problems that will be resolved through this activity. After discussing with partners by considering the ability of the implementation team, the priority problems to be resolved through this activity are 1) This partner does not yet have a chip cutting machine for the production process,

D. Solutions Offered

Based on direct observations and interviews with partners, partners expressed their problems in terms of cutting cassava chips to make them faster and with more capacity. The partner does not have a cassava cutting machine, and the business management is still simple. Based on this, this is what must be handled so that this business can develop more. Seeing the problems faced by partners and the limitations of the implementation team, it is necessary to prioritize the problems that will be resolved through this activity. After discussing with partners by considering the capabilities of the implementation team, the priority problems to be resolved through this activity are:

- 1) The partner does not have a chip slicer for the production process.
- 2) Making labels for more attractive packaging so that it is in line with market tastes.

- 3) Use of information technology as a product marketing medium.
- 4) Improved management system.
- 5) Improving product quality by making cassava flavor variants.

To solve partner problems, the solution offered is to design a cassava chip cutting machine, make packaging more attractive, provide training in management management, marketing management, and financial accounting. This solution is expected to be the basis for business development to a maximum problem solution consisting of 1500 words which contains descriptions of all solutions offered to solve the problems at hand. A complete description of the problem solution section contains the following.

- a. Write down all the solutions offered to solve the problems faced by partners in a systematic manner according to the priority of the problem. Solutions must be closely related to partner priority problems.
- b. Write down the types of output that will be generated from each of these solutions both in terms of production and business management (for productive economic partners / leading to a productive economy) or according to specific solutions to problems faced by partners from socially / economically unproductive groups of people.
- c. Each solution has its own output and as far as possible can be measured or quantitated.
- d. Describe the research results of the proposing team related to the activities to be carried out

a larger direction, with a larger production capacity as initial capital to carry out broader marketing, to higher levels of consumers. Followed by better business management skills.

IMPLEMENTATION METHOD

The method of implementing activities will be carried out through five stages of activities as follows.

1. Phase I (outreach / outreach)

The implementation of activities begins with program socialization to partners regarding the scope of the program to be implemented, the timing of the activities, activity stages, assistance, activity evaluation and monitoring. In the initial stage, partners will be given knowledge / insight regarding the business prospects they will develop, including how the production techniques, marketing and business management. Extension will be carried out using lecture and discussion methods. This activity aims to be more convincing and solidify the knowledge, insight and enthusiasm of partners to start new businesses.

2. Phase II (Production Engineering and Product Packaging Training)

At this stage partners will be trained to make snack products, namely cassava chips using a chip cutting machine. During the training, guidance and consultation activities will be carried out so that partners are truly capable and skilled at making quality products. Furthermore, partners are given training on how to package attractive products using labels and have their own characteristics.

3. Phase III (Product Marketing Management Techniques Training)

At this stage partners will be continuously trained and guided on ways to promote and market the products they produce. This activity is escorted until the partners succeed in marketing their products that can ensure the sustainability of

their business, and also use information technology as a product marketing medium, namely online media.

4. Stage IV (Counseling About Business Management)

At this stage, partners will be provided with tips for managing a business / business. Activities are carried out through lectures and discussions so that the partners really master the concepts of good business management to ensure the existence and progress of the business they will be in.

5. Stage V (Monitoring and Assistance)

Assistance activities are carried out as needed and carried out at all stages of activity, starting from restructuring and structuring the production space, accelerating the production process with the help of cassava cutting machines, technical use of machines, training in simple business bookkeeping, manufacturing product packaging. The activity implementation team will monitor and provide regular assistance to ensure the sustainability of the business that will be developed by the partners. At this stage, the implementation team will also conduct an analysis of possible problems arising from the partners while running the business and seek solutions. The success of this service activity, of course, really depends on the active participation of the partners. The expected participation of partners in this activity is as follows:

- 1) Provide a special place for business
- 2) Providing raw materials for processing cassava chips
- 3) Participating in all activities from socialization, counseling / training, use of chip cutting machines and monitoring and guidance activities
- 4) Highly committed to continuing and developing the business to be trained.

6. Stage VI (Program Evaluation)

Program evaluation is carried out in an effort to maximize the results of activities according to predetermined targets. Evaluation is carried out on all forms of activities that have been carried out. If there are activities that produce results that are not optimal, then efforts are made to improve those activities. It is hoped that the program will continue well, partners are expected to be willing to consult if they encounter problems in their business development, including their products. Production capacity is expected to be increased by at least 30%. The equipment assistance provided, such as a chip cutting machine, is expected to be able to produce with a larger capacity so that the marketing is broader. Likewise, with good bookkeeping, partners can calculate their business position and profit and loss on their business.

RESULTS AND DISCUSSION

This cassava chip household business initially experienced many problems in running its business, especially in the production of cassava chips. So far, partners cutting cassava chips conventionally have not used cassava cutting machines due to economic limitations and lack of knowledge of partners, so partners still do it conventionally. When viewed from the way of packaging, it is still simply not using labels and marketing is still limited. With this service activity, it can provide creative and innovative solutions to solve problems faced

by partners so far. In this activity partners were given counseling, providing equipment for cassava cutting machines, training on using cassava cutting machines,

The first activity carried out was the delivery of equipment to partners. On In this activity partners are given facilities in the form of equipment needed for the production and packaging process. The equipment provided here is a set of machines that can be used for the production process. The machines provided to the partners were cassava cutting machines with a capacity of 50 kg / hour. With this cassava cutting machine, it can save time and effort for partners in producing cassava chips. After the handover of the machine, the partner is given training in operating the cassava cutting machine so that the partner is able to operate it with good results and faster and more capacity ie 50kg / hr. In Figure 1, you can see the activities of handing over the cassava cutting machine to partners.



Figure 1. Handover of the cassava cutting machine with the companion team from LPPM Unimed to partners

In order to use the machine optimally, the next step is to adapt the machine to partners so that partners become proficient in using machines to produce cassava chips. After partners can use the machine optimally, the next activity is to provide training in cassava chips production. In Figure 2. It can be seen that the executive chairman and partners have used a cassava cutting machine for the production of cassava chips.



Figure 2. The chief executive of the photo shoot with partners

The community service implementation team provides input and suggestions related to the application of hygiene and sanitation during the production process, for example always washing hands after doing work, using clean equipment in the production process, keeping work areas clean, maintaining the cleanliness of individual food processors, using additional food ingredients allowed by BPOM, etc. The next activity is assistance related to product packaging. Packaging materials, packaging form, packaging appearance are important things in product marketing. Good packaging and in accordance with the ingredients / food that is packaged will affect the appearance and shelf life of the product. Partners are given input and suggestions as well as samples of product packaging designs and how to package the food products produced.

After these activities are completed, then assistance in promoting partner products. The service implementation team assists business partners in carrying out promotions through social media that display each of the products produced, including the materials used, how to order products, prices, etc. Assistance related to production constraints and problems such as lack of labor, capital, and product raw materials. The mentoring process was also carried out. With the implementation of this PKM activity, the processed cassava products by partners are able to compete with similar food products. In addition, there is still a need to develop products made from local food such as cassava as an effort to support government programs related to food diversification, through the use of local foodstuffs so as to create food security.

CONCLUSIONS AND SUGGESTIONS

A. Conclusion

Based on the results obtained from the program of this service, it can be concluded that this service activity can increase the knowledge and skills of household cassava chip entrepreneurs to overcome the problems faced by household cassava chip entrepreneurs, namely by producing and packaging various flavors of cassava chips on a scale. using modern machines. Processing of various flavors of cassava chips by applying science and technology makes the

resulting product safe, has high taste and has a long shelf life so that the resulting product can be marketed with a wide marketing area and can compete with existing similar products on the market, So that the implementation of this service activity can increase the income of household cassava chip entrepreneurs and improve the economy of the household cassava chips entrepreneurs.

B. Suggestions

After this activity is carried out well, it is necessary to suggest that the LPPM be able to foster partners so that partner businesses can increase. In order to broaden product marketing, it is necessary to register the products produced with the local health office so that they can obtain a Home Industry Food Production Certificate / P-IRT.

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