

EFFORTS TO INCREASE CATFISH PRODUCTIVITY IN BOJONG VILLAGE, KEMANG - BOGOR

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Abstract

The Community Service Program on efforts to increase catfish productivity was carried out in Bojong Village, Kemang - Bogor. This activity lasted for 4 months. The purpose of this activity is to help catfish farmers to increase the selling value of catfish produced by processing catfish into catfish floss (*Abon*), packaging the resulting products and marketing them using certain brands. Processing catfish into *Abon* is expected to improve the economy of catfish farmers because so far, catfish is only sold raw to direct buyers at low prices. In addition, in this activity partners will be assisted in terms of marketing with the hope of improving the welfare of catfish farmers. The activities carried out were counseling on the application of science and technology in the marketing of products produced and processing catfish into *Abon* catfish, training in *Abon* production and packaging, marketing technical counseling, and assistance in production and marketing activities. After this activity is carried out, the welfare of catfish farmers in Bojong Village has increased because the catfish produced can be sold in *Abon* form with certain packages and brands which can increase the shelf life and selling price of the catfish produced so that it can be concluded that this service activity can help Catfish farmers overcome the problems they face so far, namely limited market share, high maintenance costs, and low selling value of catfish.

Keywords: catfish; community service program; catfish *Abon*.

I. INTRODUCTION

Fishery resources in Indonesia are very rich and potential, both in land, coastal and marine areas. This potential is supported by diverse and favorable natural conditions for aquaculture [1], thus providing opportunities for the development of various cultivated commodities [2]. Based on the level of technology applied, cultivation can be carried out intensively, semi-intensively and traditionally [1].

Catfish is a source of animal protein that has economic value and its needs continue to increase every year [3]. The production of catfish from national cultivation in 2011 amounted to 337,557 tons and in 2015 it increased to 722,623 tons. Easy catfish farming and an increasing number of consumers have resulted in a large number of catfish. So far, catfish consumption has only been limited to processing such as frying or grilling [4]. In fact, there are processed products made from catfish, one of which is *Abon*. Processing catfish into floss is one way to increase its economic value and also to prevent spoilage of fish when it is over production [5]. Catfish is a food source of protein because the protein content ranges from 22.0 - 46.6%. Therefore, catfish-based preparations can be

an alternative source of protein [6]. One alternative to processed catfish products that has many enthusiasts and is easy to market is *Abon*.

According to [7] *Abon* fish is a fish-based processed product that has gone through several processes such as grinding, seasoning and frying. *Abon* is one of the long-lasting foods that have high protein and low cholesterol levels, which is well known to the public. *Abon* is usually processed from beef, however, fish meat can also be used as a raw material for making *Abon* meat. Catfish is one type of fish that can be used to make *Abon* fish [8]. The raw materials that are easily available and the equipment required are simple, making the catfish *Abon* business relatively not requiring a large investment cost. Therefore, the catfish floss business opportunity is very open to those who are interested in establishing a business both for a side business and a home business [9]. Catfish that can be used as raw material for making *Abon* fish is catfish that is fresh, dumbo in size, has a bright color, the meat feels chewy, and doesn't smell bad. Physical characteristics of catfish have thick flesh, have coarse fiber and do not contain many spines [8].

Based on administrative data, Bojong Village is part of the Kemang District, Bogor Regency. In 2014, catfish production in Bogor Regency reached 79,640.83 tons, an increase of 33% from 2013. Catfish farmers in Bogor Regency are scattered in several villages, one of which is Bojong Village, Kemang District. In general, catfish farmers in Bojong Village only sell their crops through middlemen or sell fresh catfish to the market at a relatively low selling price of Rp. 15,000, - per kg. The harvest period for catfish in this village takes place continuously every day, so that it can guarantee its availability from time to time, besides that there are quite a lot of catfish farmers in this area, this causes catfish produced to be quite abundant but the utilization of catfish production has not yet maximally developed by catfish farmers in Bojong Village so that the economic level of the residents has not increased. The existence of community service activities from Pakuan University can provide counseling on alternative food products, namely processing fresh catfish into catfish floss which can increase the selling value of catfish and improve the economy of catfish farmers in Bojong Village. In addition, if this business can develop, it can be used as a superior product in Bojong Village, Kemang District which will later become the center for catfish processing business in Bogor Regency. The problem faced by catfish farmers is that the marketing of cultivation products is still limited to being sold in traditional markets or sold directly to collectors, so the selling price of catfish is very cheap.

The purpose of this Community Service is to provide education and training on the application of science and technology in the development of local commodity catfish into catfish floss. Its relevance increased knowledge, skills and economy in Bojong Village, Kemang District through processing catfish into other products that are more durable and have higher economic value and can reach a wider range of market players. The targets and outputs expected from this activity are as follows Participants can apply science and technology in developing local commodities such as catfish to become alternative food products that have high economic value, Participants can know the methods of making catfish chips and floss that are healthy, nutritious high, hygienic, safe for consumption, high taste and acceptable to the market, Participants can use the equipment used in the process of making catfish floss, Participants can produce catfish floss independently and sustainably, Participants can market catfish floss on an ongoing basis with the target broader marketing, The results of the income analysis showed that there was a 65% increase in the income of the participants. The results of the Community Service program can be published. The results obtained are expected to increase the income of the cadre women in Bojong Village, Kemang District, Bogor Regency, so that this business

can support the economy of catfish farming families and can improve the welfare and economic prosperity of the family.

II. METHODS

In Kemang Subdistrict, especially Bojong Village, currently a lot of catfish farming has been carried out. The catfish produced is quite abundant and produced sustainably, but unfortunately this is not enough to sustain the economy of catfish farmers. This is due to the limited knowledge and technology possessed by farmers so that the catfish produced so far has only been sold in raw form to traditional markets or pekel catfish stall traders at relatively cheap prices without converting them into other products that have higher economic value. The relatively high price of feed is also a problem for catfish farmers. Feed costs are around 60-70% of the total fishery production costs. In addition, catfish is carnivorous, so it requires feed with high protein content. Meat protein is very good for cell regeneration [10]. Another problem faced by catfish farmers is that the marketing of cultivation products is still limited to being sold in traditional markets or sold directly to collectors, so the selling price of catfish is very cheap. Therefore, the catfish harvest needs to be processed into other products that are more durable and have higher economic value and can reach a wider market share.

Based on the above problems, the proposing team tried to create a creative and innovative idea to provide added value to local catfish commodities in Bojong Village, Kemang District, namely by processing catfish into alternative food products.

The approach method offered to catfish farmers is to provide education and training on the application of science and technology to local commodity development. One of them is modifying the shape of the catfish they produce into alternative food products that are preferred by consumers, are durable and have a higher economic value. This modification is to process catfish into catfish floss. This alternative product has the advantage of its nutritional value, and is free from preservatives because it is processed with the application of high technology. A good product if it is not marketed with good techniques will be difficult to accept in the market. Therefore, in this activity partners are given training on good marketing techniques, so that the resulting product can be accepted in the market and able to compete with products that are already on the market. The steps in implementing the solutions offered are as follows:

1. Administration and field observation
2. Making brochures, calendars and banners as training media
3. Provide counseling on the application of science and technology in commodity development local to catfish farmers

4. Provide counseling on how to process catfish into catfish floss along with the packaging and marketing techniques
5. Adaptation of the equipment used in the manufacture of catfish floss
6. Training (practice) in making catfish floss and its packaging
7. Production and marketing of catfish floss
8. Field observations on production and marketing activities
9. Income analysis.

III. RESULTS AND DISCUSSION

Community Service Activities have been carried out in Bojong Village, Kemang District, Bogor Regency, Form of Training Activities for Making Abon Catfish, with participants from cadres of Bojong Village, Kemang District, Bogor. The implementation of this Community Service activity can increase the knowledge of the residents of Bojong Village, Kemang District in terms of utilization, processing, packaging and marketing of catfish into processed products of catfish floss.



Figure 1. Training on catfish *Abon* processing

The implementation of Community Service has been published in the print media of the Radar Bogor newspaper, which was published on January 3, 2019 with the hope that the wider community can know and get information that the residents of Bojong Village have received training on how to process catfish floss and become a promotional media for marketing community products .

Processing catfish into Abon fish can increase the selling price of catfish, where in raw form the price per kg of catfish ranges from Rp. 15,000-19,000, - Every day partners are able to produce 10-15 kg of catfish so that the average income of catfish farmers every day is Rp. 85,000, -. 1 kg of catfish can produce 0.5 kg of Abon catfish where the price of 1 kg of 1 kg

of Abon catfish is Rp. 100,000, -. The production cost for processing 1 kg of catfish into Abon is Rp. 30,000, -. So that if the catfish produced in 1 day is 10 kg, the net profit that can be obtained by catfish farmers is Rp. 200,000, - or 2 times more than if catfish is sold raw.



Figure 2. catfish *Abon* products

The processed catfish into catfish *Abon* is packaged in attractive packaging and sold under certain brands and the publication of the Radar Bogor newspaper is a solution to the problems faced by catfish farmers so far



Figure 3. instructors and trainees

so that the products produced can be marketed with a higher selling value and the income of catfish farmers can increase and improve the economy of the catfish farmer families.

IV. CONCLUSION

Based on the results obtained from this Community Service, a temporary conclusion can be drawn that this Community Service activity can increase the knowledge and skills of cadre women on how to overcome the problems faced, namely by processing catfish into an alternative food product in the form of catfish floss. which has high selling value, long shelf life and better marketing techniques. Documentation during the training which is published through the printed media of the Radar Bogor newspaper can also be used as promotional media and

initial information that the residents of Bojong Village will produce catfish floss. Catfish processing which is then packaged in attractive packaging and sold under certain brands is a solution to the problems faced by catfish farmers, related to the low selling price of catfish due to the game middlemen's price and high maintenance costs if catfish is not immediately behavior. The products produced can also be marketed with a higher selling value so that the income of catfish farmers can increase and improve the economy of the catfish farmer families.

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