Increasing People’s Income through Processed Cocofiber and Cocopeat (Case in Hamlet of South Balong, Kulonprogo)

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Abstract. One of the many plantation crops in the southern Balong hamlet is coconut. However, many of the existing coconut plants are not harvested because many people in this village do not have climbing skills. Thus, the coconuts are left until they fall on their own. This resulted in a large amount of coconut fruit waste in the South Balong hamlet and disturbed the view and cleanliness of the hamlet. Processing of coconut fruit, especially the skin (fiber), into cocofiber (coconut fiber) allows the people of the South Balong hamlet to gain opportunities to increase their income. The solution offered through this service is to introduce and train the community with processed cocofiber products. This community service method will be carried out by providing counseling on the benefits of coconut plants from a health and economic standpoint, processing training of fiber coconut into cocofiber, assisting with processed cocofiber products, and monitoring and evaluating this community service activity. This service aims to increase knowledge and skills in society about processed products known of coconut. Processed cocofiber products are produced to add to the product’s selling value, which has an impact on the society of South Balong hamlet to have a new source of income from the sales of processed cocofiber products.

Keywords: cocofiber, cocopeat, income

1. Introduction

Economic growth is a real picture of a region and even a country in running its economy. Of course, this economic growth is not without purpose. With the development of the existing economy, it is hoped that it will also reduce one of the frightening scourges in society, namely poverty [1]. In accordance with the thoughts and strategies above, the direction of national economic policy needs to be aimed at sectors that are loaded with people’s interests, related to people’s potential and capacity, and at the same time in accordance with available local resources. In this context, the small industrial sector is an alternative that can be chosen and is one of the steps to build a people’s economy [2].

South Balong Hamlet, Banjarsari Ward is one of the areas that has potential local sources that can be utilized, namely coconut plants. Coconut plants are one of the plantation commodities that have long been known and play a very important role in people’s lives. When viewed from an economic aspect, this plant has high economic value. Each part of this commodity can produce various products that have a sale value, including coconut fiber [3]. The amount of coconut fiber produced in Indonesia for a year can reach 18 million tons, but only 3% is used [4]. This potential is still untapped. In fact, it just becomes...
waste that disturbs the environment and health. Many coconut trees grow in the South Balong hamlet, and the coconut products have not been utilized optimally due to limitations. There are no people who have the skills to climb coconut trees. This resulted in the coconuts being left until they were old, and then they fell off by themselves. After the coconuts are taken, the skin, commonly known as coconut fiber, is left and becomes garbage. Farmers consider coconut fiber as a disturbing waste because it is a place for caterpillars to live or used as a nest for snakes. Generally, farmers use waste-known coconuts as fuel or partly sold to the coconut fiber waste processing industry [5]. In small or household industries, coconut fiber is usually processed into doormats, ropes, or brooms. In fact, coconut coir can function as an industrial material for the manufacture of roof tiles, mattresses, seat back fillers, walls, or ceilings [6]. Coconut fiber is a by-product and is the largest part of the coconut fruit, which is about 35 percent of the weight of the coconut [7]. Coconut fiber is a by-product that is rarely processed by macro and micro-entrepreneurs who process coconuts [8]. Coconut fiber is one of the organic wastes that can be decomposed easily through natural processes. Coconut fiber is a natural fiber that can be used as a variety of useful and valuable goods. One of them can be processed into a planting medium in the form of cocopeat and cocofiber [9]. Cocopeat can be used in the agricultural sector as compost or planting medium for horticultural crops such as vegetables, flowers, or fruit in pots or as a hydroponic growing medium as a substitute for soil media [10].

The target to be partnered in this service is the South Balong hamlet community. This hamlet consists of 4 RTs with around 50 families and a population of around 250 people. The problem faced by the community is a social problem, where in the hamlet, there is a buildup of coconut fiber waste. The existence of coconut fiber waste can become a social problem if it is not processed and not disposed of in the right place, thus disturbing the comfort of the community and having a negative impact on the environment. The amount of unused coconut fiber in the South Balong hamlet has started to disturb the community. Even though it is organic waste, if it is allowed to continue, it will also interfere with daily life in the community. The negative impact that arises from the accumulation of coconut fiber waste in the South Balong hamlet is that it causes the environment to become dirty and unsightly and can become a nest for snakes, rats, and the Aedes aegypti mosquito that causes dengue fever.

Most of the people from the hamlet have a livelihood as a farmer. Sources of income are limited because they only depend on income as farmers. For this reason, the dukuh community needs to look for additional income opportunities. One of which is processing waste-known coconut into a processed product of cocofiber and cocopeat so that it can increase the selling value of coconut fiber. Based on the results of observations and surveys that were carried out with KKN students and the father of the South Balong Hamlet, Mr. Darno, several problems were encountered by the people of the South Balong Hamlet:

1. Many found organic waste in the form of coconut fiber in the hamlets, whose existence began to disturb the community environment.
2. There is no other source of income owned by the dukuh community besides farming, which is routine, continuous, and sustainable to improve the welfare of the dukuh community in South Balong.
3. The community has not mastered the skills in processing organic waste-known coconut in order to have added value and sell higher.
4. The market opportunities for processed products are not yet known as coconuts, such as cocofiber and coco peat.

To overcome partner problems, an increase in knowledge and skills is needed regarding organic waste treatment coconut into cocofiber and or coco peat using known
coconuts in the South Balong Hamlet and also an increase in the knowledge about market opportunities for cocofiber and cocopeat products.

The output targets in this community service activity can be seen in Table 1 and Table 2 below.

<table>
<thead>
<tr>
<th>No</th>
<th>Alternative Solutions</th>
<th>Outer Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Increase knowledge about the benefits of coconut plants for the environment and the economy</td>
<td>The counseling service was attended once by the people of the South Balong Hamlet. The target participants are 30 people.</td>
</tr>
<tr>
<td>2</td>
<td>Increase knowledge and skills in the practice of processing coconut fiber into cocofiber and or cocopeat to increase income</td>
<td>*Extension services 1 time attended by the people of the southern Balong dukuh. The target participants are 30 people</td>
</tr>
<tr>
<td>3</td>
<td>Increase knowledge about market opportunities for cocofiber and cocopeat products</td>
<td>*The counseling service will be attended once by the people of the South Balong Hamlet. The target is 30 participants. Training and mentoring services for processed herbal plant products</td>
</tr>
</tbody>
</table>

2. **Methodology**

To achieve the targeted output according to the problems faced, several methods will be used, which include counseling, the introduction of technology, training, and practice of implementing introduced technology, mentoring, and monitoring.

1. Counseling aims to increase knowledge about the benefits of coconut plant products from an environmental and economic perspective. The method used is collecting the community, which begins with a simple pretest. Furthermore, counseling was carried out about the benefits of coconut plants, especially for the environment, as well as the benefits of coconut plants. After counseling is carried out, it is followed by a post-test so that it is expected that knowledge about counseling material can be absorbed at least 60%.

2. Skills training activities are on processing processed coconut coir products into cocofiber and cocopeat, which have a higher selling value, as well as counseling regarding market opportunities for cocofiber and cocopeat products so that market access can be wide open so that products can be sold easily at higher prices.

3. Assistance and monitoring during and after the implementation of community service so that the results of community service can be seen and the benefits can be felt on an ongoing basis for the continuation of community life. The first assistance was during the manufacture of processed coconut coir products until the product could be made properly by the people of the South Balong hamlet.

3. **Results and Discussion**

The service activity began with the socialization of processed herbal teas, which was held on Thursday, 2 February 2023, attended by PKK female members. This socialization activity was accompanied by Ms. Tri Winarti, the Head of Kaliapak Hamlet, and was attended by approximately 26 participants. During the socialization activities, the matters discussed included the benefits of herbal plants and the economic value contained in these
herbal plants. This outreach activity uses the FGD (Forum Group Discussion) method. During the outreach activities, most of the PKK members knew about various types of herbal plants but did not have knowledge about the benefits of herbal plants and what preparations could be made from these plants.

Herbal tea processing training was carried out on 9 February 2023, located at Mrs. Tri Winarti’s house, which PKK members attended. The activity begins with a pretest first. The implementation of this activity invited resource persons who are experts in the field of herbal plants, Dr. Kintoko. He is a teaching staff at the UAD Faculty of Pharmacy. During the event, PKK women were introduced to herbal plants such as cat’s whisker plant, cardamom, lemon grass, Chinese betel, etc. Of various types of plants, the economic value of these herbs is explained, namely that these herbal plants can be used as processed herbal teas. In addition, PKK women were also given an explanation of how to make herbal tea properly and correctly. Furthermore, PKK women were also taught the technique of drying herbal plants so that they would not remove the properties contained in the herbal plants, which would be made into herbal teas. The explanation of the drying technique for herbal plants attracted the attention and enthusiasm of PKK members. After carrying out a series of outreach events and training on herbal tea processing, a post-test was then carried out to determine how far PKK members understood the benefits and statements of myths or facts about herbal plants. A demonstration of brewing herbal tea was also shown during the activity. PKK members had the opportunity to try the herbal tea and received herbal tea bags, which made PKK members enthusiastic.

4. Conclusions

Problems related to skin waste or coconut fiber can be found a solution by processing it into coco fiber and cocopeat. Communities can increase their income from processing coconut fiber and are expected to increase their income.

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References


