

## Community Service Activity to Housewife Group in Kampung Ladang Bambu, Medan Tuntungan on Utilization of Purple Sweet Potato

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**Abstract.** This activity was carried out with a background of empowerment and wanted to improve the productivity of the people of Ladang Bambu Village, Medan Tuntungan, especially housewives with poor family backgrounds. This activity is carried out by providing training to be able to make confectionary products with new innovations that will motivate housewives to become entrepreneurs at home so that later home industries in the area related to the use of purple sweet potato will develop. The purpose of this community service activities was to provide the technical guidance on processing the purple sweet potato into food products, namely noodles and sponge to open new business opportunities for group of housewives in the area of community service partners. The method used was problem analysis, technical guidance, and training in the production of Chicken Noodles and Cake (sponge) using purple sweet potato. The results of this activity have been produced noodles and cake (sponge) products from purple sweet potato by housewife. The expected outcome of this community service activity is the formation of a new business by a group of housewives to be able to increase the community income in Ladang Bambu Village, Medan Tuntungan.

**Keywords:** Noodle, Purple sweet potato, Sponge

**Abstrak.** Kegiatan ini dilakukan dengan latar belakang pemberdayaan dan ingin membantu perbaikan produktivitas masyarakat di Kampung Ladang Bambu, Medan Tuntungan, khususnya ibu rumah tangga dengan latar belakang keluarga berpenghasilan rendah. Kegiatan ini dilakukan dengan cara memberi Pelatihan untuk dapat membuat produk panganan dengan inovasi baru akan memotivasi para ibu rumah tangga menuju wirausaha di rumah sehingga industri rumahan akan

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*berkembang di daerah tersebut terhadap pemanfaatan ubi ungu Tujuan dari kegiatan pengabdian kepada masyarakat ini yaitu untuk memberikan bimbingan teknis pengolahan ubi ungu menjadi produk pangan yaitu mie dan bolu ubi ungu untuk membuka peluang usaha baru bagi kelompok ibu rumah tangga di daerah mitra pengabdian. Metode yang digunakan yaitu analisis masalah, bimbingan teknis dan pelatihan produksi Mie Ayam dan Bolu dengan menggunakan ubi ungu. Kegiatan ini menghasilkan produk ubi dan mie dari ubi ungu. Hasil yang diharapkan dari kegiatan pengabdian kepada masyarakat ini yaitu terbentuknya usaha baru oleh kelompok ibu rumah tangga untuk dapat meningkatkan pendapatan masyarakat di Kampung Ladang Bambu, Medan Tuntungan.*

**Kata Kunci:** *Mie, Ubi ungu, Bolu*

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## **1. Introduction**

Purple sweet potato is one of the agricultural products that has several advantages such as attractive color, content of antioxidant compounds, fiber content and high carbohydrate content, and has a low glycemic index value. Like other agricultural products, the availability of purple sweet potatoes is seasonal and easily damaged. This can be caused by the activity of microorganisms that can reduce the quality of purple yam, one of which can be influenced by water content.

Purple sweet potato has potential as a functional food that has a positive impact on health. Functional food is food that provides health benefits, in addition to its function as a basic nutrient [1]. In sweet potatoes, functional food is obtained from beta-carotene and anthocyanin, phenol compounds, food fiber, and its glycemic index (Glycemic Index) value. In purple sweet potato, the content of anthocyanin and phenol compounds is quite high and can function as an antioxidant [2].

Processing of purple sweet potato into food products is a big opportunity to be made as a business. Proper and attractive processing of sweet potatoes could increase the economic value of the product and does not require expensive equipment or high expertise, so that it can be conducted by any group of people from either upper, middle or lower classes, such as the housewife group in Kampung Ladang Bambu, Medan Tuntung.

Community capabilities which can be developed of course a lot such as the ability to try, ability to seek information, ability for activity, ability in agriculture and many more as needed or problems that arise by the community. What is developed from the community, that is potential or abilities, and attitude to life. Community capabilities

include, among others the ability to farm, raise livestock, do entrepreneurship, or home making skills industry; and many more abilities and community skills that can be developed [3, 4, 5]

The housewife group in Ladang Bambu Village, Medan Tuntungan District is a group consisting of housewives from the lower to middle class of society. In general, the husbands of the housewives in the group work as pedicab drivers and public transportation drivers. Based on this situation analysis, then some of the findings that have been identified as partner problems include 1) the low level of the workforce that does not complete SD / equivalent 2) most of the women / girls there only as a housewife, 3) the low level of small home industries 4) low willingness of housewives to start entrepreneurship. On the other hand, the location of the bamboo field is an agricultural area and a center for traditional markets that the raw material for purple sweet potato is straightforward to obtain. Thus, technical guidance on processing purple sweet potato into noodles and sponge cake was conducted to the group of housewives, with the aim of being able to open business opportunities so as to increase the income of the group.

## **2. Method**

### **2.1 Implementation**

#### **2.1.1 Time and Location**

This community service activity was carried out for three months starting from the survey, determining the location, visiting for permission to do the activity and carrying out technical guidance activities. The realization of the implementation was carried out on August-November, 2019 with the implementing team, namely the teaching staff and students of the Agricultural Engineering Study Program, Faculty of Agriculture, Universitas Sumatera Utara. The activity of technical guidance in processing purple sweet potatoes in the context of community service was carried out in Ladang Bambu Village, Medan Tuntungan, North Sumatra.

#### **2.1.2 Realization of Problem Solving**

The activity was carried out in two stages, namely the preparation and guidance stages. In order to solve the economical problem of the community service partner, at the preparation stage, the community service team conducted an analysis of the problems at the partner location. Then, the team and partners agreed to take steps to be carried out at the partner location.

The next stage was the implementation and technical guidance of processing purple sweet potatoes into food products, namely sweet potato noodles and sponge. Moreover, the activity was carried out in the following steps:

1. Opening by Community Service Team

The opening activity was carried out by the Prodikmas team by providing material on processing agricultural products, one of which was purple sweet potato, becoming a food product, as well as describing business opportunities for purple sweet potato noodles and sponge.

2. Technical guidance for processing purple sweet potato as a color noodle

In addition to purple sweet potatoes, processing of other agricultural products such as celery, carrots and beets was also carried out.

3. Technical guidance for processing purple sweet potato into sponge

In making sponge, besides as a coloring agent, purple sweet potato is also used as the main composition besides wheat flour.

4. Discussion

Opportunities for discussion in the form of questions and answers or responses were given as long as the technical guidance of the processing of sweet potatoes took place.



**Figure 1.** Photo of both team and partner of community service after socialization of technical guidance and bussiness oportunity of agricultural product processing

### 3. Result and Discussion

Community Service Program or Science and Technology for the Community that compiled this intended to realize empowerment towards housewives in Ladang Bambu Village, Medan Tuntung, to have an entrepreneurial mindset so as to be able to generate profits and benefits for his family and minimize his height the pre-prosperous community there, through methods training in making a product that has high economic value by innovating against making noodles and bole from purple sweet potato. This program is concerned with housewives with the background of the Pra Sejahtera (Low Income) family with give training until you can make something confectionery products with new innovations will motivate housewives to entrepreneurship in his home so that the home industry will mushroom in Ladang Bambu Village, Medan Tuntung. Utilization of purple sweet potato who have been given training to housewives in various color variations of noodles made from purple sweet potatoes, carrots and celery. In addition, direct training has been carried out to make sponge cakes from purple sweet potato with different variations such as steamed sponge and oven dry sponge.

#### 3.1 Evaluation

The activity was carried out by lecturing, technical guidance and discussion by the teaching staff of the Faculty of Agriculture USU on the terrace of the residence of the leader of the partner group of housewives in Ladang Bambu Village, Medan Tuntungan. The activity was carried out at that point of location because it was the most strategic and sufficient to accommodate the activities.



**Figure 2.** Technical guidance in processing purple sweet potato, carrot, celery and beet into colorful noodles

The material presented was about processing agricultural products, one of which was purple sweet potato, into food products, as well as exposure to business opportunities for purple sweet potato noodles and sponge. The material presented was very useful for the participants because the problems presented could be seen directly, and opened ideas to

partner groups to open new business opportunities to improve partner welfare, resulting in two-way discussions.

### 3.2. Supporting factors

Supporting factors in the implementation of community service that really helped the realization of this activity was a positive response from the community group of housewives in partner locations. Positive responses were shown with a good reception when the community service team arrived at the location and when the activity was carried out.



## 4. Conclusion

The technical guidance of processing purple sweet potatoes into colorful noodles and purple sponge has been carried out well and received positive responses from the community service partners. More than 95 % of housewives of Ladang Bambu Village were able to process a variety of products such as noodles and cakes from purple sweet potatoes.

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