



ASSISTANCE OF VARIOUS FOOD PROCESSING ACTIVITIES BASED ON LOCAL POTENTIAL IN PKK GROUP RUKURAMBA VILLAGE, ENDE-NTT

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Abstract: This activity aims to provide an understanding to the Rukuramba village PKK group regarding food processing based on local potential. The activity was carried out for one day using the method of socialization and workshop. The results of the activities showed that there was an increase in participants' understanding of food processing based on local potential. As for food products produced in the form of cassava noodles, merungge noodles, fish balls, and fish crackers

Keywords: *food processing, local potential, Rukuramba Village, Ende-NTT*

Abstrak: Kegiatan ini bertujuan untuk memberikan pemahaman kepada kelompok PKK desa Rukuramba tentang pengolahan makanan berdasarkan potensi lokal. Kegiatan tersebut dilakukan selama satu hari dengan menggunakan metode sosialisasi dan workshop. Hasil kegiatan menunjukkan bahwa ada peningkatan pemahaman peserta tentang pengolahan makanan berdasarkan potensi lokal. Adapun produk makanan yang dihasilkan berupa mie singkong, mie merungge, bakso ikan, dan kerupuk ikan

Kata Kunci: *Desa Rukuramba, Ende-NTT, pengolahan makanan, potensi lokal*

Introduction

Rukuramba is one of the villages in Ende sub-district, Ende district, Nusa Tenggara Timur province, Indonesia. This village is one of 18 villages and sub-districts in the Ende sub-district. The average area of Rukuramba village is 62 hectares and is divided into three hamlets. The estimated population of 960 inhabitants. Most of the population work as cocoa farmers because in this area cocoa plants thrive due to the flow of the Nangaba river which never dries throughout the year.

The village of Rukuramba is currently headed by Mr. Markus Nggga who has been in office since 2017. In carrying out the village work program, the village head is assisted by village officials, one of whom is the PKK group. The PKK group in this village consists of 8 women chosen from 3 hamlets in the village. PKK was formed with one of the aims of which is to create food security in the family. This is done through a program utilizing home yards to meet family needs. fertile natural conditions utilized by the residents of Rukuramba to plant various crops for daily consumption such as sweet potatoes and *merungge*. It is hoped that with the potential of existing local ingredients, families can increase the diversity of nutritious food menu. But unfortunately in realizing this program can not be done optimally due to limited human resources and knowledge of members of the PKK Rukuramba village about food processing. This situation causes the food consumed daily tends to be monotonous with the same menu.

In general, members of PKK Rukuramba village are housewives with an educational background that is high school equivalent. In addition to taking care of the household, these housewives also do side jobs such as making woven cloth and helping drying cocoa that has been harvested in the home yard. This busy life caused the lack of creativity and skills of mothers regarding the processing of various nutritious foods based on local ingredients. This condition is also supported by the lack of counseling activities regarding processing nutritious food. In recent years, the PKK group of village has only been given counseling on processing nutritious food from nutrition counselors at the local Public health center.

The mothers are aware of the benefits of nutritious food for children and parents. However, due to limited knowledge and understanding, it makes the lack of menu variations in the food consumed so that it seems to consume the same menu every day. This fact affects the consumption patterns of children in the village. A menu that tends to be monotonous makes some children have less appetite, especially when sick.

The age of children, especially toddlers is a very good stage to introduce a good diet. Children need to explore various types of food, both in taste and texture. For this reason, housewives in the village need

to be educated to be skilled in processing various nutritious menus that can arouse children's appetite. Based on the description of the problems faced by PKK group of Rukuramba village and the urgency regarding the diversification of food processing, it is necessary to apply training activities on processing various nutritious foods based on the village's local potential.

This activity aims to provide an introduction to menus whose basic ingredients are easily found in the village and are highly nutritious and favored by children. basic ingredients in question are cassava, *merungge* leaves and fish. These three ingredients are very easy to obtain in the village but everyday they are only processed with a monotonous menu. Cassava is a food that is rich in carbohydrates. Cassava tubers contain lots of glucose. In cassava there are nutritional content in the form of calories, protein, fat, carbohydrates, calcium, phosphorus, iron, vitamins and water (Septiriyani, 2017). Whereas *merungge* (*Moringa oleifera*) is a type of tropical plant that has micro nutrient content as much as 7 times vitamin C of orange, 4 times vitamin A of carrots, 4 cups of calcium milk, 3 times potassium of bananas and protein in 2 yogurt (Aminah, Ramdhan and Yanis, 2015). The results of Manggara and Shofi's research (2018) also prove that *merungge* contains a number of minerals that the body needs. Like cassava and *merungge*, marine fish also have high nutrition. Marine fish are rich in protein, minerals and fats and are the biggest producers of omega 3 fatty acids (Susanto and Fahmi, 2012).

Cassava, *merungge* and sea fish can be processed into various menus, one of which is in the form of noodles, meatballs and crackers. Through this mentoring activity, the PKK group of Rukuramba village will be given an understanding in processing the local ingredients into noodles, meatballs and crackers. It is hoped that after this activity, PKK agents will have increased understanding and skills in food processing so that it can be disseminated to mothers in the village of Rukuramba.

Materials and Method

Method in this activity is carried out with the following stages:

1. Manage licensing and problem analysis in the PKK group of Rukuramba village
Permission is made by the community service activities team a month before the activity takes place. The the community service activities team was welcomed by the village head and immediately addressed the problems and constraints faced by the PKK group in the village. The team was also introduced to the head of the PKK group so that they were more free to explore the problems within the PKK group. After obtaining agreement on the form of activities and their implementation, the the community service activities team made preparations for the activities
2. Preparation of activities
The preparations for the activities were carried out collaboratively between the team of the community service activities and the village officials. Such preparations include correspondence, permission to use space, procurement of equipment and materials for training, billboards etc.
3. Assistance activities
Assistance activities were carried out in two stages namely the socialization stage and the workshop stage. Socialization stage aims to provide an overview of healthy and nutritious food and how to process local ingredients into nutritious food. While the workshop stage was carried out by practicing how to process cassava, *merungge* and fish into various menus such as noodles, meatballs and cracker snacks.
4. Evaluation
This activity aims to increase participants' understanding of the processing of various foods based on local potential. As a form of evaluation of this activity, participants will be given a pretest and posttest before and after the activity takes place.

Result and Discussion

This activity was carried out on Saturday, April 31, 2019. The number of participants was 42 people, consisting of lecturers, students, village officials and PKK group of Rukuramba village. The opening ceremony started exactly at 9.40 minutes and was officially opened by the village head. After that the

participants were given a pretest and continued with lectures and practicum about processing various foods based on local potential.

Socialization activity aims to explain about healthy food and how to process local food ingredients into various nutritious menus. Presentation of material about healthy food was delivered by Mrs. Nining Sar'iyah who is a lecturer supporting a group of Natural Sciences courses at the PGSD Study Program of Universitas Flores. The points explained about healthy food are about the balance of the food content consumed and its effect on the body, especially in the growth and development of children. While other material about the potential of local foodstuffs into various nutritious menus was presented by Mrs. Manggu Ngguna Raji who is one of the lecturers supporting local content courses at PGSD Study Program of Universitas Flores. The socialization activity took an hour which ended with question and answer session.



Figure 1. Opening and socialization activities

The core activity of this community service activities is a workshop on how to process local food ingredients into several food menus. Workshop began with an explanation of the tools and materials needed and how to work. Local materials to be processed include cassava, fish and merungge. Cassava can be used as a substitute for carbohydrates and merungge is one source of vitamins the body needs. In the second workshop the ingredients will be processed into noodles. While sea fish which is a source of protein will be processed into fish balls and fish crackers.

Workshop activities were divided into three teams. The first team was in charge of making cassava noodles and *merungge* noodles, the second team made fish balls and the third team made fish crackers. Ingredients needed in making noodles are *merungge* leaf juice, cassava juice, starch, and water. One cup of *merungge* leaf juice is obtained through a blender process of 250 grams of *merungge* leaves with 500 ml of water. While cassava juice is made from grated cassava which is then squeezed. The results of the cassava juice is left overnight to form a precipitate. Sludge is in the form of pasta because it still contains water. Local people usually dry in the sun so that it forms into flour. In the local language flour from cassava deposits is called *alu* and is often processed into a local local snack called *Alu ndene*. One kg of cassava can produce 500 grams of *alu*.

Cassava noodle processing is done by mixing the *alu*, water, flour with a ratio of 2: 2: 1. Material is mixed until smooth and then ground with a noodle or mole grinder and boiled until cooked. *Merungge* noodle processing is done in the same way that is mixing *alu*, *merungge* juice, flour with a ratio of 2: 2: 1.



Figure 2. Process of making cassava noodles and *merungge* noodles

To process fish into meatballs, it takes basic ingredients of fish meat and starch with ratio of 2: 1. Other seasonings needed for flavorings are pepper, garlic and salt. The dough is formed round and then boiled in boiling water until cooked. While crackers are made from sea fish juice and rice with a ratio of 2: 1. Sea fish juice is made by mixing fish and water into a blender machine. Mixture of fish juice, rice and seasoning is then cooked over low heat until the mixture is lumpy. After chilling, the dough is then printed and dried.



Figure 3. Fish meatballs and crackers

Workshop was closed by distributing posttests to participants. The posttest results showed that 93% of the activity participants had understood about the processing of various foods based on local potential. Obtaining this percentage increased from pretest results which only reached 36%. However, there were still some minor obstacles in the series of activities. These obstacles include the lack of cooperation and coordination among PKK members so that the activity starts later than the scheduled time.

Conclusion

This activity aims to increase PKK members' understanding of food processing based on local potential. The results of the activities showed that there had been an increase in understanding of the participants of the activity based on the acquisition of the pretest before the activity that was 36% to 93% after the activity. Activities produce products such as cassava noodles, *merungge* noodles, fish balls and fish crackers. The product is obtained from local materials in the village. This activity has produced a variety of food products based on local potential in the village, i.e. cassava noodles, *merungge* noodles, fish crackers and fish balls. Through these activities, PKK members can disseminate the idea to the village community as an alternative type of food.

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