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# Training on Diversifying Local Food Tortillas of Glutinous Corn

# Sri Mardiyati<sup>1</sup>, Mohammad Natsir<sup>2</sup>, Muh. Arifin Fattah<sup>2</sup>

- <sup>1</sup> Agribusiness Studies Program, Faculty of Agriculture, University of Muhammadiyah Makassar, Makassar, Indonesia
- <sup>2</sup> Master study program in agribusiness, postgraduate program, University of Muhammadiyah Makassar, Makassar, Indonesia

Corresponding Author: sri.mardiyati@unismuh.ac.id

#### **ABSTRACT**

Glutinous corn is one of the local foods that are hereditary consumed by most people in the province of South Sulawesi. The diversification of glutinous corn-based processed foods in the region is still mostly boiled corn, bassang, and marning corn. The diversification of processed local food requires high creativity to meet the changing demand for consumer tastes, and to increase the added value of products. Specific goals and targets of this community service activity include: (1) increase the knowledge of housewives towards diversification of local food processed glutinous corn and entrepreneurial insights, (2) improve skills about processing local glutinous corn into multi-flavored glutinous corn tortillas, and (3) create processed corn tortilla products. Sticky rice is a variety of flavors that are hygienic and have attractive packaging and brands. To achieve the expected external goals and targets, the implementation methods used in this activity are extension and training methods. The results of the implementation of this devotional activity include: (1) The implementation of this community service program can run well (partners respond positively); (2) This program is beneficial especially for housewives to increase household income; (3) This program in general has been able to improve the knowledge and skills of housewives about entrepreneurship insights, diversification of local glutinous corn processed food, processing techniques, packaging, labelling, and good branding; (4) Housewives are mostly interested and interested in developing local food diversification businesses processed glutinous corn in the form of tortillas, both independently and in groups because of the availability of abundant local raw materials and relatively easy to do.

Keywords: glutinous corn, local food, tortillas

# **INTRODUCTION**

Government policy in the implementation of food security by utilizing as much as possible local food is very appropriate because it is available in sufficient quantities throughout the area and easily developed in the local area. Local food is the main ingredient in the manufacture of traditional food based on recipes for generations consumed by ethnicities in the specific region. This means that traditional food has a strategic role in strengthening food security. One of the potential local food commodities processed into a variety of traditional processed foods is corn. Traditional corn-based food types are diverse throughout the archipelago (Suarni, 2013). Corn is the second food source after rice. The use of corn for the food industry is very advanced and varied for medium and upper industries such as the snack industry, corn oil, corn flour, corn pulp, margarine, sugar, and so on. However, on the scale of farmers or small businesses, corn is generally only sold as a snack (Nuranisa et al., 2020).

Diversification of food consumption and nutrition needs to be pursued to increase the number and type of processed food that uses corn raw materials. Corn contains calories high enough that it can be used as a substitute or rice supplement. In addition, it is also a source of protein and dietary fiber that plays an important role in the maintenance of health. Generally corn that is preferred by the community as a staple food is the white corn of the local variety. Glutinous corn is one type of white corn that has a high amylopectin content, so the texture and taste are soft, pulen, and tasty. Various types of glutinous corn processed foods include boiled corn that can be consumed directly from the harvest of young glutinous corn (Syuryawati et al, 2010).

In South Sulawesi, glutinous corn (waxy corn) is widely cultivated, and consumed with various forms of processed food for food diversification in support of food independence. Processed glutinous corn can be made various types of food such as binte, baro'bo, fried corn / marning, boiled corn, grilled corn and as a baking material (Syuryawati & Faesal, 2009). One type of corn that is potential and widely developed is glutinous corn. This type of corn is very suitable in the manufacture of corn emping because it has a high amylopectin content (>80%). Glutinous corn emping is widely produced by small to medium-scale industries as a snack product (Kaslam et al, 2020).

Tortilla chips are one of the triangular snack products with different thickness sizes made from corn. The ingredients used in the manufacture of tortilla chips products are wheat flour, tapioca flour, eggs, salt, pepper, garlic, baking powder (Novia in Parwati et al, 2021). However, wheat flour contains gluten protein that cannot be consumed by intolerant gluten sufferers, someone who has an allergy to gluten, such as people with celiac disease (digestive tract disorders) and people with autism spectrum disorder (ASD) should avoid gluten so as not to cause adverse effects on the body (Risti in Parwati et al, 2021). So, there needs to be efforts to create alternative products that are able to minimize the use of wheat flour (Parwati et al, 2021).

Diversification of local processed foods based on glutinous corn in the South Sulawesi region is still mostly boiled corn, bassang, and marning. Glutinous corn chips or tortillas so far have not been seen enough in the local market. This reality can happen likely because the knowledge and skills of most of society are inadequate. Whereas in this era, the demand of potential consumers, especially teenagers and children for processed foods that are more modern, interesting packaging, and high taste tends to continue to increase. Thus, diversification of processed foods certainly requires high creativity to meet the changing demand for consumer tastes, and at the same time increase the added value of products. In addition, the development of tourism in Indonesia is very supportive in increasing the diversification of local processed food that has its own uniqueness and peculiarities. This is quite reasonable, because almost every tourist who visits an area certainly needs a distinctive hand fruit or souvenir, easy and light to carry. Therefore, diversification of processed foods based on glutinous corn, especially in the form of multi-flavored glutinous corn tortillas, is very prospective to be developed.

Corn is currently an icon of Takalar Regency, especially known for boiled corn that is widely sold along the road to Jeneponto Regency. Rebused corn is processed from young harvested glutinous corn. Young corn has a short shelf life so it must be cooked quickly so as not to be damaged. In the form of boiled corn has a short shelf life. Based on these conditions, it is necessary to diversify processed glutinous corn into savory and crispy textured snacks (Budiandriani & Ramlawati, 2019).

Pakkabba Village, North Galesong District, Takalar Regency is a border area with Makassar City. Most of the livelihoods of the people in Pakkabba Village are farmers, especially vegetable and corn farmers, so this community service activity is focused on diversifying local corn processed food that is more marketable, so as to motivate farmers to entrepreneurship. The reason housewives and young women are used as agents of change is because they are the closest and most often associated with the rural community.

The specific goals and targets of this community service activity include: (1) increase the knowledge of housewives towards the diversification of locally processed glutinous corn food and entrepreneurial insights, (2) improve skills about processing local glutinous corn into multiflavored glutinous corn tortillas, and (3) create glutinous corn tortilla processed products. various flavors that are hygienic and have attractive packaging and brands.

### **IMPLEMENTATION METHOD**

This community service program (PKM) was carried out in Pakkabba Village of North Galesong District of Takalar Regency, by working with housewives as PKK members. Based on the specific goals and targets that have been formulated, the approach that is done to achieve these goals is through extension and training methods. The implementation of counseling and

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training follows several stages, including: 1) preparation, 2) assessment, 3) action plan, 4) implementation, and 5) evaluation.

Counseling is done to enrich the insights of housewives about the importance of scientific knowledge as well as entrepreneurship. Extension materials provided include: 1) the importance of local processed food products that are hygienic and creative and safe to consume, 2) the importance of the quality of proceedings, packaging, and branding on the product tortila corn Glutinous, and 3) Discussion and Question & Answer.

This training is carried out mainly related to the practice of processing or the production process of glutinous corn tortillas that meet hygienic standards with packaging and branding on various flavored glutinous corn tortilla products. The activity is carried out from the preparation stage to the final stage (finished goods or processed products: local glutinous corn tortillas in hygienic packaging, labeled, branded, and attractive).

#### **RESULTS AND DISCUSSIONS**

# **Knowledge and Skills of Participants**

Efforts to improve the knowledge and skills of housewives to the benefits and nutritional value of glutinous corn and diversification of processed products are carried out through an extension approach. After the implementation of counseling activities about the benefits and nutritional value of glutinous corn, new housewives know and realize that how important and high the nutritional value of glutinous corn. So far the local community only underestimates (inferior) to glutinous corn, so it is only made into processed bassang products that are still traditional.

The knowledge of housewives is further enhanced through counseling on the importance of entrepreneurship, especially MSMEs (small and medium-sized micro enterprises) based on locally available resources. When housewives have realized the importance of the nutritional value of glutinous corn, it becomes easier for housewives to develop glutinous corn processed products that are diverse and preferred by consumers. Understanding the importance of the quality of processing, packaging, branding, and marketing also takes precedence over housewives at the location of the activity.

The skills of housewives are improved through training efforts to make various glutinous corn processed products that are carried out jointly with extensionists and escorts. The first training is done to make glutinous corn tortillas. This processed product was deliberately chosen because among children and adolescents most are liking or becoming a fast food trend that tends to be considered modern. The consumer segment of children and adolescents is very important considering they are still in their infancy in dire need of balanced nutritional intake.

Tortillas are processed food products that are usually used as intersement or supplemental foods. Glutinous corn tortilla manufacturing training is primarily focused on aspects of packaging and labeling or trademarking (packaging and branding). Habyba et al (2021) subsequent packaging improvements are in terms of appearance and must consider materials that are more environmentally friendly or require less resources and energy in their manufacture In general, housewives who actively participate in extension activities, and training on diversification of glutinous corn-based processed foods, especially tortillas, proved to be very enthusiastic and understand carefully. Therefore, the level of knowledge and skills of housewives in general is relatively increased compared to before. Although until now there has been no diversification of glutinous corn processed products that are entirely commercial, but at least housewives have been interested in making glutinous corn processed products to meet the needs of family and relatives.

## **Diversification of Processed Food Products Tortilla Corn Glutinous**

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Corn chips or corn tortillas are one of the processed foods that are much loved by the community, especially children and adolescents. But usually corn tortillas in general have the main raw materials in the form of wheat flour and sweet corn, therefore tortilla products made from glutinous corn become an option to be creative. In addition to cheap, these creations can meet foods rich in nutrients or nutrients. The implementation of this training begins with the distribution of training materials that contain how to make glutinous corn-based food processed, then explained and practiced together with the implementing team and companion. The needs of materials and tools as well as the process of making corn tortillas have been provided through training materials distributed to each participant.



**Figure 1.** Implementation of Community Service Activities: Diversification of Local Food Processed Tortilla Glutinous Corn in Pakkabba Village North Galesong District Takalar Regency

Based on the results of the assessment in general, the course of the implementation of glutinous corn tortilla training runs smoothly and well with a fairly high percentage of application rates. The questions raised by the participants were mainly related to the widespread acceptance of consumer tastes. For smart consumers, of course, if there is information on the benefits and nutrition of a food product, the awareness to buy and consume is relatively higher. Therefore, labeling and trademarking play an important role for the development of future products. While the brand or trade name embedded in this processed product is "Totilla Corn Glutinous Agri-Mu".

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