

## **Processing of Nutmeg Skins into Sweets to Develop the Creative Economy of the Cijeruk Village Community**

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### **Abstract**

One of the uses of nutmeg skin is to process it into sweets. This community service was carried out in Cijeruk Village, Dayeuh Luhur District, Cilacap Regency, Central Java Province. The implementation of this community service activity aims to determine the extent to which the community develops nutmeg so that it can become a source of community economy. The people in Cijeruk Village only use the seeds and mace so that the nutmeg skin itself is not used as an economic source. With the condition of the people who have limited knowledge, we took the initiative to make sweets made from nutmeg skin as the use and material for the community's economy in the future. The implementation of this community service activity began by looking for samples of nutmeg skins that could be made into sweets by asking for help from the heads of farmer groups in Cibengang Hamlet. After getting a sample of nutmeg skin, we immediately started the process of making candied nutmeg skin so that it could be immediately socialized and become a source of community income. The results of this community service show that public knowledge in the field of nutmeg increases with the socialization of making candied nutmeg peel. Therefore, people will increase their economic income by marketing candied nutmeg peel.

**Keywords:** Processing, Nutmeg, Sweets, Creative Economy, Society.

### **INTRODUCTION**

Nutmeg is a spice plant native to Maluku (Purseglove et al., 1995) and has been traded and cultivated for generations in the form of community plantations in most of the Maluku Islands (Bastaman, 2008). Nutmeg has high economic value (Rodianawati et al., 2015) and plays a very important role for the economy of people in various regions, especially those in Eastern Indonesia. Apart from being the largest producer of nutmeg in the world, Indonesia is also the largest supplier of nutmeg in the world with a share reaching 60-75% of world demand (Hasibuan et al., 2010; Rodianawati et al., 2015; Nurdjannah, 2007). Indonesian nutmeg commodities are indicated to contain aflatoxins, which are carcinogenic substances that trigger cancer produced by fungi on nutmeg seeds due to the lack of maximum handling of the post-harvest process which is not in accordance with standards and the impact on the rejection of shipments of nutmeg seeds by the European Union because Indonesian nutmeg contains aflatoxin B1 of around 6.4-120 micrograms per kilogram (kg) and aflatoxins total 10.1-140 micrograms per kg. This content is far above the standard aflatoxin content in nutmeg set by the European Union of 5 µg per kg and a total aflatoxin of 10 micrograms per kg. With the application of international aflatoxin content standards (Global Gap Standard), it creates a dilemma for exporters who focus on small farmers whose post-harvest processing does not seem to meet

international quality standards. Another problem is the rejection of Maluku nutmeg in the European market because it mixes Banda nutmeg with other types of nutmeg which is thought to be Banda nutmeg which has high selling value and good quality on the international market with high yields of essential oils (Fauziah, 2013).

Efforts to develop a nutmeg plantation agribusiness need to be pursued through diversification of plantation products, by not only selling commodities in the form of primary products but also in the form of processed products. Likewise, the nutmeg commodity in Cijeruk Village, Dayeuh Luhur District, Cilacap Regency, Central Java Province, needs to be developed through diversification of its products. This diversification effort is part of postharvest handling activities which must be developed according to needs. Postharvest handling activities aim to maintain the quality of fresh produce, so that it remains excellent for reaching consumers, reduce yield losses (losses) due to shrinkage and damage, extend shelf life, increase economic value. The basis for the development of the plantation product processing industry in rural areas, with the hope that in addition to spurring economic growth, the regions are also directed to increase employment opportunities, income and welfare of farmers and rural communities in general. To encourage the development of plantation product processing industries, it should be available at the farmer level in production center areas, in the form of small industries, processing facilities, processing facilities kiosks, and rural capital institutions to facilitate access for rural communities (Ashari, 2006).

Nutmeg plantation agribusiness has high economic value, because domestic nutmeg commodities can contribute to earning foreign exchange, creating jobs, overcoming unemployment and increasing the welfare of farmers. In addition, the thing that needs attention from the government and farmers is the flesh of the nutmeg fruit, the ratio of the yield of nutmeg seeds to the skin of nutmeg fruit is 1:4, but until now nutmeg skin has received little attention, because it is considered to have less economic value. compared to the seeds and mace (Astuti, 2003), whereas nutmeg skin is the largest component (77.9%), compared to the shell (5.1%), and nutmeg (17%) (Alegantina and Mutiatikum, 2009 ).

The creative economy is one of the new economic concepts that intensifies information and creativity as well as Human Resources (HR) as the most important factors of production. Products produced from the creative economy are products that have characteristics, are unique, and are different from the others. Products resulting from the creative economy can also be a development of products that have existed before. Creativity in the creative economy is something that is very valuable. The creative economy can be used to maintain businesses that are owned by innovating and creating products that are marketed. At least the resulting product has characteristics that consumers can remember when visiting a particular area or city. The development of the creative economy in Cijeruk Village is by producing and marketing nutmeg skins which were not previously used by the community and farmers. It aims to improve the welfare and economy of middle-level society. Improving people's welfare is the essence of national development. The main objective of the series of national development is not only directed at physical development but also

seeks to improve the level of social welfare. Changes desired by all levels of society after improving the level of community welfare include meeting the needs of people's lives, ease of getting services, ease of accessing information, community participation in the development process and poverty alleviation efforts (Zubaedi, 2007: 18).

## **METHOD**

The implementation of this community service activity was carried out in Cijeruk Village Rt 03, Rw 02, Dayeuh Luhur District, Cilacap Regency. This service will be held on 10 August-12 September 2021. The target of this service is the Cijeruk Village community, especially PKK mothers. This community service method is in the form of outreach to PKK mothers about nutmeg skins that have been processed into sweets and packaged beautifully. This service program is an effort to increase the creative economy of the Cijeruk Village community.

The implementation of this community service activity in the processing of nutmeg peels into sweets to develop the creative economy of the Cijeruk Village community consists of several stages as follows:

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- Preparation Stage: at this stage we visited the location of the head of the farmer group as a producer of nutmeg to make observations related to the extent of utilization of nutmeg in Cijeruk Village.
- Implementation Stage: Provision of socialization related to how to make candied nutmeg skin and how to pack it up to making the candied nutmeg logo as a typical souvenir from Cijeruk Village. In addition, in our socialization we discussed the benefits of nutmeg for body and skin health. Besides explaining how to make candied nutmeg peels, we also show a video about the process of making candied nutmeg peels. The video of the manufacturing process can be accessed via the YouTube link and distributed to the public.
- Evaluation Stage: In this Evaluation Phase, we evaluate the community's understanding of the extent of their knowledge regarding the use of nutmeg skin as sweets during the outreach activities.

Program plans and student activities are presented in Table 1. Service Method Table.

**Table 1.** Service Method Table

No.	Method	Activity
1	Field observation of the head of the farmer group in Cibengang Hamlet	Asked about the extent to which the use of nutmeg peels has been carried out by the community and farmers.
2	Preparing to make candied nutmeg skin	Candied nutmeg peels are made in stages at the post
3	Make a candied nutmeg peel logo	The candied nutmeg peel logo is a characteristic of souvenirs from Cijeruk Village
4	Carrying out the packaging of candied nutmeg skin	The packing of nutmeg skins is carried out at the command post
5	Field observation as preparation for outreach to PKK mothers	Confirm with the head of the PKK before the socialization is carried out
6	Conduct socialization with PKK mothers and village officials	Explains the procedure for making candied nutmeg skin, packaging, and making a logo. After that, do a question and answer session and share the YouTube link for making candied nutmeg skin

## RESULT AND DISCUSSION

The implementation of socialization activities on the processing of nutmeg peels into sweets to develop the creative economy in Cijeruk Village has been carried out well from the preparation stage to the evaluation stage. The results of processing nutmeg peels into sweets to develop a creative economy in Cijeruk Village are as follows:

### **Search for ingredients/samples of nutmeg skin to be made into sweets**

The search for this material was carried out by visiting the head of the farmer group to observe whether nutmeg peels were still suitable for processing into sweets. After getting the nutmeg culoids to be processed,

we returned to the command post to proceed to the next stage or to the stage of making candied nutmeg shells.

## Processing

### How to Make Candied Nutmeg:

- Nutmeg fruit peeled and seeds removed, cut into halves (candied wet) / cut fan (candied dry)
- Soak in a solution of salt and water for 1 day, then drain
- Soak in a solution of water and whiting for 1 day, then drain
- Dissolve the sugar by boiling it with water until it thickens and then cool it
- Nutmeg is soaked in sugar solution for 1 day, then drained. Do the sugar water immersion for 2/3 repetitions
- Wet candied nutmeg can be packed directly in the package
- For dried candied nutmeg, do the drying process until dry, after it is half dry, coat it with white sugar and then dry it again

## Packaging

At this packaging stage we use plastic clips to make it easy to distribute to the public as an experimental stage. Packaging is done separately between wet candied nutmeg skin and dried candied nutmeg skin.

## Labeling

To make the candied nutmeg skin look prettier, we label the packaging as a souvenir from Cijeruk. This also aims to make candied nutmeg skin more attractive. Because most consumers first look at the packaging, if the packaging looks neat and attractive, consumers will be more interested in the product.

## Socialization

The socialization of candied nutmeg peels was carried out at the Cijeruk Village Hall which was attended by PKK women and village officials. The socialization was carried out well and smoothly with the enthusiasm of the mothers regarding the processing of candied nutmeg skin. After the explanation and question-and-answer session is over, we show a video on how to make candied nutmeg skin and share the YouTube link with mothers with the aim of making it easier for mothers to access when trying to make candied nutmeg skin.

Based on the results of this socialization, the knowledge of the people of Cijeruk Village developed regarding the utilization of nutmeg skin which is processed into sweets. The people of Cijeruk Village, especially PKK women, are interested and enthusiastic about the innovation of candied nutmeg peels which

can be used as a source of income for the community. This is also intended for the welfare of the people in Cijeruk Village. According to Law No. 11 of 2009 concerning Community Welfare, community welfare is a condition of fulfilling the material, spiritual and social needs of citizens so that they can live properly and be able to develop themselves, so that they can carry out their social functions. From the Law above, we can see that the measure of the level of well-being can be assessed from the ability of an individual or group in their efforts to meet their material and spiritual needs. We can relate material needs to income which will later realize the need for food, clothing, shelter and health. Then we relate spiritual needs to education, then security and peace of life (Law No. 11 of 2009).

## **CONCLUSION AND SUGGESTION**

Nutmeg plants in Cijeruk Village, Dayeuh Luhur District, Cilacap Regency only use the seeds and mace. So, we took the initiative to make and develop nutmeg skin into sweets that can be consumed and traded by the wider community. The benefits of nutmeg which are able to nourish the body are one of the main attractions for people to consume candied nutmeg skin. This aims to help improve the community's economy, especially the people of Cijeruk village. The result of holding outreach activities to PKK mothers regarding the processing of candied nutmeg skin can run well and smoothly according to what was planned at the initial stage. This program for processing nutmeg peels can also increase the knowledge of the community, especially PKK mothers, regarding the utilization of nutmeg peels which are processed into sweets and can be widely marketed and traded as a source of the economy for the people in Cijeruk Village.

We suggest that the people of Cijeruk Village are able to develop and process candied nutmeg so that the nutmeg skin that was originally thrown away can be used and widely distributed as a special food for Cijeruk Village. We also suggest that the packaging of the candied nutmeg peels can be packaged more attractively than before so that consumers can be more interested in buying and getting the candied nutmeg peels.

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