



TRAINING ON THE MANUFACTURING OF DECORATIVE LIGHTS FROM BERENUK FRUITS (*CRESCENTIA CUJETE L*) IN THE VILLAGE OF MONGPOK CIKEUSAL SUBDISTRICT

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Abstract

In particular, people in rural areas of Indonesia benefit significantly from the country's abundance of natural resources, resulting in widespread economic growth. One of the natural resources that are beneficial to many people is the berenuk plant. Berenuk plants are also commonly found in the Cikeusal District, Serang Regency, one of which is in the village of Mongpok. Mongpok Village is one of the villages in Cikeusal District, Serang Regency, Banten Province. This Community Service activity's goal is to teach residents of the Mongpok village how to make decorative lamp crafts out of Berenuk fruit. The goal is to boost the residents of the Mongpok village's income and inspire them to think creatively. In carrying out this service, the method used is by providing skills training and assistance in making handicraft products from Berenuk fruit. From the results of this community service activity, decorative lamps are produced, which have selling points in the market. It makes the community enthusiastic because products that have selling values can, of course, improve the people's economy.

Keywords: Berenuk Plants, decorative lights, crafts.

INTRODUCTION

Indonesia is a country with a tropical climate which results in the growth of various types of plants. It is one of the sources of biological wealth because so many plants can provide value and benefits in life, for example, building materials, food, flavourings, cosmetics, medicines, and others. On the other hand, many beneficial plants are unknown to the general public, particularly those native to particular regions, due to a lack of information and expertise. There is also the Berenuk tree among them.

The Berenuk plant is a flowering dicot plant from Central and South America. Berenuk has the Latin *Crescentia cujete* Linn and belongs to the *Bignoniaceae* tribe (Dewjo, 2012). Berenuk tree height can reach 6-10 meters with blackish-white solid wood. The leaves of the berenuk tree are typically green throughout the year and have compound leaf structures that include flat edges, tapered bases, and rounded edges. However, there is only one type of funnel-shaped flower known as the berenuk flower. Berenuk flowers, which will later develop into Berenuk fruit, appear in the spaces between the branches and twigs of the tree. Berenuk fruit is yellowish-green with a large round shape, a complex and robust skin resembling a coconut. Berenuk fruit has a diameter of up to 20 cm, and inside, there is a pulp with tiny seeds attached to the Pulp (Yani, 2011).

Berenuk has been used as a traditional medicine in several areas of Indonesia. Berenuk fruit pulp is called *Pulp* which contains chemical compounds in the form of alkaloids, flavonoids, saponins, tannins, polyphenols, vitamins A, C, E, niacin, riboflavin, thiamin, carbohydrates, and other minerals such as sodium, phosphorus, calcium, magnesium and potassium (Yani, 2011). It is supported by several previous studies that state that Berenuk plants can be used as medicine. Among them is research on Berenuk leaf extract as a wound medicine (Parvin et al., 2015), Berenuk as a medicine for diabetes and cancer (Kusuma et al., 2014), and research on the potential of Berenuk fruit as an alcohol/biofuel ingredient (Bahroni and Istianah, 2018).

In addition to its use in medicine, the tough skin of the berenuk fruit can be fashioned into various handicrafts, including pieces of household furniture, musical instruments, ornaments, and other decorative items. Berenuk fruit with hard skin/shell has flesh or Pulp that smells bad. The shape is black, sticky, and smelly. This Pulp from Berenuk can be used as a natural fertilizer and pesticide. However, research on berenuk related to practical cultivation has yet to be carried out.

Based on the results of initial observations, Berenuk plants can also be found in the Cikeusal District, Serang Regency, one of which is in the village of Mongpok. Mongpok Village is one of the villages in Cikeusal District, Serang Regency, Banten Province. In 1982 Mongpok town was divided into two villages, namely Gandayasa Village and Mongpok Village itself. Mongpok Village has an area of 4,022,825 Ha. Mongpok village is generally located in a lowland area with a tropical climate. It causes the Berenuk to thrive by itself and very much.



Figure 1. Berenuk tree and fruit

In Mongpok, the community knows the Berenuk fruit as Gerenuk, which is a poisonous and dangerous fruit; this is because the contents of the fruit are black, sticky, and smell bad. These plants grow wild and are not maintained. Berenuk's potential as an ingredient has yet to be discovered. Consequently, the community does not bother to preserve these plants and has even gone so far as to cut some of them down. Although this is the first time anyone has attempted this, most people are aware that the tough skin of the berenuk fruit can, of course, be used to make household furniture or handicrafts such as dippers, flower pots, and other similar items. However, this is the first time anyone has ever done so. Based on this, it is necessary to conduct training and skills in the use of berenuk fruit by increasing the knowledge of the village community about berenuk. It can be accomplished by increasing the number of people who know about Berenuk. This training will teach participants how to make decorative lamps out of Berenuk fruit so that the lights have value in the community that can be realized through sales. Community service is provided in the form of this activity carried out in Mongpok Village by lecturers and students. As a result of this activity, it is hoped that there will be an increase in Human Resources (HR) and the potential of the village and the residents' economies.

This Community Service activity aims to help members of the Mongpok village community become more proficient in using Berenuk fruit in producing decorative lamp crafts using these fruits.

This volunteer work in the community was carried out in the Mongpok village environment for four days, beginning on the 23rd of August 2022 and ending on the 26th of August 2022.

METHOD

The method used in this activity is providing skills training and assistance in making handicraft products from Berenuk fruit. The activity method is carried out in 3 stages, namely:

1. Preparation phase

Before the training, the Service Team made direct observations in the Mongpok village environment at a location where Berenuk trees grew. This initial observation was conducted by interviewing villagers regarding their knowledge and utilization of Berenuk trees. Based on this, it is known that in the village of Mongpok, Berenuk is known as Gerenuk and Maja. Almost all villagers explained that the Berenuk tree is a wild plant that grows by itself and cannot be consumed or is poisonous. Of the ten people interviewed, only one knew that

Berenuk could be used as medicine, although they needed to know what type of disease they used.

Furthermore, only one villager knows about the use of Berenuk pulp as compost. While using gerenuk fruit as a handicraft, many residents know about making diapers. So on, but based on observations, this has never been done by the people of Mongpok village.

2. Implementation Stage

The implementation phase is carried out after observing residents' knowledge of Berenuk. So then skills training is carried out to provide information about the use of berenuk fruit. The aim is for the public to realize that berenuk fruit can also be an item or product that is useful and has a sale value in the community. After explaining the steps for processing gerenuk fruit, six residents were selected to be assisted in making decorative lights.

3. Evaluation Stage

After assisting residents who work on decorative lights, the final stage is Evaluation. Evaluation activities are carried out to determine activities' success levels from start to finish. The following is the flow of methods for implementing this community service activity.

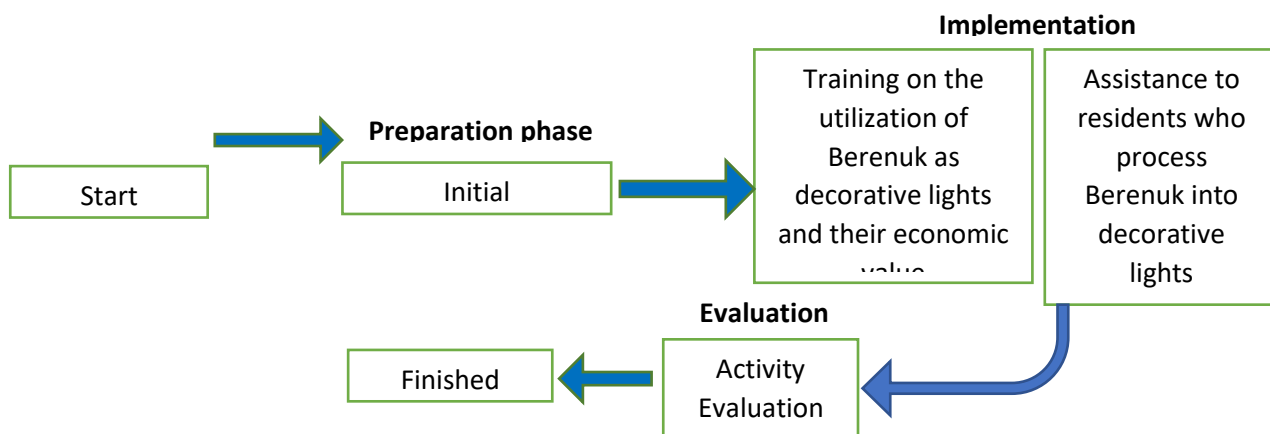


Figure 2. The flow of activity implementation

RESULTS AND DISCUSSION

This community service activity was initiated by the large number of gerenuk trees that grew wild and were not cared for in the Mongpok village environment due to the lack of knowledge of the Mongpok community regarding the potential of Berenuk, which could be utilized. After being given training by transferring knowledge about Berenuk and its benefits, the community

knows that Berenuk is not a useless poisonous wild plant. The training was also carried out by informing them that one of the products to be made was a decorative lamp from Berenuk fruit. This training was held at the Mongpok village office and was attended by 13 Mongpok residents as participants.

The Service Team demonstrates the materials, tools, and manufacturing steps as follows:

- Material :
 1. Berenuk fruit
 2. Coconut shell
 3. Kaso or wooden beams or bamboo
- Tools :
 1. varnish
 2. Paintbrush
 3. Sandpaper
 4. ruler
 5. Whiteboard marker
 6. Wood saws
 7. Hacksaw
 8. Hand Drill
 9. grinding
 10. Light series
- Ways of making :
 1. After the Berenuk fruit is obtained, it is cleaned by washing it and then drying it; it is cut using a saw according to the desired size.
 2. Remove the contents of the berenuk fruit until it is spotless.
 3. Berenuk fruit skin that has been cleaned, then the outer surface is smoothed using sandpaper.
 4. The next stage is drilled according to the desired model or hole size and then varnished.
 5. Dry in the sun until completely dry for about 2-3 days.
 6. Prepare other supporting materials such as coconut shells, rafters, or wooden beams/bamboo, then assemble them according to the desired model.

7. Complete with a series of lights and decorate as desired.

Some residents seem curious about how to clean the contents of the berenuk fruit because the Pulp on the berenuk smells terrible. To overcome this, the service team recommends that residents use masks when cleaning Berenuk fruit pulp or, if necessary, use gloves. It is because the contents are black and sticky, but touching it with your hands is not dangerous.



(a) Drilling process

(b) Surface smoothing process

Figure 3.

The participants, who were members of the Mongpok village community, were very enthusiastic about participating in this activity. The community is also interested in examples of decorative lamps prepared by the service team. Besides being very bright, this decorative lamp can be used as an ethnic display/decoration at home/cafe/restaurant/villa. Due to time constraints, the dedication team only prepared 6 Berenuks for six residents who would be accompanied to make the decorative lights, and all of them were men. Assistance starts with raw Berenuk fruit obtained directly from the tree and then processed to become decorative lights.

This activity only takes two days due to the hot weather, sufficient to support the drying process of berenuk fruit. So that the entire community service activity only takes 4 (four) days, the first day of training with the transfer of information (the 23rd of August 2022), the

second and third days of assistance in making decorative lamps (24-25 August 2022), the 4th day of the evaluation process (the 26th of August 2022).



Figure 4. Process of painting/varnishing

An evaluation is carried out after completing the mentoring phase. The evaluation phase begins with interviewing 6 (six) residents who have been given training and assistance in making decorative lamps from Berenuk fruit. Residents were satisfied with their work and stated that the process was simple. In the future, they can work on these decorative lights independently. Several residents who did not work on decorative lamps were also interviewed for their opinion. Almost all residents stated that the decorative lights were attractive and could be sold if they were further beautified/beautified. This decorative lamp can be sold in the market if the community can increase creativity in packaging its shape. It makes people enthusiastic because products that have a selling value can improve the people's economy. In addition, residents are also eager to try other forms of handicrafts that can be made from Berenuk fruit.



Figure 5. Assistance in making decorative lights

This community-based activity with the theme of making decorative lights from Berenuk is a community service activity, and it is explicitly geared towards the male youths and adults of the Mongpok village. Work can quickly be done at home and does not require much time. Because of this activity, the community better understands that Berenuk trees can be used for various purposes and even be transformed into products with high-profit potential.



Figure 6. Take a photo with residents and decorative lights from Berenuk



Figure 7. Decorative lamp from Berenuk fruit

The obstacle faced in this community service activity is that many residents need complete decorative lamp-making tools such as drills, saws, and grinders, so they borrow from one another. The service team suggests that residents who will work on Berenuk processing in the future should buy equipment so that the manufacturing process can run smoothly and the tool can be used for a long time. The feedback that the service team received from the participants indicated that this kind of skill training should always be held with a more significant number of participants. It is because Mongpok village comprises several monumental villages, not just Mongpok village alone. It is reasonable to conclude that this activity was carried out successfully and without incident.

CONCLUSION

From the training activities that were conducted in Mongpok Village, Cikeusal District, to make decorative lamps from Berenuk fruit, it is possible to conclude that the community already knows the use of Berenuk trees, whether as medicine, compost, handicrafts, or furniture such as dippers, piggy banks, and other similar items. The community is also aware of one possible application of Berenuk fruit, which is the production of decorative lamps; in the not-too-distant future, with the assistance of the community service team, the community will be able to produce these lamps on their own. Overall, residents have positive feelings and enthusiasm regarding this activity.

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