
Utilization of local Natural Resources Palm Leaf sticks (*Elaeis guineensis*) Based on Local wisdom Pematang Seleng Village

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Abstract

*This encoding activity for the community was carried out with the aim of helping residents of Pematang Seleng Village, bar Hulu Hulu District, Labuhanbatu Regency in utilizing palm oil stick waste (*Elaeis guineensis*) into handicraft innovations that have selling value. Waste products from oil palm sticks (*Elaeis guineensis*) in the form of fruit containers and other household items such as mirrors. The population in this study is 50 people in Pematang Seleng Village. People in the village are still rarely utilizing palm oil stick waste as the potential of local wisdom to be used into goods with an economical selling price. The use of palm oil sticks as a basic material for making household furniture is one solution to reduce plantation waste while creating economically valuable products. This study aims to describe the process and the potential of oil palm sticks as household furniture materials using qualitative descriptive method. Data were collected through interviews with artisans and field observations, and supported by related literature studies. The results showed that oil palm sticks have good strength and flexibility, and are easily processed into various products such as fruit holders, mirrors and other household furniture. However, the challenges faced include the lack of modern processing techniques and limited market access. With the support of training, technology, and promotion, the utilization of oil palm sticks can be further developed as an environmentally friendly creative industry and has the potential to improve people's welfare.*

Keywords: *Creative Industries, Palm Leaf Sticks, Plantation Waste, Home Furnishings, Environmentally Friendly*

INTRODUCTION

Oil palm (*Elaeis guineensis*) is one of Indonesia's leading commodities that has a major contribution to the national economy, especially in the plantation sector. However, behind the large production of oil palm, there is quite significant waste, including palm fronds that are often not utilized optimally. These palm fronds are generally just left to pile up or burned, causing environmental problems.

In rural areas, coconut leaves are often used as roofs, usually called ijuk roofs. Ijuk roofs can reduce heat so they can be used to cover other types of roofs. Coconut leaves are also often used as janur (party decorations), materials for making ketupat wrappers and made into woven goods. Leaf bones can also be used to make brooms, or cut into short pieces for skewers.

Coconut leaf fronds are one of the parts produced by coconut trees. Coconut leaf fronds have many benefits besides being often made into brooms, coconut leaf fronds can also be used for other household needs such as broom plates, fruit baskets from fronds, vases from fronds and others. The ribs as the main ingredient in making rib plates must have the same flexibility with approximately the same length so that they can be woven well. The selection of ribs that

have the same flexibility can be done by holding a pinch of ribs at the end and then lifting the end of the rib, you will see the ribs that fall due to gravity and the ribs that do not fall (stiff) do not have the same flexibility as the other ribs.

A rib plate is a kind of base plate made of coconut leaf ribs/palm leaves/oil palm ribs that have been processed until smooth and arranged to resemble a dinner plate. Most people currently use rib plates as a substitute for glass plates or plastic plates. Because the use of rib plates is very cheap and practical. In addition, rib plates do not break, are durable, and economical. To make a rib plate, perseverance, tenacity and patience are needed when assembling the weave.

Pematang Seleng Village, Bilah Hulu District, Labuhanbatu Regency is an area that produces oil palm plantation commodities (*Elaeis guineensis*). However, the utilization of coconut leaf ribs by the community has not been maximized, coconut leaf ribs are mostly wasted in coconut plantations owned by farmers and become garbage. In fact, besides being made into brooms, coconut ribs can also be used as handicraft materials that have a fairly high selling value in the community. In addition, as coconut farm laborers, the income of these mothers is uncertain because when the harvest is finished they do not have other promising jobs, some have switched to becoming fried banana sellers, vegetable sellers at the market in Pematang Seleng Village, while waiting for the next coconut harvest. Currently, coconut leaf rib plates are used by the community as food containers, also as dinner plates. Changes in people's lifestyles/cultures that want something more practical, especially for party activities, if they used to use plates made of glass, now they prefer to use plates made of coconut ribs or rattan.

RESEARCH METHODS

This community service activity was carried out in September 2024 in Pematang Seleng Village, Bilah Hulu District, Labuhanbatu Regency using a socialization method by providing material on the utilization of oil palm frond waste (*Elaeis guineensis*). This study uses a qualitative descriptive approach to understand and explain the phenomenon of utilizing oil palm fronds as a basic material for making household furniture. This method was chosen because it is able to describe in depth the process, potential, challenges, and opportunities for utilizing oil palm fronds through non-numerical data collection, such as interviews, observations, and literature studies. Qualitative research provides flexibility in exploring the perspectives of craftsmen and related parties in depth. The subjects of the study were the people of Pematang Seleng Village who use oil palm fronds as the main material in making household furniture. In addition, this study also involved consumers and other stakeholders to obtain a comprehensive view of products from oil palm fronds. Data collection techniques used in this study include: 1. In-depth interviews: Researchers conducted semi-structured interviews with oil palm frond craftsmen, consumers, and other related parties. The interview aims to obtain information about the production process, economic benefits, obstacles faced, and market responses to furniture products made from oil palm fronds. 2. Direct observation: Researchers conducted direct observations at the production site to study the processing techniques of oil palm fronds into household furniture, as well as to observe the working conditions of the craftsmen. This observation was also conducted to document the steps in making furniture, from collecting raw materials to finished products. 3. Literature study: This study also utilized various literature sources such as journals, books, and relevant articles related to the utilization

of oil palm fronds and the craft industry. This literature study was used to support field findings and provide a solid theoretical framework.

RESULTS AND DISCUSSION

This study aims to describe the use of oil palm fronds as a raw material for making household furniture, using a qualitative descriptive approach. Research data were obtained through interviews with the community and field observations in oil palm producing areas, precisely in Pematang Seleng Village, Bilah Hulu District, Labuhanbatu Regency. In addition, secondary data in the form of literature and related research also support this analysis.

A. Availability of Oil Palm Frond Raw Materials

Based on the results of observations, oil palm fronds are very abundant in oil palm plantation areas, especially in Pematang Seleng Village, Bilah Hulu District, Labuhanbatu Regency. Fronds are part of oil palm leaves that are usually not used after the pruning process or after the leaves fall to the ground. Craftsmen usually collect these fronds from around the plantation at no additional cost, making them a cheap and easily obtained raw material. Several craftsmen stated that the fronds chosen were naturally dried fronds. These fronds have better quality because they are more durable and not easily brittle. This confirms that the availability of raw materials greatly supports the production of household furniture crafts based on oil palm fronds.

B. Processing Process of Palm Oil Leaf Ribs

The results of the study showed that the process of processing palm oil ribs into household furniture is carried out in several simple stages. The following is a series of processes commonly carried out by craftsmen, namely by collecting and sorting: Palm oil ribs are collected from plantations, separated from the leaves, then cleaned using a household furniture polisher made of aluminum, namely a polisher made of steel. After being cleaned, the palm oil leaf ribs that have been separated from the leaves and have been scrubbed clean are then soaked for about 3-4 hours, after which they are dried until they can be shaped to be made into the desired household furniture. Craftsmen admit that the process of processing ribs is quite easy to do without the need for sophisticated equipment. They use simple tools such as scissors, machetes, knives, and raffia rope to shape the ribs into furniture.

C. Products from Palm Oil Ribs

These palm oil leaf ribs can be made into plates, either small, medium or large. These plates are widely used at wedding parties, on average those who hold parties use this because apart from being affordable, it is also effective.





CONCLUSION

The use of palm fronds as a raw material for making household furniture is an innovative solution to reduce plantation waste while creating products with economic value. This material is easily available, cheap, and environmentally friendly, so it has great potential to be developed as a creative industry. Although there are still some obstacles in terms of production techniques and market access, with the right support, this business can grow faster and have a positive impact on society

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