

Utilization of Palm oil Plant as a Creative Business in Supporting the Economy: Making Food Plate

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Abstract---The research was conducted with the aim of providing direct insight into the community related to the use of oil palm frond waste as a productive product and has a sale value. The research to be carried out is a descriptive study that illustrates how the process and results of the utilization of palm oil waste. The research was carried out by means of simulations of making products and continued to design independently. The method of conducting the research consisted of: (1) field survey, (3) coordination to the village, (4) socialization, (5) simulation, and (6) dissemination of the community response questionnaire. Data collection tools consisted of interview sheets and community response questionnaire sheets. The results showed an increase in public knowledge after being given training in plate making, this result was from holding a plate-making training in the form of plates made from palm fronds.

Keywords---Utilization Of Palm Oil Plant, Creative Business, Supporting The Economy

I. INTRODUCTION

According to statistics (BPS, 2018) the total workforce in February 2018 was 133.94 million people, an increase of 2.39 million compared to February 2017. In line with that, the Labor Force Participation Rate (TPAK) was 69.20 percent, an increase of 0,18 percent point. This shows that the higher demand for work and will lead to reduced employment. So that people are required to be creative one of them by developing business independently. One of the developing sectors in Indonesia is the plantation sector. Oil palm plantations are one of the sources of income for some residents in Indonesia. According to data from the Directorate General of Plantations at the Ministry of Agriculture (Kemtan), the total area of Indonesian palm oil recorded to date is 14.03 million hectares. One of the islands which has a very large land area is the Sumatra island. Sumatra Island has the largest area of People's Plantation (PR) compared to other islands. The area of oil palm plantations reaches 3,526,582 hectares. Large oil palm plantations will have an impact on their management. Some people have difficulty with the waste produced by oil palm. One of the wastes that is a problem for farmers is the oil palm fronds. The fronds produced by oil palm have a hard structure so it takes a long time for weathering. Palm fronds are often an obstacle for farmers in managing land to increase the productivity of oil palm plants. According to Pahan (2007), oil palm trees can produce

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22 palm fronds / year and if no pruning can exceed 60 fronds / year. One appearance of oil palm midrib waste is as shown below;

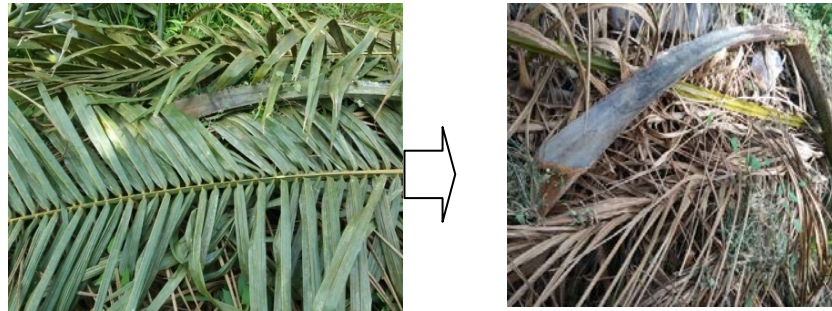


Figure 1. Palm Oil SheeP Waste

Palm oil fronds become one of the untapped wastes among farmers. This causes the frond waste can disrupt production results. One of the efforts in reducing these wastes by utilizing them as a basis for making products that have a sale value. Utilization of palm oil waste can be done by making dinner plate products and places. So there is a need to provide guidance to the community to manage palm oil waste to be processed into products that have a sale value. Based on the description above, a training course on making dishes to use palm oil waste as a creative endeavor in this case is making dinner plates. The target of the plate making training is the PKK mother in Nakau Village, Central Bengkulu District.

II. METHODOLOGY

2.1.Methods

- 1) Survey-The initial survey was conducted to observe the condition of the community, especially the community's economy and micro-businesses that can be utilized by the community as additional income. An initial survey was also conducted to review the palm oil plantations owned by residents in the area of Nakau Village, Bengkulu Tengah Regency.
- 2) Coordination-Coordinate with the village head to take care of licensing and determine the location of the plate-making training
- 3) Program Socialization-The program's socialization aims to provide information on plans for a series of plate-making training and the materials needed for plate-making training to the communities targeted by plate-making training.
- 4) Implementation of plate-making training-Before the training on plate making was carried out, a pretest was held first to find out the respondent's initial abilities. Implementation of activities by providing simulations of the process of making creative products to the community. The public is asked to try directly in making products to product finishing.
- 5) Evaluation of Activities-After being given a plate-making training, the participants were given a response questionnaire aimed at knowing the community's response to the plate-making training that had been given. The questionnaire analysis uses Linkert scale criteria with 5 criteria, namely: (1) Very High, (2) High, (3) Enough, (4) Low, and (5) Very Low.

2.2 Product Manufacturing Stages

- 1) Collection of Materials-Material collection is carried out by selecting fresh palm oil sheaths in the farmer's garden when the farmers harvest. Palm fronds are selected and cut according to needs. At this stage participants are invited directly to sort out the materials used.
- 2) Formation of Materials- At this stage the palm fronds are separated between the sticks and the midrib. Separation is done to distinguish the ingredients for making dishes. Forming the material is done by cleaning using a knife and refined so that the material can be woven.
- 3) Pattern Making-At this stage the pattern is made as desired. Weaving a stick that has been smoothed is then done. sticks are woven to make dishes for eating places.
- 4) Marketing-The last stage is product marketing. Marketing is done by entrusting it in traditional markets and selling online.

2.3 Data collection technique

- 1) Observation-Observation activities carried out to observe the activities of participants in participating in plate-making training activities. Observations were made by researchers to observe the activeness and participation of participants in making products in plate-making training.
- 2) Interview-The interview is a data collection tool that generally consists of questions or statements that are used to collect the desired research information (Toha, 2008). The interviews were used to gather information about the participants' responses to the training in making dishes for products made from oil palm fronds
- 3) Documentation-Documentation is done to strengthen the data obtained in observation. The document is used to give a concrete picture of the activities carried out by students in attending plate-making training.
- 4) Evaluation of Activities-Evaluation of the implementation of the activity is carried out by distributing questionnaire responses to the training participants in making dishes. The questionnaire contains statements about students' responses to the activities that have been carried out. Questionnaire in the form of a statement consisting of five evaluation criteria, namely: (1) Strongly Disagree, (2) Disagree, (3) Enough, (4) Agree, (5) Strongly Agree.

2.4 Data analysis technique

1.Descriptive statistical analysis

Analysis based on the results of students' pretest and posttest. In addition, an analysis of students' responses to learning was also carried out. The questionnaire analysis uses Linkert scale criteria with five criteria, namely: (1) Very High, (2) High, (3) Enough, (4) Low, and (5) Very Low.

2.Statistical analysis

Analysis of statistical data consists of two stages, namely (1) prerequisite test and (2) independent sample t test. Statistical analysis was carried out using the help of the SPSS program. The stages in the statistical statistical analysis in this study are described as follows:

- a) Test for Normality and Homogeneity

Testing the normality of the data in this study was done by using the SPSS program with the skewness test. The test criteria used are normally distributed data at the significance level $\alpha = 0.05$ if the calculated value is in the range of values between -1.96 to +1.96. Furthermore, homogeneous testing is carried out using the SPSS program with the test criteria if significance $> \alpha = 0.05$ then the data is homogeneous distribution.

b) Paired Sample T-test

Paired sample t-test testing was performed using the SPSS program. The basis for the decision to accept or reject the hypothesis on the paired sample t-test, namely: (1) If the probability (Asymp.Sig) < 0.05 , the hypothesis is accepted. (2) If the probability (Asymp.Sig) > 0.05 then the hypothesis is rejected.

III. RESULTS AND DISCUSSION

3.1 Description of Research Implementation

The training on making dishes for the utilization of oil palm fronds as the basic material for making goods in the form of productive dinner plates in Nakau Village was attended by 50 participants. Participants consisted of PKK mothers and youth clubs in the village of Nakau, Bengkulu Tengah District. The research begins with coordinating activities with village officials or officials related to licensing. The second stage of the survey was carried out by inviting participants to go to oil palm plantations and directly select materials to be used for manufacturing products. The third stage was the training of plate making using powerpoint media to explain directly the process of making products. The next stage is product assistance. In conducting the research, the pretest knowledge of the research target was also carried out. At the end of the activity, a posttest was conducted and the participants' questionnaires were distributed. The public is also given knowledge about how the marketing of products that have been made and where marketing is done such as the use of social media as a forum for promotion. Description of the implementation of research as in the following picture.



Figure 2. Research Implementation

3.2 Overview of Research Subjects

The subjects in this study consisted, namely the community in the village of Nakau consisting of PKK and youth clubs. The selection of research targets was based on invitations given through the coordination of the Village Head, PKK Chairperson, and Karang Taruna Chairperson. The characteristics of 50 research subjects are described by sex, age, and level of education. General description of subject characteristics in this service is summarized in the following Table 1:

Table 1. Karakteristik Subjek Penelitian

Number	Characteristics of Respondents	Number of people	Percentage (%)
1	Gender		
	Man	10	20,00
	Girl	40	80,00
2	Age		
	> 25 years	11	22,0
	25-30 years	28	56,00
	30-40 years	9	18,00
	> 40 years	2	4,00
3	Level of education		
	Bachelor (S1) and Diploma	18	36,00
	High school / middle school	26	52,00
	Elementary school graduates equivalent	6	12,00

3.3 Data on Understanding and Response of Research Objectives

Before the training on making plates for making products from the palm oil sheaths, participants were given test questions that measured participants' general knowledge about palm oil waste and processed products. The questions contain general questions that are packaged in the form of multiple choices with a total of 10 questions. After the training on making the posttest plate. The participants' pretest and posttest results are described in the following graph.

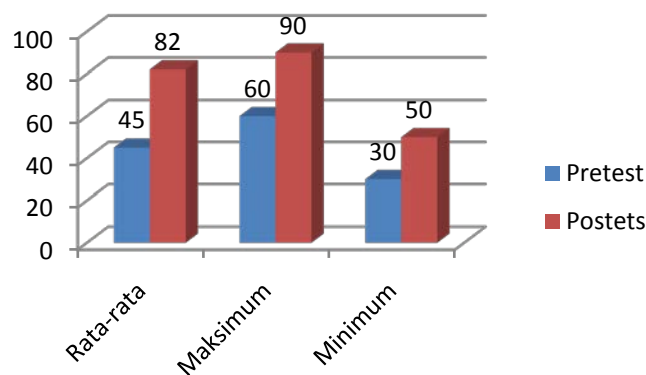


Figure3. Comparison of Pretest and Posttest Understanding Results

The picture above shows that there was an increase in the knowledge of the participants before and after the plate-making training was given. The average score obtained by the participant before being given a plate-making training was 45 with a score range of 0-100. While the average after being given training in plate making increased

to 82 from the range of assessment scores from 0-100. This data shows that there is an effect of providing plate-making training on increasing participants' knowledge about the use of palm oil waste.

After the plate-making and simulation training is conducted, participants are then given a questionnaire that measures the response. Questionnaire in the form of a statement consisting of five evaluation criteria, namely: (1) Strongly Disagree, (2) Disagree, (3) Fairly Agree, (4) Agree, (5) Strongly Agree. Distribution of questionnaires to 50 participants after analysis that met the criteria. The questionnaire was given to see the participant's response after being given a plate making training. The questionnaire used contained statements about the participants' responses consisting of 15 statement items. Following are the results of the distribution of participants' questionnaire responses.

Table 2. Results of Research Target Responses

No	Many Masters	Score Range	Category	Percentage (%)
1	6 person	$X > 60$	Very high	12,00
2	27 person	$41 < X \leq 60$	high	54,00
3	15 person	$31 < X \leq 41$	Cukup	30,00
4	-	$22 < X \leq 31$	Low	00,00
5	-	$X \leq 22$	Very low	00,00
Total Average		57,68	High	

3.4 Hypothesis Testing Analysis

The results showed that on average there were differences in understanding of the participants in the plate-making training before and after the plate-making training was given. This is indicated by the average value of students' knowledge that is significantly different. Furthermore, the statistical difference testing is done by testing the t test with the hypothesis tested as follows.

H0: There is no significant difference between the nakau community's knowledge about the use of palm oil waste before and after training on plate making

H1: There is a significant difference between community knowledge about the use of palm oil waste before and after training in plate making. Test criteria: if significant level $< \alpha = 0.05$, H1 is accepted. and a significant level $> \alpha = 0.05$ then H1 is rejected. T test results using SPSS software as in the following table.

Table 3. T Test Result Data

		Paired Differences			t	df	Sig. (2-tailed)
		Mean	Std. Deviat ion	Std. Error Mean			
Pair 1	Pretest - Posttest	42,70	6,301	1,233	5,70	49	0,002

The t-test table has a significance level of 0.002 less than $\alpha = 0.05$. Based on the testing criteria, the hypothesis (H1) is accepted so that there is a significant difference between community knowledge about the use of palm oil waste before and after training in plate making.

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