

COUNSELING ON INCREASING RICE-ADDED VALUE TO IMPROVE THE COMMUNITY ECONOMY IN PUNGGUR DISTRICT, CENTRAL LAMPUNG REGENCY

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ABSTRACT

Punggur District, Central Lampung is one of the largest rice-producing areas in Lampung Province. However, this does not guarantee that the people's economy will be very good. The instability of rice prices, especially during the main harvest, causes farmers to suffer losses. One of the efforts that can be done to improve the community's economy is to increase the added value of rice through product innovation. This community service was aimed to increase the knowledge of rice farmers in increasing the added value of rice for increasing the economy in Punggur District, Central Lampung. Counseling is used as a method to implement a community development program on rice farmers followed by the practice of making instant rice. The results of the activities showed that participants' knowledge about the added value of products through product innovation increased. This shows that participants understand the material provided, this is also shown from the response to questions and the desire of rice farmers to put this knowledge into practice.

Keywords: template, instructions, conference, publications

1. INTRODUCTION

Punggur District is one of the sub-districts in Central Lampung district, Lampung Province, which has an area of 118.45 Km². With a population of +38,045, the majority of which are livelihoods in agriculture and industry (Central Bureau of Statistics: Central Lampung 2018). In general, the income received by farmers is not sufficient compared to the hard work they have spent plus the risk of crop failure. The level of income received by farmers depends on various factors that affect land productivity. Several indicators show that in some areas many farmers have not enjoyed the fruits of their labor adequately (Mardiyanto, 2005). Besides the problems mentioned above, one of the sources of the low selling price of grain received by farmers is the length of the grain marketing chain. The level of grain trade consists of village-level traders, sub-district-level traders, district-level traders, and wholesalers who will process unhulled rice into the rice and sell it to consumers. Rice Harvest, the Average Farmer's Grain Price in Lampung is Down 14.39% below HPP) (BPS Lampung Province, 2021).

Other data shows that, on average, farmers in Punggur District have an income below the UMK (Regency Minimum Wage) which is below Rp. 2,000,000 per month, not enough to meet the needs of life, while women of productive age do not work. women farmer groups because it aims as an effort to directly involve women in efforts to increase agricultural output or other results, such as being part of a motivator in the adoption and introduction of farming technology. This dual role of women farmers is very strategic in increasing farm productivity and has the potential to increase income and food security for the welfare of farmer households in rural areas.

BPS prediction results show that rice consumption in 2014 is estimated at 97.67 kg/capita/year, or an increase of 0.27% compared to 2013. In 2015, rice consumption per capita is predicted to decrease by 0.6% compared to 2014. or to be 97.09 kg/capita and in 2016 to be 96.53 kg/capita/year. (Center for Agricultural Data and Information Systems, 2014).

Rice is generally consumed directly as a staple food or made into porridge or crackers. To extend the shelf life and diversify products, cooked rice can be processed through a series of processes, one of which is the instantiation process, which is processed rice that has been cooked and then dried so that it can be stored for a longer time, but can be served in a faster time. . so that you get quick cooking rice, also known as instant rice, is rice that can be quickly converted into rice. Instant food products are available in dry or concentrated form, easily dissolved so that they are easy to serve by simply adding hot or cold water. Instant food products are growing rapidly following the times where people demand food products that are easy to consume, nutritious and easy to serve (Maharani, 2017).

2. METHOD

Location And Time

This activity was conducted at the Punggur District office, Central Lampung Regency from 14 -15 September 2021

Method

Community service activities were carried out through counseling to increase the capacity and capability of farmers in making instant rice. In this case, farmers will be given knowledge and practice of technology for making instant rice in the form of liwet instant rice. Furthermore, measurements were made on the impact of the counseling results on the knowledge and practice of Instant Rice Making through interviews and observations.

Data Analysis

The data of farmers' knowledge is the level of knowledge of farmers about the technology of making instant rice measured by a total of 4 questions. The answers obtained are then processed by scoring each question with a score of 1 if the answer is correct and 0 if the answer is incorrect. The knowledge score of instant rice processing technology ranges from 0 to 5. To determine the percentage, the total score obtained is then divided by the maximum value and then multiplied by 100%. The results obtained were then categorized into good (>80%), moderate (60% -80%), and poor (<60%) (Khomsan, 2000).

The data on the practice of Instant Rice Processing is complicated with positive questions that use two levels of answer scales, namely "yes" and "no". If the answer is "yes" then it is given a score of 1, and if the answer "no" is given a score of 0. The number of questions given to measure food safety practices is 5 questions, so the maximum score is 5. To determine the percentage then the total score is divided by the score maximum about practice and then multiplied by 100%. Traders' practices regarding food safety are grouped into three categories, namely good (>80%), moderate (60%-80%) and poor (<60%).

Data regarding the impact of the Instant Rice Processing technology training intervention were conducted by interview and observation. Next, a paired sample t-test was conducted to determine whether there was a difference between knowledge and practice of processing instant nasi liwet before and after counseling. Before testing the mean value of two paired samples, a similarity test of variance was conducted. Data processed with SPSS 15.0: πr^2

$$t = (\Sigma D / \sqrt{((N \Sigma D^2) - (\Sigma D)^2) / (N - 1)})$$

where:

D = sum of differences between each pair (X1-X2 = D)

N = number of samples

Tcount < Ttable, then H0 is accepted

Tcount > Ttable, then H0 is rejected

The statistical hypothesis used:

H0 = 0 There is no difference between knowledge and practice before and after the intervention.

H1 0 There is a difference between knowledge and practice of food safety before and after counseling.

3. RESULT AND DISCUSSION

The results and discussion of the implementation of community service are divided into 2 stages, namely counseling and training activities for making liwet instant rice. Counseling farmers regarding knowledge of rice raw materials such as raw materials for processed rice products; Kinds of Processed Products Rice-based products; How to Make Instant Rice; and Selection of Packaging and how to Pack Instant Rice.

The counseling activities

The counseling activities carried out in the Askowani Hall, Punggur District were first carried out to provide information about increasing the economic value of rice through the innovation of rice-based products, so that they can process rice into products that have a higher economic value than rice. One of them by processing it into instant rice. Instant rice is rice that can be quickly converted into the rice. Cooking rice into rice quickly, namely by rehydrating dry rice with boiling water for some time so that rice is ready to be consumed. The cooking time required for instant rice is about 5-8 minutes. Instant rice is more resistant to insect and micro-organism attacks than ordinary milled rice (Widowati, 2008). After the counseling activity, it was continued with training activities on making instant rice and packaging it. The atmosphere during the presentation of instant rice processing technology is shown in Figure 1.



Figure 1. The atmosphere during the presentation of instant rice processing technology

Training activities for instant rice-making and packaging

In the instant rice-making training, participants were divided into 8 groups, each practicing the stages of making instant rice. Instant rice is made in the form of instant liwet rice. Each group was given equipment and raw materials to practice making instant liwet rice. Then, the counseling participants were guided step by step in making instant liwet rice. The atmosphere of Training on Making Instant Liwet Rice as shown in Figure 2.



Figure 2. Training on making instant liwet rice

The first step in making instant rice is to prepare 200 grams of rice, spices (4 red chilies, 4 red onions, 4 garlic cloves, 2 medium-sized lemongrass stalks, 3 bay leaves, and 5 cm galangal), 20 grams of coconut milk powder, 1/2 tsp fine salt, and tsp chicken stock powder. Next, the prepared rice is packed in vacuum plastic packaging. As for the spices in the form of lemongrass and galangal, thinly sliced rice before being dried along with bay leaves. After drying, the spices are packed in vacuum plastic packaging. The garlic and shallots and red chilies are first sliced and then fried and drained and then packaged in vacuum plastic packaging. Likewise with powdered ingredients in the form of powdered coconut milk, salt, and powdered broth. After being mixed, it is immediately packed with vacuum plastic packaging. The final stage of the instant rice manufacturing process is to pack the rice, spices, and powdered ingredients in one plastic pouch. The pouch packaging is then affixed with a label with product information. Step-by-step making instant liwet rice can be seen in Figure 3.

The impact of counseling activity

Counseling participants characteristics

Age

Participants in this extension activity are rice farmers aged between 41 to 65 years, which are grouped into early adults (20-40 years), middle adults (41-65 years), and late adults (> 65 years) (Peter and Olds, 2001). Data on the age of the counseling participants can be seen in Table 1.



Figure 3. Step-by-step making instant liwet rice

Table 1. Data on the age of the counseling participants

<i>Age Category (year)</i>	<i>Number</i>	<i>Percentage</i>
Early Adult (20-40)	21	52.5%
Middle Adult (41-65)	19	47.5%
Late Adult > 65	0	0
Total	40	100%

Table 1 shows that the majority of participants in the instant rice liwet processing technology counseling were 41-65 years old (47.5%), and the rest were 20-40 years old (52.5%). Regarding age, participants with early adult age were the participants who attended the most training. This shows that they have been in this business for a very long time. Age is stated to have a significant influence on the work produced (Firmansyah, 2015). The younger, the greater the productivity of the extension participants, the age of 20-40 years is the productive age. Although in Aprilyanti's research (2017) age did not show a significant effect on productivity.

Gender

The gender counseling participants consisted of men and women. Based on the data obtained, it is known that the participants in the counseling consisted of 25% male and 75% female. The gender counseling participants as shown in Table 2.

Table 2. The gender counseling participants

Gender	Number	Percentage
Male	10	25%
Female	30	75%
Total	40	100%

Education Level

The education of rice farmers in this activity ranges from not graduating from elementary school to graduating from the Diploma Program. Data on education level can be seen in Table 3 which shows that the education level of most rice farmers is High School graduates, as many as 17 people (42.5%), then Junior High School graduates as many as 15 people (37.5%) and not graduating Elementary School as many as 5 people. (12.5%), the rest are Diploma Program graduates as many as 3 people (7.5%). Data on the education level of Counseling participants are presented in Table 3.

Table 3. Data on the education level of extension participants

Education Level	Number	Percentage
Not Graduating from Elementary School	5	12.5%
Graduated Junior High School	15	37.5%
Graduated High School	17	42.5%
Graduated Diploma program	3	7.5%

Knowledge and practice of instant liwet rice processing technology before counseling

Knowledge and practice of Instant Rice Liwet Processing Technology in Punggur District, Central Lampung Province before counseling was still not good. The average score of knowledge and practice of making instant rice liwet before counseling are presented in Table 4.

Table 4. The average score of knowledge and practice of making instant rice liwet before counseling

Perilaku keamanan pangan	Skor Min.	Skor Maks.	Skor Rata-Rata ± SD
Pengetahuan	20.00	100.00	80.80 ± 27.37
Praktek	30.43	65.21	48.52 ± 16.91

Table 4 shows that the average score of knowledge of farmers and kelo is 80.80 with the lowest score of 20.00 and the highest score of 100. The average value of farmers' practice on the technology of processing instant rice liwet is 48.52 with the lowest score of 30.43 and the highest score of 65.21. The frequency distribution of farmers according to behavioral item categories before counseling is listed in Table 5.

Table 5. Frequency distribution of farmers according to behavioral item categories before counseling.

Behavioral	Poor		Moderate		Good	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Knowledge	4	16	5	20	16	64
Practice	19	76	6	24	0	0

Table 5 shows that based on the group's average score, the scores obtained are categorized as good with a value of > 80%, moderate 60% - 80%, and less than 60%, so as much as 64% of knowledge of Instant Nasi liwet processing technology is categorized as good, 20% moderate and 16% categorized as less good. As many as 80% of rice farmers carry out the practice of making instant rice liwet and 20% are. Before the extension, the good category was (88%) while the good category was 0%.

Knowledge and practice of instant rice liwet processing technology after counseling

The existence of Counseling activities on Instant Rice Liwet Processing Technology has increased the knowledge score and practice of processing instant liwet rice for farmers in Punggur District, Central Lampung Province. Complete data on the average score of knowledge and practice of making instant liwet rice after counseling is presented in Table 6 which shows the average score of knowledge on instant rice liwet processing technology after counseling is 88.80, an increase of 8.0 compared to before counseling. The practice of farmers on the technology of processing instant rice liwet after the extension was quite good, with a score range of 52.17 – 100 and an average score of 68.5.

Table 6. The average score of knowledge and practice of making instant liwet rice after counseling

Behavioral	Minimum Score	Maximum Score	Average Score ± SD
Knowledge	40.00	100.00	88.80 ± 19.21
Practice	52.17	100.00	68.52 ± 16.33

Meanwhile, the frequency distribution of farmers according to behavioral item categories after counseling can be seen in Table 7 which shows that the training in liwet instant rice processing technology has improved the knowledge and practice of farmers knowledge and practice of processing technology for instant rice liwet better, ie 76% of farmers' knowledge is categorized as good. and 24% moderate and 4% poor. The practice of processing instant rice liwet has increased, namely 16% in the poor category, 64% in the medium category, and 20% in the good category.

Table 7. The frequency distribution of farmers according to behavioral item categories after counseling

Behavioral	Poor		Moderate		Good	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Knowledge	1	4	16	24	19	76
Practice	4	16	16	64	5	20

Knowledge of Instant Liwet Rice Processing Technology

Knowledge of rice processing technology instant liwet achieved before counseling an average of 80.80 and after intervention became 85.99. The knowledge proved to be different at p=0.01. These data indicate that the knowledge of farmers in Punggur District, Central Lampung Province was quite high before the extension. The knowledge of the

farmers is quite high, it is suspected that the farmers have tried to make instant liwet rice independently. The provision of counseling carried out continues to increase the knowledge of food safety for farmers. With the increase in knowledge, it is hoped that they will pay more attention to instant rice processing technology to increase the added value of rice.

The practice of instant rice liwet processing technology is an action taken by farmers regarding how to process rice into instant liwet rice. The data shows the average score of practice before counseling is 48.52, with details of 24% less and 76% moderate, none of which is categorized as good. The training intervention on instant rice liwet processing technology increased the practice score to 68.52 and the paired sample t-test results obtained a value of $p=0.00$ ($p<0.05$). This shows that there is a positive effect of counseling on the practice of processing instant liwet rice.

The increase in the practical ability of the farmers is thought to be due to their increased knowledge of instant rice processing technology. This is by Wardani's research (2013), labor safety behavior is influenced by the knowledge of PT. Indonesian Cement. The existence of outreach activities to increase knowledge and practice of processing rice into instant rice liwet. This shows that extension activities as a form of intervention will increase knowledge, attitudes, and behavior (Bela et al (2016) and Nuryani and Paramata (2018)).

4. CONCLUSION

Counseling activities have been successful and run well, namely providing information to farmers in Punggur District about the added value of rice through processed rice innovations. The results of the activities showed that participants' knowledge about the added value of products through product innovation increased. This shows that participants understand the material provided, this is also shown from the response to questions and the desire of rice farmers to put this knowledge into practice.

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