Implementation Of The CSR Program Of Pt Pertamina Patra Niaga Fuel Terminal Rewulu In Improving The Capacity Of Local Food Utilization Of Koro Beans

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Abstract

Many local food commodities in Indonesia, especially Yogyakarta, are still not utilized into products that are worth selling. This results in the amount continuing to increase in fresh conditions, resulting in a short shelf life. For this reason, through the implementation of the CSR program Pertamina Patra Niaga Fuel Terminal Rewulu together with the academic team aims to 1) increase the use of local food, especially jack beans which are easy to grow in all areas in Bantul, Yogyakarta, 2) Prepare the abilities of members of the Women's Farmers Group (KWT) to be able to process milk from koro beans. The assistance methods used are in the form of socialization, discussion, training and assistance in processing dairy products, as well as evaluation. This activity was carried out in several meetings to ensure that KWT members were able to carry out the processing appropriately. Based on the results of observations, it was found that KWT members were able to practice the training provided and carry out routine production activities during the last three months during the monitoring and evaluation period. It is hoped that through this mentoring activity, KWT members can take advantage of local food which is available in abundance with a higher selling value.

Keywords: Local food, koro beans and koro milk.

I. INTRODUCTION

Jack beans are available in abundant quantities, especially in the Bantul area, Yogyakarta. Jack bean is a plant that belongs to the leguminocoel family. Some of the nutritional content of koro beans is quite high, where 100 grams of koro beans contain 27.4% protein, 399kcal energy, and a fairly low fat content, namely 2.9 grams. The high carbohydrate and protein content and low fat certainly opens up great opportunities as a high-protein product and reduces the risk of dependence on wheat, cow's milk, etc. protein-rich flour such as wheat². Because it has high nutritional content, namely protein content, it can support community nutrition as an effort to reduce the risk of stunting, and has high economic value.³ On the other hand, the abundance of koro beans and their high nutritional content are not accompanied by their use to have a higher selling value. In general, people only use koro beans fried or used as animal feed. With sales results that are not much, the koro beans are just thrown away. Based on observations, some people are afraid to process it into processed products, this is because previous experience after processing it into chips turns out that many people feel dizzy after consuming them. This is likely due to the high content of cyanide acid (HCN) in jack beans. The high HCN content in jack beans makes people afraid to process them into other products. Meanwhile, if it is processed into fried koro beans it actually increases the fat content of the koro beans even though the koro beans should have less fat as an advantage of the koro beans.

The high HCN content in jack beans requires proper pretreatment and processing, such as washing with running water, soaking, germinating, fermenting and heating. Cyanide is an anti-nutritional substance which of course can disrupt health, such as respiratory system problems, this is because oxygen in the blood will be bound by this toxic substance. High cyanide content of 0.5-3.5 mg / kg of material can cause death⁴. Therefore, proper pretreatment and processing is very necessary to reduce the amount of cyanide acid. One of the products that can be produced from koro nuts is milk. Seeing as many children and parents have allergies to animal milk, milk products made from vegetable protein are very necessary. Milk is a

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product that is needed by all levels of society, especially children, as a source of protein and as an effort to prevent stunting. In processing milk, a correct sanitation process is required, therefore monitoring the processing process and implementing correct sanitation is something we monitor and observe during training and mentoring.

II. RESULTS AND DISCUSSION

1. Implementation Stage

Implementation of service is carried out in three stages, the first stage is the preparation or coordination stage. In the preparation stage, the PT Pertamina Rewulu CSR service group conducted a preliminary survey to see conditions in the field regarding the potential of available local food and the activity of the Women's Farmers Group (KWT). Next, the PT Pertamina Patra Niaga Fuel Terminal Rewulu CSR service team together with the academic team analyzed the initial abilities and knowledge of all KWT members and interviewed the obstacles they experienced. The second stage is the implementation stage of activities including socialization and training which takes place several times. Before entering the second stage, of course the service team provides assistance to the subject in the form of the necessary equipment to ensure that all the tools used are also safe for processing. The method for implementing this activity is face-to-face training. The location of the activity is KWT Mandiri Berlian Progo with the chairman, Mrs. Winarti. There were 20 activity participants, the majority of whom were farmers and housewives. The first activity is socialization (Fig 1).

![Fig 1. Socialization activities for the implementation of the PT Pertamina Patra Niaga Fuel Terminal Rewulu CSR program with the academic team](https://ijcsnet.id)

The socialization activity is a provision or preliminary activity to provide basic knowledge regarding the processing of koro beans into milk, as well as the correct processing method by implementing good sanitation. Training participants gain a conceptual understanding of the correct processing methods, especially by paying attention to sanitation and ensuring that the HCN content is removed, as well as how to maintain protein in jack beans during the processing process. The second activity is drill (exercise). The training method in this training is carried out by carrying out direct practice related to processing milk from jack beans, from washing with running water, soaking for three days where every 6 hours the water is changed, rinsing with running water, cooking or pasteurization, bottle sterilization, to packaging (Fig 2).

![Fig 2. Training activities for implementing the CSR program of PT Pertamina Patra Niaga Fuel Terminal Rewulu with a team of academics](https://ijcsnet.id)
Followed by case discussions, role plays and group discussions. This is done after participants understand the training material. The third activity is evaluation. Providing feedback from sources that are useful for managing the skills and competencies of KWT members. The implementation team in the service was directly involved in providing feedback regarding the practices of processing milk from koro nuts carried out by training participants.

2. Results of activities

Of the activities that have been carried out, the first activity is socialization with the theme taken is the use of local food, one of which is koro beans. Socialization was carried out in one meeting attended by all members. In socialization activities, KWT members have high enthusiasm (Figure 1), have a desire to know more deeply about the knowledge they are learning, and have a good way of communicating between members so that if there are members who don't understand or misunderstand the instructions they will remind each other. In socialization activities, of course, the knowledge of KWT members is increased. This is proven when there is feedback from mentors, they try to answer directly.

Fig 3. Observation activities for Koro milk products resulting from the implementation of the PT Pertamina Patra Niaga Fuel Terminal Rewulu CSR program with the academic team

In the second stage, namely training activities, previously trial and error was carried out by the academic team to get the best formulation. The best formulation obtained was with a soaking time of 3 days and changing the soaking water every 6 hours. The resulting product has the following characteristics: The viscosity seems generally milky, clear to white in color, the unpleasant odor is disguised, and the protein is higher than other treatments, and the HCN is low. After getting the best formulation, it was continued with training on making koro bean milk for KWT members by the service team for approximately 3 times. Training also covers sanitation that must be implemented from preparation to processing. After 3 trainings and mentoring, all KWT members were seen to be able to directly practice the processing methods that had been given, and also maintain the correct sanitation process. The third stage is evaluation, where at this stage there is a discussion session and providing feedback by the service team. At this stage the KWT team conveys the products they have made and their sales plans. At this stage, we have obtained products that are produced routinely with almost the same consistency in each production. Sales will begin among the public and KWT members. Based on the information obtained, the product can be well received by the public.

Fig 4. Process of evaluating and providing feedback on the results of implementing the CSR program of PT Pertamina Patra Niaga Fuel Terminal Rewulu with the academic team

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III. CONCLUSION

Jack beans are a local food that is widely grown in Bantul, Yogyakarta. In general, koro beans are only fried or used as animal feed. Therefore, through this program it is hoped that it will be able to increase the selling value of koro beans. One of them is processed into milk because it is high in protein and is liked by all groups and is suitable for those who have lactose intolerance. Service activities take place through 3 stages, namely; socialization, training and mentoring, as well as evaluation and feedback. Based on the results obtained, KWT members were able to apply the milk processing training provided by the service team with similar consistency in each production.

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