



Community Empowerment KWT "Bengke Sakato" Pariaman With Innovation of VCO Process Waste Converted into Bags and Tiles

Pemberdayaan Masyarakat KWT "Bengke Sakato" Pariaman Dengan Inovasi Limbah Proses VCO Diubah menjadi Tas dan Ubin

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Article History: Received: 1-8-2022 Revised: 23-11-2022 Accepted: 20-12-2022 Published: 29-12-2022	<p>Abstract</p> <p>The partner of the Community Service Team chaired by Prof. Dr. Suryani, MSi is KWT "Bengke Sakato" a partner from Padang Pariaman Regency. KWT "Bengke Sakato" has long been engaged in having a Virgin Coconut Oil (VCO) production business, because in addition to the natural products where KWT is domiciled abundantly with coconut trees, this group has also been given training on how to make VCO. This VCO production waste has not been maximized, even though the waste such as coconut husk can be used as cocopeat and cocofiber, and shells can be used as charcoal, bags and tiles or tiles. The method used has several stages, namely Socialization, Workshop, Monitoring and Evaluation as well as mentoring. This program successfully trains people to make bags and tiles from coconut shells using machines provided by the Service Team. With the training of these KWT members, they process VCO waste into various products, it can increase the income of this group. From 500 coconut shells can earn Rp. 5,900,000. And can also increase his knowledge by 79.33%. Thus, this activity of service in the future can contribute to community income.</p> <p>Keywords: KWT "Bengke Sakato", coconut shell tiles. Innovation, coconut whitewashing bag, empowerment.</p> <p>Abstrak</p> <p>Mitra dari Tim Pengabdian Masyarakat yang diketuai oleh Prof. Dr. Suryani, MSi adalah KWT "Bengke Sakato" mitra dari Kabupaten Padang Pariaman. KWT "Bengke Sakato" sudah lama bergerak mempunyai bidang usaha produksi Virgin Coconut Oil (VCO), karena selain hasil alam tempat KWT ini berdomisili melimpah dengan pohon kelapa, juga kelompok ini sudah diberi pelatihan tentang cara membuat VCO. Limbah produksi VCO ini belum maksimal dimanfaatkan, padahal limbahnya seperti sabut kelapa dapat dijadikan cocopeat dan cocofiber, serta tempurung dapat dijadikan arang, tas dan ubin atau tegel. Metode yang digunakan ada beberapa tahapan, yaitu Sosialisasi, Workshop, Monitoring dan Evaluasi serta pendampingan. Program ini berhasil melatih masyarakat membuat tas dan ubin dari tempurung kelapa menggunakan mesin yang dihibahkan Tim Pengabdian. Dengan telah terlatihnya anggota KWT ini mengolah limbah VCO menjadi berbagai produk, maka dapat menambah penghasilan kelompok ini. Dari 500 tempurung kelapa dapat menghasilkan Rp. 5.900.000. Dan juga dapat meningkatkan pengetahuannya sebanyak 79,33%. Dengan demikian, kegiatan pengabdian ini kedepannya dapat berkontribusi terhadap pendapatan masyarakat.</p> <p>Kata kunci: KWT "Bengke Sakato", ubin tempurung kelapa. Inovasi, tas tempurung kelapa, pemberdayaan.</p>
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INTRODUCTION

The business of making Virgin Coconut Oil (1), (2), (3) by the Women Farmers Group (KWT) "Bengke Sakato", Sungai Sariak, Padang Pariaman Regency, (4), (5) has been carried out since 2019. This group consists of as many as 17 people and is chaired by Mrs. Ernatius, and the Secretary, Mrs. Arnita. The production capacity in one week reaches 37 liters of VCO. The basic ingredients for producing that much use are 500 coconuts. So that in one month as many as 2000 coconuts or fruit.

The process of making VCO produces waste such as coconut water, coconut shell, and coir, all of which have not been used optimally. Just sitting like a trash can be seen in Figure 1 and Figure 2, below



Figure 1. Wasted coconut shells or VCO production waste.



Figure 2. Wasted coconut coir that has not been utilized..

Coconut water can be made into Nata de Coco (6), during the service program carried out by the Andalas University Team. At this time, KWT member 'Bengke Sakato' don't have knowledge about how to make Nata seeds. The Service Team, chaired by Prof. Dr. Suryani, MSi, provides training on making Nata de Coco seeds, which are made from pineapple (7).

Apart from coconut water, the waste from making VCO that has not been optimally used is coconut shells. Coconut shells can be processed into charcoal which is used to improve the quality of agricultural land (8). To improve the chemical quality of agricultural soil, coconut shells are burned by incomplete combustion or pyrolysis, to become charcoal. Charcoal is mashed in such a way and added to the soil. With the charcoal in the ground, it will absorb water. So that it will improve the quality of the soil.

Coconut shell can also be processed into tiles or tiles (9). The coconut shell was first cut into small pieces and then put together with wood glue. As can be seen in the following figure,



Figure 3. Example of tiles or tiles from coconut shells

If the coconut shell which is the waste of VCO production can be turned into bags and tiles, it can increase the income of the members of the "Bengke Sakato" Farmer's Group. Thus the purpose of community service is to empower the KWT "Bengke Sakato" Pariaman community with the innovation of VCO process waste being turned into bags and tiles.

METHOD

The community service program for the "Bengke Sakato" Farmer Women's Group, was attended by 17 of its members, where the activities carried out were in several stages as follows:

1. **Socialization** about the benefits of the shell can be turned into Bags and Tiles. Before the socialization was given the Pre Test and after the socialization was given the Post-test. To measure changes in the knowledge of socialization participants.
2. **Training or Workshop**, making bags from coconut shells and making tiles or tiles from coconut shells. At this workshop, KWT members "Bengke Sakato" were given a machine to cut coconut shells and other tools needed. Apart from that, workshops or training are also provided on how to market this product, including training on how to make IG, and FaceBook products, even to make the Web, and market these products through Tokopedia, Lazada, and the like.
3. **Accompaniment** until the community members of this KWT are good at making their own bags and tiles, as well as assistance in running Web sites and others.

4. **Monitoring and evaluation, are** done to ensure the continuity of this program.

RESULTS AND DISCUSSION

There are several results of this dedication that can be stated, such as:

1. **Socialization** attended by KWT members, one of which is shown in Figure 4, below,



Figure 4, during socialization the program head is giving material..

Before the socialization activity, questions were given in the Pre Test activities, to measure the initial knowledge of the participants, and at the end, they were given another Post Test. The results of the Pre Test and Post Test can be seen in Table 1 below.

Table 1. Knowledge Test Results Before and After Outreach Activities.

No	Nama	Pre Test	Post test	Kenaikan Pengetahuan
		% soal yang dijawab betul		
1.	Jazimah Syadni	20	80	60
2.	Ermatus	50	70	20
3.	Atika Febri	30	90	60
4.	Arnita	20	80	60
5.	Murdiati	10	70	60
6.	Resti	40	90	50
7.	Nursam	30	70	40
8.	Rezna Okti Y	40	90	50
9.	Zuraida	20	70	50
10.	Desmiyanti	50	80	30
11.	Ermawati	20	70	50
12.	Jusmanidar	30	70	40
13.	Yuni	20	80	60
14.	Rismawati	10	90	80
15.	Masni	40	90	50
	Rata-rata	28,67	79,33	48,6

From Table 1 it can be seen that there has been a change in knowledge regarding VCO waste, especially coconut shells that can be used as bags and tiles or tiles. From knowledge before socialization, it was an average of 28.67%, there was an increase in knowledge to 79.33%. This also happened in the community service program (7).

1. **The results of the training in making tiles or tiles there** are already tiles made by the participants, which can be seen in Picture 5. Here,



In Figure 5 it can be seen that the tiles or tiles from coconut coir have been made, the result of training for KWT members "Bengke Sakato". Likewise, bags from coconut shells have also been successfully made by them.

1. Assistance to KWT members is aimed at efforts to be independent and skilled in training members in producing tiles and bags from coconut shells in the future. At the time of mentoring, a website was also created to market this product. The website is <http://korongbengke.go.id>
2. Evaluation activities, we direct members to study the deficiencies that occur during the production of bags and tiles, so that in the future KWT members are proficient in producing and marketing them..

Table 2. Economic analysis of tile production

Bahan	Jumlah	Harga (Rp)
Modal		
Batok kelapa	50 buah	-
Lem kayu	1 kaleng	55.000.
Amplas	10 lb	45.000.
Listrik		10.000
Jumlah		110.000
Penjualan		
5 buah batok jadi 1 ubin		
100 buah 3 x 3		
50 buah batok jadi 10 ubin	70.000.	700.000.



Up to Income

for 10 tiles or 50 coconut shells 700.000.- 110.000 =590.000.

If there are 500 coconuts multiplied by 10 then you get 5,900,000 income.

CONCLUSION

After this service program has been implemented and has been evaluated, it can be concluded that this program can empower the KWT "Bengke Sakato" community by producing tiles and bags from coconut shells.

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