STRENGTHENING THE COMMUNITY ECONOMY THROUGH USE OF OIL WASTE AND ECO-PRINT TRAINING FOR SME INNOVATION IN PASIR DISTRICT HORSE

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Abstract
Pasir Kuda Village was assigned as the location of KKN group 02 of Ibn University Khaldun University of Bogor. The focus of the work program is the development of MSMEs around the community to increase the competitiveness of their products. The duration of this activity for 25 days, from August 7-31, 2023 in RW 04 Pasir Kuda Village, West Bogor. Kuda Village, West Bogor. Students use their creativity and knowledge in making a real contribution to the community through innovative solutions. They also involved 6th grade elementary school students in the training to hone their creativity and expertise. The research methods used were survey and case study with a descriptive approach. Primary data was obtained through direct observation and interviews with relevant informants, while secondary data was collected from sources such as history, profile, regulations, etc. secondary data was collected from sources such as history, profiles, policies and documentation of activities in RT04 RW03 and RT02 RW04 Kelurahan, policies and documentation of activities in RT04 RW03 and RT02 RW04 Pasir Kuda Kelurahan. Pasir Kuda Village. The implementation includes data collection techniques of field observation, direct interviews, and documentation as the main media to obtain the required information. There are two main stages, namely training processing of used cooking oil into aromatherapy candles and the implementation of ecoprinting techniques at Cibalagung 04 Elementary School. ecoprint technique at SD Negeri Cibalagung 04. policies and documentation of activities in RT04 RW03 and RT02 RW04 Kelurahan, policies and documentation of activities in RT04 RW03 and RT02 RW04 Pasir Kuda Kelurahan. Pasir Kuda Village. The implementation includes data collection techniques of field observation, direct interviews, and documentation as the main media to obtain the required information. There are two main stages, namely training processing of used cooking oil into aromatherapy candles and the implementation of ecoprinting techniques at Cibalagung 04 Elementary School. ecoprint technique at SD Negeri Cibalagung 04. policies and documentation of activities in RT04 RW03 and RT02 RW04 Kelurahan, policies and documentation of activities in RT04 RW03 and RT02 RW04 Pasir Kuda Kelurahan. Pasir Kuda Village. The implementation includes data collection techniques of field observation, direct interviews, and documentation as the main media to obtain the
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**Keywords:** Innovation, Real Work Lecture, Micro, Small and Medium Enterprises.

**INTRODUCTION**

Micro, Small, and Medium Enterprises (MSMEs) are businesses operating in various fields that can be created by looking at the opportunities that exist around them. Of course, the business that is created starts from productivity which can later generate income for the entrepreneur who has created it. MSMEs have a very important role in improving the economy from the regional scope to the national economy. This is because MSMEs play a role in driving the regional economy, encouraging the use of local resources, minimizing unemployment, and as suppliers of raw materials needed by large industries.

According to Robbins and Coulter (2016), innovation can be defined as the process of taking creative ideas and turning them into products or work methods that have benefits. If a business venture is able to innovate, then the business will be able to lead in the industry and reduce the possibility of competitors innovating earlier. Therefore, business people need to develop innovation strategies to create advantages compared to their competitors. Based on the opinion of Utaminingsih (2016), sustainable innovation in a company is very important because it is able to create competitive advantages. By continuously innovating, companies can stay relevant in an ever-evolving market and increase their competitiveness. So, the conclusion is that innovation is a key factor for the success of a business. Through developing creative ideas into new products or work methods, businesses can gain a competitive advantage and remain relevant in an ever-evolving market.

Thornhill (in Ellitan Anatan, 2009) provides a definition of innovation as the process of generating new ideas, introducing new products, developing novelty in an organization, and providing processes or services that are beneficial to society. There are two types of innovation divided by Ellitan Anatan (2009), namely product innovation and process innovation. According to Langley et al. (in Rosli et al., 2013), product innovation is creating new products from completely new raw materials (completely new products) or updating existing products to meet customer satisfaction. In other words, Thornhill argues that innovation includes the development of new ideas, the introduction of the latest products, increasing creativity in an organization, as well as providing processes or services that are useful to the community.
Meanwhile, Langley et al. emphasizes the importance of developing new products and improving existing products to meet customer needs and satisfaction.

Pasirkuda Village is one of the areas in West Bogor District, Bogor City. Based on the results of interviews between students and the Village Head, there are several facts regarding the residents of Pasirkuda subdistrict, one of which is that many residents prefer to be considered "unable to afford". Seeing this problem, we as students carried out activities related to MSME innovation with residents in one of the Pasirkuda sub-districts, precisely in RW 04.

Pasirkuda Village is the assignment location for Real Work Lecture (KKN) group 02 at Ibn Khaldun University, Bogor. Where all programs that have been designed will be implemented in the area. Seeing the real conditions and situations, especially in RW 04, the students decided to create a work program related to MSMEs in the surrounding community. In order to face existing competition, innovation is needed that can increase the competitiveness of MSME products.

Innovative behavior includes utilizing technology to defend itself and continue to grow in running its MSMEs. Business behavior requires innovative behavior in utilizing technology in changes such as marketing, product updates and increasing production capacity. This change is expected to create different business and service opportunities with the use of technology. In an effort to provide innovation to the community in Pasirkuda Village, students have a very important role. Through the creativity and knowledge that students have which can be channeled to local residents, students can make real contributions in the form of innovative solutions for the community in Pasirkuda Village. Apart from providing MSME innovation to local residents,

Looking at these problems, the author will discuss the role of students in providing innovation for MSMEs in Pasirkuda Village, the benefits and impacts resulting from student contributions in providing strengthening the community economy through innovation to the community in Pasirkuda Village.

DESCRIPTION OF ACTIVITY LOCATION

2.1. Geographical Conditions

Pasirkuda Village was originally part of Pasirkuda Village which is located in Ciomas District, Bogor Level II Regional Regency. However, in August 1995, expansion occurred when the city developed into a Municipality, and Pasirkuda Village was included in the area. Since then, the status of Pasirkuda Village has been upgraded to Pasirkuda Village.

Geographically, Pasirkuda Village is located in West Bogor District, Bogor City. This area is one of 16 sub-districts in the area. Located on a plain with an altitude of 368 meters above sea level.

2.2. Geographic Conditions

The distance from Pasirkuda Village to the District capital is around 5 kilometers which can be reached in around 30 minutes. Meanwhile, the distance to the capital city of Bogor is around 3 kilometers with a travel time of around 15 minutes. The distance to the provincial capital is around 183 kilometers and takes around 3 hours 30 minutes. Meanwhile, the distance to the nation's capital is around 64 kilometers and takes around 45 minutes.
In terms of land use, the Pasirkuda subdistrict area has the following land allocation: village settlement area of 36.1 hectares, complex settlement area of 12 hectares, offices area of 10.8 hectares, road facilities of 3 hectares, educational facilities of 0.7 hectares, land rice field area of 0.5 hectare area, security facilities for 0.7 hectare area, and facilities for 1 hectare area.

Several rivers that flow in the Pasirkuda Village area include the Cikaret River which borders Cikaret Village, the Ciomas River which borders Bogor Regency, and the Cisalak River which flows in Pasirmulya Village. This sub-district is also equipped with public facilities and infrastructure, including a 3.5 kilometer long Protocol Road, a 1.2 kilometer long Collector Road, 11 village roads, 66 alleys, and 4 bridges.

![Pasir Kuda Subdistrict Boundary Map](image)

2.3. Activity time
This community service activity in the form of KKN will be carried out for 25 days, starting from 7 August - 31 August 2023, at RW 04, Pasir Kuda Village, West Bogor.

2.4. Target Audience
The general public of Pasir Kuda Village, 6th grade students at Cibalagung 4 State Elementary School, and special targets, namely RT/RW residents of Pasir Kuda Village.

METHOD IMPLEMENTATION
Several community service activities in Pasir Kuda Village include training and workshops by carrying out three stages of implementation methods, namely;

Planning Stages
Carry out identification, environmental observations and survey, make plans for what activities will be carried out such as (time and budget required), preparation of materials, methods and relevant training materials, development of the materials and determine targets, discover community needs and identify solutions to problems.
Stages of Implementation

Implementation of activities by providing training related to the use of used cooking oil for aromatherapy and "Training on the Use of Used Cooking Oil to Make Aromatherapy Candles" in its implementation, students provided sterin (a material for hardening oil into wax), candle wicks, crayons and aromatherapy oil, while residents were directed to bring their own used cooking oil and containers for making candles., followed by implementation of "Ecoprint" activities at Cibalagung State Elementary School 04. Cibalagung State Elementary School 04 Pasirkuda. Where the participants in this activity are Pasirkuda residents (mothers, fathers and teenagers) and to grade 6 elementary school students at SD Negeri Cibalagung 04. Location These are located in RT 04 RW 03 and RT 02 RW 04, PasirKuda Village, West Bogor District, Bogor City.

Final Stage

Evaluate and monitor the impact of training on the use of used cooking oil and increasing innovation for MSMEs in the Pasir Kuda sub-district environment as well as documenting all training programs including the results of lessons learned, while the documentation is used as a reference for future innovation development programs.

RESULTS AND DISCUSSION

According to the Organization for Economic Co-operation and Development (OECD), Micro, Small and Medium Enterprises (MSMEs) refer to independent companies or what are also known as independent companies that have a number of employees below a certain limit. The limit can vary between countries, but is generally less than 250 employees. In some other countries, this limit is set at less than 200 employees. Meanwhile, in the United States, companies that are included in MSMEs are companies with less than 500 employees. In the context of business size, small businesses usually refer to businesses with fewer than 50 employees. Meanwhile, for micro businesses, it usually refers to businesses that employ a maximum of 10 people.

In this way, it can be said that each MSME has different criteria for each type of business, especially in terms of the number of employees working in the company. The characteristics of MSMEs are as follows.

4.1. Characteristics of MSMEs

According to Law No. 20 of 2008, MSMEs can be defined as small companies owned and managed by individuals or groups of people with a certain amount of wealth and income. Based on research by Sarwaono and Rijianto (2015:13-14), the characteristics of MSMEs can be explained as follows:

4.1.1. Micro business:

1) The types of goods or commodities used in MSME businesses are not always fixed and can change at any time.
2) MSME business premises are also not always fixed and can be moved to other places as needed.
3) However, financial administration in MSMEs is generally not carried out in a simple way.
4) Sometimes there is a merger between family finances and business finances without a clear separation.
5) Human resources in MSMEs often lack sufficient entrepreneurial spirit to develop their business.
6) The average education level among MSME entrepreneurs tends to be low when compared to the overall education level.
7) Access to banking is generally still difficult for most MSMEs, but some already have access to non-bank financial institutions.
8) Most MSMEs do not yet have a business permit or other legal requirements, including a Taxpayer Identification Number (NPWP).

4.1.2. Small business
1) The types of goods or commodities produced by MSMEs are generally stable and do not change easily.
2) The location or place of business for MSMEs is usually fixed and rarely moved.
3) In general, MSMEs already carry out financial administration, although still at a simple level.
4) Company finances began to be separated from family finances so that they were more organized.
5) A business balance sheet has been prepared to see the company's financial position clearly.
6) MSMEs already have business permits and meet other legal requirements, including NPWP.
7) Human resources (entrepreneurs) in MSMEs have experience in entrepreneurship that can help develop their business.
8) Most MSMEs already have access to banking to meet their capital needs.
9) However, most MSMEs are still unable to create good business management such as business planning.

4.1.3. Medium Business
1) MSMEs have improved their management and organization by clearly dividing tasks, such as finance, marketing and production divisions.
2) Regular financial management has been carried out by implementing an accounting system, thereby facilitating the auditing and assessment process, including by banking institutions.
3) Have organized and managed the workforce and have a good organizational structure in their business.
4) Has met legal requirements, including obtaining permission from neighbors or relevant authorities.
5) Already have access to banking funding sources as an option for obtaining business capital.
Generally, they already have trained and educated human resources in running their business.

In developing their business, MSME entrepreneurs often face several weaknesses that are interrelated with each other. Several indicators of these weaknesses include: (1) Limited capital both in terms of amount and funding sources. (2) Lack of ability in management and operational skills to organize a business. (3) Limitations in product or service marketing efforts.

The role of micro businesses is very significant in community economic activities. Micro businesses play a very important role in developing the country's economy, especially in meeting daily and future needs. Micro and medium enterprises (MSMEs) have a crucial role in economic growth in Indonesia. For example, when the monetary crisis occurred in 1998, MSMEs succeeded in restoring the economic level in Indonesia.

According to Ade Komarudin (2014:2), the concept of micro, small and medium enterprises has several meanings. First, this business was founded with the aim of economic activity and not as a non-profit activity. Second, this business aims to generate profits from the business activities carried out. Third, this business is independent in the sense that it does not depend on other parties in carrying out its operations. Fourth, business ownership can be owned by business entities or individuals.

4.2. Implementation Stages

In this case, the stages carried out by students in order to provide MSME innovation to local residents include: The first stage carried out is a survey, planning what activities will be carried out and determining targets. After knowing the situation and conditions, students determine activities and activity targets. There are two targets for this activity, namely the Pasirkuda residents (mothers, fathers and teenagers) and 6th grade elementary school students at SD Negeri Cibalagung 04. As for the activities The two are different, where the activities carried out with residents are related to MSME innovations made from used cooking oil which is processed into aromatherapy candles. Meanwhile, in elementary school, we make Ecoprint activities based on tote bags and plants to train creativity and skills from an early age.

The second stage was the implementation of the activity “Training on the Use of Used Cooking Oil to Make Aromatherapy Candles.” In its implementation, students provided sterin (a material for hardening oil into wax), candle wicks, crayons and aromatherapy oil, while residents were directed to bring used cooking oil and containers for making their own candles. On Saturday, August 19 2023, we conducted training on the use of used cooking oil for residents of Pasirkuda RW 04 on the badminton court. Starting at 09:00 in the morning, it started with a manufacturing demonstration carried out by students. After carrying out the demonstration and explanation, residents were given the opportunity to carry out training. Experiments and training were carried out 4 times which resulted in 8 aromatherapy candles.

The stages in making aromatherapy candles are as follows; 1) heating the used cooking oil, 2) adding sterin to the used cooking oil, 3) stirring the oil and sterin until dissolved, 4) adding crayons as candle coloring, 5) adding aromatherapy oil, 6) preparing the candle wick into a container, 7) pouring the oil has been processed into the container provided.
Picture 2. Aromatherapy Candle Making Training Activities

Picture 3. Print the candle in the space provided
Picture 4. Photo Session with Training Participants

Picture 5. Results of Aromatherapy Candle Making Training
The third stage is the implementation of "Ecoprint" activities at Cibalagung 04 State Elementary School. Cibalagung 04 Pasirkuda State Elementary School, is a school that has implemented students' creative thinking in every activity. However, it has not gone well because there are several obstacles to developing creativity in learning. Therefore, students create a new creative activity at school that is plant-based and related to economic ideas so that it is hoped that it can become a provision for students in the future.

During the implementation, students provided tote bags and alum, while students were directed to bring plants, plastic and stones. This activity was carried out on Wednesday, August 23 2023 on the school field. It started by distributing tote bags to each student and giving directions by explaining step by step how to make ecoprint. It starts with arranging the plants on a tote bag which has been coated with plastic, then pounding it using stones, until the plants absorb it and are printed on the plastic tote bag which can be removed then the tote bag is dried in the sun and washed using the alum water provided. Students did this enthusiastically and with different plants, resulting in various tote bag motifs. After the totebag has been washed and dried again, students can take home the work they have made.

Picture 6. Ecoprint Activities Before Pounding
Picture 7. Ecoprint Activities After Pounding

Picture 8. Final Stage of Making Ecoprint
4.3. Program Achievements

4.3.1. Aromatherapy Candle Training Program Achievements

The training program on the use of used cooking oil to make aromatherapy candles went well and produced 8 aromatherapy candles which were distributed to local residents. The residents of RW 04 enthusiastically participated in the program.

Apart from that, this program has succeeded in increasing residents' knowledge regarding the use of used cooking oil that was previously wasted. After carrying out this activity, residents no longer waste used cooking oil that is no longer suitable for use, but residents have started to use the used cooking oil to make aromatherapy candles.

Apart from using used cooking oil, this can also be a new livelihood innovation in the Pasirkuda Village area with basic ingredients that are easy to obtain.

4.3.2. Ecoprint Activity Program Achievements

The program for implementing Ecoprint activities at SD Negeri Cibalagung 04 has been successfully carried out, this activity resulted in 30 totebags being distributed to each student, during the implementation the students looked enthusiastic in participating in the Ecoprint activities carried out by the students.

From this activity, students understand that plants can be used for other things that are also useful, such as making plants the basic material for decorating tote bags. This activity program can train students' abilities in processing things, apart from that, this activity can also be an innovation to create a new business in the Pasirkuda Village area.
CONCLUSION

From the activities that have been successfully carried out, it can be concluded that students have a role in providing innovation to the surrounding community regarding Micro, Small and Medium Enterprises (MSMEs). Meanwhile, after carrying out the activities held by students, it was seen that innovation was gained as well as new knowledge gained by the community about innovations or new business ideas that could be created with easy basic materials.

There are two stages of activities carried out by students. The first stage is training to use used cooking oil to make aromatherapy candles. The second stage was the "Ecoprint" activity at SD Negeri Cibalagung 04 where students made tote bags using plants as motifs. The students enthusiastically carried out this activity and produced various kinds of tote bag motifs.

With programs like this, it is hoped that they can provide encouragement to the development of MSMEs, improve community skills in producing quality products, and have a positive impact on the regional economy.

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