

Community Service Through Empowering The Skills Of Housewives In Utilizing Used Cooking Oil Into Multipurpose Soap In Parung Village, Parung Sub-District, Bogor.

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Abstract

Community service through collaboration to find solutions for the utilization of household waste that is useful through the Creativity Industry Seminar activity, which produces soap as a cleaning agent that is usually made from fat or oil processed with alkali, such as sodium hydroxide, and functions to bind dirt and oil so that it can be cleaned with water and has economic value and benefits as a cleaning agent soap that can be used in everyday life.

Keywords: *Community service, Skills empowerment, Recycled product innovation, Utilization of household waste*



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1. INTRODUCTION

One of the three main pillars of the Indonesian higher education system is community service in the implementation of the Tri Dharma of Higher Education, which, along with teaching and research, aims to empower and provide direct benefits to society.

One of the Tri Dharma of Higher Education is community service which is defined as the efforts of the entire academic community (lecturers, students, and all components of higher education) as implemented by the Islamic Religious Education Study Program, Faculty of Tarbiyah, Institut Agama Islam Depok, through collaborative activities with the Parung Village Government, Parung District, Bogor Regency.

One form of Community Service is the application of the results of education and research in higher education to solve community problems. Through skills

training, application of appropriate technology in rural areas, or assistance in local economic development by utilizing waste that can be reused, namely used cooking oil which can be processed into all-purpose soap.

Lecturers and students provide education and counseling related to improving welfare and general welfare through skills training in processing used cooking oil into multi-purpose soap. The purpose of the community service program is to improve the welfare of the community through skills training.

Building collaboration between universities and the community through cooperation to find solutions to the utilization of household waste that is useful. Through this service, universities contribute to social change and contribute to the formation of a more knowledgeable, independent, and prosperous society.

2. METHODOLOGY

In accordance with Articles 47 and 48 of Law Number 12 of 2012 concerning Higher Education, the purpose of community service in higher education is to practice and cultivate science, knowledge, and technology to advance the general welfare and intellectual life of the nation. In accordance with the Minister of Education and Culture Regulation No. 3 of 2020 concerning National Higher Education Standards, carrying out community service (dikti.kemdikbud.go.id);

- a. Build models that support community empowerment;
- b. Increase the ability to commit to the community;
- c. Provide solutions based on academic research to problems faced by the community, either directly or indirectly;
- d. Taking actions that empower communities at all social, economic, political and cultural levels; and
- e. Bringing art, technology, and science to the community for development

3. RESULT

Hamid (2018), explains that empowerment is the social action of a community within the population where it organizes itself in making collective plans and actions in order to be able to solve social problems or meet social needs with its abilities and resources. Efforts to improve the abilities, knowledge and skills of housewives so that they can better contribute to the economic, social and family

aspects are known as housewife skills empowerment. Many times, the purpose of this empowerment includes several things, such as:

1. Improving Economic Independence: Providing skills training that can help housewives start small businesses or work from home, such as digital skills, cooking, sewing, or handicrafts.
2. Improving Skills and Knowledge: Training can include entrepreneurship, financial management, marketing, or even technology skills.
2. Optimizing Roles in Family and Society: Housewives are more confident to participate in household management and active roles in the community if they have better skills.
3. Strengthening Social Networks: This empowerment also forms a supportive community of housewives where they can help each other and share opportunities and experiences.

According to Bahri (2019), sustainable community empowerment is based on three main components: input, process, and output. He also provides an explanation;

a. Input element

Taking this additional element into consideration, sustainable community empowerment relies on individual resources, family resources, and institutional and group resource resources

b. Process component

The process of empowerment has four steps. Sustainable community means change of views (attitudes), improvement of knowledge, linking of skills, and management of related resources.

c. Outcome aspect

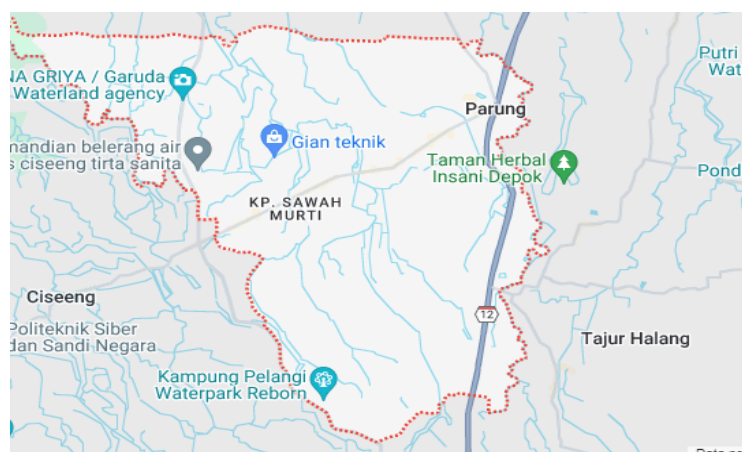
In terms of output, what is expected from empowerment Individuals, families, groups, and institutions form a sustainable community.

4. DISCUSSION

This empowerment is carried out in collaboration with government agencies, non-government agencies, or local communities concerned with the welfare of

housewives. The Islamic Institute of Depok, especially the Islamic Education Study Program as a Higher Education institution that has a role in the Tri Dharma of Higher Education, implements community service through Real Work Lecture Activities which were held in August 2024 in Parung Village.

Parung is a village in Parung sub-district, Bogor Regency, West Java, Indonesia. This area was famous in the past because it was a link between Bogor City, Depok City, and Greater Jakarta. Parung sub-district is directly adjacent to Bojongsari sub-district in Depok City. This sub-district has a zip code of 16330.



Source Google Maps Year 2024: Parung Sub-district Area Map

One form of activity chosen in increasing economic independence is to utilize used cooking oil as raw material in making multi-purpose soap. By utilizing used cooking oil, the kitchen waste left over from cooking by housewives is converted into soap that is useful and has economic value.



Seminar on creative industry in making used cooking oil soap

The ingredients and stages of soap making can be seen from the following picture:



Materials and process of making soap from used cooking oil

Picture description:

1. The soap making ingredients consist of used cooking oil, caustic soda, papaya juice, water.
2. The process of filtering used cooking oil
3. Papaya juice filtration.
2. Mixing of caustic soda with water.
3. Stirring the caustic soda with water.
4. Stirring the caustic soda until it dissolves with water.

5. Mixing the caustic soda into the oil and papaya juice mixture.
6. Stirring all the ingredients that have been mixed.
7. Keep stirring the mixture until it thickens.
8. Molding the soap ingredients.
9. Aerated until hardened.
10. Removed from the mold, let stand for 6 days and the soap can be used.

From this process, it can be obtained the usefulness of used cooking oil into useful and economically valuable soap. The benefits of this soap can be used for bathing or washing clothes, and to increase the economic value of soap making can be shaped and packaged beautifully.

Soap is a popular cleaning agent because it is able to clean dirt such as dust and metabolic waste. One of the benefits of soap as a sanitizer is its ability to control various pathogenic bacteria from causing disease. One way to prevent bacterial infections on the skin is to clean the skin with soap containing antiseptic substances (Mardiana, 2020).



The practice of making soap in collaboration between IAID students and housewives in Parung Village.

With the creative industry seminar in making soap from used cooking oil, Parung village women are very enthusiastic and have new knowledge that used cooking oil

left over from the cooking process in the kitchen can be converted into soap that is effective in cleaning, this soap is safe to use for washing clothes, washing hands and feet.



Activity Processing of used cooking oil into soap

The Ministry of Energy and Mineral Resources of the Republic of Indonesia in Press Release Number: 388.Pers/04/Sji/2020 Date: December 6, 2020 with the title Used Cooking Oil: A Promising Energy Business Potential. Explaining that reprocessing used cooking oil also means reducing the disposal of used cooking oil, which can pollute the environment and cause damage to the ecosystem. It is possible that carelessly disposed used cooking oil causes an increase in the chemical (COD) and biological (BOD) oxygen demand levels in waters. This causes a layer of oil to cover the water surface. As a result, sunlight cannot enter the water, which causes biota to die and contaminates groundwater.

Jalaluddin, et al. (2023), Soap is an alkali metal salt (usually sodium salt) of fatty acids resulting from the saponification reaction of fatty acids with free alkali. Soap contains mainly C16 and C18 salts, can also contain some carboxylates with lower atomic weights.

The benefits of soap as a cleaning agent that is usually made from fats or oils processed with alkali, such as sodium hydroxide, and serves to bind dirt and oil so that it can be cleaned with water. Soap can not only be used to wash the body and hands, but can also be used to wash equipment and clothing. Each type of soap, such as bar soap, liquid soap, and antibacterial soap, has different purposes and benefits.

5. CONCLUSION

Community service through Creativty Industry seminar activities, is well implemented by the implementation of recycling used cooking oil into soap that has economic value and usefulness as a cleaning agent soap that can be used in everyday life.

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