

Environmental Empowerment through the use of Plastic Waste in Growing the Creative and Innovative Soul of *Pembinaan Kesejahteraan Keluarga (PKK)* of Women

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Abstract	Article Info
Plastic waste management is the main focus of community service in Tanjung Harapan village, Seputih Banyak sub-district, Central Lampung. Plastic waste is identified as a crucial problem with significant negative impacts on the environment. The aim of this service is to gain an understanding of the concept of plastic waste management, creating a clean environment and providing a positive impact on local residents. Through the 3R concept (Reuse, Reduce and Recycle), this service aims to reduce plastic waste in the village. Using the CBPR (Community Based Participatory Research) method which is a mixed method for researching community aspirations and needs. Participants in this activity were 15 PKK women from Tanjung Harapan village. This activity was held at the Tanjung Harapan Seputih Banyak Village Meeting Hall. The results of this service show that PKK women as activity participants increasingly understand how to manage plastic waste. The conclusion of this activity had a positive impact on PKK women because they were given strengthened insight into how to manage plastic waste.	Article History <i>Received :</i> <i>January 10, 2024</i> <i>Revised :</i> <i>March 23, 2024</i> <i>Accepted :</i> <i>March 31, 2024</i> Keywords: <i>Community Empowerment, Plastic Waste, Environmental Empowerment</i>
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INTRODUCTION

The term environment has a very broad meaning and is often a common topic of discussion everywhere (Cahya, 2022). Talking about the environment can be interpreted with various different meanings, such as subdistrict boundaries that are divided into the environment or talking about the surrounding atmosphere (Mu'adib & Subagyo, 2024). Biologists interpret the environment somewhat differently, namely, environment literally means "scope" or "surroundings" or "surrounding nature" or "surrounding society" (Arif et al., 2024). Environment can also mean everything that influences the lives of living creatures collectively or the environment is the sum of everything that is around something or someone or around living creatures, including all living creatures and their natural forces (Habib & Rajagukguk, 2022). Based on this understanding, the environment is defined as the sum and relationship of one thing with another (Saputra et al., 2023).

Waste is a crucial problem and can be considered a cultural problem because it impacts various aspects of life (Luturmas et al., 2023). The main source of waste comes from residential areas, with 75% of the presentation being organic waste and the rest being inorganic waste (Apriyanto et al., 2022). Organic waste has been used for compost, briquettes and biogas, but inorganic waste management is still minimal (Rahmawati et al., 2021). Inorganic waste, especially plastic, is difficult to degrade and cannot even be decomposed naturally (Gatta et al., 2022). Therefore, creativity is needed that can reduce the negative impact of inorganic waste (Putra & Yuriandala, 2010). By having creative thinking you can reduce the negative impact of inorganic waste.

Many experts provide definitions of creativity. One school of thought states that creativity is the ability to connect and reassemble knowledge in the human mind, which allows them to think more freely to produce new things or ideas that surprise other people, which in the end can be useful (Widjajanti et al., 2017). Another definition states that creativity is the bringing together of knowledge from various different fields of experience to create new, better ideas (Fatmawati, 2022). Creativity is also defined as the skill to form new relationships, by combining concepts that already exist in the mind to produce new ideas (U.s, 2015). Apart from that, creativity is also considered as generating new ideas and innovations which can be realized in the form of new products, services, processes or methods (Balqis, 2021).

With such a view, we, students of Ma'arif Lampung University (UMALA) Social Work Lecture (KKS) group 21, in Tanjung Harapan village, Seputih Banyak District, Central Lampung Regency, invite the community, especially PKK women, to protect the environment. by utilizing plastic waste with the aim of protecting the environment and fostering a creative and innovative spirit in managing plastic waste.

Based on the description of the background of the problem, the researcher formulated the problem, namely how to use plastic waste to foster a creative and innovative spirit in the PKK women of Tanjung Harapan village, Seputih Banyak subdistrict, Central Lampung. In accordance with the problem formulation above, the aim of this service is to find out how to utilize plastic waste by recycling it into an interesting creation. Hopefully this service can provide benefits, *First*, can provide sources of information about how to utilize and recycle plastic waste. *Second*, can provide insights and ideas for readers. *Third*, to hone knowledge and skills in utilizing waste by making it into a craft that has value

Based on the background of the problem described above, the author took the title of service about "Care for the Environment Through the Use of Plastic Waste in Cultivating the Creative and Innovative Spirit of Pkk Women in Tanjung Harapan Village, District. As White as Many, Central Lampung Regency."

METHOD

In this service, mentoring uses a CBPR approach. Community based Participatory Research (CBPR) is a mixed method approach used to research community aspirations

and needs (Mandeka et al., 2023). CBPR is a form of research that involves active commitment from the community as support in the research process (Iftinani et al., 2023). The aim of this CBPR approach is to increase people's insight and knowledge about a problem, as well as combining this information to design strategies and social transformations that are beneficial for all elements of society and the researchers involved (Witi & Khwuta, 2022).

CBPR research is still in the model category *action research*. However, CBPR involves the community in conducting research (Apriansyah1 et al., 2022). Not just in implementing the model design that has been formulated by a researcher as an academic, as in *action research* and also in *classroom action research* (CAR) (Arosih, 2023). Research using the CBPR method has a concept (Fitriyah et al., 2020):

1. Invite the community to participate in development and activities in the Village.
2. Jointly formulate the activities that will be carried out during the mentoring process.
3. Determine the mentoring group.
4. Apply and use the model design that has been formulated.
5. Take real action together.

RESULT AND DISCUSSION

The use of plastic waste into items with artistic value was carried out together with PKK women in Tanjung Harapan village, Kec. Seputih Banyak, Central Lampung Regency with the aim of understanding how to manage plastic waste and reducing plastic waste in the village. The environmental empowerment program carried out through the use of plastic waste is an initiative that is very relevant and has a positive impact, especially in the context of developing local communities such as Tanjung Harapan (Aliwu et al., 2024). In the midst of global challenges related to environmental pollution by plastic waste, efforts to invite and involve PKK women are very important.

In this project, Tanjung Harapan PKK women play a major role as agents of change at the community level. They are not only wise consumers in managing plastic waste at home, but also creative actors who transform plastic waste into value-added goods. Through various training and workshops, PKK women are taught recycling techniques and creations from plastic waste, such as making handicrafts, household furniture, or even alternative building materials.

Apart from being beneficial and reducing the amount of plastic waste that pollutes the environment, this program also has a very significant positive impact (Sugiyanto et al., 2023). The active participation of PKK women in managing waste increases awareness of the importance of maintaining a clean environment. More than that, the creative and innovative process in managing plastic waste also stimulates the development of the entrepreneurial spirit and creativity of society, especially among mothers (Hartati et al., 2024).

By involving the entire community, both through routine PKK activities and collaboration with related parties, such as local government, non-governmental organizations and the private sector, this program creates an inclusive and sustainable environment (Padilah et al., 2023). Thus, the environmental empowerment program through the use of plastic waste not only provides a concrete solution to the plastic waste problem, but also becomes a vehicle for fostering a creative, innovative and collaborative spirit in building Tanjung Harapan towards a more sustainable and competitive future (Kaharuddin et al., 2024).

The aim of this community service is prepared with the hope that the community can better understand the concept of plastic waste management, create a clean environment, and have a positive impact on local residents. The contribution of this service lies in the implementation of a plastic waste management program in the village, which is expected to involve active participation from the community. With the hope that society will become more creative and innovative.

The use of plastic in modern life continues to increase rapidly, because of the practicality and cleanliness it offers as a packaging material or container (Dzody, 2022). However, human dependence on plastic is increasing because of its ease of acquisition, long durability and affordable price. However, many people are not aware of the risks posed by plastic and how to use it correctly (Lestari & As'ari, 2022).

Based on its origin, solid waste comes from two main sources, namely organic waste and inorganic waste (Aditya et al., 2019). Organic waste consists of biological materials that can be broken down by microbes or are biodegradable (Fahri, 2022). On the other hand, inorganic waste consists of non-biological materials, including synthetic products and the results of technological processing of mining materials (Suwangsih et al., 2023). Inorganic waste cannot be decomposed naturally or by microorganisms as a whole because it is unbiodegradable (Irdiana & Supriatna, 2023).

By implementing the 3R concept, namely Reuse, Reduce and Recycle with the aim of reducing plastic waste in the village (Ristya, 2020). What is meant by Reuse is reusing items with the same or different function (Eprianti et al., 2021). Like reusing plastic bottles for drinking containers. Meanwhile, Reduce is reducing the use of goods that will produce waste. Such as bringing cloth shopping bags when going to the market so that you can reduce the use of single-use plastic bags (I. G. A. A. Y. Dewi, 2018). Meanwhile, in this service, we use the third concept, namely Recycle, namely recycling goods into new forms or new functions (Rijati et al., 2017). Such as recycling mineral water bottles into pots, tissue holders, drink holders and so on. The types of plastic waste management carried out in this service are, making drinking containers from plastic bottle waste, flower vases, and flowers made from drinking straw waste.

Thus, the benefits that can be generated from environmental empowerment through the use of plastic waste are:

1. Reducing environmental pollution: by managing plastic waste effectively, through recycling and creation processes, this program helps reduce the amount of plastic

waste that pollutes the environment both on land and at sea (N. P. M. Y. K. Dewi & Pradhana, 2022).

2. Increased environmental awareness: through participation in plastic waste utilization activities, people become more aware of the importance of maintaining environmental cleanliness and environmentally friendly waste management practices (Miswar et al., 2023).
3. Local economic empowerment: the process of utilizing plastic waste can create new economic opportunities, especially for local communities. By selling recycled products or crafts from plastic waste, people can increase their income and reduce dependence on limited economic resources (Utami et al., 2021).
4. Promotion of creativity and innovation: through the creation of new items from plastic waste, such as handicrafts or household furniture, this program stimulates the development of creativity and innovation among the community. This can open up opportunities for the development of sustainable local creative industries (As'ari et al., 2022).
5. Improving quality of life: by reducing environmental pollution and creating new economic opportunities, environmental empowerment through the use of plastic waste has the potential to improve the quality of life of society as a whole. A clean and healthy environment and better economic opportunities will have a positive impact on the social and economic welfare of society (Santoso et al., 2023).
6. Community collaboration and involvement: this program also strengthens collaboration and active community involvement in overcoming environmental problems (Haslinah et al., 2023). By involving various parties such as the government, non-governmental organizations and the private sector, this program creates an inclusive environment that allows various potentials and resources to be used optimally to support sustainable development (Azhari et al., 2023).



Figure 1. Processmaking works from plastic waste



Figure 2.*Pencil case from straw*



Figure 3.*Flowers from plastic straws*



Figure 4.*Aqua glass holder*

CONCLUSION

This plastic waste management activity was welcomed by the PKK women of Tanjung Harapan village. This activity is very useful for PKK women in recycling plastic waste. With this activity, the PKK women came to understand how to manage plastic waste which at first glance was seen as just rubbish into an artistic item. By managing plastic waste, it means conserving the environment and also keeping the environment clean and beautiful. By managing plastic waste you can also contribute to reducing and keeping the environment fertile due to the impact produced by the plastic waste.

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