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Utilization of Plastic Waste as Handicrafts in Pagar Dewa Village, Bengkulu City

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ABSTRACT

Background. Of course, plastic waste is still a major problem in maintaining the cleanliness of the local environment. Plastic can be reprocessed into an object that is useful in the future and can be reused in community activities. The danger caused by unprocessed plastic waste can certainly cause damage to the environment. Through the activities carried out in Pagar Dewa Village, Bengkulu City, of course, it can provide a new lesson in terms of understanding and processing plastic waste.

Purpose. Of course, plastic can be reprocessed into a craft, besides that it can also increase the creativity of teenagers in the use and processing of plastic waste.

Method. The method of implementing the activities used is socialization and practicum for young mothers and teenagers in Pagar Dewa Village, Bengkulu City in managing plastic waste into crafts and the advantages gained are adding value to creativity.

Results. The results obtained are in the form of products from the utilization of used plastic into stationery storage which is used for storing stationery items such as pencils, pens and erasers and can also be used for fruit baskets and so on.

Conclusion. The first stage of activity provides socialization regarding understanding in the form of education to young mothers and teenagers regarding plastic waste processing activities and guides them by teaching them how to process plastic waste so that they can produce creative products and can even increase their finances.

KEYWORDS

Crafts, Creativity, Plastic Waste

INTRODUCTION

A clean and healthy environment is an environment that is free of various impurities, including dust, garbage and odors. Environmental hygiene and health issues have always been a prolonged polemic in society. Even cases involving environmental hygiene and health problems are always increasing every year. Many human activities have a negative impact on environmental quality, one of which is the poor management of waste and waste (Campanale dkk., 2020; Chai-Arayalert & Puttinaovarat, 2021).

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Indonesia is ranked as the second largest plastic waste producing country in the world. Plastic waste is decomposed within 1 millennium or around 1000 years (Kugapi & Höckert, 2022; Lu dkk., 2023). Even cases involving environmental hygiene and health problems are always increasing every year. Many human activities have a negative impact on environmental quality, one of which is the poor management of waste and waste (Campanale dkk., 2020; Chai-Arayalert & Puttinaovarat, 2021). Indonesia is ranked as the second largest plastic waste producing country in the world. Plastic waste is decomposed within 1 millennium or around 1000 years (Kugapi & Höckert, 2022; Lu dkk., 2023). Plastic waste has a negative impact on the environment, such as the accumulation of garbage, which causes environmental pollution. Garbage is one of the problems that is quite difficult to handle both in big and small cities in Indonesia, including in the Pagar Dewa Village, Bengkulu City. This happens because of the habits of the people as consumers who always produce waste, especially plastic, every time they use a product. Along with the development of technology, the need for plastic continues to increase, plastic is an artificial inorganic material composed of chemicals that are difficult to decompose so that it is harmful to the environment. This waste becomes an environmental problem because the quantity and level of danger interferes with the survival of living things (Karuppannan Gopalraj & Kärki, 2020; Lai dkk., 2020; Tang dkk., 2021). Therefore by converting plastic waste into items that can be reused can help reduce environmental pollution.

The creativity of using plastic waste to make handicrafts is a pretty good solution for turning plastic waste into something that can be used again, even has a sale value and can be made into goods that have aesthetic value (Cao dkk., 2021; Zhu dkk., 2020). Creativity in a person can be grown in many ways, one of which is by making handicrafts. Plastic waste can be made into handicrafts such as wallets, travel bags, shopping bags, makeup bags, pencil cases, baskets, and so on. Utilization of plastic waste is still rarely done in areas where residents pay little attention to things such as the creativity of handicrafts using waste (Liu dkk., 2021; Shen, 2020; Wang dkk., 2020). In Pagar Dewa Village, Bengkulu City, there has also been no effort to use plastic waste to be processed into handicrafts. Apart from that, there are still many young mothers and teenagers who are still productive but don't have a job, only have the status of housewives and find it difficult to find work so they still have a lot of free time. With this community service activity program for utilizing plastic waste into handicrafts, it is hoped that groups of young mothers and teenagers in Pagar Dewa Village, Bengkulu City will be able to increase their awareness of the environment by utilizing waste, apart from that they will have skills in terms of creativity and can increase their welfare or income. family. Maintain and create a clean environment by utilizing plastic waste into crafts that have sales value that can increase family economic income.

RESEARCH METHODOLOGY

The implementation of this community service activity was carried out for 1 month, from 05 October to 05 November 2022. Location This community service activity was carried out in Pagar Dewa Village, Bengkulu City. Participants who took part in this training activity were housewives and teenagers in Pagar Dewa Village, Bengkulu City, totaling 15 people. This training activity was carried out in two sessions, namely the first session the participants were given guidance and knowledge about the use of waste and how to sort plastic waste. In the second session, participants were trained and taught how to make handicrafts according to the type of plastic waste used.

RESULT AND DISCUSSION

The aim of the Community Partnership Program (KPM) is to empower target audiences to have knowledge about the importance of using free time in positive activities that can bring profit or additional income, namely by making handicrafts made from plastic waste (Barbarich dkk., 2021; Ding dkk., 2021). The benefits of this PKM activity are that by holding this community service it is hoped that it will be useful or beneficial for: 1. Increase the knowledge of young mothers and teenagers about the importance of utilizing free time with profitable and useful activities. 2. Increase the skills of young mothers and teenagers in making handicrafts from plastic waste. 3. Maintaining and creating a clean environment by utilizing plastic waste into handicrafts that have a selling value so that they can increase the family's economic income (Alampay dkk., 2020; Kanungo dkk., 2020; Singhal & Tanwar, 2021). From the results of a survey that has been conducted, it turns out that the problems faced by groups of young mothers and teenagers in Pagar Dewa Village, Bengkulu City, namely: 1. Young mothers and teenagers in Pagar Dewa Village, Bengkulu City, so far have not been able to utilize their free time to produce positive things. 2. The group of young mothers and teenagers, Pagar Dewa Village, Bengkulu City, still do not have jobs that can help the family's economy. 3. The large amount of plastic waste that pollutes the environment in Pagar Dewa Subdistrict, Bengkulu City, is in accordance with the problems faced by partners (Colombo dkk., 2021; Hannah, 2021), so the solution offered to be able to overcome the problems faced by partners is to provide a skills training program for making crafts made from plastic waste, which is carried out using the following activity methods: 1. Using the lecture and discussion/question and answer method, used when delivering activity material, namely material on the use of plastic waste into handicrafts.



Figure 1. Early Stage Extension Process



Page 2. Advanced Extension



Page 3. Initial Manufacturing Process



Page 4. The Gluing Process Using Hot Glue



Page 5. The results of becoming a fruit basket



Page 6. Group photo of young mothers and teenagers, Pagar Dewa Village, Bengkulu City

The waste problem is now a very complex issue, because it must be handled comprehensively (Sutama, 2023). Plastic bags are packaging bags that are used to carry groceries (Song dkk., 2020). The low level of public awareness and concern causes the generation of household B3 waste mixed with non-B3 household waste. (Resubun, 2023) Many people still dispose of waste by burning it or just throwing it away without sorting or separating it from organic and inorganic waste. In addition to its benefits, the market also provides potential problems, namely the generation of waste, especially plastic waste that cannot be decomposed on the ground (Budiyantoro dkk., 2023). Bratha (2023) LDPE (Low Density Polyethylene) type plastic is most often found in the environment and is often used as a source of environmental pollution because it can disrupt the balance of the ecosystem. Usually this type of LDPE plastic is found in plastic bags (cresek), plastic trash bags, shopping bags to food wrappers.

CONCLUSION

Based on the results of the activities of the community partnership program in groups of young mothers and teenagers in Pagar Dewa Village, Bengkulu City, the implementation of the Community Service Training Activities for creativity in utilizing plastic waste into handicrafts, it can be concluded that the service participants are interested, happy and enthusiastic in participating in creativity training activities in the utilization of plastic waste into handicrafts. Service participants after participating in training activities can understand the importance of creativity training activities in utilizing plastic waste into handicrafts, so that they can utilize their plastic waste and free time to carry out positive activities in making handicrafts that can be sold to increase family income. After monitoring and evaluating, the output of handicrafts made from plastic waste from young mothers and teenagers of Pagar Dewa Village, Bengkulu City, became better and more satisfying and they were able to develop various models of handicrafts with various kinds of raw materials. The hope is that in the future they will be able to help the family economy.

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AUTHORS' CONTRIBUTION

Look this example below:

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

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