


Plastic Waste Recycling Innovation as a P5-PPRA Activity at MI Miftahul Ulum Gumayun

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Received: October 05, 2025	Review : February 28, 2026	Accepted : March 20, 2026
 DOI : https://doi.org/10.47625/fashluna.v7i1.1123		

ABSTRACT

The problem faced around MI Miftahul Ulum Gumayun is the high amount of plastic waste that has not been managed properly. For this reason, an innovation in recycling plastic waste was carried out and made it a P5-PPRA activity. This study aims to observe how the innovation of recycling plastic waste as a P5-PPRA activity at MI Miftahul Ulum Gumayun. This research was conducted at MI Miftahul Ulum Gumayun by involving representatives of 6th grade students consisting of four boys and four girls. Data collection through observation and documentation. For data analysis, the stages of data reduction, data presentation, and conclusion drawing were carried out. The results of this study are that the innovation of recycling plastic waste as a P5-PPRA activity is one form of effective empowerment in waste management. In addition to being a P5-PPRA activity, the product of this plastic waste recycling innovation was also displayed at the Annual Jamboree Carnival event. And MI Miftahul Ulum Gumayun won 1st place in the Best Carnival at the 2025 Jamboree. With this research, it is hoped that awareness about waste management and the importance of protecting the environment will increase so that students can be more creative in processing waste.

Keywords : Recycling, Plastic Waste, Paper Waste, Carnival, Jamboree

INTRODUCTION

Education in Indonesia has undergone several curriculum changes. Currently, most schools have implemented the independent curriculum. The independent curriculum is based on developing student profiles so they can possess and apply the values embodied in Pancasila in their lives. The Ministry of Religious Affairs also plays a role in establishing policies for the educational institutions under its auspices. Madrasahs (Islamic schools) play a role in character formation by deepening religious knowledge and embodying the values of the Pancasila profile, which are presented to students. ¹KMA Number 347 of 2022 states that the Ministry of Religious Affairs combines two aspects: the Pancasila profile and *the rahmatan lil alamin profile*. *Educational institutions within the Ministry of Religious Affairs align values that align with Pancasila and the rahmatan lil alamin values*, which are the main foundation of the madrasah education process in Indonesia, hereinafter referred to as the student profile.²

The student profile is a student who has a mindset, attitude, and behavior that reflects the noble values of Pancasila and religious moderation. The Student Profile also has knowledge and thinking skills including: critical thinking, problem solving, metacognition,

¹ Herpiana et al., "Implementation of the Pancasila and Rahmatan Lil Alamin Student Profile Strengthening Project (P5-PPRA) at Elementary Madrasahs in Bone Regency," *EKSPOSE: Journal of Legal and Educational Research*. Vol. 24, no. 1 (2025): pp. 111-124.

² Decree of the Minister of Religion of the Republic of Indonesia Number 347 of 2022, *Concerning Guidelines for the Implementation of the Independent Curriculum in Madrasahs*.

communication, collaboration, innovation, creativity, information literacy, piety, noble character, and moderation in religion. The Pancasila Student Profile Strengthening Project and *the Rahmatan lil Alamin* Student Profile or P5-PPRA is an interdisciplinary learning in observing and thinking of solutions to problems in the surrounding environment to strengthen various competencies in the Student Profile. This is a means of providing opportunities for students to gain experience and knowledge as a process of strengthening character as well as an opportunity to learn from their surroundings.³

Field Experience Practice (PPL) is an activity carried out by students in the process of forming prospective teachers, in the form of teaching practice activities or educational/teaching tasks outside of teaching in a guided and integrated manner to fulfill the requirements for the formation of the educational profession. During the implementation of PPL at MI, students will be involved in various learning activities, not only in academic activities, but students are also involved in non-academic activities and extracurricular activities at MI. In addition, the implementation of PPL at MI also becomes an opportunity for students to develop their skills in communication, collaboration, and problem solving.⁴

In the implementation of the PPL PGMI IBN Tegal which was carried out at MI Miftahul Ulum Gumayun, students saw that there were problems faced around MI Miftahul Ulum Gumayun, namely the high amount of plastic waste that had not been managed properly, thus causing a negative impact on the environment. Moreover, MI Miftahul Ulum Gumayun was under construction, so not only was there a lot of plastic waste scattered around, there was also a lot of construction waste such as cement paper and others. At MI Miftahul Ulum Gumayun, waste was still seen as something useless and would become trash, even though waste could bring benefits and could bring positive things if managed properly. Even waste could be used to produce creative products and services.⁵

A clean and healthy school environment is crucial for supporting the learning process. Waste is unwanted leftover material after a process has ended.⁶ Without an adequate waste management system, it can have negative environmental impacts, such as soil, water, and air pollution. Poorly managed waste can contaminate natural ecosystems and damage biodiversity. Furthermore, waste piles can become breeding grounds for disease vectors, such as mosquitoes, rats, and flies, which can carry various infectious diseases. Therefore, an effective and sustainable waste management policy is needed, awareness to manage waste properly is very important in overcoming this problem.

According to Ramadhan, the utilization of plastic waste in an effort to reduce plastic disposal as much as possible can be done by recycling.⁷ So based on this background, PPL students are interested in innovating plastic waste recycling and making it a P5-PPRA activity at MI Miftahul Ulum Gumayun. This study aims to observe how the innovation of plastic waste recycling as a P5-PPRA activity at MI Miftahul Ulum Gumayun. The focus of this study is to

³ Directorate of KSKK Madrasah, Directorate General of Islamic Education, Ministry of Religious Affairs of the Republic of Indonesia, *Guidelines for Developing the Pancasila Student Profile and Rahmatan Lil Alamin Student Profile Strengthening Project*, (Jakarta, 2022), p. 1.

⁴ FITK IBN Tegal 2025 *Field Experience Practice Guidebook*, page 3

⁵ Evi Khofifah and Lyswidia Andriarsih, "Snack Bouquets to Empower the Creativity of PKK Mothers in Villages," *IQTISHODIAH: Journal of Islamic Economics and Banking*, Vol. 4, no. 2 (2022): pp. 21-27.

⁶ Parida et al., "Utilization of Waste Through Creative Recycling to Improve the Creativity of Students of SDN 143 Inpres Leko," *Panrannuangku Journal of Community Service*, Vol. 4, no. 4 (2024): pp. 236-240.

⁷ Miftahul Fikri et al., "Community Empowerment Through the Utilization of Plastic and Paper Waste into Creative Clothing in Carnival Activities Commemorating Scout Day at SDN Tambakan II," *Proceedings of UIN Sunan Gunung Djati Bandung* Vol. 5, no. 3 (2024): pp. 2-15.

analyze the implementation of P5-PPRA in improving students' understanding of waste management, as well as assessing its impact on students' motivation to participate in recycling practices. By understanding these results, researchers hope to provide useful insights into innovative ways to manage waste better. In addition, through this activity, it is hoped that it can foster a culture of utilizing waste into valuable products, so that students are more active in maintaining environmental cleanliness, while providing education to the younger generation about the importance of preserving nature in an innovative and fun way.

In a previous study, the UPTD of SMP Negeri 7 Bangkalan carried out P5 activities with the theme "Bhinneka Tunggal Ika" which utilized used materials such as plastic waste and sacks in making and producing traditional clothing. The utilization of this activity can provide participants with new experiences and new insights. In addition, students can think more critically, creatively, as a generation with noble morals, global diversity, mutual cooperation and devotion to God Almighty.⁸In another study, the utilization of plastic waste through creative recycling was also carried out to increase the creativity of students at SDN 143 Inpres Leko. By turning waste into works of art, students can learn the aesthetic and functional value of used goods, and contribute to waste reduction and improving the quality of life of the community.⁹SDN Tambakan II also faces waste problems, especially the high volume of plastic and paper waste that has not been managed properly. This encouraged the implementation of a program to utilize waste into creative clothing. The result of this service was the successful holding of a carnival with the theme of creative clothing made from plastic and paper waste, which actively involved students. This program successfully achieved its goal of increasing environmental awareness and encouraging student participation in creative waste management.¹⁰

RESEARCH METHOD

This study uses a qualitative approach by applying the Participatory Observation method to examine the contribution and impact of plastic waste recycling innovation as a P5-PPRA activity at MI Miftahul Ulum Gumayun. This method involves researchers to be directly involved in plastic waste recycling, providing an opportunity to observe in depth how the material is used in the recycling process.¹¹This research was conducted at MI Miftahul Ulum Gumayun by involving representatives of 6th grade students consisting of four boys and four girls in the plastic recycling process. Data collection was carried out through a participatory observation process, namely researchers conducted direct observations of recycling activities and recorded how students process recycled plastic. Data was also obtained by documenting each stage of the recycling process in the form of photos. Through this direct observation and documentation, researchers were able to understand how participants apply recycling techniques, as well as record the challenges they face and the solutions they find in the recycling process. For data analysis, the stages of data reduction, data presentation, and conclusion drawing were carried out.

⁸ Amelia Shabrina Cahyarani et al., "The Role of Students in Making Traditional Clothes from Plastic Waste for P5 Activities at SMP Negeri 7 Bangkalan," *Journal of Community Empowerment and Community Development*, Vol. 1, no. 2 (2024): pp. 66-74.

⁹ Parida et al., "Utilization of Waste Through Creative Recycling to Improve the Creativity of Students of SDN 143 Inpres Leko," *Panrannuangku Journal of Community Service* Vol. 4, no. 4 (2024): pp. 236-240.

¹⁰ Miftahul Fikri et al., "Empowerment..."

¹¹ Anjani Putri Belawati et al., "Recycling the Contribution of Creative Works in the Advanced Indonesia Carnival," *El-Madaniyah: Journal of Community Service P3M STAI Sangatta* Vol. 2, no. 1 (2025): pp. 34-42.

RESULTS AND DISCUSSION

It's important to understand that recycling is the process of reprocessing used materials or waste into new products so they can be reused. The primary goal of recycling is to reduce the volume of waste going to landfills and conserve energy and natural resources. The recycling process generally involves collecting used materials, sorting them, cleaning them, and processing them into new forms or products. Examples of frequently recycled materials include paper, plastic, and others, all of which can be processed into useful products and reduce the environmental impact of waste.¹²

In addition to implementing PPL, students also held a recycling innovation by managing plastic waste as a P5-PPRA activity at MI Miftahul Ulum Gumayun. This waste recycling innovation focuses on making creative clothing. The clothing is made from plastic waste that is no longer used. This aims to reduce existing plastic waste and to introduce students to the fact that plastic waste can be recycled into a more useful type of item. Students act as mentors for students in developing their understanding of creating works. Students act as experts, who design or develop their ideas to then be able to create and produce works/products. The implementation of this participatory activity, starting from the planning stage to the implementation stage in achieving solutions to problems.

The implementation carried out to realize the implementation of this participatory activity can be detailed as follows:

Environmental Observation

In this first stage, students observed the MI Miftahul Ulum Gumayun environment, conducted a survey, including observations in the school environment. This survey aims to obtain information from students and teachers about the waste problem in the surrounding environment. The results of the environmental observation found a lot of plastic waste that is still not managed properly. In addition, there is a lot of used waste from the MI Miftahul Ulum Gumayun Construction such as cement paper and others. After obtaining data from the results of the environmental observation, the PPL students continued by meeting the principal to convey the activity plan and apply for permission for this recycling activity. The plan for plastic waste recycling innovation is carried out by making creative clothing. In addition to plastic waste, used construction waste such as cement paper and others will also be recycled in innovations in the form of Poci and Tegal Aci properties . These recycled innovation products will later be displayed at the 2025 Jamboree Carnival event in Dukuhwaru District which is attended by MI Miftahul Ulum Gumayun.

Socialization of Activity Implementation

The socialization was conducted to develop a deep understanding of the situation and problems faced by MI Miftahul Ulum Gumayun in order to precisely identify the initial needs for future problem solutions. This socialization was held to introduce the recycling program and to involve stakeholders and students of MI Miftahul Ulum Gumayun in collecting waste materials needed in the recycling process for making creative clothing and properties for teapots and Tegal aci tofu such as plastic bottles and plastic bags. There is also waste from the remaining construction process of MI Miftahul Ulum Gumayun such as Wire, Cement Paper, Used Plastic Buckets, Bamboos. And Sacks. In addition to these materials, used cardboard and used CD cassettes were also collected as additions to making fashion accessories.

Waste Recycling

¹² Belawati et al.

This waste recycling aims to create innovative and environmentally friendly solutions into creative works by utilizing waste such as plastic bottles, plastic bags, sacks into Creative Clothing. There is also waste left over from the construction of MI Miftahul Ulum Gumayun such as cement paper, bamboos, and used plastic buckets to become Tegal Poci and Tegal Aci Tofu Properties. This process includes several stages, such as making designs, cutting, painting plastic bottles, making frames, installing, fitting. Continued with the process of recycling waste from the construction of MI Miftahul Ulum Gumayun such as cement paper, bamboos, used plastic buckets, and others to make Tegal poci and aci tofu properties. Then the installation of accessories from used CD cassettes. The details are as follows.

Table 1. Sequence of Activities

Date	Activity
August 11-12, 2025	Creative Fashion Design and Drafting Process
August 13-14, 2025	Process of Collecting Used Bottles and Others
August 15-16, 2025	Fashion Frame Making and Painting Process
August 19-20-21, 2025	Process of cutting used bottles, CD cassettes, and others
August 22-23, 2025	Making Wings, Crowns, and Men's Clothing from Used CDs
25 26-27 August 2025	The fitting of women's and men's clothing continued with the making of carnival props, such as teapots, glasses, and tofu.

This waste utilization activity through recycling is an innovation from PPL students of the Elementary School Teacher Education (PGMI) IBN Tegal study program as a P5-PPRA activity with the aim of increasing awareness of waste management or utilizing waste into something usable. This activity also encourages students to develop creative skills and work together in teams. Not only producing beautiful works, but also valuable experiences for their character development. In addition to being a P5-PPRA activity, products from recycled waste in the form of creative clothing and teapot properties as well as Tegal aci tofu will also be displayed at the 2025 Jamboree Carnival attended by MI Miftahul Ulum Gumayun. In this waste recycling process, students were seen to be very enthusiastic about carrying out this P5-PPRA activity. PPL students acted as facilitators and companions in making creative clothing and teapot properties as well as Tegal aci tofu. In addition, PPL students also directed students in practicing clothing making patterns to suit the theme of "Tegal Culture" adjusted to the theme of the 2025 Jamboree Carnival.

The results of this study are that the innovation of plastic waste recycling as a P5-PPRA activity is an effective form of empowerment in waste management at MI Miftahul Ulum Gumayun. This activity not only succeeded in reducing the amount of waste, but also provided benefits in terms of social education and the environment. In addition, this activity also serves as a means to develop creativity and skills, while strengthening social relationships within the school environment and its surroundings. And through this waste recycling innovation, MI Miftahul Ulum Gumayun won 1st place in the Best Carnival at the 2025 Jamboree.

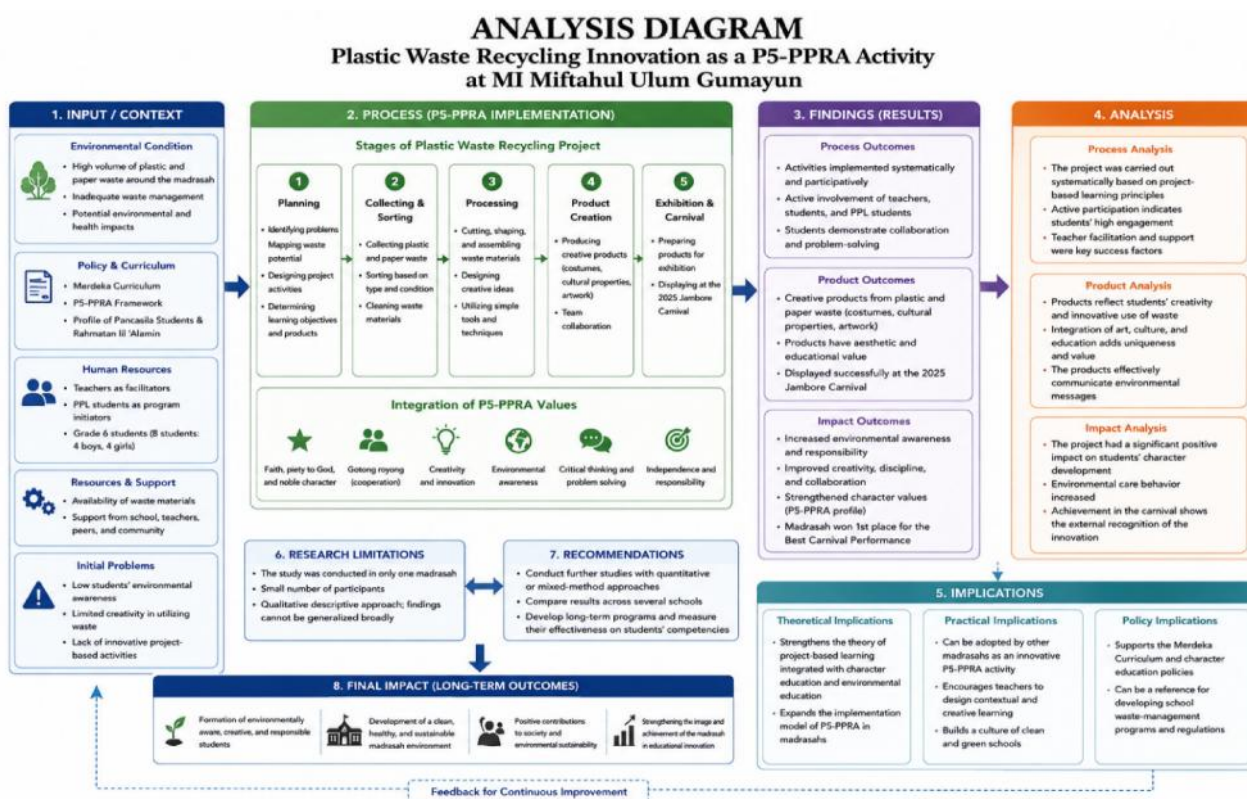
The carnival held during the Jamboree serves not only as entertainment but also as a medium to spread the message of the importance of environmental protection. By wearing creative costumes and using teapots and Tegal Tofu Aci props made from innovative recycled waste, students convey the message of the importance of recycling and waste reduction to the wider community. Through this event, the community around the school is encouraged to be more aware of the importance of protecting the environment through simple yet impactful

methods, such as recycling waste. This message is conveyed visually through an attractive and unique parade, making it more easily accepted by the community.

Analysis and Implications of Research Results

Research result show that innovation recycling repeat rubbish integrated plastic in P5-PPRA activities at MI Miftahul Ulum Gumayun No only functioning as activity learning based project , but also become a medium for formation character participant educate . Activities processing waste plastic become fashion creative , property culture and works art educative show existence transformation learning from just a transfer of knowledge going to learning contextual that fosters awareness ecological , creativity , and responsibility answer social students . Findings This indicates that implementation of P5-PPRA based on environment capable create experience learn more active , participatory , and meaningful for participant educate . In perspective education character , activities the show existence internalization values of mutual cooperation, discipline , caring work environment equal , and independence through involvement direct student in every stages activity project .

In a way analytical , results study This in line with various study previously confirmed that learning based project - *based* learning can increase skills think creative , collaborative , and problem-solving problem participant educate . However , research This own uniqueness Because integrate project recycling repeat rubbish with strengthening profile students mercy lil ' alamin (PPRA) in the context of elementary madrasah . The integration show that education environment No only directed at aspects ecological , but also associated with spiritual values , caring social and responsibility moral responsibility in perspective Islamic education . With Thus , research This expand understanding that implementation of P5-PPRA can developed through approach contextual based culture environment school and needs public around .



Implications of the results study This own dimensions theoretical and practical . In theoretical , research This strengthen draft that learning based integrated projects with education character and awareness environment capable produce a holistic educational process

. Findings this also provides contribution to the development of the P5-PPRA implementation model in madrasahs based on innovation environment and creativity participant educate . In a way practical , results study can made into references for other madrasahs in develop learning programs based management waste and entrepreneurship creative as part from strengthening character students . In addition , the involvement of teachers, participants education and environment school in project This show importance collaboration all over madrasah residents in create culture caring education environmental and sustainable .

Although Thus , research This own limitations Because only done on one institution education with approach qualitative descriptive , so that the result Not yet can generalized in a way extensive . Research has not yet been measure in a way quantitative influence activity to improvement competence specific to participants educate . Therefore that , research furthermore recommended For develop evaluation models based experiment or mixed methods to measure effectiveness implementation of P5-PPRA based on recycling repeat rubbish to improvement character , creativity , and awareness environment participant educate in a way more comprehensive .

CONCLUSION

Rahmatan lil Alamin Student Profile (P5-PPRA) Strengthening Project is a cross-disciplinary learning in observing and thinking about solutions to problems in the surrounding environment to strengthen various competencies in the Student Profile. In the implementation of the PPL PGMI IBN Tegal which was carried out at MI Miftahul Ulum Gumayun, students saw that there were problems faced around MI Miftahul Ulum Gumayun, namely the high amount of plastic waste that had not been managed properly , resulting in a negative impact on the environment. For this reason, an innovation in recycling plastic waste was carried out and made it a P5-PPRA activity at MI Miftahul Ulum Gumayun. In addition, recycled waste products will be displayed at the 2025 Jamboree Carnival in Dukuhwaru District which was attended by MI Miftahul Ulum Gumayun. The results of this study are that the innovation in recycling plastic waste as a P5-PPRA activity is an effective form of empowerment in waste management. This activity not only succeeded in reducing the amount of waste, but this activity also became a means to develop creativity and skills, while strengthening social relationships in the school environment and its surroundings. And through this waste recycling innovation, MI Miftahul Ulum Gumayun won 1st place in the Best Carnival at the 2025 Jamboree. With this research, it is hoped that awareness about waste management and the importance of protecting the environment will increase so that students can be more creative in processing waste. Students are not only invited to recognize the dangers of plastic waste, but also encouraged to think creatively in converting used plastic into products with economic value. This is expected to be able to create positive and independent habits in schools in managing waste, so that they can significantly reduce the amount of waste in their environment.

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