



JPM

Jurnal Pengabdian Mandiri

Volume 3 Issue 1, 2026 (7-10)

ISSN (*online*) : 3089-3070

Homepage : <https://jurnalunived.com/index.php/MANDIRI>

Doi : <https://doi.org/10.37676/mandiri>

Waste Management Education for Children in RT 06

Ferliando Frisan Hamid ¹, Bayu Noperanda Abdillah ², Wahyu Dwi Saputra ³, Eko Susilo ⁴,
Suhendri ⁵, Ririn Afriani ⁶, Hesti Nur'aini ⁷, Mimpira Haryono ⁸
^{1,2,3,4,5,6,7,8} Universitas Dehasen Bengkulu, Indonesia
e-mail : ¹ frisnan15@gmail.com

Received [30 April 2026]

Revised [01 Juni 2026]

Accepted [03 Juni 2026]

Abstract. Waste is a significant issue in the community, including in RT 06, Pematang Gubernur Village, Bengkulu City. Children's lack of understanding about waste sorting leads to a lot of mixed waste and careless dumping, especially around gutters. This Community Service Program (KKN) aims to increase children's awareness and skills in processing and sorting waste from an early age. The implementation method is an educational approach that includes outreach, material provision, interactive games, and hands-on practice of sorting organic and inorganic waste. The results of the activity indicate an increase in children's understanding and enthusiasm for environmental cleanliness. Children are beginning to differentiate between types of waste and demonstrate a caring attitude towards their surroundings. This program is expected to foster positive and sustainable habits in maintaining environmental cleanliness in RT 06.

Keywords: *Education, Waste Sorting, Children, KKN, Environment.*

INTRODUCTION

The community of RT 06 in Pematang Gubernur Subdistrict, Bangkahulu District, Bengkulu City, possesses characteristics that are conducive to environmental education on waste management for children. However, a lack of awareness in managing waste can lead to various negative impacts, such as environmental pollution, clogged drainage systems, and a decline in public health quality. This issue is also evident in RT 06 Pematang Gubernur Subdistrict, where mixed waste is still commonly found and disposed of indiscriminately, particularly by children. Children play an important role as the next generation in environmental preservation. Instilling environmental awareness from an early age is therefore a strategic step in shaping positive behaviors in the future. Through appropriate education, children can develop an understanding of waste types, waste processing methods, and the importance of maintaining environmental cleanliness.

Various previous community service activities have focused on waste management education. Waste management involves a series of systematic stages aimed at reducing environmental impacts, optimizing resource utilization, and supporting sustainability. In Indonesia, this approach follows the 3R principles (Reduce, Reuse, Recycle) and is supported by facilities such as TPS 3R and TPST before waste is ultimately transported to landfills (TPA). This process is inherently educational, as it encourages community participation starting at the household level to minimize waste generation. Although such activities have provided an initial contribution to cleanliness and discipline in waste management among children, they have generally lacked elements of creativity and active engagement. As a result, these activities have not fully enhanced children's knowledge, attitudes, and skills in waste management needed to create a clean, healthy, and sustainable environment.

Waste utilization-based education is an educational process designed to improve community awareness and skills in managing waste effectively, with a focus on transforming

waste into valuable resources such as compost, handicrafts, or energy. This approach integrates the 3R principles (Reduce, Reuse, Recycle) through interactive methods including socialization, training, and hands-on practice, aiming to shift behavior from merely “disposing of waste” to engaging in productive actions. Moreover, such education fosters an understanding of the environmental impacts of waste, provides technical knowledge on organic and inorganic waste segregation, and encourages active participation in recycling to reduce dependence on landfills. As a result, organic waste can be processed into compost or biogas, while inorganic waste can be transformed into usable products such as ecobricks or paving blocks.

Therefore, regular socialization activities are needed in RT 06 and schools to promote waste processing, composting, and handicraft production from inorganic waste, such as ecobricks and eco-enzymes, for direct utilization. Practical workshops, including household composting and waste bank activities that monetize waste, can enhance participation and environmental awareness among children. This Community Service Program (Kuliah Kerja Nyata / KKN) aims to foster early environmental awareness so that children become accustomed to sorting and utilizing waste responsibly, reducing the volume of waste sent to landfills, and addressing challenges related to waste management education in the RT 06 community.

RESEARCH METHODS

This teaching activity was conducted over one day, on January 14, 2026, and took place at the RT 05 RW 05 community post in Pematang Gubernur Subdistrict. The primary target participants were elementary school-aged children residing in the RT 06 neighborhood. The implementation method was carried out in an integrated manner and included socialization through the delivery of educational materials on the definition of waste, the classification of organic waste (such as food leftovers and leaves) and inorganic waste (such as plastic and paper), as well as their negative impacts on the environment, including soil, water, and air pollution. An interactive approach was applied through educational games and question-and-answer sessions designed to enhance children’s active participation, thereby enabling the material to be more easily understood and retained.

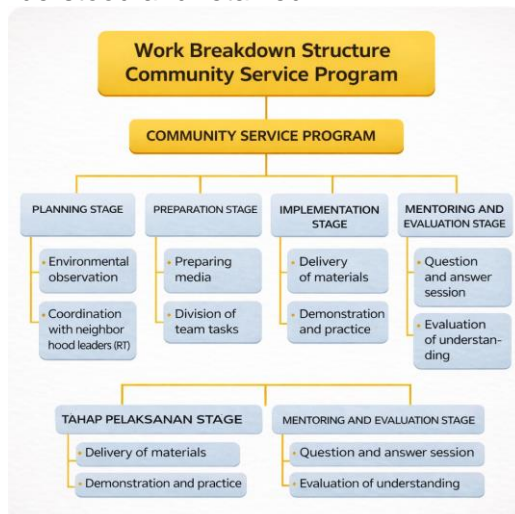


Figure 1. Work Breakdown Structure of Community Service

RESULTS AND DISCUSSION

The waste segregation education program was implemented smoothly and received a very positive response from children in RT 06. The activity introduced basic concepts of organic and inorganic waste through interactive explanations, visual aids, and hands-on sorting practice.

The children showed high enthusiasm and were able to correctly identify and sort waste according to its type. Active participation was evident through questions and discussions related to environmental impacts, creating an engaging learning atmosphere.

The results indicate an increased understanding and awareness of environmental cleanliness among the children. A brief survey showed that 90% of participants expressed their intention to continue practicing waste segregation at home, demonstrating the effectiveness of the program in fostering pro-environmental attitudes from an early age.

Prior to the activity, RT 06 faced issues related to indiscriminate waste disposal and mixed waste, reflecting limited community awareness of proper waste management. Through this educational intervention, children gained practical knowledge about waste classification, its environmental impacts, and appropriate management practices.

Following the activity, observable behavioral changes emerged, including improved disposal habits, attempts to sort waste independently, and peer reminders to avoid littering. These changes suggest that early educational efforts can positively influence children's attitudes and behaviors toward environmental responsibility.

Overall, the waste segregation education program serves as an important initial step toward building sustainable environmental awareness in RT 06. With continued support from families and the community, these positive behaviors are expected to contribute to a cleaner and healthier environment in the long term.



Figure 2. Educational Activities about Waste

CONCLUSION

The Community Service Program (KKN) conducted by Group 63 of Universitas Dehasen Bengkulu made a tangible contribution to the community of RT 06, Pematang Gubernur Subdistrict. The waste management education program implemented for children in RT 06 successfully increased their knowledge and awareness of the importance of maintaining environmental cleanliness. The children were able to identify different types of waste and correctly practice waste segregation. This activity had a positive impact on shaping environmentally responsible behavior from an early age. It is expected that waste segregation education activities will be continued sustainably by the neighborhood administration, schools, and the local community. In addition, the provision of separate waste disposal facilities is necessary to ensure that the habit of sorting waste can be consistently applied in daily life.

REFERENCES

Astuti, D., Pratama, A. R., & Lestari, N. (2023). Edukasi pemilahan sampah sebagai upaya peningkatan kesadaran lingkungan pada anak usia sekolah dasar. *Jurnal Pengabdian kepada Masyarakat Nusantara*, 4(2), 156–164.

- Dewi, M. K., Mutiara, R., Husna, T. A., Reywanda, S. D., Purnomo, S. B., Rahmat, M., & Nurlaili, N. (2025). Pendidikan karakter untuk anak-anak di Desa Binjai Baru melalui program kreatif mahasiswa KKN. *Jurnal Pengabdian Masyarakat Bhinneka*, 4(1), 877–883.
- Hendrawan, R. P., Hanand, Z. H. A., Putri, F. M., Afifullah, R., & Elsandika, G. (2025). Upaya meningkatkan minat baca dan kesadaran literasi siswa melalui program KKN di desa. *NAJWA: Jurnal Pengabdian dan Pemberdayaan Masyarakat*, 3(1), 81–91.
- Mufaizah, M., Rodyah, S. K., Ikwan, M., & Mahaphaksi, M. (2025). Peranan Kuliah Kerja Nyata (KKN) mahasiswa dalam kehidupan bermasyarakat. *MAJU: Indonesian Journal of Community Empowerment*, 2(1), 173–178.
- Putra, R. A., & Nurhayati, S. (2020). Pembentukan karakter peduli lingkungan melalui pembiasaan memilah sampah pada anak. *Jurnal Pendidikan Karakter*, 10(1), 65–73.
- Rahmawati, L., & Hidayat, A. (2021). Pendidikan lingkungan hidup berbasis partisipatif untuk menanamkan perilaku peduli lingkungan sejak dini. *Jurnal Pendidikan dan Pemberdayaan Masyarakat*, 8(2), 112–120.
- Sari, M. P., Widodo, S., & Handayani, R. (2022). Peran mahasiswa KKN dalam meningkatkan kepedulian lingkungan masyarakat melalui program pengelolaan sampah. *Jurnal Abdimas Lingkungan*, 3(1), 45–53.
- Yuliana, E., Saputra, D., & Fitriani, A. (2023). Implementasi program edukasi pengelolaan sampah rumah tangga dalam kegiatan KKN tematik. *Jurnal Pengabdian Masyarakat Berkemajuan*, 6(1), 89–97.