



Environmental Education Through the Waste Bank Program in Maintaining Environmental Health in Tegalaren Village

Nur Ngazizah (Muhammadiyah University Purworejo, Indonesia)
Tiara Dwi Damayanti, (Muhammadiyah University Purworejo, Indonesia)
Dwi Lestari Oktaviani, (Muhammadiyah University Purworejo, Indonesia)
Syifa Agnessya (Muhammadiyah University Purworejo, Indonesia)

Correspondence Author Email: ngazizah@umpwr.ac.id

Keywords

Environmental
education,
Environmental
Health,
Waste Bank

Abstract

This research aims to learn and understand more about the scope of environmental education. Environmental education is not only about knowledge related to the environment but also about how to apply environmental education in society and everyday life. Waste banks are activities that fall within the scope of environmental education. The existence of this program increases public awareness in Tegalaren Village in maintaining a clean and healthy environment. The method used in this research is a descriptive method with a qualitative approach. The qualitative approach involves collecting data from various sources, including observations and interviews, field notes, audio recordings, videos, and documentation as sources of information. The result of this research found how influential society is in respecting and protecting the environment. Through the waste bank program, we can raise awareness of the importance of creating a clean and healthy living environment. Because humans and the environment cannot be separated. This shows that community participation in protecting the environment supports life, and creates clean, healthy, and comfortable environmental conditions.

Introduction

Indonesia is an archipelagic country. Consists of many islands and is located in a geographically strategic position and has a wealth of natural resources (Manurung, 2018). Low environmental awareness will encourage community activities that tend to damage the natural environmental order. One of the negative impacts that will be caused by the activities of people who do not care about the environment is the problem of environmental cleanliness and health. Humans living their lives on earth, namely their living environment, have a central position in managing the living environment properly and correctly to fulfill their basic needs, to achieve benefit (prosperity) (Aulia, 2021). On the other hand, errors in environmental management will not only threaten the survival and sustainability of the environment but can also have serious consequences for the destruction of humanity itself. Therefore, there is a need for environmental education as an educational means to provide insight into the environment.

Environmental education is an educational activity that aims to form attitudes, values, and habitual behavior to protect the environment (Ferdyan, nd). We can create people who care about the environment through environmental education, especially in maintaining environmental cleanliness and health. This goal will be achieved if the public can be educated in choosing and applying methods appropriately. If environmental education is implemented in learning at school, it will raise awareness among students of the importance of respecting

the environment. One way to educate about the environment is by implementing methods or ways to maintain environmental cleanliness and health, namely by holding a waste bank program.

The waste bank is an initiative that aims to reduce waste, manage waste, and support environmentally friendly practices. Waste banks are generally related to the increasing amount of waste and the environmental problems it causes. Accumulation of waste that is not managed properly can cause environmental pollution, spread of disease, and various other problems. The waste bank is based on the concept of recycling, which can reduce the need for new materials and reduce the waste that goes to landfill (Hayati et al., 2020). Therefore, the waste bank program can be used as an educational tool in environmental education to protect the existing environment.

Waste Bank Program

Purworejo is a district located in Central Java Province, Indonesia. Efforts to maintain environmental cleanliness in Purworejo are very important to ensure public health and nature conservation. Tegalaren is a village in Purworejo Regency, Central Java, Indonesia. Each village or region definitely has different environmental cleanliness challenges and initiatives according to local conditions and needs. The Tegalaren Village Head created a campaign to increase public awareness about the importance of keeping the environment clean. This could include outreach and educational programs on waste and environmental issues. The Tegalaren Village Head invited the local community to improve the waste management system, such as collecting, sorting and recycling waste. These activities include the installation of public trash bins and educational programs for the public on how to dispose of waste properly. Focusing on activities that need to be in the hands of the community, carried out by the community and beneficial to the community can also be called community education (Putra & Ismaniar, 2020).

Waste management is all activities carried out to handle waste from the time it is generated to final disposal. Waste management is all activities carried out to handle waste from the time it is generated to final disposal. In general, waste management activities include: controlling waste generation, waste collection, transportation, processing and final disposal. Waste management is not easy, but very complex, because it includes technical, economic and sociopolitical aspects (Dewanti et al., 2020). Thus, the program chosen to improve the cleanliness of the surrounding environment is to build a waste bank program. Awareness of limited natural resources, such as raw materials for plastic products, makes society and the government increasingly concerned about reducing waste and recycling materials. Public awareness of the importance of protecting the environment is increasing. This is driven by knowledge of the negative impact of waste on nature, animals and human health. Governments often support the establishment and operation of waste banks as part of their efforts to reduce waste and improve environmental cleanliness. The running of the waste bank program requires participation from the local community. In this way, the waste bank program will run well.

Society participation

Community participation in the waste bank program is the key to its success. The waste bank program not only involves the community in collecting and recycling waste, but also encourages awareness of the importance of responsible waste management. The public can participate by actively collecting their own waste, separating organic waste from non-organic

waste, and storing it in appropriate containers. This is an important first step in the waste bank program (Sekarningrum et al., 2020). People can also learn about how to recycle waste, such as paper, cardboard, plastic bottles and cans. Clean, sort, and sell this recyclable waste to waste banks or recycling facilities. The community can be involved in waste bank operations. They can help manage the local waste bank, assisting in weighing, recording and distribution activities.

Waste banks can help empower the community's economy by providing the opportunity to generate additional income through the sale of recycled waste. People can take advantage of this opportunity to improve their welfare (Manurung & Ruing, 2020). The community's advantage in waste bank activities can also be to develop creative products from recycled waste. For example, making handicrafts. Thus, waste banks are a useful solution in overcoming waste problems, supporting a cleaner and more sustainable environment, as well as providing economic and educational benefits to the community. With the right support from the government and community, waste bank programs can achieve significant results in keeping the environment clean and reducing the negative impact of waste on our planet.



Figure 1. Waste Sorting Activity

Method

This research applies a descriptive method with a qualitative approach. The qualitative approach to this research involves collecting data from various sources, including observations and interviews, field notes, audio recordings, videos, and documentation as sources of information. The research was carried out on October 12 2023, by visiting the "Gayuh Mentari" Waste Bank in Tegalaren Village, Purwodadi District, Purworejo Regency. The activities carried out were observations and interviews with Tegalaren village residents who manage or manage the waste bank.

Results and Discussion

The "Gayuh Mentari" waste bank is located in Tegalaren Village, Purwodadi District, Purworejo Regency. The "Gayuh Mentari" waste bank has been established since 2019. The aim of establishing this waste bank is to make it easier for the residents of Tegalaren Village to pay land and building taxes (PBB). The proceeds from the sale of waste will be saved as residents' (customers') savings which will later be used to pay taxes. If the money from savings is not enough to pay taxes, it will be added to the personal money of the citizen concerned, and if there is any left over, then the remaining money will be saved again to pay taxes in the following year. This waste bank program can run well because the residents of Tegalaren Village really support the existence of waste bank activities.

The existence of this waste bank activity program can provide many benefits or positive impacts for residents in Tegalaren Village. The public is educated about how to protect the environment. Awareness is growing in society through the waste bank program, including environmental education. Not only does it raise awareness of the importance of respecting and protecting the environment but also gain knowledge related to the environment. This waste bank program is quite helpful for the community, apart from easing the burden on residents in paying taxes, the existence of this waste bank program can also make the environment in Tegalaren Village clean and there is no rubbish scattered around. Thus, the waste bank activity program is quite effective in providing understanding and being able to raise awareness in the community to create clean and healthy environmental conditions.

Gayuh Mentari Waste Bank Management Mechanism

The implementation of the "Gayuh Mentari" waste bank program was spearheaded by the government's program regarding the procurement of waste banks. The program was well received by the residents of Tegalaren Village, Purwodadi. The "Gayuh Mentari" waste bank is chaired by the Village Head and consists of six residents recruited from each dawis group in the village. There is also a waste bank management mechanism as follows.

- a. Manager. The waste bank is managed by 7 people consisting of the chairman of the management and 6 representatives from each dawis.
- b. Implementation. The waste bank program is carried out once a month. The waste bank administrators take the waste that has been collected by residents at each dawis which will then be sorted again by the waste bank administrators based on categories/types of waste, then later sold to waste collectors.
- c. Type of trash. The categories of waste that are sorted are drink glasses, cardboard, plastic, drink bottles, plastic bags, cans, glass bottles, iron or copper, damaged electronic goods and also used bags and shoes.
- d. Income. The waste produced each month can reach 300-400 kg. The proceeds from sales of sorted waste can reach 400-500 thousand per month.
- e. Craft. Apart from being sold, the collected waste is also made into crafts such as flowers, pencil boxes, bags, toy cars and many other crafts. However, the crafts made have not been sold because they will only be used as goods for exhibitions and equipment for the August 17 carnival.



Figure 2. “Gayuh Mentari” Waste Bank Command Post



Figure 3. UM Purworejo students and waste bank administrators

Conclusion

Based on the description of the results of the research that has been carried out, it can be concluded that environmental education is very important. Implementation of the waste bank program is an initiative that aims to reduce waste, manage waste, and support environmentally friendly practices. The key to the success of the waste bank program is support or participation from the community, as well as public awareness of the importance of keeping the environment clean and comfortable.

Recommendation

This article can be used as a reference regarding environmental education material and environmental management through the waste bank program.

Acknowledgement

Thank you to all parties who have provided support and participation in writing this article, without the cooperation of all parties this article might not have been completed on time.

References

- Aulia, A. G. (2021). Kebersihan dan Kesehatan Lingkungan menurut Hadis. *Jurnal Riset Agama*, 1(1), 187–196. <https://doi.org/10.15575/jra.v1i1.14367>
- Dewanti, M., Purnomo, E. P., & Salsabila, L. (2020). Analisa efektifitas bank sampah sebagai alternatif pengelolaan sampah dalam mencapai smart city di kabupaten kulon progo. *Publisia: Jurnal Ilmu Administrasi Publik*, 5(1), 21–29. <https://doi.org/10.26905/pjiap.v5i1.3828>
- Ferdyan, R. (n.d.). *Model Pendidikan Lingkungan Hidup: Kegiatan Pembelajaran pada Siswa Sebagai Bagian dari Lingkungan di Era New Normal*.
- Hayati, N., Yulianto, E., & . S. (2020). Peranan Keuangan Berkelanjutan Pada Industri Perbankan Dalam Mendukung Sustainable Development Goals: Peranan Keuangan Berkelanjutan Pada Industri Perbankan Dalam Mendukung Sustainable Development Goals. *Jurnal Akuntansi Bisnis dan Ekonomi*, 6(1), 1633–1652. <https://doi.org/10.33197/jabe.vol6.iss1.2020.473>
- Hikmah, N., & Ruing, H. L. (2020). Sosialisasi pembuatan bank sampah serta pengelolaan sampah organik serta anorganik. *Masyarakat Berdaya dan Inovasi*, 1(2), 90–95. <https://doi.org/10.33292/mayadani.v1i2.20>
- Manurung, H. (2018). INDONESIA MENUJU POROS MARITIM DUNIA. *Prosiding Seminar Nasional Pakar*, 147–152. <https://doi.org/10.25105/pakar.v0i0.2714>
- Putra, W. T. & Ismaniar. (2020). Pemberdayaan Masyarakat Melalui Pengelolaan Sampah di Bank Sampah. *Jambura Journal of Community Empowerment*, 1–10. <https://doi.org/10.37411/jjce.v1i2.569>
- Sekarningrum, B., Sugandi, Y. S., & Yunita, D. (2020). Sosialisasi dan Edukasi Kangpisman (Kurangi, Pisahkan dan Manfaatkan Sampah). *Kumawula: Jurnal Pengabdian Kepada Masyarakat*, 3(1), 73. <https://doi.org/10.24198/kumawula.v3i1.25244>
- Sari, PP, Lafiani, E., Sholikhah, S., & Ngazizah, N. (2022). Environmental Education through the Prosperous Waste Bank Program as Concern for the Environment. *Journal of Education and Counseling (JPDK)*, 4(1), 35-40.

Authors Information

Nur Ngazizah

Muhammadiyah University Purworejo
Purworejo, Jawa Tengah, Indonesia

Contact:

E-mail Address: ngazizah@umpwr.ac.id

*She is a lecturer in the Science Division of
the Primary School Teacher Education
Department*

Tiara Dwi Damayanti

Muhammadiyah University Purworejo
Purworejo, Jawa Tengah, Indonesia

Contact:

E-mail Address: tiaradd5@gmail.com

*She is a student of Primary School Teacher
Education Department*

Dwi Lestari Oktaviani

Muhammadiyah University Purworejo
Purworejo, Jawa Tengah, Indonesia

Contact:

E-mail Address:

oktaviani.lee10@gmail.com

*Short Biography of the third author:
Student of Primary School Teacher
Education Department*

Syifa Agnessya

Muhammadiyah University Purworejo
Purworejo, Jawa Tengah, Indonesia

Contact:

E-mail Address: syifaagnessya@gmail.com

*Short Biography of the fourth author:
Student of Primary School Teacher
Education Department*