



COMMUNITY EMPOWERMENT THROUGH THE 3R MOVEMENT AND THE ESTABLISHMENT OF A WASTE BANK IN WIRITTASI VILLAGE

Syarifah Khusnul Khotimah, Nasruddin, Hanida Aulia Santi, Asse Padly, Anastasya Rosyida An-Nafi

Universitas Lambung Mangkurat, Banjarmasin, Indonesia

Email: 2210416120009@mhs.ulm.ac.id, nasruddin.luthfie@ulm.ac.id

2210416120007@mhs.ulm.ac.id, 1910416310024@mhs.ulm.ac.id 2210416320042@mhs.ulm.ac.id

Abstract

This study examines the implementation of the 3R movement and the establishment of waste banks to empower the community to create a Zero Waste Wirittasi Village that Cares for the Marine Environment. By applying a participatory approach, villagers are actively involved in program planning and implementation, raising their awareness of the importance of reducing, reusing, and recycling waste. The method used in this study is the quantitative descriptive method. The establishment of waste banks is at the core of this initiative, providing infrastructure for more structured waste management and empowering communities to manage waste efficiently. Implementation outcomes include a reduction in the amount of waste, changes in consumer behavior, and positive impacts on the marine environment. Nevertheless, challenges such as the sustainability of community participation and infrastructure capacity building are still a concern. The study provides an in-depth look at community empowerment efforts in the context of Zero Waste and provides a basis for the further development of sustainability strategies at local and global levels.

keywords: zero waste, waste bank, community empowerment, waste, wirittasi village

INTRODUCTION

Community empowerment is a fundamental effort to improve the quality of life and welfare of the community (H. Hamid, 2018; Laksono, 2018). Community empowerment can be interpreted as an activity carried out to shape the quality and standard of life of the community through the process of encouraging individuals to carry out and develop their lives by strengthening potential, development, and independence (Irmawita, 2013; Putra, 2020; Wahyuni, 2018). Community is one of the important aspects that have a role in development so empowerment is no longer a new thing but is often echoed (Maryani & Nainggolan, 2019). One important aspect of community empowerment is the Tridaya national program (Rosalina, 2012). Empowered communities are those who can meet their own needs, do not depend on others and can run their lives independently, creatively and innovatively, and can be relied on by other communities (Adibowo

& Wibiksana, 2020). Amid global concerns over the impact of climate change and the growing problem of plastic waste, concrete steps are needed to create an environmentally conscious society.

One of the most important things in waste management activities is public awareness (Irwati et al., 2023). 3R Movement (*Reduce, Reuse, Recycle*) has become one of the effective solutions to reduce the amount of waste and minimize its impact on the environment. This concept emphasizes the importance of reducing the use of single-use items, recycling materials, and optimizing the use of natural resources. In addition, the establishment of waste banks is also a strategic step in managing waste efficiently and sustainably.

Marine pollution is one of the direct impacts of this poor waste management. Plastic waste that is thrown carelessly or untreated can reach rivers and eventually reach the sea. This not only harms marine ecosystems but also threatens the lives of coastal communities that depend on marine resources as their source of life. Public health problems also arise due to poor waste management. Waste that is not managed properly can be a breeding ground for diseases and outbreaks, especially in areas that have a lack of adequate sanitation facilities. An increase in the amount of organic waste that is not treated properly can also result in air and water pollution, threatening overall public health. The high level of consumption of disposable goods and products also creates problems in the utilization of natural resources. The raw materials used to manufacture products often come from vulnerable or scarce ecosystems, leading to a decline in environmental quality and the sustainability of natural resources. In addition, the lack of public awareness and understanding of the importance of environmental conservation is also a serious problem. Without adequate understanding, it is difficult for society to change towards more sustainable behavior. With these problems, Wirittasi Village faces a big challenge in creating a sustainable environment and caring for the sea. Therefore, the implementation of the 3R movement and the establishment of a waste bank in Wirittasi Village is not only a concrete step to overcome this problem but also a much-needed effort to change the mindset and behavior of the community as a whole to achieve the vision of Wirittasi Village that Zero Waste Cares for the Marine Environment.

Wirittasi Village that Zero Waste Cares for the Marine Environment is a vision that answers global challenges to marine pollution, especially by plastic waste. Clean and sustainable oceans are essential for ecosystems and the sustainability of life. Wirittasi Village is expected to become a pioneer model in community empowerment efforts through the implementation of the 3R movement and the establishment of waste banks. Through the 3R movement, the people of Wirittasi Village are invited to actively reduce the use of single-use plastics, develop creativity in reusing items, and practice waste recycling. In addition, the establishment of waste banks will help the community manage waste in a more structured manner. These waste banks can be centers for collecting, sorting, and recycling waste, creating economic value from waste that was previously considered a problem. In addition to economic benefits, the waste bank will also educate the

Community Empowerment Through the 3R Movement and the Establishment of a Waste Bank in Wirittasi Village

public about the importance of keeping the environment clean and the positive impact of 3R practices. Through the active participation of the community in this movement, Wirittasi Village is expected to reduce its contribution to marine pollution, maintain the sustainability of natural resources, and create a healthy and sustainable environment.

The implementation of the 3R movement and the establishment of a waste bank in Wirittasi Village has a significant impact on various aspects of people's lives. One of the positive impacts is the paradigm shift of society towards waste. With education conducted through waste banks, people become more aware of the consequences of consumptive behavior and *disposable culture* and are able to identify ways to reduce their environmental footprint. Local economic empowerment is also one of the results of this step. With the waste bank, the community can involve themselves in the process of collecting and managing waste, creating new jobs, and opening up recycling business opportunities. This not only increases people's incomes but also gives a boost to the overall development of the local economy.

Based on these problems, the purpose of this activity is to improve the ability of communities that have not previously been able to manage their waste independently from the village household level. For this reason, this empowerment activity is here to provide.

METHODS

The analytical method used in this study is a qualitative approach with a descriptive-analytical method. PPK Ormawa HMG FISIP ULM activities in Wirittasi Village focus on community-based waste handling and management to realize a Zero Waste Maritime Village that Cares for the Marine Environment. The population in this activity is the community of Wirittasi Village which amounts to 506 families with a sample of 20 fishing families. The method of implementing the 3R movement and the establishment of a waste bank in Wirittasi Village is a series of holistic and structured actions. First of all, a participatory approach is involved in the planning and implementation of the program. Local communities are invited to actively participate in the decision-making process, ensuring that proposed solutions are appropriate to their local needs and context through the Focus Group Discussion method). The first step was carried out through campaign activities with socialization, counseling, and education on the importance of the 3R movement and the establishment of Sampa banks for training and mentoring activities. This activity also involves collaboration with government agencies, namely the Tanah Bumbu Regency Environmental Office and related parties can also join forces to support this education effort.

RESULTS AND DISCUSSION

Zero Waste Maritime Village Socialization

According to Murtani, 2019; Umasugi, (2021) Socialization is one of the media that affects a person's personality by accommodating and informing the public about certain things that can

increase their knowledge. Socialization activities are one of the agendas carried out by the Ormawa HMG PPK Team to empower partner village communities related to waste management.

Zero waste is a method of conservation through production, consumption through recovery and reuse of products, materials, and packaging without going through the combustion process and not disposing of the remaining waste into water, soil, and air so that it can be a threat to human health and the environment (Săplăcan & Márton, 2019). Zero waste is one strategy that can be done in various places including companies, communities, industrial sectors, schools to the home environment as a form of protection for the environment (S. Hamid et al., 2020). Changing people's lifestyles to zero waste is sal; ah one effort that can be made to have a good impact on the environment (Lestari & Munib, 2022). The establishment of Zero Waste Maritime Village is one of the targets in empowerment activities by TIM PPK Ormawa HMG. Through the introduction of the Zero Waste Maritime Village movement, it is hoped that the people of Wirittasi village can manage their waste so that they can reduce the amount of waste in the environment so that they can create a healthy, neat, and beautiful village. Through this socialization activity, the Zero Waste campaign is expected to change the attitude and behavior of the community from those who originally did not understand how to manage their waste to be more concerned and understand the right way to reduce the accumulation of the amount of waste in the environment.



**Figure 1. Submission of Zero Waste Maritime Village idea by TIM PPK Ormawa HMG
Introduction to how to sort garbage**

Environmental damage can be caused by various factors including the production of organic and inorganic waste that has not been managed properly (Yuwana & Adlan, 2021). The implementation of the introduction of how to sort waste was carried out through the provision of material by the implementing staff of waste management and management (PP3) of the Environmental Office of Tanah Bumbu Regency. about the type of waste to the community and explain the importance of sorting waste before being thrown in the trash. Waste becomes one of the serious problems, both organic and inorganic waste if it is not handled properly (Restuaji et al., 2019). This fact is one of the things conveyed to the community so that they can process their waste before disposal. At this stage, the community is directly introduced to selecting and sorting their waste (Yuwana & Adlan, 2021). Through waste sorting activities, it will increase community

Community Empowerment Through the 3R Movement and the Establishment of a Waste Bank in Wirittasi Village

knowledge so that it can distinguish between organic and inorganic waste. This activity has also made the community more motivated to make different bins for organic and non-organic waste and feel the increasing importance of carrying out routine service work to clean up the waste of the environment around them.



Figure 2. Introduction to types and how to sort garbage

3R Movement Education (Reuse, Reduce, Recycle)

Sustainable waste management is carried out through activities that seek to reduce waste, reuse it, and recycle and manage it into energy sources known as reuses, reduce and recycle as well as energy waste (Gusti et al., 2015). This changes the paradigm of waste management that was previously collected, transported, and then disposed of into collected-sorted-processed and transported (Chaerul & Kartika, 2021). The 3R movement is an activity to reduce the increase in the volume of waste in the environment. The implementation of a waste management system requires the active contribution of the community and local government to achieve an integrated and better waste management system. The application of 3R principles in waste management offers benefits from various sectors such as public health, socio-economic, and cultural (Hayati & Saputri, 2021). This can then improve quality of life, good behavior in waste management, and satisfaction with the waste management system.

The results of the implementation of the delivery of 3R movement material in Wirittasi Village have achieved significant positive changes in various aspects. Today the community has been able to sort between organic waste and inorganic waste Through effective education and active community participation in 3R practices, the consumption of single-use items has been reduced, and the practice of recycling and reusing items has become more common.

Waste Management Training



Figure 3. Training on Craft Making and used straw waste

Training is a form of non-formal education that aims to increase the special skills of the community and as an effort to develop their potential (Dewi, 2020; Mustangin, 2018; Riyadi, 2020). Waste management training through waste recycling practices is carried out to develop community creativity and concern for the environment, especially in terms of inorganic waste management such as plastic straws. The practice of making handicrafts was demonstrated to several community groups by a team from the Tanah Bumbu Regency Environmental Office and by the PPK Ormawa HMG team. The training activity aims to inform and increase public knowledge about waste management (Mardhia & Wartiningih, 2018). In its implementation, the facilitator arranges from the community how to make handicrafts from used straws that can be used as pencil holders, flower vases to frames.

Garbage Bank Formation

The establishment of waste banks has also brought a great positive impact. With the existence of waste banks, communities have become more organized in managing their waste. That is, the establishment of waste banks is one form of systematic and sustainable initiative on waste management and is the initial momentum to collectively foster public awareness to sort and recycle their waste in addition, waste bank management that (Dhewanto et al., 2018; Selomo et al., 2016). The community has a mandatory role in what is produced by their households while the government and other institutions act as facilitators as well as motivators for those who have managed their waste (Purwendah & Wahyono, 2022).

The process of collecting and sorting waste runs more efficiently, minimizing its negative impact on the environment. In addition, waste banks have created new economic opportunities through the sale of recycled materials, creating an additional source of income for the community. In addition to the direct impact, the implementation of this program also creates a long-term impact on the development of the local economy and sustainable tourism.

Community Empowerment Through the 3R Movement and the Establishment of a Waste Bank in Wirittasi Village



Figure 4. Inauguration of Wirittasi Village Waste Bank

Program Sustainability

Maintaining the success of this program requires ongoing involvement and support from various parties, including local governments, non-governmental organizations, and the private sector. This support is needed to maintain waste bank infrastructure, provide ongoing training and education, and ensure the implementation of supportive environmental policies. Despite achieving several positive results, Wirittasi Village also faces several challenges and potential improvements in the implementation of the 3R movement and the establishment of waste banks. One of the main challenges is consistency and sustainability of community participation. Raising public awareness is an important first step, but it needs ongoing efforts to ensure that 3R and waste management practices continue to be applied in everyday life. Further development of waste bank infrastructure capacity is also needed, including investment in more efficient and environmentally friendly waste management technologies. This effort will help improve operational efficiency and responsiveness to the increase in the volume of waste that can be processed by waste banks.

CONCLUSION

Overall, the implementation of the 3R movement and the establishment of a waste bank in Wirittasi Village has resulted in positive and significant changes in efforts to create a sustainable village that cares for the marine environment. Through increased public awareness, 3R practices have been implemented successfully, reducing the amount of waste and creating positive changes in consumer behavior. The establishment of waste banks has also brought positive economic impacts and helped manage waste more efficiently. Nonetheless, challenges such as continued community participation, infrastructure capacity building, and deeper integration with the local business sector still need to be addressed. With continuous involvement and support from various

parties, Wirittasi Village can continue to strengthen its initiatives towards Zero Waste Care for the Marine Environment, becoming an inspiring example for local and global communities in undergoing the journey towards sustainability and environmental preservation.

REFERENCES

- Adibowo, R., & Wibiksana, I. G. (2020). Empowerment of Reuse, Reduce and Recycle Programme (Kang Pisman) In Bandung. *Proceeding of International Conference on Business, Economics, Social Sciences, and Humanities*, 3, 376–385.
- Chaerul, M., & Kartika, I. (2021). Aplikasi Model Sistem Dinamik untuk Evaluasi Skenario Pengelolaan Sampah di Wilayah Pelayanan Tempat Pengolahan dan Pemrosesan Akhir Sampah (TPPAS) Nambo. *Jurnal Permukiman*, 16(2), 101.
- Dewi, R. V. K. (2020). Pemberdayaan Perempuan Peserta Pelatihan Tata Rias Pengantin di Lembaga Kursus Pelatihan (LKP) Vivi Kota Samarinda. *Learning Society: Jurnal CSR, Pendidikan Dan Pemberdayaan Masyarakat*, 1(2), 12–17.
- Dhewanto, W., Lestari, Y. D., Herliana, S., & Lawiyah, N. (2018). Analysis of the business model of Waste Bank in Indonesia: A preliminary study. *International Journal of Business*, 23(1), 73–88.
- Gusti, A., Isyandi, B., Bahri, S., & Afandi, D. (2015). Hubungan pengetahuan, sikap dan intensi perilaku pengelolaan sampah berkelanjutan pada siswa sekolah dasar di kota Padang. *Dinamika Lingkungan Indonesia*, 2(2), 100–107.
- Hamid, H. (2018). *Manajemen pemberdayaan masyarakat*. De la macca.
- Hamid, S., Skinder, B. M., & Bhat, M. A. (2020). Zero waste: A sustainable approach for waste management. In *Innovative waste management technologies for sustainable development* (hal. 134–155). IGI Global.
- Hayati, L., & Saputri, R. A. (2021). Empowering Society in Waste Management System with the Reduce Reuse and Recycle Approach in Pagarawan Bangka. *IOP Conference Series: Earth and Environmental Science*, 926(1), 12020.
- Irmawita. (2013). *Model Pemberdayaan Masyarakat Desa Berbasis Kebutuhan Belajar*. PLS FIP UNY.
- Irwati, D., Kholik, D., Iklimatorriza, M., Ramadhan, W. G., & Prasetyo, I. (2023). Edukasi Gerakan 3R (Reduce, Reuse, Recycle) Kepada Siswa SDS Midori Cikarang Selatan: Indonesia. *Jurnal Pelita Pengabdian*, 1(2), 180–184.
- Laksono, B. A. (2018). The Community Empowerment Through Social and Educational Institutions. *Jurnal Pendidikan Humaniora*, 6(3), 115–122.
- Lestari, B. C., & Munib, J. A. (2022). Designing motion graphics as a zero-waste lifestyle campaign media for the Indonesian people. *IOP Conference Series: Earth and Environmental Science*, 1114(1), 12053.
- Mardhia, D., & Wartiningasih, A. (2018). Pelatihan pengolahan sampah skala rumah tangga di Desa Penyaring. *Jurnal Pendidikan dan Pengabdian Masyarakat*, 1(1).
- Maryani, D., & Nainggolan, R. R. E. (2019). *Pemberdayaan masyarakat*. Deepublish.
- Murtani, A. (2019). Sosialisasi Gerakan Menabung. *Sindimas*, 1(1), 279–283.
- Mustangin, M. (2018). Kajian perencanaan pendidikan orang dewasa pada program kesetaraan paket C PKMB Jayagiri Lembang. *Jurnal Penelitian Ilmu Pendidikan*, 11(1), 40–47.

Community Empowerment Through the 3R Movement and the Establishment of a Waste Bank in Wirittasi Village

- Purwendah, E. K., & Wahyono, D. J. (2022). WASTE BANK AS AN ALTERNATIVE TO COMMUNITY-BASED WASTE MANAGEMENT. *Jurnal Komunikasi Hukum (JKH)*, 8(2), 10–17.
- Putra, W. T. (2020). Pemberdayaan Masyarakat Melalui Pengelolaan Sampah Di Bank Sampah. *Jambura Journal of Community Empowerment*, 69–78.
- Restuaji, I. M., Pujiono, F. E., Mulyati, T. A., & Lukis, P. A. (2019). Penyuluhan pengelolaan sampah rumah tangga. *Journal of Community Engagement and Empowerment*, 1(1).
- Riyadi, R. (2020). Hubungan antara hasil pelatihan dengan tingkat penerapan teknologi padi sawah. *Learning Society: Jurnal CSR, Pendidikan Dan Pemberdayaan Masyarakat*, 1(1), 1–11.
- Rosalina, I. (2012). Efektivitas Program Nasional Pemberdayaan Masyarakat Mandiri Karangrejo Kabupaten Magetan. *Fakultas Ilmu Sosial dan Hukum Universitas Surabaya*, 1, 0–216.
- Săplăcan, Z., & Márton, B. (2019). Determinants of adopting a zero waste consumer lifestyle. *Regional and Business Studies*, 11(2), 25–39.
- Selomo, M., Birawida, A. B., Mallongi, A., & Muammar, M. (2016). Bank sampah sebagai salah satu solusi penanganan sampah di Kota Makassar. *Media Kesehatan Masyarakat Indonesia*, 12(4), 232–240.
- Umasugi, M. T. (2021). Sosialisasi dan Edukasi Pemberian Vaksin Sebagai Upaya Trust Pada Masyarakat Kota Ambon. *Journal of Human and Education (JAHE)*, 1(2), 5–7.
- Wahyuni, D. (2018). Strategi pemberdayaan masyarakat dalam pengembangan Desa Wisata Nglanggeran. *Aspirasi: Jurnal Masalah-Masalah Sosial*, 9(1), 85–102.
- Yuwana, S. I. P., & Adlan, M. F. A. S. (2021). Edukasi pengelolaan dan pemilahan sampah organik dan anorganik di desa pecalongan bondowoso. *FORDICATE*, 1(1), 61–69.

Copyright holder:

Syarifah Khusnul Khotimah, Nasruddin, Hanida Aulia Santi, Asse Padly, Anastasya Rosyida An-Nafi (2023)

First publication right:

Journal Transnational Universal Studies (JTUS)

This article is licensed under:

