

COMMUNITY EMPOWERMENT TOWARDS WASTE UTILIZATION AS A MEANS OF PAYMENT FOR EDUCATION IN PALEMBANG CITY

Sanny Nofrima¹, Salsanabilatul Janah²
^{1,2} Universitas Indo Global Mandiri, Indonesia.
Email Korespondensi: sanny@uigm.ac.id

Abstrak: Adanya permasalahan ekonomi dalam mengakses pendidikan formal dan rendahnya kesadaran masyarakat akan pentingnya menjaga lingkungan sekitar, maka penelitian ini bertujuan untuk menjelaskan bagaimana persepsi pemberdayaan masyarakat terhadap pemanfaatan sampah sebagai alat pembayaran pendidikan di TK Junjung Birru. Terletak di Jalan Demak 2 Ulu, Kelurahan Tuan Kentang, Kecamatan Jakabaring, dekat dengan kawasan kumuh Kota Palembang. Metode yang digunakan dalam penelitian ini adalah pendekatan kualitatif dengan menggunakan teknik pengumpulan data wawancara, analisis data, observasi dan pencatatan. Sumber data yang diperoleh adalah hasil wawancara dengan sopir Sekolah Junjung Birru Kota Palembang. Hasil penelitian menunjukkan bahwa Sekolah Junjung Birru merupakan sekolah TK yang fokus pada peningkatan kesadaran kebersihan di masyarakat dengan menerapkan sistem pembayaran sampah untuk membantu dan mengurangi beban orang tua dalam membayar biaya sekolah bulanan. Sekolah ini didirikan pada tahun 2007. Sekolah ini awalnya didirikan karena pendiri Sekolah Junjung Birru merasa cemas dan prihatin dengan banyaknya sampah organik dan non-organik yang dibuang sembarangan di masyarakat.

Kata kunci: Pemberdayaan, Sampah, Sekolah, Lingkungan

Abstract: *The existence of economic problems in accessing formal education and the low awareness of the community of the importance of protecting the surrounding environment, so this study aims to explain how the perception of community empowerment towards the utilization of waste as a means of paying for education at Junjung Birru Kindergarten. Located on Jalan Demak 2 Ulu, Tuan Kentang Village, Jakabaring Sub-district, close to the slum area of Palembang City. The method used in this research is a qualitative approach using interview data collection techniques, data analysis, observation and recording. The source of data obtained was the results of interviews with the driver of Junjung Birru School Palembang City. The results showed that Junjung Birru School is a kindergarten school that focuses on increasing hygiene awareness in the community by implementing a waste payment system to help and reduce the burden on parents in paying monthly school fees. The school was established in 2007. The school was initially established because the founder of Junjung Birru School felt anxious and concerned about the amount of organic and non-organic waste that was carelessly thrown away in the community.*

Keywords: Empowerment, Garbage, School, Environment.

Article History:

Received; 10-08-2023; Revised; 02-09-2023; Accepted; 28-10-2023

INTRODUCTION

The waste problem in Indonesia is a complicated problem due to the lack of public understanding of the consequences of waste. Apart from that, the waste problem in Indonesia is also exacerbated by the increase in living standards of a community, without the knowledge and commitment of the community in maintaining cleanliness by throwing rubbish in the right place (Fatimah 2022). The increase in population, changes in consumption patterns and people's lifestyles have caused an increase in the amount, type and diversity of waste as waste. Increasing people's purchasing power for various main products is driven by advances in sophisticated technology, increasing business activities or supporting regional economic growth also has a significant impact on the waste produced, the elimination of which



This work is licensed under a
Creative Commons Attribution-ShareAlike 4.0 International License.

does not implement sustainable and environmentally friendly waste management processes, even though it has the potential negative impacts on health, can also disrupt environmental ecosystems such as habitats, forests, agricultural land, rivers and seas (Marliani 2015).

Law Number 18 of 2008 concerning Waste Management describes that waste is the result of daily human activities and natural processes in solid form. Waste management, on the other hand, refers to activities carried out in an organized, comprehensive and sustainable manner that includes steps to reduce and handle waste. Article 4 explains that the purpose of waste management is to improve public health, environmental quality, and convert waste into useful resources. To achieve this, waste management requires public awareness throughout the Indonesian population as well as regulations implemented by the Government. Article 5 of the Waste Management Law emphasizes that the Government's task is to ensure the implementation of effective waste management.

Urban areas with large populations always face similar challenges in terms of residential structure, poverty, waste and education. Continuously increasing population growth, as well as increasing income, can cause changes in individual and family lifestyles towards a consumptive pattern which has an impact on increasing the amount of waste produced per person (Ningsih 2015). As long as humans exist, waste production will continue and will never stop. Garbage is the result of human activity and its quantity is in line with the population. If it is not managed effectively and efficiently, waste will have a reverse negative impact and harm the surrounding environment. We need to realize that settlements are the main source of waste, with 75% being organic waste and the rest being inorganic waste (Putra and Yuriandala 2010).

Waste management, waste and used goods are partly used in the production of new goods with good value and quite high prices. Apart from being used as a source of income, used goods can also be used as a means of education. Bearing in mind that educational standards in elementary schools are increasing, such as bureaucratic requirements to complete the Kindergarten/PAUD stage first to enter elementary school, as well as expensive costs. Because not everyone can access a kindergarten (TK) with complete facilities and reasonable fees, TK/PAUD schools also have significant financial needs. In cities and villages, we cannot avoid the problem of poverty. There are still many people who live in unhealthy conditions below the poverty line. Poverty is often described as a lack of resources, poor income, and a limited way of life and poverty is a very complicated social problem for us to face (Harahap 2021).

Addressing the problem of the lack of community access to education, especially kindergartens (TK) due to limited funds in the City of Palembang, there is a kindergarten school (TK) that pays the cost of providing educational support using certain services/goods, known as the School Junjung Birru Kindergarten (TK). This school was founded in 2007 and is focused on improving the living environment, with the aim of providing assistance to local residents who have low economic conditions and have young children. To achieve this, this school implements a payment system using waste. Every day, students are asked to bring non-organic waste as a contribution to school fees. And not only that, Junjung Birru School also provides education regarding the importance of self-awareness in protecting and respecting the environment and utilizing waste into valuable goods through recycling waste. Previous research on the Junjung Birru Kindergarten School in Palembang City has also been studied by scholars, (Purwaningtias, Ulfa, and Franata 2020), (Anwar 2016), (Putra and Wardani 2020). Based on the studies that have been carried out, more emphasis is placed on utilizing waste management through the Junjung Birru Waste Bank. After considering previous research, researchers are interested in analyzing in depth community empowerment through the use of waste as a means of paying for education at the Junjung Birru Kindergarten in Palembang City. For this reason, this study seeks to examine in more depth the relationship between civil society and millennials through the Junjung Birru school regarding the importance of using waste as a means of education and maintaining a waste-free living environment.

RESEARCH METHOD

This research utilizes a descriptive method with a qualitative approach. According to Bogdan and Taylor in the book (Moleong 2018) Qualitative research methodology is a research process that produces descriptive data through observations and interviews of individuals and observable behavior. The data can be in written or oral form. (Moleong 2018) Qualitative research is a type of research that involves the use of open interviews as a method to explore and understand the attitudes, beliefs, feelings and behavior



This work is licensed under a
Creative Commons Attribution-ShareAlike 4.0 International License.

of individuals and groups. Meanwhile, according to (Abdussamad 2021) qualitative research method is a research technique used to investigate the natural conditions of the object being researched, where the role of the researcher is the main tool in the process, data is collected through a triangulation approach, and in qualitative research, data analysis is carried out inductively with more emphasis on understanding meaning than generalization.

Qualitative methods can be explained as an observational process that helps in collecting written and verbal data by observing people and their behavior. This is important to ensure that the data obtained is of good quality and relevant. This method is gaining high interest because of its advantages which are easier to understand and can immediately lead to policy action, in contrast to quantitative research (Subadi 2006). Data analysis in qualitative methods is carried out inductively, where based on the facts found, the data can be used to form hypotheses or theories. In the process of qualitative research, researchers collect data through interviews, observation, and documentation. Therefore, research on the use of waste as an educational facility for the Junjung Biru Kindergarten in Palembang City in 2023 focuses on using qualitative research methods with the aim of analyzing the use of waste which can be used as a support for educational facilities in the City of Palembang.

RESULTS AND DISCUSSION

Environmental problems are not only a problem in one country, but have affected the whole world. Complicated and complex issues related to the environment emerge through various print and electronic media, these problems often arise due to environmental changes that are not appropriate or even unsupportive for the public interest (Munir 2016). The environmental problems currently occurring are related to the presence of waste, considering that humans are the main driver of waste generation, population growth that is not well managed causes large amounts of waste to accumulate in various locations, and the accumulation of this waste has a negative impact on the surrounding environment (Lubis Reskita Lega 2019). Society will always produce various types of waste at any time, such as organic, inorganic and other dangerous waste, but few are aware of this. Household waste is a source of waste originating from residential areas (Agus, Oktaviyanthi, and Sholahudin 2019).

Based on research (Haryanti, Gravitiani, and Wijaya 2020) explains that waste is considered as items that are worthless, useless, even damaged or unwanted, and must be removed using the correct method, therefore waste management needs to be carried out using optimal methods, so as not to have a negative impact on life. In sustainable waste management, a paradigm shift is needed in society. Previously, the community only applied the simple principle of collecting, transporting and disposing of waste. However, nowadays it is very important to implement the 3R principles which include reduce waste, reuse and recycle. Therefore, the population's awareness and skills in waste management using the 3R principles must be increased through education and teaching at the individual level and society as a whole (Asteria and Heruman 2016).

Waste management refers to all actions taken to manage waste from formation to disposal, waste management activities in general include controlling the amount of waste produced, waste collection, transportation, processing to final disposal because dealing with waste problems is not simple, it is even complex because involving technical, economic and socio-political aspects (Dewanti, Purnomo, and Salsabila 2020). Not only can it be used as a greening effort, but waste management also has the potential to be a means of providing education to the community and children so that they become more interested in saving.

One indicator that can be used to evaluate individual or societal happiness is income. That is, income reflects limited family resources, so this can influence family spending choices. Families with limited income will generally allocate most of their income to meet food needs, so that the proportion of their expenditure on food will be greater compared to families with higher income (Meidiana 2019). Social and economic conditions are a person's position in a socially determined structure of society. In this position, a person is given a mandate and responsibilities that must be carried out in accordance with his status. Non-material factors such as customs, education, age and gender influence a person's social level, while economic level is determined by factors such as income, type of work, education, and investment (Novianty 2014). Both education and income have positive and significant effects on well-



being. For this reason, it is necessary to improve the quality of human resources, for example by placing a higher priority on the education sector.

Education is an effort to change students so they can adapt to the surrounding environment. From this method, changes within students can occur, so that education can function in social life. Teaching is tasked with directing the educational process so that it meets its objectives, namely to achieve the desired changes in students. The growth of students depends on two elements that influence each other, namely the talents they are born with and the surrounding environment (Miswar 2020). Bearing in mind that in facing learning demands to influence and direct students, starting from the lowest level of education, namely passing through kindergarten/preschool level first.

Children between the ages of zero and six need guidance that is appropriate to their developmental stage. This guidance takes the form of educational stimulation aimed at supporting children's physical and mental abilities, so that they are ready to face further levels of education (Mardhiati 2019). The kindergarten period (4-5/6 years) in early childhood education is considered a very important period in a child's physical and mental development. Children at this age are very sensitive to the influences of their surrounding environment, and their mental development at this age has a big impact on their future. Children's progress at this stage has a fundamental impact on their future success. Therefore, it is very important to pay special attention to developing the potential of early childhood, especially in the aspect of developing multiple intelligences. In the learning process, this effort is needed so that the child's potential can develop as a whole and sustainably (Diana 2003).

The environment includes everything around us, whether on a small, large or global scale. According to Law Number 32 of 2009 concerning Protection in Environmental Management (UUPLH), the environment consists of all elements, resources, situations, living creatures, including humans and their behavior, which influence nature, human survival and the welfare of creatures. Other life. In his research at the University of Adelaide, Australia, Bradshaw stated that Indonesia was included in the group of four main countries that had a major impact on environmental damage. Other countries that fall into this category include Brazil, the United States, China, and Indonesia (Viva 2010).

Previously, people believed that environmental problems were mainly influenced by natural factors such as rainfall levels, temperature and air pressure. However, public awareness has now increased because human activities also have a significant impact on environmental damage. This is marked by behavior that unknowingly damages the environment, such as littering, the use of disposable products made from plastic, air pollution caused by two main factors, namely cigarette smoke and pollution from motorized vehicles, wastage of electrical energy, deforestation, and so on. Environmental health issues are given serious attention because a bad environment can cause disease and even human death. Environmental health is a branch of public health science that examines the relationship between humans and the environment in a harmonious ecological context (Purnama 2018).

Ministry of Health survey data shows that only 20% of the Indonesian population pays attention to cleanliness and health. The results of a survey by the Ministry of Environment of the Republic of Indonesia in 2012 showed concern about low behavior related to the environmental index in society. The lack of access to waste disposal facilities in public places further encourages this behavior. This concerns us all (Hamdani 2018). Garbage not only causes an ugly sight and an unpleasant smell. However, the accumulation of waste in open landfills can cause more serious problems, Indonesia is ranked second as the country with the largest contribution to the disposal of plastic waste in the world, with the amount reaching 64 million tons per year. Of this amount, around 3.2 million tons are thrown into the sea every year (Abdilla 2021). Most people don't care about the nature around them, especially issues of cleanliness and waste handling.

In the context of Palembang City, South Sumatra, the Environment and Sanitation Service (DLHK) noted that waste production reaches 1,180 tons per day. However, only around 800-900 tons are successfully transported to final disposal sites (TPA) every day. Assuming that the population of Palembang is around 1.6 million and each individual produces around 0.7 kg of waste per day, the total waste production in this city reaches 1,180 tons per day. This figure is in accordance with applicable national regulations (Azizah 2022).



Table 1. Amount of Waste in Palembang City from 2019 – 2021

| No | Year | Annual Waste Generation |
|----|------|-------------------------|
| 1 | 2019 | 424,869.16 |
| 2 | 2020 | 426,390.66 |
| 3 | 2021 | 430,791.65 |

Sumber : National Waste Management Information System (SIPSN)

Based on the table above, the increase in the amount of waste generated every year in Palembang City can be caused by a lack of awareness and knowledge in some communities about waste problems. Therefore, empowerment efforts are needed to overcome this problem.

Community empowerment in the environmental context aims to provide awareness, ability, and concern for each individual in maintaining and conserving natural resources in a sustainable manner. This is important for maintaining survival and improving quality of life. One form of this empowerment is by increasing public awareness about the impact of environmental damage on living things, especially in terms of waste management. In addition, empowerment also involves knowledge about the value of waste that can be processed into valuable objects through the waste management process. This is based on the principle of environmental management by humans, where we need to change shopping habits in order to reduce the use of goods that have the potential to become waste. Apart from that, we also have to reuse items that can still be used and recycle waste into products that have economic value, which is known as the 3R concept (Reduce, Reuse, Recycle). Another way to solve the waste problem is to manage it, by sorting it into three parts: wet waste, dry waste and B3 waste (hazardous and toxic materials). Organic waste includes food scraps, vegetables, fruits, garden waste, and kitchen waste. Inorganic waste includes paper, cardboard, plastic, textiles, rubber, glass, cans, and other types. Meanwhile, hazardous and toxic waste (B3) includes batteries, paint, pesticides, waste from hospitals, and other materials that are potentially hazardous to health and organisms (Munawir 2015).

One step that can be taken is to empower the community to use waste as a means of paying for education. Utilization of waste as payment for education is a system where people can exchange the waste they collect with the cost of education at certain institutions. Thus, the community can reduce the burden of educational costs and at the same time reduce the amount of waste that is disposed of in landfills (TPA), a clear example of the use of waste as payment for education is carried out by the Junjung Birru Kindergarten School in Palembang City. Junjung Birru Kindergarten is an early childhood education institution (PAUD) that has implemented a payment system using waste since 2017, with the aim of helping parents of students who are economically disadvantaged and also to increase environmental awareness in students and the community around.

Junjung Birru School is a Kindergarten (TK) located on Jalan Demak 2 Ulu, Tuan Kentang Village, Jakabaring District and close to the slum area of Palembang. This school was founded in 2007 to be exact in July by Shalfitri, S.E,CHt,S.Psi, a graduate of an economics degree who has concern for the environment and early childhood education. The establishment of this school stems from Mrs. Shalfitri's anxiety and concern for the accumulation of organic and non-organic waste that is disposed of carelessly by the community, as the result of an excerpt from an interview with one of the organizers of the Junjung Birru School, in May 2023, she said that:

“Ms. Shalfitri is uncomfortable and uncomfortable when she sees trash everywhere, if someone throws trash carelessly, they are always chased until they get it” (interview, 2023).

Based on the results of the interview above, it can be revealed that there is a lack of public awareness of cleanliness in the surrounding environment, and of course he has the desire to invite the public to care more about protecting the environment, especially by providing direction through early teaching to students in Kindergarten uphold Birru. The name junjung birru itself has a deep meaning and at the same time is a symbol of hope that is full of inspiration for the students who study here, the meaning of “Junjung Birru” is a great hope for the children who get education at the school. The word “uphold” in the Big Indonesian Dictionary (KBBI) has the meaning of a position that is above or upholds, which describes



big ideals. While “Birru” does not refer to the color blue, but is a prayer for goodness and blessings, the school’s name is also in line with the school’s vision which describes environmental education and waste recycling practices which the school emphasizes.

The Junjung Birru school building was built using previously unused land and space around Mrs. Syalfitri’s house. Then, the land was converted into a simple study room. This school was established with the aim of providing assistance to local residents who have poor economic conditions and have pre-school age children, through an Education Development Contribution (SPP) payment system that does not use money, but rather waste, considering that the entry requirements Elementary schools are currently getting higher and higher, such as having to go through Kindergarten/PAUD first before you can enter Elementary School level, plus the costs are large. Not to mention, TK/PAUD schools also require a lot of money. As a result of excerpts from an interview with one of the organizers of the Junjung Birru School, in May 2023, he said that:

“This school was founded to help and reduce the burden on parents in paying monthly school fees, so they only collect rubbish and donate it to us, because valuable rubbish can be a learning tool for them, in this way the parents can send their children to school here ” (interview, 2023).

Based on the results of the interview above, it can be revealed that this school was founded to help people with low incomes and those who cannot afford to meet the costs of their children’s education. By collecting non-organic waste every day, both by students and their parents, the waste will then be weighed and valued at a monetary value. If the amount of rubbish collected by a student is sufficient to cover one month’s school fees, then the student can continue their education at no additional cost. However, if the amount of garbage collected is insufficient, an additional fee will be charged to the student.

Students who attend school at Junjung Birru have the opportunity to receive formal education like a public school, with the ease of purchasing affordable school supplies. The initial registration fee of 950 thousand rupiah includes three uniforms, writing equipment, textbooks, as well as an Education Development Contribution (SPP) for one month. The Education Development Donation (SPP) itself is IDR 100,000 per month and includes magazines. These school supplies are available at cheaper prices, and all these costs can be paid in installments during the school year with a daily payment of one thousand or two thousand rupiah.

By implementing an environmental education theme that focuses on increasing awareness of cleanliness among the surrounding community. Within the school environment, there are murals or wall paintings that depict the beauty of nature and at the same time contain messages about the current environmental conditions in Indonesia. The painting depicts dark blue clouds, green trees, and white birds sitting on branches. However, there is also a lot of trash around it, which reflects the current environmental situation in Indonesia. As a result of excerpts from an interview with one of the organizers of the Junjung Birru School, in May 2023, he said that:

“Even though it’s a natural picture, the shades of the clouds are rather dark. Because it describes our condition that was damaged by karhutla. Apart from that, the presence of rubbish stuck to it shows that our sustainable environment has been polluted by the large amount of rubbish scattered around” (interview, 2023).



Figure 1. Junjung Birru School, 2023



This work is licensed under a
Creative Commons Attribution-ShareAlike 4.0 International License.

From the results of the interview above, it can be revealed that our environment has been polluted due to the large amount of garbage scattered in various places. The mural on the front wall of the school has a dual role as an educational tool and a reminder for students to maintain cleanliness and avoid littering. Through this mural, students are reminded to be disciplined in maintaining cleanliness so that the environment remains clean and avoids contamination, and its sustainability is maintained.

At Junjung Birru, students are taught to reduce the use of items that generate waste, such as plastic, paper, and the like. They also learned about how to recycle waste that still has use value, such as used bottles, used cans, and used boxes. These items are then used as materials to make educational aids for Junjung Birru Kindergarten students, such as piggy banks, pencil cases, flower vases, animals, and many more. Thus, in addition to reducing environmental pollution, processing non-organic waste also provides economic and educational benefits to the surrounding community.

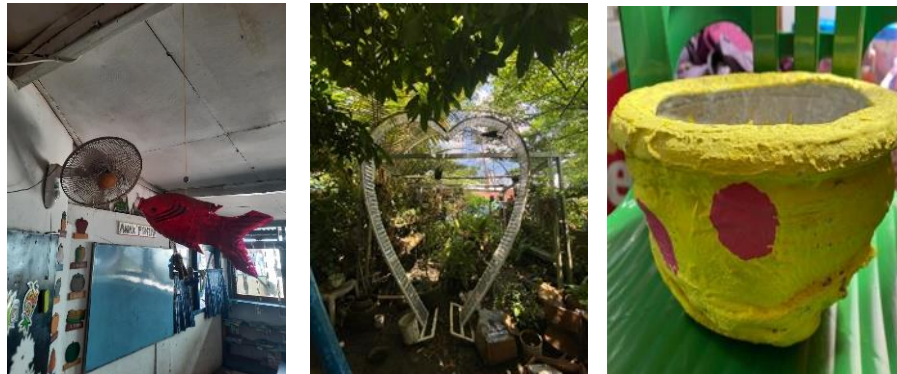


Figure 2. Junjung Birru School, 2023

As the results of an interview with one of the activists of Junjung Birru School, in May 2023, he said that:

"In Junjung Birru, they are also taught to manage waste, they can produce beautiful handicrafts just by utilizing waste, even our play tools from bottle caps, from milk spoons, wood, newspapers and many more" (interview, 2023).

Based on the results of the previous interview, it can be concluded that students at Junjung Birru are also taught about waste management by applying the 3R principle, namely reducing (reduce), reusing (reuse), and recycling (recycle). The aim of this principle is to reduce the amount of waste produced and to reprocess waste into something useful.

At the beginning of the school's formation, there was a tendency of rejection from the community who were reluctant to join, because they thought that waste had no value or benefit anymore, and was considered to have an unpleasant and disgusting odor. However, Mrs. Syalfitri and a team of kindergarten teachers were on a mission to adopt a school fee system using waste as payment. Eventually, the community became interested and responded positively to this initiative. Unfortunately, until now the funding to support and improve Junjung Birru's school facilities has relied solely on private money and there is no involvement from the government.



Figure 3: Junjung Birru School, 2023



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

The government needs to pay more attention to schools that show initiative and creativity in improving the quality of education and the environment. One form of government attention is through the provision of School Operational Assistance (BOS), which can be used for various school operational purposes, including facility and infrastructure improvements. In addition, the government can also provide technical support and training to teachers and other education staff to improve their competence and professionalism. With these measures, Junjung Birru school will continue to progress and provide positive benefits to the surrounding community.

CONCLUSION

Based on the description of the results of the research that has been conducted on community empowerment in utilizing waste as a means of paying for education at Junjung Birru Kindergarten in Palembang City in 2023, it is found that Junjung Birru school is a kindergarten that implements a payment system using waste to help low-income communities and increase environmental awareness. The school, like any other school, teaches students to reprocess non-organic waste into educational props and useful items. Despite initial resistance from the community who consider waste useless and disgusting, the community later became interested and joined the school. Unfortunately, the government has not paid enough attention to this school in terms of improving facilities and infrastructure. The school hopes that the government can give more attention to educational institutions that show initiative and creativity in improving the quality of education and the environment.

REFERENCES

- Abdilla, Reynas. 2021. "Indonesia Penyumbang Sampah Plastik Terbesar Kedua Di Dunia." *Tribun News*. Retrieved May 20, 2023 (<https://www.tribunnews.com/Nasional/2021/09/26/Indonesia-Penyumbang-Sampah-Plastik-Terbesar-Kedua-Di-Dunia>).
- Abdussamad, Zuchri. 2021. *Metode Penelitian Kualitatif*. Cv. Syakir Media Press.
- Agus, Ria Noviana, Rina Oktaviani, and Usep Sholahudin. 2019. "3r: Suatu Alternatif Pengolahan Sampah Rumah Tangga." *Kaibon Abhinaya: Jurnal Pengabdian Masyarakat* 1(2):72. Doi: 10.30656/Ka.V1i2.1538.
- Anwar, Widya Fransiska Febrianti Dan Primadella. 2016. "Pendampingan Masyarakat Untuk Perencanaan Sarana Pendidikan Sekolah Taman Kanak-Kanak (Tk) Dan Bank Sampah Junjung Birru Kota Palembang."
- Asteria, Donna, and Heru Heruman. 2016. "Bank Sampah Sebagai Alternatif Strategi Pengelolaan Sampah Berbasis Masyarakat Di Tasikmalaya." *Jurnal Manusia Dan Lingkungan* 23(1):8.
- Azizah, Nora. 2022. "Produksi Sampah Kota Palembang Capai 1.180 Ton Per Hari." *Republika*. Retrieved May 20, 2023 (<https://news.republika.co.id/berita/Rn57tx463/Produksi-Sampah-Kota-Palembang-Capai-1180-Ton-Per-Hari>).
- Dewanti, Mike, Eko Priyo Purnomo, and Lubna Salsabila. 2020. "Analisa Efektifitas Bank Sampah Sebagai Alternatif Pengelolaan Sampah Dalam Mencapai Smart City Di Kabupaten Kulon Progo." *Publisia: Jurnal Ilmu Administrasi Publik* 5(1). Doi: 10.26905/Pjiap.V5i1.3828.
- Diana, Nirva Dan Mesiono. 2003. *Dasar-Dasar Pendidikan Anak Usia Dini*. Vol. 90.
- Fatimah, Mustika. 2022. "Identifikasi Pembuangan Sampah Di Anak Sungai Musi Kelurahan 9 / 10 Ulu Kecamatan Seberang Ulu I Palembang." 2(April).
- Hamdani. 2018. "Mengapa Tidak Peduli Lingkungan Dan Buang Sampah Sembarangan? Halaman 1 - Kompasiana.Com." *Kompasiana*. Retrieved December 7, 2022 (<https://www.kompasiana.com/Cangkoiburong/5b82617d6ddcae626435d336/Mengapa-Tidak-Pedulil-Lingkungan-Dan-Buang-Sampah-Sembarangan>).
- Harahap, Ahmad Syarifuddin. 2021. *Pengaruh Pendapatan, Jumlah Anggota Keluarga Dan Pendidikan Terhadap Pola Konsumsi Rumah Tangga Miskin Di Kecamatan Sugai Kanan Kabupaten Labuhanbatu Selatan Provinsi Sumatera Utara*.
- Haryanti, Sri, Evi Gravitiani, and Mahendra Wijaya. 2020. "Studi Penerapan Bank Sampah Dalam Upaya Pengelolaan Lingkungan Hidup Di Kota Yogyakarta." *Bioeksperimen: Jurnal Penelitian Biologi* 6(1):60-68. Doi: 10.23917/Bioeksperimen.V6i1.10434.



This work is licensed under a
Creative Commons Attribution-ShareAlike 4.0 International License.

- Lubis Reskita Lega, Umari Fitriana Zuul. 2019. "Analisis Laju Timbulan Sampah Di Kecamatan Ilir Timur I Kota Palembang." *Prosiding Applicable Innovation Of Engineering And Science Research 2019* 216–21.
- Mardhiati, Retno. 2019. "Pendidikan Perilaku Hidup Bersih Dan Sehat (Phbs) Anak Usia Dini." 2(3).
- Marliani, Novi. 2015. "Pemanfaatan Limbah Rumah Tangga (Sampah Anorganik) Sebagai Bentuk Implementasi Dari Pendidikan Lingkungan Hidup." *Formatif: Jurnal Ilmiah Pendidikan Mipa* 4(2):124–32. Doi: 10.30998/Formatif.V4i2.146.
- Meidiana, Ni Putu Cahya Agung Tika Dan Marhaeni. 2019. "Pengaruh Kepemilikan Aset, Ketersediaan Infrastruktur, Dan Pendidikan Terhadap Pendapatan Dan Kesejahteraan Rumah Tangga Miskin." 24(1):54–69.
- Miswar, Dedy. 2020. "Ekologi Pendidikan." *Suparyanto Dan Rosad* 5(3):248–53.
- Moleong, Lexy J. 2018. *Metodologi Penelitian Kualitatif*. Bandung: Pt Remaja Rosdakarya.
- Munawir. 2015. "Bank Sampah: Upaya Pemberdayaan Masyarakat Dan Penanganan Lingkungan." 01(01):31–37.
- Munir, Misbakhul. 2016. "Prinsip Biologi Dalam Lingkungan Berkelanjutan." *Al-Ard: Jurnal Teknik Lingkungan* 2(1):31–37. Doi: 10.29080/Alard.V2i1.131.
- Ningsih, Nur Safiah. 2015. "Analisis Pemanfaatan Sampah Rumah Tangga (Studi Kasus Unit Bisnis Pengolahan Sampah Oleh Siswa Smk)." *Artikel Penelitian* 13(3):1576–80.
- Novianty, Mita. 2014. "Dampak Program Bank Sampah Terhadap Sosial Ekonomi Masyarakat Di Kelurahan Binjai, Kecamatan Medan Denai, Kota Medan." 1–16.
- Purnama, Sang Gede. 2018. "Dasar Kesehatan Lingkungan." 1–97.
- Purwaningtias, Fitri, Maria Ulfa, And Febi Franata. 2020. "Decision Support System For Selection Of The Best Member At Junjung Biru Waste Bank Using The Composite Performance Index (Cpi)." *Khazanah Informatika: Jurnal Ilmu Komputer Dan Informatika* 6(2):184–89. Doi: 10.23917/Khif.V6i2.11058.
- Putra, Hijrah Purnama, And Yebi Yuriandala. 2010. "Studi Pemanfaatan Sampah Plastik Menjadi Produk Dan Jasa Kreatif." *Jurnal Sains & Teknologi Lingkungan* 2(1):21–31.
- Putra, M. Pramadani Riyanis, And Kiki Rizky Nova Wardani. 2020. "Penerapan Text Mining Dalam Menganalisis Kepribadian Pengguna Media Sosial." *Jutim (Jurnal Teknik Informatika Musirawas)* 5(1):63–71. Doi: 10.32767/Jutim.V5i1.791.
- Subadi, Tjipto. 2006. *Metode Penelitian Kualitatif*. Surakarta: Penerbit Muhammadiyah University Press.
- Viva. 2010. "Indonesia, Rangkings Empat Perusak Lingkungan." Retrieved May 19, 2023 (<https://www.viva.co.id/Berita/Nasional/149597-Indonesia-Rangkings-Empat-Perusak-Lingkungan>).

