

GREEN BUSINESS IMPLEMENTATION THROUGH THE SUKORAME WASTE MANAGEMENT SYSTEM (SIMPOSKO)

Ariadafa Wahyu Rhiansyah, Natassya Adelia Candradhita Leonard, Restin Meilina

University of Nusantara PGRI Kediri
Ahmad Dahlan Street, No. 76, Mojoroto, City of Kediri, Eastern Java-64112, Indonesia natnatassya21@gmail.com

ABSTRACT

The purpose of this research is to answer the statement problem as follows: What is the current condition of waste management in Sukorame Village and what are the problems that occur in the existing waste management system? How can the concept of *green business be applied in waste* management in Sukorame Village? And What features does the SIMPOSKO waste management system need to have to support the implementation of green business in waste management in Sukorame Village? This uses a qualitative method with a descriptive approach. This research type is field research. The informants are head of the sukorame sub-district, waste bank administrators, and several community as representatives. The result show that waste management in Sukorame sub-district is still a collection, transport and disposal system without segregation whereas residents are able to produce can produce handicrafts from waste as a green business implementation and this is facilitated by the features in the sukorame waste management system (SIMPOSKO).

Keywords: Green Business, Waste Management, Waste Bank, Management System, Handicraft

INTRODUCTION

Indonesia is recorded as the second largest contributor of plastic waste to the sea after China with an estimated 0.48–1.29 million metric tons per year, with 80 percent of marine waste coming from waste generated on land from human anthropogenic activities (Abdila, 2021). The Ministry of Environment and Forestry (KLHK) acknowledges that in 2020 total national waste production will reach 67.8 million tonnes. This means that around 185,753 tons of waste are generated every day by 270 million people. Or each resident produces around 0.68 kilograms of waste per day (Setiawan, 2021). This figure has increased compared to previous years. In 2018 national waste production has reached 64 million tonnes from 267 million residents. This waste ultimately contributes greatly to increasing landfills in final disposal sites (TPA). Increased economic growth has led to an increase in the standard of living of the population, indicated by increased production and consumption activities. But on the other hand, this increase has an impact on increasing the diversity of types and the amount of waste landfills if it is not managed properly.

The waste that is not managed properly can cause various problems such as environmental pollution and health problems (Bahauddin et al., 2022). Waste accumulation and careless disposal of waste in open areas will result in soil contamination which will also affect groundwater. While burning garbage will cause air pollution. It doesn't stop there, dumping garbage into rivers also causes water pollution and clogged drains which can cause flooding during the rainy season, as well as an unpleasant odor.

Data in Kediri City, as of 2022 the Klotok Final Management Site (TPA) receives 140 tons of waste per day, both organic and inorganic waste. This number can continue to grow every year if the community still relies on the principle of college transport and dispose (Saichu, 2022). In order to overcome this, the City of Kediri activated the waste bank program. It is recorded that there are 110 waste banks in the city of Kediri, but they are not yet optimal in reducing the amount of landfill waste.

A waste bank according to the Regulation of the Minister of Environment of the Republic of Indonesia Number 13 of 2012 is an institution regulated by the Ministry of Environment



and Forestry to manage money and waste. The waste bank collects waste from customers to sell to collectors, to create works in the form of new items which will also be sold and generate money, which can also be exchanged for gold, buying groceries, paying for electricity, and medical expenses. Customers are also allowed to borrow money and return it with garbage worth the money borrowed. This waste will be handed over for processing to factories, recycling agents, or PKK mothers. One of the waste banks that has a high commitment to reducing waste problems in the City of Kediri is the Melati waste bank in the Sukorame sub-district. With a limited number of administrators and having other jobs besides being administrators, the Melati Waste Bank continues to routinely carry out waste collection activities. Several achievements have been achieved, both at the city and provincial levels. Garbage collected is then collected to collectors to become money.



Figure 1. The Process of Sorting and Weighing the Waste of the Jasmine Garbage Bank for sale to collectors



Figure 2. The Recycled Waste Craft Products that are only for display

The picture above shows that the Melati waste bank has the potential to produce recycled waste products. This can be seen from the window of the waste bank where there are several waste recycling works from the management themselves. The product is indeed produced for assets if at any time there is an appraisal. There is no effort to market because they think the potential for sale is small, even though if this product is sold it will provide a large profit for the waste bank so that it can improve the welfare of its members. This is also a form of green business, namely a business that is not only profit-oriented, but also maintains environmental sustainability (Utomo et al., 2022). In June 2023 the researchers and the team designed a web-based waste management system to be implemented in the Sukorame Village, Kediri City, which was named SIMPOSKO with educational features on waste sorting, waste bank management, and marketing of waste recycling products. The purpose of this research is to answer the statement problem as follows: (1) What is the current condition of waste management in Sukorame Village and what are the problems that occur in the existing waste management system? (2) How can the concept of green business be applied in waste management in Sukorame Village? (3) What features does the SIMPOSKO waste management system need to have to support the implementation of green business in waste management in Sukorame Village?



From the results of this study it is hoped that it can provide important input for the development of a waste management system (SIMPOSKO) so that it can optimize the green business concept in its implementation so that SIMPOSKO truly becomes a useful system for waste management in Sukorame Village and is very likely to be developed throughout the city Kediri.

LITERATURE REVIEW

Green Business

Green business is one type of business that concern to sustainable environmental aspects, such as efficient energy use, reduced carbon emissions, and environmentally friendly waste management. It is the part of green economics which focus to generate profit by protecting the environment and sustainability (Permana et al., 2023). The paradigm of sustainable development consist of three pillars: social, economic and environmental must play a role together. If there is a misalignment in one of the pillars or more, it will cause the failure of sustainable development (Suciati & Aviantara, 2019). Green Business is an effort to achieve environmental economic progress as a pillar of the implementation of sustainable development for the transition process towards a low-carbon and green economy (Kristianto, 2020). In this study, green business is demonstrated by production made primarily from waste as an effort to reduce and overcome problems caused by waste that threatens environmental sustainability.

Information Management System

An information system is a combination of people, hardware, software, communications networks, and resources to collect, transform, and disseminate information in an organization (Yuniva et al., 2018). The rapid development of information technology encourages the development of information systems that are increasingly fast, efficient and accurate (Pamungkas et al., 2020). Currently, web-based information systems are widely used for efficiency in various aspects of management, both operations/production management, HR, finance, and marketing. (Soedrijanto et al., 2019; Yuniva, 2016).

Waste Management

Garbage is material residue from human activities that is no longer used. Waste will continue to grow and will never stop during human life (Putra & Yuriandala, 2010). Therefore there is a need for waste processing, especially for plastic waste because it is difficult to decompose. Without processing, waste will continue to accumulate and become waste that damages the environment. One of the waste processing that can generate additional income is the business of creating plastic waste.

METHODS

This study uses a qualitative method with a descriptive approach to answer the Problem Statement of this research. This type of research is field research, where the author collects data directly into the field to obtain valid data and observe the problem of waste management in Sukorame (Uma Sekaran, 2017). This study uses primary and secondary data. Primary data were obtained from direct interviews with informants, secondary data were obtained from books, journals, literature and supported documents. In determining informants, the authors used 4R technique (Meilina & Sardanto, 2020): (1) Relevance, researchers ensure that informants understand the problem under study, (2) Recommendation, researchers select informants based on recommendations from key informant, (3) Readiness, the researcher conducted the interview when the informant stated that he was ready to be interviewed, (4) Reassurance, the informant stated that he was willing to provide honest, clear and open answers without pressure from any party. The informants of this research is the head of the sukorame sub-district, waste bank administrators, several community as representatives. Data collected is then reduced, analyzed, and conclusions drawn for the development of simposko



RESULTS

Based on the answers from all informants, the waste management in Sukorame subdistrict is still a collection, transport and disposal system without segregation. Except for the Melati waste bank, which has gone through a sorting process so that it can be sold to collectors at a high price. Most residents who are not become customers of the waste bank cannot benefit from their waste and instead add to the height of the waste pile. This needs to be overcome with socialization and education about waste sorting and processing, the advantages of joining a waste bank, and the potential benefits of creating works from waste..

Most residents do not understand and implement green business. The observation results show that the potential for green business that can be implemented in the Sukorame sub-district is the creative economy of waste, especially plastic waste. Residents have attended training on making knitting bags, and are able to apply them instead of using knitting threads but using plastic. In addition, there are many other works. Here's an example of the work of waste:



Figure 3: The Potential of Green Business in the Sukorame

SIMPOSKO has been designed by the research team since June with the following design:

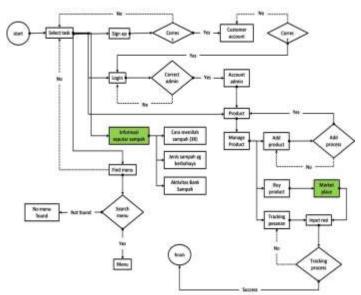


Figure 4: SIMPOSKO flowchart

To support the implementation of green business in waste management in Sukorame, SIMPOSKO has the features as the initial design, namely: (1) Educational features on the



dangers of waste, waste sorting, and 3R (reduce, reuse, recycle) which are expected to be the first research solution where many residents have not done waste sorting, have not joined as customers of a waste bank to benefit from waste while reducing the dangers of waste, (2) Marketplace feature which is the second research solution for implementing green business by selling recycled waste products. With this feature, citizens can do business by not only pursuing profits but also implementing the 3R principles (reduce, reuse, recycle).

CONCLUSION

From the result above, concluded that green business can be implemented in the Sukorame sub-district through the Sukorame Waste Management System (SIMPOSKO). This can work if residents are motivated to produce handicraft products from waste which are then marketed and promoted through the marketplace feature in the system. Before this system implemented, it is necessary to provide training on production, packaging, selling price calculations, and product branding. Product branding must also campaign for green business besides highlighting the product image in order to invite people to love the environment by buying recycled products. residents must also understand the use of digital marketing technology so that marketing can reach widely, not only locally, nationally, but also internationally.

LIMITATION

The limitations of this research are the limited time and the method used is still simple. Further research will be continued with the design development method from the results of this study.

REFERENCES

- Abdila, R. (2021, September 26). Indonesia Penyumbang Sampah Plastik Terbesar Kedua di Dunia. *Tribunnews.Com.* https://www.tribunnews.com/nasional/2021/09/26/indonesia-penyumbang-sampah-plastik-terbesar-kedua-di-dunia
- Bahauddin, A., Abdullah, M. H., Kurniawan, B., Fuad, A., Trenggonowati, D. L., Rahmayetty, R., & Suhendi, E. (2022). Perancangan sistem informasi manajemen penanganan sampah berbasis circular economy secara digital di Kota Cilegon. *Journal of Systems Engineering and Management*, 1(1), 53. https://doi.org/10.36055/joseam.v1i1.17601
- Kristianto, A. H. (2020). Sustainable Development Goals (Sdgs) Dalam Konsep Green Economy Untuk Pertumbuhan Ekonomi Berkualitas Berbasis Ekologi. *JIBEE: Journal Business, Economics and Entrepreneurship,* 2(1), 27–38. https://doi.org/10.46229/b.e.e..v2i1.134
- Meilina, R., & Sardanto, R. (2020). Dampak Perubahan Lingkungan Kerja Non Fisik Masa Pandemi Covid-19 bagi Karyawan Toserba Barokah Kota Kediri. *Jurnal Penelitian Manajemen Terapan ..., 5*(1), 46–56. http://journal.stieken.ac.id/index.php/penataran/article/view/462
- Pamungkas, E. R., Susanti, D., Resmanah, D., Studi, P., Informatika, T., Teknik, F., Majalengka, U., Teja, D., & Garut, B. S. (2020). Aplikasi bank sampah berbasis web di desa teja. *Proceeding SENDIU 2020*, 978–979.
- Permana, N. F. N., Alfauzy, A., & Sabila, T. K. (2023). Penerapan Green Business Pada Toko Ritel Dalam Upaya Mengurangi Pencemaran Lingkungan. *Synergy Jurnal Ilmiah Multidisiplin*, 1(10), 19–25.
- Putra, H. P., & Yuriandala, Y. (2010). Study of Using Plastic Waste to Become Creative Products and Services. *Jurnal Sains & Teknologi Lingkungan*, 2(1), 21–31.
- Saichu, A. (2022). TPA Klotok Kota Kediri Tampung 140 Ton Sampah per Hari. *Kediri Dalam Berita*. https://kedirikota.go.id/p/dalamberita/14424/tpa-klotok-kota-kediri-tampung-140-ton-sampah-per-hari

Rhiansyah et al: Green Business Implementation ...

- Setiawan, A. (2021). Membenahi Tata Kelola Sampah Nasional. *Indonesia.Go.Id Portal Informasi Indonesia*. https://www.indonesia.go.id/kategori/indonesia-dalam-angka/2533/membenahi-tata-kelola-sampah-nasional
- Soedrijanto, A., Mas'ud, F., Mauladi, K. F., & Prihartini, E. S. (2019). Strategi Implementasi Sistem Informasi Ketertelusuran ISO 8402 pada Rantai Pemasaran Ikan Bandeng (*Chanos chanos*, Forskal). *Agrikan: Jurnal Agribisnis Perikanan*, 12(2), 266–271. https://doi.org/10.29239/j.agrikan.12.2.266-271
- Suciati, F., & Aviantara, D. B. (2019). Green Technology Untuk Green Company Dengan Penerapan Sistem Fotobioreaktor Penyerap Karbon Dioksida. *Jurnal Rekayasa Lingkungan*, 12(1), 15–40. https://doi.org/10.29122/jrl.v12i1.3657
- Uma Sekaran, R. B. (2017). *Metode Penelitian Untuk Bisnis: Pendekatan Pengembangan Keahlian.* Salemba Empat.
- Utomo, M. N., Rita, M. R., Pratiwi, S. R., & Puspitasari, I. (2022). *Green Business: Strategi Membangun Kewirausahaan Berdaya Saing dan Berkelanjutan*. Syiah Kuala University Press. https://books.google.co.id/books/about/Green_Business_Strategi_Membangun_Kewira.html?id=2LNsEAAAQBAJ&redir_esc=y
- Yuniva, I. (2016). Perancangan Model Knowledge Management System Berbasis Web. *Paradigma*, *XVIII*(1), 38–47.
- Yuniva, I., Andriansah, A., & Maulina, D. J. (2018). Perancangan Sistem Informasi Penjualan Produk Hasil Daur Ulang Sampah Berbasis Website Dengan Pendekatan Metode Waterfall. *Jurnal Media Informatika Budidarma*, 2(4), 174. https://doi.org/10.30865/mib.v2i4.896