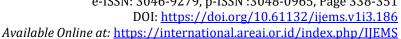
### **International Journal of Economics and Management Sciences** Volume. 1 No. 3 August 2024

e-ISSN: 3046-9279, p-ISSN: 3048-0965, Page 338-351





## Rubbish Bank, Resources, and The Velocity of Money at Medan Belawan Sub-District

Dewi Mahrani Rangkuty 1\*, Yanti Br Naibaho 2, Anwar Suhut 3

<sup>1,2</sup> Economics Department, Universitas Pembangunan Panca Budi, Indonesia <sup>3</sup> Non Govermental Organization, Gugah Nurani Indonesia, Indonesia dewimahrani@dosen.pancabudi.ac.id 1\*, naibahoyantibr@gmail.com 2, anwarsuhut@gmail.com<sup>3</sup>

Address: 4, Jl. Gatot Subroto No.km, Simpang Tj., Kec. Medan Sunggal, Kota Medan, Sumatera Utara 20122

Email correspondence: <a href="mailto:dewimahrani@dosen.pancabudi.ac.id">dewimahrani@dosen.pancabudi.ac.id</a>

Abstract. Garbage is a serious problem in Indonesia, including in Medan Belawan District. The Rubbish Bank Program is present as a solution for Rubbish management and economic empowerment of the community. This research aims to analyze the concept of green economy through the Rubbish Bank program in Medan Belawan District. The research method used is qualitatively descriptive with a case study approach. Data is collected through observation, interview, and documentation. The data analysis technique used is thematic analysis. The Rubbish Bank Program in Medan Belawan District has provided economic, social, and environmental benefits. Economic benefits include increased community income, job creation, and savings in Rubbish transportation costs. Social benefits include increasing public awareness about the importance of good Rubbish management, and increasing public concern for the environment. Environmental benefits include reducing Rubbish generation, reducing environmental pollution, and preserving natural resources. The Rubbish Bank Program in Medan Belawan District is an example of the implementation of an effective and sustainable green economy concept. This program can be a model for other Rubbish management programs in Indonesia.

Keywords: Green Economy, Rubbish Bank, Community Economic Empowerment, Medan Belawan District

#### 1. INTRODUCTION

Green economy is a concept of sustainable economic development, focusing on the balance between environmental conservation and economic growth. Rubbish has become a global problem of growing concern. Green economy is not only a concept, but also a movement that needs to be realized by all parties. By applying the principles of green economy, we can create a more sustainable, prosperous and environmentally friendly future.

Rubbish Bank is a microfinance institution established by the community to manage Rubbish systematically and economically. The Rubbish Bank receives Rubbish from the community, sorts it by type, and then sells it to collectors or processes it into new products that have economic value. The Rubbish Bank is an innovative solution to address the Rubbish problem and empower the community's economy. With the Rubbish Bank, Rubbish can be turned into a blessing for the community and the environment.

Rubbish is a serious problem in various regions in Indonesia, including Medan Belawan Sub-district. The accumulation of unmanaged Rubbish pollutes the environment, endangers health, and damages the aesthetics of the city. In the midst of this situation,

sustainable Rubbish management efforts and community economic empowerment through Rubbish are the keys to overcoming this problem.

Sustainable Rubbish management and community economic empowerment through Rubbish are the keys to overcoming Rubbish problems in Medan Belawan Sub-district. Efforts made by the government, such as building infrastructure, conducting socialization and education, developing a Rubbish Bank, and working with the private sector, need to be optimized. The Rubbish Bank has proven to be one of the effective solutions for community economic empowerment in Medan Belawan Sub-district. With proper development and management, the Rubbish Bank can provide wider benefits for the community and the environment.

The accumulation of Rubbish that is not managed properly can cause various negative impacts on the environment, such as water and air pollution, ecosystem damage, and the spread of disease. In Indonesia, Rubbish problems are increasingly complex, especially in urban areas with high population density. This is exacerbated by the low level of public awareness in managing Rubbish properly. Rubbish has become an increasingly complex problem in Indonesia, including in coastal areas such as Belawan. The accumulation of Rubbish that is not managed properly can pollute the marine environment and cause various negative impacts on ecosystems and public health. Recognizing this condition, Bank Sampah Berkah comes as an innovative solution to turn Rubbish into blessings for the people in Belawan. Bank Sampah Berkah is a microfinance institution established by the community to manage Rubbish systematically and economically.



Figure 1. Blessing Rubbish Bank in Medan Belawan Sub-District

Rubbish is a serious problem in various regions in Indonesia, including Medan Belawan Sub-district. The accumulation of unmanaged Rubbish pollutes the environment, endangers health, and damages the aesthetics of the city. In the midst of this situation, sustainable Rubbish management efforts and community economic empowerment through Rubbish are the keys to overcoming this problem.

Belawan, as a dynamic coastal area, is not immune to Rubbish problems. The accumulation of unmanaged Rubbish can have a negative impact on marine ecosystems, public health, and tourism image. This condition encourages the search for Rubbish management solutions that are not only effective, but also sustainable. The concept of green economy offers a relevant approach. Green economy emphasizes economic development that is in harmony with environmental sustainability and social welfare. Bank Sampah Berkah is present as one of the concrete manifestations of the green economy in Belawan. Berkah Rubbish Bank is an institution managed by the community to manage Rubbish in a sustainable and economically valuable manner. The community can deposit their segregated Rubbish into the Rubbish Bank and receive financial rewards. Green Economy is the concept of sustainable economic development, in harmony with environmental sustainability and social welfare. Bank Sampah Berkah is aligned with this concept as it offers ecological and economic benefits. Effective Rubbish management is one of the important elements in realizing a green economy. Rubbish that is not managed properly can cause various negative impacts, such as environmental pollution, ecosystem damage, and public health problems. Bank Sampah Berkah in Medan Belawan Sub-district is an example of a community-based Rubbish management program that applies the green economy concept.

#### 2. LITERATURE REVIEW

Rubbish is one of the most pressing environmental issues in Indonesia, including in Medan Belawan Sub-district. Unmanaged Rubbish accumulation can have a negative impact on human health, the environment, and city aesthetics. The green economy concept offers a solution to the Rubbish problem by combining economic and environmental aspects. Bank Sampah Berkah in Medan Belawan Sub-district is one example of a program that applies the concept of green economy through sustainable Rubbish management and community economic empowerment.

## **Green Economy Concept**

Green economy is a concept of sustainable economic development, focusing on the balance between environmental conservation and economic growth. The benefits of a green economy include: Preserving the environment such as preserving ecosystems, biodiversity, and air and water quality. Improving people's health by creating new jobs, increasing incomes, and providing access to basic needs such as clean water, sanitation, and energy. Ensuring sustainable development such as meeting the needs of the current generation without compromising the ability of future generations to meet their needs.

## Berkah Rubbish Bank's Role in the Green Economy

Bank Sampah Berkah in Medan Belawan sub-district plays an important role in realizing a green economy through its programs, among others: Rubbish reduction by encouraging the community to reduce Rubbish generated and sorting Rubbish for recycling. Increasing the economic value of Rubbish such as providing economic value, so that Rubbish is no longer considered a worthless item. Empowering the community's economy by creating new jobs for people involved in Rubbish management. As well as increasing environmental awareness such as increasing public awareness about the importance of environmentally friendly Rubbish management.

#### 3. METHOD

This research uses descriptive qualitative methods with case studies, Qualitative methods allow researchers to understand phenomena more deeply and comprehensively, Produce rich and meaningful data, such as interview transcripts, field notes, and photo documentation. Allows researchers to build a contextual understanding of the Bank Sampah Berkah program and allows researchers to gain deeper and more comprehensive insights and understanding of the Bank Sampah Berkah program and how it contributes to the green economy. This data can provide a clearer and more detailed picture of the Bank Sampah Berkah program and how the concept of green economy is applied in the program. The research was conducted in Medan Belawan II Sub-district, Medan City, North Sumatra. Data was collected through Observation, Interview, and Document analysis.

### 4. RESULTS AND DISCUSSION

### Profile of the Blessing Rubbish Bank in Belawan

Bank Sampah Berkah is one of the successful Rubbish Banks in Medan City. Established in 2017, it is located in Belawan II Village, Medan Belawan District, Medan City, North Sumatra. Manager, Gugah Nurani Indonesia (GNI). Bank Sampah Berkah has provided many benefits to the community and the environment. By continuing to develop and innovate, Bank Sampah Berkah is expected to be a good example for other Rubbish Banks in Indonesia.



Figure 2. Medan Belawan Blessing Garbage Bank



Figure 3. Together with the Mayor of Medan for Achieving the Best Award in 2023

The achievements obtained include:

- a. Third Champion of the Best Rubbish Bank in Medan City in 2023
- b. Award from the Mayor of Medan for the Best Rubbish Bank Management in 2023

Based on the results of my research and interviews, the Berkah Rubbish Bank program in Medan Belawan Sub-district in the framework of the Green Economy focuses on processing inorganic Rubbish that has economic value and can be recycled. The types of Rubbish include:

## Plastic Rubbish:

- a. Plastic bottles (PET, HDPE, PVC)
- b. Plastic packaging (food wrap, detergent, soap, etc.)
- c. Plastic crackle
- d. Styrofoam
- e. Plastic cables

## Paper Rubbish

- a. White paper (HVS paper, newspapers, magazines)
- b. Cardboard (used cardboard boxes)

c. Tetrapak (beverage packaging)

#### Metal Rubbish

- a. Aluminum cans
- b. Iron cans
- c. Electronic scrap (cable, iron, copper)

#### Glass Rubbish

- a. Glass bottles
- b. Shards

## Problems of the Blessing Garbage Bank in Medan Belawan Sub-district

The Blessing Rubbish Bank in Medan Belawan Sub-district has played an important role in Rubbish management and community economic empowerment. Nonetheless, there are still some issues that need to be addressed to improve the effectiveness and sustainability of Bank Sampah Berkah. The following is a more in-depth analysis of some of the key issues faced by Berkah Rubbish Bank:

### **Capacity and Infrastructure Limitations**

- a. Limited TPS Capacity: The volume of Rubbish received by Berkah Rubbish Bank continues to increase, but the capacity of the TPS is not proportional to the increase. This leads to accumulation of Rubbish and disrupts the smooth operation of the Rubbish Bank.
- b. Limited Rubbish Processing Facilities: Limited Rubbish processing facilities, such as shredding machines and sorting tools, hamper the Rubbish recycling process and result in sub-optimal processed products.
- c. Lack of Transportation Facilities: The lack of transportation facilities to transport Rubbish from the community to the Rubbish Bank is an obstacle for people who want to participate.

#### **Lack of Public Awareness and Participation**

- a. There is still low awareness about Rubbish segregation: Many people do not understand the importance of Rubbish segregation and still mix organic and inorganic Rubbish.
- b. Lack of Active Community Participation: Active participation of the community in bringing Rubbish to the Rubbish Bank is still low, so the volume of Rubbish processed is still far from the maximum potential.
- c. Lack of Understanding of the Benefits of Rubbish Banks: There are still many people who do not understand the economic and environmental benefits of the Rubbish Bank.

## **Limited Funding and Financial Support**

- a. Limited Funding Sources: Bank Sampah Berkah only relies on revenue from Rubbish sales and membership fees, so the availability of funds for operations and development is limited.
- b. Lack of Government Support: Lack of financial and policy support from the local government hinders the development of Bank Sampah Berkah.
- c. Difficulty in Obtaining Funding: Difficulties in obtaining financial assistance from non-governmental organizations or companies due to various factors, such as complicated requirements or lack of information about assistance programs.

## **Competition with Illegal Rubbish Collectors**

- a. Lower Rubbish Price: Bank Sampah Berkah has to compete with illegal Rubbish collectors who offer higher Rubbish prices, although the quality of the processed products is not guaranteed.
- b. Lack of Government Supervision: The lack of government supervision on the activities of illegal Rubbish collectors allows them to operate freely and puts Berkah Rubbish Bank at a disadvantage.
- c. Difficulty in Reaching Certain Communities: Illegal Rubbish collectors often have an easier time reaching communities in remote areas, making it difficult for Berkah Rubbish Bank to attract participation from communities in those areas.

The types of Rubbish that can be accepted at the Rubbish Bank can vary depending on the policies and management capabilities of each Rubbish Bank, the Rubbish Bank does not accept organic Rubbish such as food Rubbish, vegetables, and leaves. The Rubbish Bank program in Medan Belawan Sub-district is expected to increase community awareness about the importance of sustainable and environmentally friendly Rubbish management. In addition, the program also aims to create economic value from Rubbish by recycling it into new useful products.organic Rubbish such as food Rubbish, vegetables, and leaves. The Rubbish Bank program in Medan Belawan Sub-district is expected to increase community awareness about the importance of sustainable and environmentally friendly Rubbish management. In addition, the program also aims to create economic value from Rubbish by recycling it into new useful products.



Figure 4. Types Of Rubbish

From the Berkah Rubbish Bank Operational Data that researchers found that there are 174 customers who save garbage, from January to May 2024. As researchers found that there are 48 customers who are less active in saving garbage, 20 customers who are no longer active in saving garbage and 106 customers who are still actively saving garbage. Then, researchers found 1 customer who saved the most garbage from 174 customers who saved, namely Mr. Zulkarnaen around Rp.4,000,000. He uses the proceeds from saving garbage to meet his basic needs such as buying rice, oil, and other needs.

The following is the percentage of operational data sourced from the Berkah Rubbish Bank in 2024:

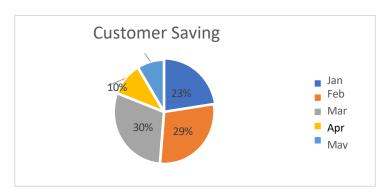


Figure 5. Percentage of Customers Saving at Bank Sampah Berkah in 2024

Seen from the graph above, customers saving at Bank Sampah Berkah (BSB) above experience an increase and decrease every month around an average of 3% to 5% each month.

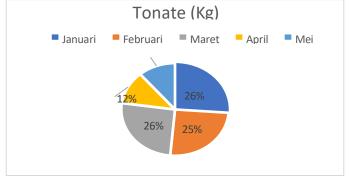


Figure 6. Percentage Of Rubbish That Is Collected Every Month

It can be seen from the graph above, that the Rubbish obtained from the results of customers saving in each month has an increase and decrease, it can be seen in May that it has decreased by 15%, it can be concluded that Rubbish income every month is not fixed.

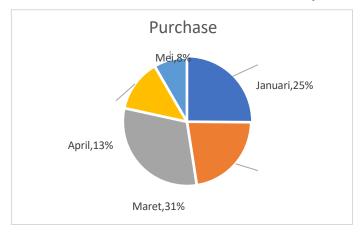


Figure 7. Percentage of Rubbish Purchase From Customers

Seen in the graph above, the results of the purchase of the Berkah Rubbish Bank to customers who save are not much different from month to month.

The concept of Rubbish Banks can foster public awareness in Rubbish management and improve green economic attitudes. Rubbish Bank management has a significant influence on the green economy attitude of its customers by allowing people to exchange their household food Rubbish for food packages, increasing the economic value of Rubbish and encouraging participation in protecting the environment. In synthesis, green economy and Rubbish management are interrelated in improving community welfare, reducing environmental risks and creating jobs. Strategies involve Rubbish control, plastic Rubbish management, and investment in sustainable Rubbish management technologies.

## 5. CONCLUSION

The circular economy through the Bank Sampah Berkah program in Medan Belawan Sub-district shows a significant transformation in Rubbish management and local economic development. The program succeeded in changing the community's perspective on Rubbish, from something considered useless to a valuable resource. The community is encouraged to sort and collect household Rubbish, which is then deposited into a Rubbish Bank to be exchanged for money or goods.

This program not only helps reduce the volume of Rubbish going to landfills, but also provides direct economic benefits to residents. Thus, there is an increase in environmental awareness as well as economic empowerment among the local community. In addition, this activity encourages the creation of new jobs, both in Rubbish collection, processing, and

recycling. Overall, Bank Sampah Berkah in Medan Belawan serves as a concrete example of how the concept of circular economy can be applied at the local level, resulting in sustainable positive impacts for the environment and community welfare.

#### **REFERENCES**

- Amaliah, F. N. (2020). PERAN PENGELOLA BANK SAMPAH RAMAH LINGKUNGAN (RAMLI) DALAM PEMBERDAYAAN MASYARAKAT DI PERUMAHAN GRAHA INDAH KOTA SAMARINDA. Learning Society: Jurnal CSR, Pendidikan, dan Pemberdayaan Masyarakat Jurnal Program Studi Pendidikan Masyarakat, 18-22.
- Ani Umyati, Y. D. (2018). PENGARUH PROGRAM BANK SAMPAH TERHADAP TINGKAT PENDAPATAN KELUARGA NASABAH BANK SAMPAH MANDIRI DI KELURAHAN KEBONSARI. *Journal Industrial Servicess Vol. 4* No. 1 Oktober 2018, 64-68.
- Anwar Hariyono, A. R. (2020). LITERASI KEUANGAN MENABUNG SEJAK DINI DAN PENDAMPINGAN PENGELOLAAN KEUANGAN BERBASIS PEMBUKUAN SEDERHANA PADA BANK SAMPAH DESA BRANGKAL, KECAMATA BALONG PANGGANG, KABUPATEN GRESIK. *DedikasiMU* (Journal of Community Service) Volume 2, Nomor 1, Maret 2020, 247-257.
- Ashari Kara, E. R. (2023). PEMBERDAYAAN MASYARAKAT MELALUI BANK SAMPAH BINAAN PT. PEGADAIAN PERSERO SEBAGAI PELAKSANAAN PROGRAM TANGGUNG JAWAB SOSIAL PERUSAHAAN. *Jurnal Darma Agung Volume: 31, Nomor: 3, Juni 2023, 225-239, 225-239.*
- Auliani, R. (2020). Peran Bank Sampah Induk dalam Pengelolaan Sampah Kota Medan. *Jurnal Abdidas Volume 1 Nomor 5 Tahun 2020 Halaman 330 337*, *1*, 330-337.
- DESA SIDAKARYA DENPASAR SELATAN. PARTA: Jurnal Pengabdian Kepada Masyarakat Vol 1 No 1, Juni 2020, 44-48.
- Despa Wildawati, E. H. (2019). FAKTOR YANG BERHUBUNGAN DENGAN PENGELOLAAN SAMPAH RUMAH TANGGA BERBASIS MASYARAKAT DI KAWASAN BANK SAMPAH HANASTY. *Jurnal Human Care*, 149-158.
- Dewi Mahrani Rangkuty, S. G. (2021). Peningkatan Pemahaman Masyarakat Kelompok Nelayan Desa Pahlawan Tentang Konsep Dasar Perdagangan Internasional. *Jurnal Pengabdian UntukMu NegeRI*, 139-144.
- Fadlan, A., & Pratama, A. (2024). The Analysis of Tilapia Exports on Regional Original Revenue (ROR) of Dairi Regency, North Sumatra. Lead Journal of Economy and Administration, 2(3), 114-124.
- Faried, A. I., Hasanah, U., & Sembiring, R. (2023). Impact of Arabica Coffee Production on Social Welfare: A Comprehensive Analysis. International Journal of Management, Economic and Accounting, 1(2), 310-320.

- Fitriani Pramita Gurning, C. A. (2023). PENINGKATAN KESADARAN MASYARAKAT DALAM PENGELOLAAN SAMPAH BERBASIS MASYARAKAT PESISIR DI KELURAHAN BELAWAN BAHARI. *MODELING: Jurnal Program Studi PGMI Volume 10, Nomor 3, September 2023*, 1-11.
- Guntoro, A. A. (2021). Sosialisasi Website Portal Bank Sampah Universitas Lancang Kuning. *INTERNATIONAL JOURNAL OF COMMUNITY SERVICE LEARNING Volume 5 Nomor 3 2021, pp 259-264*, 259-264.
- Harahap, M. (2023). Analisis Penanggulangan Kemiskinan Ekstrem di Kota Medan. *Journal Economy and Currency Study (JECS)*, 85-94.
- Hasanah, U., Fadlan, A., Sabilayana, S., & Monica, S. (2023). Affecting Rice Production On The Income And Welfare Of Rice Farmers In Desa Mangga. Prosiding Universitas Dharmawangsa, 3(1), 636-648.
- Heruman, D. A. (2016). BANK SAMPAH SEBAGAI ALTERNATIF STRATEGI PENGELOLAAN SAMPAH BERBASIS MASYARAKAT DI TASIKMALAYA. J. MANUSIA DAN LINGKUNGAN, Vol. 23, No.1, Maret 2016: 136-141, 23, 136-141.
- Heruman, D. A. (2016). BANK SAMPAH SEBAGAI ALTERNATIF STRATEGI PENGELOLAAN SAMPAH BERBASIS MASYARAKAT DI TASIKMALAYA . *J. MANUSIA DAN LINGKUNGAN, Vol. 23, No.1, Maret 2016: 136-141*, 136-141.
- I Nyoman Widnyana Wartama, N. P. (2020). PEMBERDAYAAN MASYARAKAT DALAM PENGELOLAAN SAMPAH RUMAH TANGGA MELALUI BANK SAMPAH DI
- Ina Yuliana, Y. W. (2019). Partisipasi Masyarakat pada Program Bank Sampah. *IGEIA JOURNAL OF PUBLIC HEALTH RESEARCH AND DEVELOPMENT*, 545-555.
- Ischak. (2001). Peran Serta Masyarakat Kota Yogyakarta Dalam Menangani Sampah. *Majalah Geografi Indonesia, Volume 15, Nomor 3 September 2001*, 185-200.
- Isna Wardiah, Y. P. (2023). PENGEMBANGAN EKONOMI HIJAU MELALUI PENGELOLAAN BANK SAMPAH BERBASIS TEKNOLOGI. *Jurnal Impact: Implementation and Action Volume 5, Nomor 2, 2023*.
- Jastam, M. S. (2015). Pemberdayaan Masyarakat Melalui Pengelolaan Sampah (Studi Kasus di Bank Sampah Pelita Harapan, Kelurahan Ballaparang, Kecamatan Rappocini, Makassar). *HIGIENE VOLUME 1*, NO.1, JANUARI APRIL 2015, 1, 43-48.
- Linda Fitrina Hasnam, R. S. (2017). STRATEGI PENGEMBANGAN BANK SAMPAH DI WILAYAH DEPOK. *Jurnal Aplikasi Bisnis dan Manajemen, Vol. 3 No. 3, September 2017*, 407-416.
- Linda, R. (2016). PEMBERDAYAAN EKONOMI KREATIF MELALUI DAUR ULANG SAMPAH PLASTIK (STUDI KASUS BANK SAMPAH BERLIAN KELURAHAN TANGKERANG LABUAI). Jurnal Al-Iqtishad, Edisi 12 Volume I Tahun 2016, 1-18.

- Luh Gede Mita Laksmi Susanti, N. N. (n.d.). ALTERNATIF STRATEGI PENGELOLAAN SAMPAH BERBASIS PEMBERDAYAAN MASYARAKAT MELALUI BANK SAMPAH DI DESA TUNJUK, TABANAN. *KAIBON ABHINAYA: JURNAL PENGABDIAN MASYARAKAT*, 106-110.
- Lusiana Dewi, U. H. (2021). Determinan Harga dan Potensi Sampah sebagai Sumber Modal Ekonomi di Bank Sampah Syariah UINSA Surabaya. *Copyright* © 2021, *Nomicpedia: Journal of Economics and Business Innovation*, 15-26.
- Mariya Ulpah, I. M. (2022). MANAJEMEN BANK SAMPAH KRISSAN DALAM PEMBERDAYAAN EKONOMI MASYARAKAT KARANG TENGAH,
- Meliana, A. A. (2021). EDUKASI EKONOMI HIJAU DALAM MENUMBUHKAN SEMANGAT "GREEN ENTREPRENEURSHIP". *Jurnal ABDIMAS Vol.2-2021. Edisi Khusus Dies Natalis Unikal Ke-40*, 1-7.
- Mujahiddin, Y. T. (2021). Pelatihan Pengelolaan Sampah Rumah Tangga di Desa Pematang Johar, Deli Serdang. *DINAMISIA: Jurnal Pengabdian Kepada Masyarakat Vol. 5, No. 3 Juni 2021, Hal. 623-630*, 623-630.
- Nasution, L. N., Siregar, A., & Rangkuty, D. M. (2023, September). Integration of Financial Capability and The Economy of North Sumatra (Panel Regression Model). In The International Conference on Education, Social Sciences and Technology (ICESST) (Vol. 2, No. 2, pp. 182-190).
- Nelson Tanjung, R. A. (2023). PENGELOLAAN SAMPAH DENGAN SISTEM REDUCE, REUSE, RECYCLE DAN REPLACE DI DESA SAMPUN DUSUN 2 KECAMATAN DOLAT RAYAT KABUPATEN KARO . *Jurnal Ilmiah Indonesia p–ISSN: 2541 0849 e -ISSN: 2548 1398*, 1894-1910.
- Purwanti, I. (2021). KONSEP DAN IMPLEMENTASI EKONOMI SIRKULAR DALAM PROGRAM BANK SAMPAH (STUDI KASUS: KEBERLANJUTAN BANK SAMPAH TANJUNG). *AmaNU: Jurnal Manajemen dan Ekonomi*, 89-98.
- Purwanto. (2019). Pengelolaan "Bank Sampah" Berbasis Masyarakat sebagai Alternatif Meningkatkan Ekonomi Warga RT 004/RW 09, Cikarang Utara—Bekasi. *Academics in Action Journal Volume 1, Number 1, 27-37, 27-37.*
- Rangkuty, D. M. (2024). What Is The Role Of Badan Riset Dan Inovasi Daerah (BRIDA) At Medan City? *International Journal of Economics and Management Sciences*, 01-08.
- Rangkuty, D. M., & Hidayat, M. (2021). Does Foreign Debt have an Impact on Indonesia's Foreign Exchange Reserves?. Ekuilibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi, 16(1), 85-93.
- Rangkuty, D. M., Nasution, L. N., Hasyyati, Z., Siregar, S. D., & Firmansyah, D. (2024). The Monetary and Fiscal Policies on International Trade in Indonesia. The Es Economics and Entrepreneurship, 3(01), 1-11.

- Romauli situmorang, H. Q. (2023). Tingkat Kesadaran Kurangnya Pemahaman Masyarakat Tentang Daur Ulang Limbah Sampah Plastik Masyarakat TPS. *JURNAL WILAYAH, KOTA DAN LINGKUNGAN BERKELANJUTAN (JWIKAL) Vol. 2, No. 2 Desember 2023*, 28-39.
- Rondiyah, S. M. (2014). Faktor-Faktor Yang Mempengaruhi Kinerja Pengelolaan Sampah Di Pasar Banjarsari Kota Pekalongan. *JURNAL KESEHATAN MASYARAKAT (e-Journal), Volume 2, Nomor 3, Maret 2014, 2,* 192-199.
- Rusiadi, Hidayat, M., Rangkuty, D. M., Ferine, K. F., & Saputra, J. (2024). The Influence of Natural Resources, Energy Consumption, and Renewable Energy on Economic Growth in ASEAN Region Countries. International Journal of Energy Economics and Policy, 14(3), 332-338.
- Sari, W. I., Sanny, A., & Yanti, E. D. (2023, March). Analysis Of Digital Economic Transformation In Improving The Economy Of Home Industries In Kota Pari Village. In Proceeding of The International Conference on Economics and Business (Vol. 2, No. 1, pp. 01-16).
- Shofiyatul Muntazah, D. I. (2015). PENGELOLAAN PROGRAM BANK SAMPAH SEBAGAI UPAYA PEMBERDAYAAN MASYARAKAT DI BANK SAMPAH BINTANG MANGROVE KELURAHAN GUNUNG ANYAR TAMBAK KECAMATAN GUNUNG ANYAR SURABAYA. *E-Journal UNESA*, 2015, 1-13.
- Sidarta, I. D. (2021). Pelaksanaan Pengelolaan Sampah Berbasis Masyarakat di Kota Semarang. *Jurnal Serambi Hukum Vol 14 No 01 Tahun 2021*, 65-77.
- Siregar, K. H. (2023, December). Analysis of Efficiency Islamic Banking In Indonesia: Stochastic Frontier Approach. In International Conference On Islamic Community Studies (Vol. 1, pp. 199-206).
- Siti Nur Azizah, I. R. (2022). Rintisan Pembentukan Bank Sampah "Manfangati" Sebagai Bentuk Pemberdayaan Masyarakat Desa Candiwulan Kecamatan Adimulyo Kabupaten Kebumen. *Journal of Community Service and Empowerment Vol. 3, No. 1, April* 2022, 26-30.
- Suhendi, S. (2023). Analisis Pembentukan Bumdes Dalam Mendukung Pembangunan Desa Mandiri Di Desa Lae Gambir Kecamatan Simpang Kanan Kabupaten Aceh Singkil. NUSANTARA: Jurnal Ilmu Pengetahuan Sosial, 10(6), 3136-3147.
- Suleman, N. I. (2021). SISTEM INFORMASI PENGELOLAAN BANK SAMPAH SAMPURNA BERKAH BERBASIS WEBSITE. *Indonesian Journal on Software Engineering (IJSE) Vol. 7, No. 1, Juni 2021, hlm. 78-85*, 78-85.
- Suryani, A. S. (2014). PERAN BANK SAMPAH DALAM EFEKTIVITAS PENGELOLAAN SAMPAH (STUDI KASUS BANK SAMPAH MALANG). *nih Sri*
- Suryani, Peran Bank Sampah dalam Efektivitas Pengelolaan Sampah, 71-84.
- Sutanto, H. B. (2021). Pengembangan Wisata Edukasi Sampah Berbasis Komunitas di Kelurahan Sorosutan, Yogyakarta. *Prosiding Sendimas VI Tahun 2021*, 360-366.

- Syahputra, H. (2021). Manajemen Tata Kelola Sampah Kota Medan Melalui Pendekatan Reduce at Source dan esource Recycle. *Jurnal Theosofi dan Peradaban Islam Vol.* 3 NO. 1, Juni 2021, 64-84.
- TANGERANG. Madani Syariah, Vol. 5 No. 1 Februari 2022, 1-10.
- Umi Chotijah, T. A. (2019). PENERAPAN PEMBUKUAN BANK SAMPAH DESA KALIGERMAN. DedikasiMU (Journal of Community Service) Volume 1, Nomor 1, Desember 2019, 138-149.
- Veronika, S. (2022). ANALISIS STRATEGI PEMASARAN HIJAU BANK SAMPAH DALAM MENCIPTAKAN PERILAKU HIJAU PADA KONSUMEN BANK SAMPAH BERSINAR. *ESENSI: Jurnal Manajemen Bisnis, Vol. 25 No. 1, 2022, 39-47.*
- Wandira Naibaho, H. N. (2023). PEMBERDAYAAN MASYARAKAT MELALUI PENGEMBANGAN DESA WISATA ANDRI, KECAMATAN GUNUNGPATI, KOTA SEMARANG. *Journal of Public Policy and Management Review*.
- Wegi Trio Putra, I. (2020). Pemberdayaan Masyarakat Melalui Pengelolaan Sampah Di Bank Sampah. *Jambura Journal of Community Empowerment (JJCE) Volume (1) Nomor (2), (Desember) (2020), Halaman (69-78), 1,* 69-78.
- Yuwita Ariessa Pravasanti, S. N. (2020). BANK SAMPAH UNTUK PENINGKATAN PENDAPATAN IBU RUMAH TANGGA. *Jurnal BUDIMAS*, 31-35.
- Zuliani, N. (2022). Sistem Informasi Bank Sampah Untuk Masyarakat Bireuen Berbasis web. Device: Journal Of Information System, Computer Science And Information Technology Vol.3, No.2 Hal 16-22, 16-22.