The existence of waste bank management and the impact on the environment and trends of community consumption (Case study of the Ngudi Resik Waste Bank, Krecekan, Wironanggan, Sukoharjo)

Ika Feni Setiyaningrum a,1,*, Asiah Wati b,2, Suryati c,3

^a Center for Science and Technology, UIN Raden Mas Said Surakarta

^b Faculty of Sharia, UIN Raden Mas Said Surakarta

^c Faculty of Islamic Economic and Business, UIN Raden Mas Said Surakarta

¹ ika.fs@iain-surakarta.ac.id *; ² asiahwati@staff.uinsaid.ac.id; ³ suryati@iain-surakarta.ac.id

*corresponding author

Article information	ABSTRAK
Article history	Kehadiran lembaga bank sampah mampu mendorong masyarakat untu
Received May 12, 2022	memiliki kebiasaan memilah sampah serta mengubah paradigma bahwa
Revised June 29, 2022	sampah bernilai rupiah. Dengan adanya bank sampah, masyarakat dapa
Accepted June 29, 2022	memperoleh penghasilan tambahan dari aktivitas menjual sampah
	Kehadiran bank sampah juga berdampak pada aspek kebersihan lingkungan
	Dalam studi ini, peneliti ingin mengetahui dampak lingkungan dari kehadira
	bank sampah dan alokasi penghasilan tambahan yang didapatkan olel
	masyarakat dari penjualan sampah yang telah dipilah. Metode yang
	digunakan dalam penelitian ini adalah survey dengan melakukan wawancar
Kata kunci:	terhadap pengurus bank sampah untuk mengetahui model pengelolaan
Bank Sampah	Wawancara juga dilakukan terhadap nasabah bank sampah untu
Sampah	mendapatkan data mengenai jumlah sampah yang disetor dan alokas
Manajemen 	keuangan nasabah. Jumlah nasabah yang ada di Dusun Krecekan sejumlal
Tren Konsumsi	19 orang. Analisis data dilakukan dengan metode statistic deskriptif untu
Alokasi Pendapatan	menggambarkan mekanisme pengelolaan bank sampah sekaligus pors
	alokasi penghasilan tambahan masyarakat dari partisipasi dalam kegiata
	bank sampah. Kehadiran bank sampah Krecekan Ngudi Resik merupakan
	hasil inisiasi dari masyarakat dengan didorong keinginan agar tercipt
	lingkungan yang bersih. Pengelolaan bank sampah yang baik menjadi kund
	pokok eksistensi bank sampah secara berkelanjutan. Kehadiran da
	dukungan tokoh masyarakat juga memegang peranan penting bag
	keberlangsungan bank sampah. Bank sampah Krecekan Ngudi Resik telal
	memberikan pengaruh positif dalam aspek kebersihan lingkungan da
	perekonomian masyarakat. Sebagian besar masyarakat yang menjad
	nasabah (78,9%) mengalokasikan uang yang diperoleh dari kegiatan ban
	sampah untuk kebutuhan konsumsi.
	ABSTRACT
Keywords:	The presence of a waste bank institution can encourage people to have the
Waste bank	habit of sorting waste and change the paradigm that waste is worth
Waste	

Management
Consumption trends
Financial allocation

Furthermore, with a waste bank, the community can earn additional income from selling waste. The presence of a waste bank also has an impact on aspects of environmental cleanliness. In this study, researchers describe the environmental impact of the existence of a waste bank and the allocation of additional income earned by the community from the sale of sorted waste. The method used in this research is a survey by conducting interviews with the waste bank management to determine the management model. Interviews were also conducted with waste bank customers to obtain data on the amount of waste deposited and the customer's financial allocation. The number of customers in Dusun Krecekan is 19 people. Data analysis was conducted using descriptive statistical methods to describe the waste bank management mechanism and the portion of the community's additional income allocation from participation in waste bank activities. The presence of the Krecekan Ngudi Resik waste bank is the result of initiation from the community-driven by the desire to create a clean environment. Good waste bank management is the key to a sustainable waste bank. The presence and support of community leaders also play an essential role in the sustainability of the waste bank. The Krecekan Ngudi Resik waste bank has positively impacted environmental hygiene and the community's economy. Most people who become customers (78.9%) allocate money obtained from waste bank activities for consumption needs.

This is an open access article under the **CC-BY-SA** license.



INTRODUCTION

The waste problem is a problem that has not been resolved until now. In Indonesia, the amount of waste heap reaches 23,072,691.72 tons per year with a total daily generation of 63,212.85 tons. The majority of waste generation is dominated by food waste (40.3%), while plastic waste ranks second with a percentage of 17.22% (SIPSN, 2021). Based on data from the Indonesia National Plastic Action Partnership released in April 2020, as much as 67.2 million tons of Indonesian waste accumulates every year, and 9 percent, or around 620 thousand tons, go into rivers, lakes and seas. In Indonesia, it is estimated that 85,000 tons of waste are produced, with an estimated increase of 150,000 tons per day in 2025 (Pranita, 2021).

The habit of littering is often encountered and becomes a reality in plain sight. Throwing up on the river bank, on the side of the road, or in an empty open land is a habit of individuals who are not responsible for the environment. The encouragement of this habit is due to the lack of awareness possessed by the community (Khoiriyah, 2021, Reksa et al., 2021). Not to mention the habit of sorting waste that still feels so difficult for the people of Indonesia (Dhokhikah et al., 2015, Hutabarat and Purnomo, 2021). The existing habit is to throw it away and transport it to the TPA, so the volume of waste in the TPA is increasing. The capacity of several landfills in Indonesia can only be allocated for a few years. Therefore, piles of garbage in various landfills result in a landfill emergency.

Knowing the source of the waste comes from is the important way to solve the waste problem. Based on SIPSN (2021) data, households are the largest source of waste in Indonesia, with 45.6%. Therefore, to overcome the waste problem, it is necessary to start with managing household waste. Waste management in question is to implement 3R (reduce, reuse, recycle). Another effort is to carry out waste sorting activities so that they can be further utilized, one of which is deposited with a waste bank institution.

A waste bank is one of the community empowerment institutions that has been found in various regions in Indonesia. Based on data from SIPSN (2021), the total number of waste banks in Indonesia reached 24,502 unit waste banks (BSU) and 544 central waste banks (BSI). Indonesia already has laws and regulations for waste management, specifically at waste banks, namely the Regulation of the Minister of Environment and Forestry of the Republic of Indonesia No. 14 of 2021. This Ministerial Regulation states that the responsibility for managing household waste or the like is the responsibility of the Government, Local Government, and the community.

The Waste Bank Program is one of the efforts to improve waste management by the community because the waste bank program contains elements of the 3R concept, namely reduce, reuse, and recycle, which can reduce the volume of waste (Setyaningrum, 2015). The waste bank is one of the strategies to reduce the volume of waste transported to the TPA. The implementation of the waste bank is, in principle, a form of social engineering to invite the public to sort their waste. An innovative solution was finally found to "force" the public to sort their waste through the waste bank. By equating waste with money or valuables saved, people are finally educated to value waste according to its type and value to be willing to sort waste (Saputro et al., 2015). A waste bank directly benefits the community by reducing waste generation in the community and making the environment cleaner (Asteria and Heruman, 2015, Sarfiah and Juliprianto, 2017). Furthermore, the existence of a waste bank can mobilize public awareness so that they understand, want, and can behave in a clean and healthy life (Solihin et al., 2019). In addition, the waste bank also provides economic benefits, wherefrom saving waste, they get money to pay for electricity and buy groceries, realise environmental health and the condition of the community being cleaner, greener, more comfortable, and healthier. Integrated waste management can stimulate creativity and innovation in the community to improve citizens' welfare (Asteria and Heruman, 2015).

Krecekan Hamlet is one of the hamlets located in Wironanggan Village, Gatak District, Sukoharjo. In this hamlet, there is a Ngudi Resik waste bank which has only been operating for one year. Even though it has just been established, this waste bank has become one of the institutions that received an award from the regent in the Kampung Merdeka Garbage competition. The establishment of a waste bank in this location is motivated by the desire of the community to make the surrounding environment clean. As many as 50% of the people in this area actively join the waste bank customers. People are moved to sort out their waste and deposit their trash once a month. The proceeds from the sale of waste by the community can be taken immediately after the activity is completed or periodically in the form of money or gold savings.

The existence of community participation in the waste bank certainly has an impact on environmental and household economic aspects. In the financial part, the waste savings obtained by the community become additional income that can be used to meet the needs of the family. Therefore, researchers are interested in knowing the existence of waste bank and its impact on the environment and the allocation of savings obtained by the community from waste deposits.

METHOD

The research was conducted at the Ngudi Resik waste bank in Krecekan Hamlet, Wironanggan, Gatak District, Sukoharjo Regency. The location selection was made deliberately because no research had been done before on this waste bank. In addition, this waste bank has achievements because it has only been established for one year, but it can be one of the winners of the Kampung Merdeka Garbage competition representing Gatak District at the Sukoharjo Regency level. The time of the study was carried out from January-April 2022.

Data collection was carried out by conducting structured interviews with the community members of the Ngudi Resik waste bank customer based on the previous questionnaire. The questionnaire contains some indicator question, like motives for being a customer, length of time being a customer, income earned and its allocation, waste management carried out at home, and the impact after becoming a customer in the waste bank. The number of active customers who were interviewed was 19 people. Interviews were also conducted with the waste bank management to obtain more complete data on the management of the waste bank. In addition,

observations were made when the waste bank was operating to determine the actual condition of the flow of the waste bank activity

Data analysis in the study was carried out using descriptive statistics by presenting percentages and graphs. The description describes the waste bank management mechanism and customer financial allocation. Literature studies are also carried out to complete the discussion related to the topic under study.

RESULTS AND DISCUSSION

Krecekan Ngudi Resik Waste Bank Profile

The Ngudi Resik Waste Bank is one of the unit waste banks located in Gatak District in Sukoharjo Regency. The total unit waste bank (BSU) in Sukoharjo Regency is 195 units (SIPSN, 2022). The Ngudi Resik Waste Bank was inaugurated in August 2020. The initial establishment of this waste bank stemmed from the desire of PKK RT.04 women to create a clean environment by managing the waste produced by residents. Therefore, the management of PKK RT 04 agreed to invite one of the activists managing the waste bank of Sukoharjo Regency to be a resource person in the socialization event on waste management from home. The women greeted the socialization enthusiastically, so a waste bank management was formed and agreed to name it Krecekan Ngudi Resik.

The membership of the waste bank continues to grow at every weighing activity. Currently, 62 customers from both neighborhood association (RT 04) and other RT participate in waste bank activities. However, the number of active customers consists of about 25 people. Most of the customers who become members of the waste bank are women.

In November 2021, this waste bank was appointed as the representative of the Gatak District to participate in the Kampung Merdeka Garbage competition and succeeded in getting the 4th Winner at the Sukoharjo Regency level. After winning the competition, the waste bank activities continued to be followed up with competitions between the community group of 10 houses called "dasawisma" to keep the environment clean.

Ngudi Resik Waste Bank Management with Margin System

Waste bank activities begin with waste sorting activities carried out by customers at home. The sorting activity of each member is different depending on the willingness and the value of rupiah to be obtained. The more waste that is sorted according to its type, the higher the value of the waste will be because the price of each type of waste is different. Waste is divided into paper, plastic, metal, and glass waste. In detail, several categories of waste are sorted in the waste bank, namely cans, iron, bottle, glass, colour, white, duplex, cardboard, newspapers, sheet HVS, mixed HVS, PE plastic, HD plastic, glass, and foam. After sorting the waste, customers deposit it to the waste bank management at the secretariat office on a predetermined schedule. The Ngudi Resik waste bank operates once a month on the third Sunday of the week. After being deposited, the waste is weighed and recorded by the management in the record book. Earnings from the sale of waste are also written in the savings book owned by each customer. The proceeds from the sale of waste can be taken directly by the customer, saved in the form of money that can be taken at any time, saved in gold, or donated to charity. At the end of the waste bank activity, all the collected waste is then transported by collectors on the same day. This waste bank does not do waste storage because it does not have storage facilities.

During the current year, the turnover received by the waste bank is Rp. 4,200,000, with details of the lowest monthly turnover of Rp. 170,000,- and the highest of Rp. 800,000. Garbage banks take a margin from the sales of waste deposited by customers. The margin starts from IDR 50 per kilo to IDR 500,- depending on the selling price of each type of waste (interview with Waste Bank Director, 2022). The policy carried out by the Ngudi Resik Waste Bank manager is different from the directives contained in the Minister of Environment and Forestry RI 14/2021. The guide states that the system used is profit sharing with a percentage of 85:15, 85% for savers, and 15% for waste bank implementers. The 15% allotment is used for waste bank operational activities such as making account books, photocopies, purchasing stationery, and purchasing equipment for carrying out waste bank operations (Permen LHK RI No. 14 of 2021). The Ngudi

Resik Waste Bank management did not use the percentage because it was feared that the margin taken would be too high. Management is happier if the sale of waste is more profitable for the customer. The margin system is also implemented in several other waste banks in neighboring villages because it makes it difficult for managers to do calculations (interview with Sukoharjo waste bank community activist, 2022). Therefore, in several waste banks that implement a margin system, the management lists the purchase price and selling price of waste as a benchmark for calculating.

The Ngudi Resik Waste Bank has operated 14 weighing activities for 15 months, running until November 2021. Waste weighing activities are sometimes delayed due to the busyness of the committee or village activities that coincide with the weighing schedule. The amount of waste received by this waste bank from January to December 2021 is 2,027.8 kg or approximately 169 kg per month. Based on BPS (2021) data, the total municipal solid waste in Gatak District reaches 48,499 m3/year. Using the assumption of a solid waste density of 0.121 kg/L (Lubis, 2018), the total waste generated in Gatak District is 5,868,379 kg. If we compare the amount of waste managed by the Ngudi Resik waste bank with the total waste in Gatak District, it can be seen that the Ngudi Resik Waste Bank has helped reduce waste by 0.035%. However, this number does not look significant because this waste bank is small, covering only one neighborhood association (called RT), and only a few people from other RT have joined. In addition, not all communities are members of the customer. The potential for waste that a waste bank manages will increase if all the people in this village are actively involved as customers of the waste bank. Therefore, there is a need for more massive socialization and education that motivates the public to participate in waste bank activities. In several other locations, waste banks still manage a relatively minimal amount of waste compared to the total existing waste generation because not all communities have become customers (Survani, 2014, Saputro et al., 2015, Gunartin, 2019).

The Krecekan Ngudi Resik Waste Bank structure consists of a director, deputy director, treasurer, secretary, sorting, recording, weighing, and packing sectors, which refers to the socialization of the Sukoharjo waste bank forum. According to the RI Minister of Environment and Forestry Regulation No. 14 of 2021, there are no standard rules governing forming a waste bank structure. However, what must be considered in the organizational structure of the waste bank is the need for personnel who carry out the main functions of implementing the waste bank, as follows: 1) the person in charge; 2) the recording section of the implementation of the duties of the waste bank or the administrative field in the preparation of programs and reporting on the implementation of the waste bank; 3) the executive division of the financial sector of the Waste Bank and the operational division of the waste bank, and 4) production department. At the Ngudi Resik Waste Bank, the main obstacle when setting up a waste bank is that no people are willing to become administrators. Therefore, in this hamlet, community leaders are involved in the management to run the waste bank activities. The head of RT 04 in Dusun Krecekan is a supervisor of waste bank activities. The presence of community leaders in the management of this waste bank is one of the motors of the community's willingness to participate in waste bank activities. In the research of Saputro et al. (2015), the presence of community leaders who support waste sorting activities, namely the Village Government, is able to make policies to expand the scope of the waste bank's operational area. The existence of community leaders plays a vital role in pioneering, campaigning, and managing waste in their environment (Setyoadi, 2018).

The Krecekan Ngudi Resik waste bank activity received support from various parties, the local village government, philanthropic institutions, and local governments. The village government provides financial assistance and includes waste bank administrators in various online and offline training. In addition, the village government also provides space for waste bank managers to provide education and guidance to other communities. Philanthropic institutions provide support by providing plant seeds for the reforestation movement in the Krecekan Hamlet. The Regency Government has a role in encouraging the community to activate the waste bank. Socialization of the formation of waste banks to the RT/RW level was intensified by the Environmental Service (DLH) with the hope that waste would become a

source of environmental pollution problems and provide added value for residents who manage it (Wardani, 2020).

Environmental Impact of the Presence of a Waste Bank

Garbage banks are present as government partners in waste management. Waste management is meant here consists of reducing and handling waste. The waste handling activities include sorting, collecting, and processing waste (Permen LHK RI No. 14 of 2021). The Ngudi Resik waste bank has managed waste by encouraging people to sort inorganic waste for sale. The waste processing activity carried out by this institution is through composting activities, although it has not run well because it has only been run once. The first composting was carried out in April 2021 when a mutual cooperation activity was to clean up plans to create a village park. The compost is harvested three months later. The harvested compost is used to grow various vegetables by the community. The community uses a garbage chopper borrowed from another village in making compost because this hamlet does not yet have the equipment. In addition to the collective composting activity, several members of the waste bank customers also do individual composting at home using a simple composter. One of the customers has also made eco enzymes which are used as cleaners and organic fertilizers.

The activities of processing waste into compost that are carried out in a sustainable manner certainly positively impact the environment. In addition to reducing the pile of organic waste in the TPA -- which dominates there --, compost has many benefits. Compost can be used as fertilizer to fertilize better-quality plants than chemical fertilizers. Continuous chemical fertilizers will negatively impact soil productivity and the environment (Sulaeman et al., 2017). Compost can also be of economic value if it can be adequately managed.

The waste bank has had a positive impact on the surrounding environment. A total of 78.9% of respondents stated that the house is clean. This condition is in line with the results of research by Haryanti et al. (2020), which states that the existence of a waste bank makes the environment clean. Waste management through the waste bank program is an alternative to solve the waste problem and participate in preserving the environment so that it will make a positive contribution to the environment. A waste bank's presence can also help increase public awareness to maintain a clean environment in the village, even being ashamed and afraid to throw garbage carelessly (Rahmadani, 2020).

In addition, the impact felt by the community is the reduction in the pile of garbage. The waste initially disposed of can then be sorted and deposited in a waste bank. The presence of the Ngudi Resik Waste Bank has helped reduce waste by 0.035%. The same thing is experienced by people in the Negeri Hatu, Central Maluku. The existence of a waste bank can reduce domestic generation by 0.17% (Ramadani et al., 2020). Reducing the amount of waste that is disposed of causes a reduction in the burden received by landfills (Setyoadi, 2018). Ideally, a waste bank can reduce 30 percent to 50 percent of waste before it is sent to the Final Disposal Site (Dewanti et al., 2020).

Improving the Community Economy from the Presence of a Waste Bank

A waste bank is a facility for managing waste with the 3R principles (reduce, reuse, and recycle) as a means of education, behavior change in waste management, and the implementation of a circular economy formed and managed by the community, business entities, and or local government (Permen LHK RI No. 14 of 2021). Furthermore, the presence of waste banks has encouraged citizens' capacity building by seeking the formation of independence and self-reliance through the formation of awareness, knowledge, and abilities that encourage participation in managing the environment in their communities (Asteria and Heruman, 2016). In addition, the existence of a waste bank also has an economic impact on the community customer.

In Dusun Krecekan, especially RT 04, 82 families live in the area. Of this total, 75.6% of the community members become customers, and 25 people (30.5%) actively deposit waste. In this study, the respondents were 19 people from the total active customers (76%). All customers are women because they have a big role in sorting household waste. According to Solihin et al.

(2019), the participation of homemakers in waste management through waste banks can solve the increasing waste problem. Moreover, increased knowledge about the dangers of unmanaged waste will increase their involvement in waste management. As many as 78.9% of Krecekan Waste Bank customers are in the productive age category, while the rest are non-productive age (over 64 years old). The customers' education level, respectively, is S1 (bachelor), SMA/SMK (senior/vocational high school), SMP (junior high school), and SD (primary school), which are 10.5%, 21.1%, 42.1%, and 26.3%. Customers' professions are divided into four categories, namely housewives, employees, entrepreneurs, and teachers, with percentages sequentially of 42.1%, 21.1%, 26.3%, and 10.5%. The amount of customer income varies each month. The majority of people earn less than Rp. 500,000.00 per month (63.1%). As many as 26.3% of the people earn Rp. 500,000.00 to 1,500,000.00 5.3% percent earn in the range of Rp. 1,500,000.00 to Rp. 2,500,000.00, while incomes range from Rp. 3,500,000.00 to Rp. 5,000,000.00 as much as 5.3% (Figure 1).

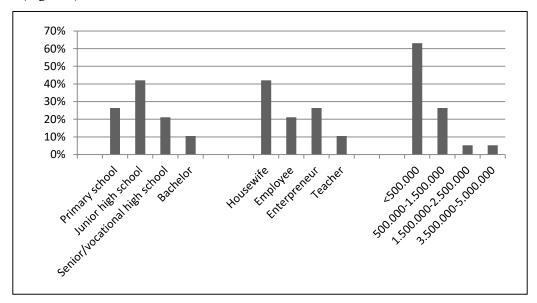


Figure 1. Sociodemographic conditions of customers of the Krecekan Waste Bank Ngudi Resik

Almost all customers have started to join waste bank activities since the beginning of the establishment (94.5%). Participation as a customer is welcomed because establishing a waste bank has become a mutual agreement in the PKK forum for women in RT.04. However, some people choose not to join as customers due to certain factors. For example, some argue that they do not join the waste bank activities because their waste is donated to customers' neighbors. Some of them are not indeed as rich people but they do not have high ambitions to increase their income from waste selling. In addition, some residents choose to pay for waste transportation services. On the other hand, people are motivated to become customers because they care about the environment so that the waste produced does not pollute their homes and surroundings. Apart from being motivated to care for the environment, other motives for participating in waste bank activities are obeying directions from community leaders (10.5%) and economic factors to increase income (42.2%).

Customers mainly take the income that people get from selling waste once a year, during Eid, so much money is collected (89.5%). Nevertheless, some people immediately take the money (10.5%). In other waste banks, for people who have sufficient income, the money obtained from the sale of waste is usually saved in gold savings. As for people who are not interested in participating in gold savings, the money is immediately taken or saved in the form of money that can be withdrawn. The gold savings program cannot be taken any time because they have to wait for 1 gram of gold. This reason is a consideration for people who make waste savings to fulfill their daily needs, choosing not to participate in gold savings (interview with Sukoharjo waste bank community activist, 2022). In Krecekan Hamlet, only a few customers are

members of the gold savings program, namely as many as eight who are waste bank administrators. Not all customers know about this information, and some residents are not interested in participating. The waste bank manager still informs the gold savings program only to the management and not to all customers. Although customers have recently followed the gold savings program, it has only been running for four months. The savings programs in various waste banks vary depending on the policies of the administrators. The savings products offered at the Malang waste bank include regular savings, necessities savings, Eid savings, school savings, environmental savings, and social savings (Suryani, 2014).

According to the directives of the Minister of Environment and Forestry of the Republic of Indonesia No. 14 of 2021, in order to make waste weighing more efficient and recording in the account book easier, it is necessary to apply a minimum weight requirement for saving waste, for example, 10 kg for each type of waste. So, unit waste bank (BSU) and central waste bank (BSI) savers are encouraged to save their waste savings at home before reaching the minimum weight requirement. However, this directive does not apply to the Ngudi Resik waste bank. This garbage bank accepts any amount of garbage residents own so that garbage does not accumulate and the environment looks clean. The community also has awareness that if there is not much waste to be deposited, then the waste will be deposited in the following month.

The Trend of Society Consumption

The human desire to fulfill their needs has given birth to consumption theory. Consumption is a very vital part of economic activity for human life. Consumption is human nature to sustain life. However, if humans are still holy, humans are aware that consumption has limitations in terms of property capabilities and what will be consumed according to needs. Normal human consumption behavior stems from the duality of economic rationalism and utilitarianism, both of which emphasize individual interests (self-interest) at the expense of the interests of other parties. The concept of self-interest rationality, according to Edgeworth, even though it looks good economically, still has consequences for looser consumption behavior because the rational measure is as long as it fulfills the self-interest. Meanwhile, utilitarianism emphasizes how the most significant benefit can be obtained even if it has to sacrifice the interests/rights of other parties (Arif Pujiyono, 2006).

The presence of the Krecekan Ngudi Resik waste bank has had an economic impact because it can become an additional income for its customers. The community in various other waste banks also experienced the same (Fitriasari and Nurjannah, 2016, Halid et al., 2022, Nisa and Saputro, 2021). However, even if they look at the nominal, the additional income is not seen significantly and cannot be used as a primary source of income. Fikriyyah and Adiwibowo's research (2018) show that waste banks do not significantly affect household income but can provide additional income for respondent households. The household income of the respondents increased by 0.34% to 0.68% of the average household income per month. The amount of income from the waste savings depends on the intensity of saving, the type of waste, and the amount of waste saved.

In a community economy, income expenditures, both primary and additional income, are divided into two parts, namely household consumption, and investment or savings. Public consumption expenditure is essential for assessing the population's economic welfare. Public consumption expenditures are expenditures made by households on final goods and services to meet needs such as food, clothing, and other necessities. Goods produced to be used by the community to meet their needs are consumption goods. Consumption is closely related to savings, where savings are part of income that is not consumed or spent—the greater the consumption, the smaller the investment or savings, and vice versa. If the income used for consumption is small, then savings will be more significant.

The additional income that people get from selling waste will, of course, be spent according to the needs of each customer. In the first year of the Krecekan Ngudi Resik waste bank running, all customers received the results of their waste savings in the form of money. Money is given to customers during Eid. Based on customer interviews, most of the money earned by the waste

bank was allocated to buy necessities (78.9%). Others use it for snacks for children (10.5%), alms (5.3%), and savings (5.3%).

The small percentage of customers tend to save because the average community in Dusun Krecekan still needs additional income to meet their needs. It can be seen that the products that customers spend after getting money from the waste bank are primary needs in the form of necessities. People who allocate their money for savings are customers whose income is quite large, namely at 3.5 million -5 million per month. However, there is a tendency that the higher the income, the higher the level of consumption (Sangaji, 2009). Keynes's theory states that current consumption depends on current income, which in the form of the consumption function is formulated:

$$Ct = C0 + C1Yt$$

Ct: current consumption), Yt: current income, C0: autonomous consumption, and C1: marginal propensity to consume (MPC).

The results of Sultan's research (2019) show that the community's food consumption pattern is greater than the non-food consumption pattern. Expenditure for food consumption is 65.74% of the total expenditure for overall consumption. It also shows that income has a positive effect on consumption. As income increases, public consumption also increases.

CONCLUSION

The Krecekan Ngudi Resik waste bank is the result of initiation from the community driven by the desire to create a clean environment. Good waste bank management is the key to a sustainable waste bank. The presence and support of community leaders also play an essential role in the sustainability of the waste bank. The Krecekan Ngudi Resik waste bank has positively influenced the environmental cleanliness aspect, so it received a reward in the "Kampung Merdeka Sampah" competition. In addition, this waste bank also helps the community's economy, especially for customers, because they get the additional income that can be used for household needs, especially consumption.

ACKNOWLEDGEMENT

The author would like to thank Mrs Lusi Nugraheni, S.Pd, who has helped us provide information regarding the management of the Krecekan Ngudi Resik waste bank.

REFERENCES

- Abdul Halid, Kiki Yulianto, dan Muhammad Saleh. 2022. Strategi Pengelolaan Bank Sampah di NTB (Studi Kasus Bank Sampah Bintang Sejahtera). Journal of Innovation Research and Knowledge 1 (8)
- Asteria, Donna dan Heru Heruman. 2016. Bank Sampah Sebagai Alternatif Strategi Pengelolaan Sampah Berbasis Masyarakat Di Tasikmalaya. J. Manusia dan Lingkungan 23 (1): 136-141
- Dewanti, Mike, Eko Priyo Purnomo, 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): 21-29
- Dhokhikah, Yeny, Yulinah Trihadiningrum, Sony Sunaryo. 2015. Community participation in household solid waste reduction in Surabaya, Indonesia. Resources, Conservation and Recycling 102: 153–162. http://dx.doi.org/10.1016/j.resconrec.2015.06.013
- Fikriyyah, Dary Farah dan Soeryo Adiwibowo. 2018. Pengaruh Bank Sampah Terhadap Perilaku Pengelolaan Sampah Rumah Tangga dan Pendapatan Nasabah (The Effect of Waste Bank to the Member's Household Management Behavior and Income). Jurnal Sains Komunikasi dan Pengembangan Masyarakat 2 (6): 703-716 DOI: https://doi.org/10.29244/jskpm.2.6.703-716
- Fitriasari, Fika dan Dewi Nurjannah. 2016. Analisis Pengaruh Bank Sampah Malang (BSM) Terhadap Pendapatan Masyarakat Kota Malang. Business Management Journal 12 (1)

- Gunartin. 2019. Analisa Efektivitas Bank Sampah sebagai Alternatif Pengelolaan Sampah Dalam Upaya Menuju Smart City di Kota Tangerang Selatan. Inovasi 6 (1)
- Haryanti, Sri, Evi Gravitiani, dan Mahendra Wijaya. 2020. Studi Penerapan Bank Sampah dalam Upaya Pengelolaan Lingkungan Hidup di Kota Yogyakarta. Journal Bioeksperimen 6 (1): 60-68
- Hutabarat, Lolom Evalita dan Candra Christianti Purnomo. 2021. Tingkat Pemahaman Masyarakat Terhadap Pemilahan Sampah Rumah Tangga Di Dusun Pademare Lombok Utara. e-Journal CENTECH 2 (2):72-81
- Khoiriyah, Himmatul. 2021. Analisis Kesadaran Masyarakat Akan Kesehatan terhadap Upaya Pengelolaan Sampah di Desa Tegorejo Kecamatan Pegandon Kabupaten Kendal. Indonesian Journal of Conservation 10(1): 13-20
- Nisa, Siti Zahrotun dan Dedy Riyadin Saputro. 2021. Pemanfaatan Bank Sampah sebagai Upaya Peningkatan Pendapatan Masyarakat di Kelurahan Kebonmanis Cilacap. Bantenese Jurnal Pengabdian Masyarakat JPM Bantenese 3 (2)
- Peraturan Menteri Lingkungan Hidup dan Kehutanan No. 14 Tahun 2021 tentang Bank Sampah
- Pranita, Ellyvon. 2021. Masalah Sampah Indonesia Ancam Target Nol Emisi. Diakses dari https://www.kompas.com/sains/read/2021/10/29/130000623/masalah-sampah-indonesia-ancam-target-nol-emisi-kok-bisa-?page=all pada tanggal 06 Desember 2021
- Rahmadani, Faisal Arif. 2020. Upaya Menumbuhkan Kesadaran Masyarakat dalam Menjaga Kebersihan Lingkungan Melalui Pengelolaan Bank Sampah. Jurnal Comm-Edu 3 (3)
- Ramadani, Aisyah Hadi, Mohammad Taufik, Siti Fatonah. 2020. Kajian Dampak Bank Sampah Terhadap Perbaikan Lingkungan Negeri Hatu Maluku Tengah. Jurnal Biologi dan Pembelajarannya 7 (2): 1-7
- Reksa, Muhammad Angga, J.P. Zahara, P.Faradilla, W.Anggraini, dan M.Syahbudi. 2021. Analisis Perilaku Masyarakat Dalam Menjaga Kebersihan Lingkungan, Lingkungan VI Kelurahan Cengkeh Turi Kecamatan Binjai Utara Provinsi Sumatera Utara. Jurnal Pengabdian Kepada Masyarakat MAJU UDA 2 (1)
- Maryam Sangaji. 2009. Fungsi Konsumsi Rumah Tangga di Indonesia (Pendekatan Model Koreksi Kesalahan). Journal of Indonesian Applied Economics 3 (2): 150-165
- Saputro, Yusa Eko, Kismartini, Syafrudin. 2015. Pengelolaan Sampah Berbasis Masyarakat Melalui Bank Sampah. Indonesian Journal of Conservation 4 (1): 83—94
- Sarfiah, Sudati Nur dan Whinarko Juliprijanto. 2017. Manfaat Bank Sampah Bagi Masyarakat di Dusun Semali Desa Salamkanci Kecamatan Bandongan Kabupaten Magelang. (Study Bank Sampah Semali Berseri). Jurnal Riset Ekonomi Pembangunan 2 (2)
- Setyaningrum, Ike. 2015. Karakteristik Peningkatan Pengelolaan Sampah oleh Masyarakat Melalui Bank Sampah. Jurnal Teknik PWK 4 (2): 185-196
- Setyoadi, Nino Heri. 2018. Faktor Pendorong Keberlanjutan Pengelolaan Sampah Rumah Tangga Berbasis Partisipasi Masyarakat di Kota Balikpapan dan Bogor. Jurnal Sains dan Teknologi Lingkungan 10 (1): 51-66
- Solihin, Muhtar Mochamad, Pudji Muljono, dan Dwi Sadono. 2019. Partisipasi Ibu Rumah Tangga dalam Pengelolaan Sampah melalui Bank Sampah di Desa Ragajaya, Bojonggede Bogor Jawa Barat. Jurnal Ilmu Lingkungan 17 (3): 388-398
- SIPSN. 2022. Capaian Kinerja Pengelolaan Sampah. Diakses dari https://sipsn.menlhk.go.id/sipsn/pada 6 Januari 2022
- Suryani, Anih Sri. 2014. Peran Bank Sampah dalam Efektivitas Pengelolaan Sampah (Studi Kasus Bank Sampah Malang). Aspirasi 5 (1): 71-84
- Wardani, Indah Septiyaning. 2020. Bank Sampah Dibentuk hingga Tingkat RT/RW di Sukoharjo. Diakses dari https://www.solopos.com/index.php/bank-sampah-dibentuk-hingga-tingkat-rt-rw-di-sukoharjo-1067659?utm_source=terkini_desktop pada 3 Maret 2022
- Saputro, Yusa Eko, Kismartini, Syafrudin. 2015. Pengelolaan Sampah Berbasis Masyarakat melalui Bank Sampah. Indonesian Journal of Conservation 4 (1): 83-94
- Sulaeman, Yoyo, Maswar dan Deddy Erfandi. 2017. Pengaruh Kombinasi Pupuk Organik Dan Anorganik Terhadap Sifat Kimia Tanah, Dan Hasil Tanaman Jagung Di Lahan Kering Masam. Jurnal Pengkajian dan Pengembangan Teknologi Pertanian 20 (1): 1-12

Sultan, Hardiyanti. 2019. Pengaruh Pendapatan Terhadap Konsumsi Petani Cengkeh Di Kabupaten Toli-Toli (The Effect of Income on the Consumption of Clove Farmers in Toli-toli District). J. Agroland 26 (2): 189 - 197