

THE GADE CLEAN AND THE GOLD WASTE BANK: SOCIETY'S ECONOMIC  
EMPOWERMENT BASED ON ENVIRONMENTAL HYGIENE

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**Abstract.** The Gade Clean and Gold is one of the forms of CSR program (Corporate Social Responsibility) of a state-owned enterprise of pawnshop company in addressing the waste problem in Indonesia. The program allows the public to exchange waste in the waste bank that has been established by the pawnshop with gold savings. The research aims to examine the role of The Gade Clean and Gold program in the society's economic empowerment that is based on environmental hygiene. This study is conducted using descriptive analytics method, based on interview, desk study, and field observation. The results of this paper showed that The Gade Clean and Gold was successful in raising people's interest in investing in sustainable economies as well as increasing public awareness of the environment.

**Keywords:** waste bank; gold investment; community empowerment; waste management; CSR

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## 1. Introduction

Waste has become a global problem and will continue, as every person produces waste every day. The industrial growth that is increasing rapidly also increases product waste which can pollute the environment at a dangerous level (Sukoco et al., 2018; Vegeera et al., 2018). The increase in human population and the increasingly complex economic activity are the major factors that cause the amount of waste to increase rapidly. Not only in terms of the quantity that continues to increase, but the quality or the composition of waste is also increasingly complex. The world generates 2.01 billion tons of municipal solid waste in 2016 and this number is expected to grow to 3.40 billion tons by 2050 under a business-as-usual scenario (Kaza et al., 2018).

In the year of 2016, the amount of waste in Indonesia reaches 65.2 million tons per year with a population of 261,115,456 (Environment Statistics of Indonesia, 2018) at an average rate of 0.68 kilograms per person per day (Kaza et al., 2018). These conditions require serious handling because waste can be the source of problems such as flood disaster until the occurrence of various diseases. Areas with poor waste handling, experience two times higher diarrhea incidence and acute respiratory infections six times higher than the area with good handling of waste collection. The increasing volume of waste raises the public awareness of waste management that is characterized by the emergence of various innovations and researches on waste management. Such as green innovation that encourages companies to convert waste products into viable products that increase company value (Agustia et al., 2019). Waste management is carried out by various parties from the government level as policymakers and facilitators; community as actors in waste management; and private companies as

community partners in terms of financing through CSR programs (Wijayanti and Suryani, 2014). Procurement of transportation of waste transporter, waste shelters, until cleaning service by the government require a high enough cost. Therefore, awareness is needed from various parties in the waste management. One of the participations of Indonesian people in waste management is the presence of waste banks. BPS (Environment Statistics of Indonesia, 2018) mentions that waste banks have been existed in all capitals of province in Indonesia, as many as 5,244 waste banks spread over 34 provinces or 219 districts or cities in 2017. According to directorate general of waste management, Ministry of Environment and Forestry, the establishment of waste bank contributed to 1.7% of national waste reduction or equal to 1.389 thousand tons of waste per year.

Waste bank has a double value, both materially, and also the increase in the quality of the environment. Working system of waste bank starts with waste bank customers collecting wastes, then deposited them to the manager of waste bank to be weighed and judged by a certain nominal. The amount is stored in the form of savings that can be disbursed at the specified time.

With the high participation of the community, the waste bank system can be used as an alternative to the community based waste management model. Waste bank also becomes a tool for bringing together stakeholders: local government, public (communities), private sectors, non-governmental organizations and mass media (Wijayanti and Suryani, 2014). The impact that is obtained in the presence of waste bank is realized in synergy between communities, waste banks and governments in realizing the government's program and community empowerment (Wulandari, Utomo and Narmaditya, 2017).

One of the private sectors that innovate the waste bank is the state-owned enterprise of pawnshop company, which is PT Pegadaian's CSR program (Coorporate Social Responsibility) "The Gade Clean and Gold". The company established a waste bank that can exchange waste with gold savings, so the environment becomes clean while providing education to invest (Wulandari et al., 2017). Example of the program's outcome is waste bank in Sidokumpul village, Gresik, East Java, Indonesia. Gresik city produce 200 tons waste per day includes plastic and household waste.

The research aims to examine the role of The Gade Clean and Gold program in the economic empowerment of environmental hygiene-based communities in Sidokumpul, Gresik, East Java. Hopefully, this research can provide an alternative in increasing interest and awareness of the community to waste management and the importance of saving and investing gold through waste management.

## 2. Literature Review

The level of waste generation significantly depends on economic development, the richer the country, the more waste is generated (Minelgaite, 2019). In the study of Minelgaite (2019), it analyzes the relationship of waste problems that are increasing seriously in the European Union with a change in the attitude of public awareness to waste (reduce, reuse, and recycle). The author concluded that reducing and reusing behaviors influenced waste generation insignificantly and relationship between recycling behavior and waste generation was positive and statistically significant.

Minelgaite (2019) also mentioned that the most effective tools for solving the waste problem should be the enhancement of reducing, reusing, and recycling behaviors. The research of Wulandari, Utomo, and Narmaditya (Wulandari et al., 2017) found that waste bank was as an alternative model for waste management in an effort to reduce the waste problem and improve the local economy. The author mentions that the waste bank model requires an active role of the community. Other researchers, such as the research of Wijayanti and Suryani (2014), it mentioned that the waste bank has a role in bringing together various parties: local government, public (communities), private sectors, non-governmental organizations, and mass media in resolving waste problems and environmental hygiene.

The research of Wulandari, Utomo, and Narmaditya (Wulandari et al., 2017) also explained about the role of waste bank in supporting the community economy. Waste management model emphasizes the active role of

the community, both as a customer, waste bank managers and also driving community in improving the local economy. The research of Indrianti (2016) strengthens the previous research, the author mentions that on the economic side, MJ-SWB (Miftahul Jannah Solid Waste bank) generates income for the Taman Pendidikan Al Qur'an or TPA (Al Qur'an educational place), this proves that MJ-SWB is able to financially support the learning process of TPA Miftahul Jannah in a sustainable manner.

The research found six factors that are influencing the level of community participation in waste management through the waste bank program, namely socialization of waste management, community economy, environmental education, environmental hygiene, waste management facilities provided by the government and waste bank service system. In attracting people, it is needed an innovation in the trash bank to capture broader and more intensive community participation. PT Pegadaian provides an innovation to the waste bank through the redemption of waste with gold saving through the waste bank. Gold is one of the valuable items that can be accepted by everyone as a means of exchange or jewellery. Gold dominates the other items in terms of durability, homogeneity, divisibility, rarity, and global, that is why gold is an ideal store of value, i.e. something that can be saved for future use, even very far into the future (Meera, and Larbani, 2006). In other words, people see gold as a good source of investment thereby holding on to it acceptance (Yusuf, Ghani and Meera, 2013).

Further in this paper, it will analyze the role and excellence of The Gade Clean and Gold, which is an innovation in the general waste bank program.

### **3. Method**

This study uses a qualitatively descriptive method. The approach in this study is a qualitative approach and describes the waste bank as a community-based waste management model to increase awareness of long-term investing to support the community economy. Surveys consist of in-depth interviews while the observation methods include field observations on research objects as well as data is gathered from various literature studies.

The location of this research is in Sidokumpul Village, Gresik, precisely Adil Sejahtera waste bank, where the reason for the selection of this observation object is because Sidokumpul is one of the areas with the waste bank system that has used the gold savings account that the sharia-driven pawnshop. One of the other factors is because Gresik is the largest area that has the largest waste bank system in East Java as an environmental management effort.

The interview was conducted with the Ms. Cholifah, as the director of the waste bank 'Fair Prosperous' in Sidokumpul village, Gresik; Mr. Yazid as the person in charge of The Gade Clean and Gold program; and Mrs. Kiki, one of the waste bank participants. We conducted an in-depth interview on the condition of the waste bank that became the research assessment, explaining how gold savings account exchange performance through the waste collected by the community.

### **4. Result and Discussion**

#### ***4.1. The Gade Clean and Gold Waste Bank System***

PT Pegadaian is a state-owned enterprise company engaged in finance since 1901. PT Pegadaian has 3 core services including financing business, gold business, and various services. As a state-owned enterprise that serves as an agent of development, pawnshop or "Pegadaian bersih-bersih" program and increase financial inclusion. One of the best CSR (Corporate Social Responsibility) programs is The Gade Clean and Gold, which is sorting trash-saving gold (Pegadaian, 2018). Through the Gade Clean and Gold, the pawnshop invites the community's participation to create a clean environment by sorting out the waste and redeeming it to the trash bank to be converted into gold savings. This program aims to improve the health and welfare of people's lives, reduce the impact of environmental waste, improve livelihoods, and socialize the product service of Pegadaian. The reason for choosing Sidokumpul village is because this village is one of the small villages in Gresik

district. Initially, Sidokumpul became a poor village before the local government (head of village) launched a waste bank program. It takes enough time to be able to convince residents to take part in saving waste, until the pawnshop manages to hold the “Adil Sejahtera” waste bank, the name of the waste bank Sidokumpul, the amount of interest in the population is increasing.

The Gade and Gold Waste Bank system is not much different from the trash bank system in general. Gade Clean and Gold Waste Bank has 3 important actors, namely customers waste bank, trash bank manager, and the pawnshop. Trash banks are usually present in every RT/RW (RT or Rukun Tetangga is the division of villages in Indonesia under **Rukun Warga** or RW, while **Rukun Warga** is the division of regions in Indonesia under the Village or Kelurahan), where the customers are residents of the community.

Trash bank customers first open a gold savings account in the pawnshop. After that, the customer collects and sorts the waste that corresponds to the criteria. Waste banks receive waste that is included in plastic waste, paper, glass, and iron. Then the waste is deposited to the trash bank every two weeks, meaning that in one month there are two collections. Waste bank will weigh and record the acquisition of each customer with nominal money. Then at the end of the month, the amount of money will be converted into gold savings (see Figure 1).

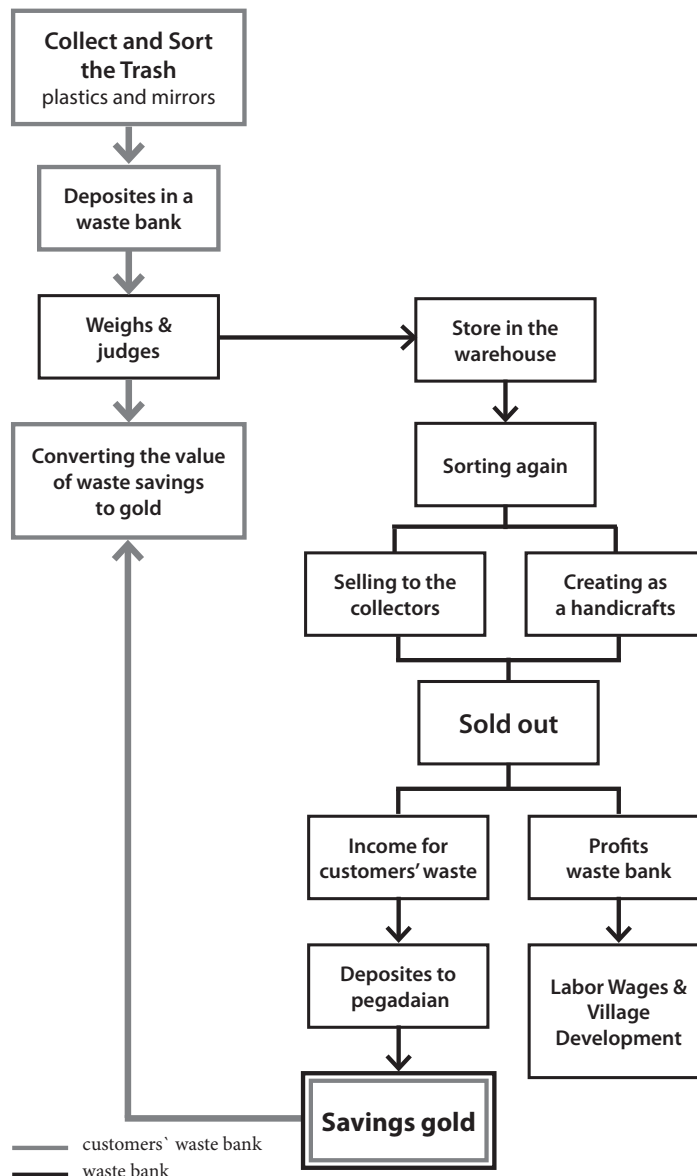


Figure 1. The Gade Clean and Gold Waste Bank System.

Waste that is accumulated in waste warehouse for one month will be sorted for sale to the collectors as well as for handicrafts. The handicrafts are done by empowering the creativity of local residents, which then when the craft has sold, its profits will be divided for (1) the crafters and (2) the waste banks.

Waste bank also gets profit from the difference in the purchase price of customers' waste with the selling price to the collectors. The profit will be divided for (1) the interests of waste banks such as labor wages and (2) the development of the surrounding. Meanwhile, the proceeds from the customer waste will be paid to the pawnshop to be changed into gold saving form. Then for each month, it will be reported to the customer about the gold savings balance earned.

Good synergy between the community, waste bank, and pawnshop will help the success of The Gade Clean and Gold program in realizing a clean and free of waste.

#### ***4.2. The Impact of The Gade Clean and Gold Waste Bank in Sidokumpul Village to Local Economy***

The majority of waste bank customers in Sidokumpul Village are housewives. Starting from PKK (a program at village level to educate women on various aspects of family welfare) members in the village who want a clean environment, see a lot of household waste wasted or even hoards to cause an unhealthy scenery to the concern of the onset of disease. Then the establishment of trash bank by local village named "Adil Sejahtera" waste bank which is currently registered to the national waste bank. Initially, the waste bank only deposited the waste from the customer to the collectors who then the money was made in the savings of the customer cash nominal. Waste collection is scheduled every month. To facilitate the sorting of waste, RT 2 RW 7 with Coordinator of The Gade Clean and Gold Program and director of trash bank, schedule the citizens to deposit the trash every 2 weeks. From the economic side, every month each deposit is around Rp 6000-8000 per customer. Thus, the public can see that waste is no longer just as a problem but as a money-generating tool. Wastes that are collected by the community are like household wastes such as; paper, plastic, cans, bottles, cardboard, and so on. People can benefit from the presence of this waste bank, in addition to the additional money, it also began to create a clean environment from the consequences of citizens who started to care about the environment by collecting household waste.

Seeing the response and the spirit of customers of the Adil Sejahtera waste bank in the socialization of the "Pegadaian bersih-bersih" program was welcomed positively by the citizens. The Gade Gold and Clean program is one of the shariah pawnshop CSR programs that offer the savings of waste bank into a gold account savings. This program in addition to participating in the growing awareness of clean environment, it also aims to increase the awareness of long-term investments in society. After 4 months of waste Bank the Gold and Waste Bank in RT 2 RW 7 village Sidokumpul Gresik, it has 52 customers with total achievement of gold savings overall reaches 24 grams of gold. Through the Gade Gold and Clean program, it is hoped that the community will be more aware of the importance of saving and investing. In addition to the dominant motives, people are aware of the importance of protecting the environment. The average income earned by depositing waste is only around 6000 to 8000 rupiahs per month. This is due to the low selling price of waste that is not much. That is, saving trash is not the main income but adds to the main income for housewives. By collecting waste from daily household use, you can save the results of the waste savings. Not to fulfill daily needs but to be used for a certain period of time.

#### ***4.3 The Impact of The Gade Clean and Gold Waste Bank in Sidokumpul Village to Environment***

At first, waste bank program is implemented to emerge public awareness of environmental hygiene with recycling system. This is due to the government's assumption that there is a need for community empowerment to participate in solid waste management.

Recycling makes the goods can be re-utilized and can be economical valued. This economical value becomes an attraction for people to collect solid waste in waste bank. The gold savings incentive that is promoted by The

Gade Clean and Gold program caused the increasing interest of people in collecting and sorting waste, which has an impact on the environment to become cleaner. The word gold and trash have opposite connotations, but The Gade Clean and Gold program changes the public's perception of waste which at first has no value and is then considered to have value. The perception slowly raises the habit of society to care for the environment, no longer at the recycle stage, even at the stage of reuse and reduce. When it has become a habit then hygiene will be a part of the community. A clean environment will affect both the physical and mental health of people, preventing various disasters that are caused by waste, and reducing the use of production materials that drain natural resources such as paper and iron.

Another role of PT Pegadaian on The Gade Clean and Gold program is as a facility provider. When a community wants to apply the waste bank system, the problems that arise a lot is the lack of facilities such as the place and the tools necessary for the sustainability of the waste bank. PT Pegadaian provides waste bin, temporary waste warehouse, to the trash bank office to support The Gade Clean and Gold program in Sidokumpul Village. In addition, The Gade Clean and Gold participated in the management of environmental governance to create a clean and beautiful environment.

#### 4.4 Synergy Element of The Gade Clean and Gold Waste Bank in Sidokumpul Village

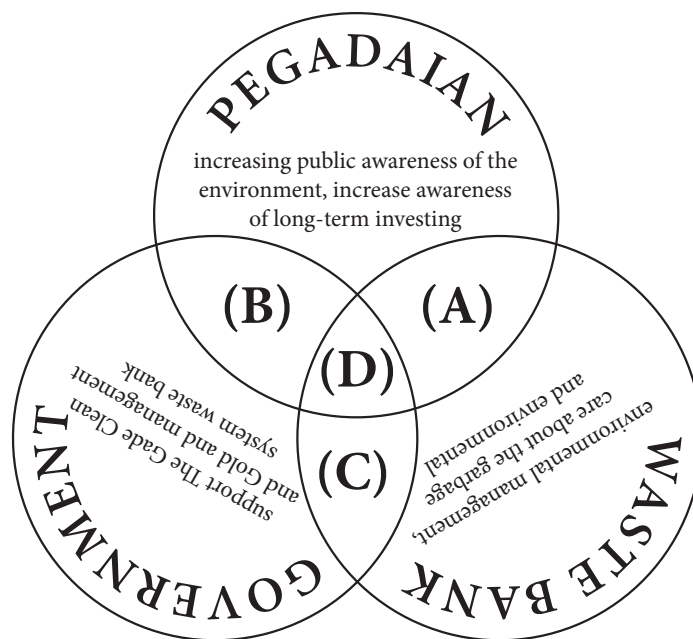


Figure 2. The synergy of government, waste bank, and pawnshop (PEGADAIAN).

Synergy from pawnshop, waste banks, and local governments is embodied in the Intercept (A), (B), (C) and (D). Intercept (A) shows the cooperation between pawnshop and waste bank. The cooperation is realized in supporting efforts to foster public awareness to participate in waste management efforts as well as an awareness in investing gold through The Gade Gold and Clean program. Through such participation, it is not only profitable from the economic side, which is the micro economic empowerment, but also in the case of environmental and social problems. Figure 2 shows the pattern of establishing awareness in investing and maintaining the environment through pawnshop, not only based on individual but the need of synergies between waste bank, pawnshop and government through three models of Helix above.

Intercept (B) collaborative and cooperative relationship of the pawnshop with the government and waste bank in which there is a form of active participation of the community or society in an effort to support the government program, in this case, Sidokumpul Village in the community investment empowerment.

Intercept (C) is a joint venture between the trash bank and the government. This is manifested in collaboration in realizing the local economy, community empowerment, and also an alternative model to address waste, social and economic problems.

Intercept (D) is a third-party collaboration (trash bank, and the government) in realizing a better local economy. Through the synergy of this element, economic empowerment programs make the community more independent and improve the economy, social and environment.

According to Birkhölzer (2009), describing the local community requires the same purpose, not only for individual purposes (for common good). Local economy begins based on the community or local community. In addition, an integrated holistic approach is essential in defining economic problems. It means that it does not only result in the production of goods and services, but also takes the environment, social and culture into account. Building and improving social capital is important to improve the capacity, knowledge, and ability of the local people.

## 5. Conclusions

The Gade Clean and Gold is one of the innovations to the waste bank system so that people are more interested in maintaining the environment to stay clean by managing waste. This program has 3 important roles which are supporting community economic empowerment, keeping the environment clean, and bringing people's interest in investing, especially gold investment. In support of the success of The Gade Clean and Gold program, there needs to be a synergy between stakeholders, namely the community, waste banks, governments, and pawnshop. In regards of supporting the economic of the society, the Gade Clean and Gold might reproduce the waste to become higher valuable goods (i.e., souvenirs), the profit of high valuable goods might be invested in the gold saving to support the development of the village. The Gade Clean and Gold in the village of Sidokumpul Gresik has helped the community to create a clean and beautiful environment, to be an income support generator, as well as an interest generation in investing.

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