

## LEGAL POLITICS ROLE MODEL OF DIGITAL-BASED WASTE BANK ADMINISTRATION IN TANGERANG SELATAN CITY

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### ABSTRACT

*This research is motivated by the Waste Bank program which is an alternative to overcome the waste problem which is a national problem. Waste bank is one solution for household waste management. Efficient waste management is the main prerequisite for achieving sustainability because every waste is generated and has become a national problem that requires special attention and handling. Thus, government and community interventions need to offer promising assistance to reduce individual/family waste/waste and support the role of waste banks as one of the solutions for waste management. Waste banks that have been operating so far are still using a manual system in administration so that services to waste bank customers are less effective and efficient. The digital-based waste management administration system as an effort to optimize waste bank customer service is expected to be able to facilitate waste management activities and waste bank customer service. This research method is normative juridical with a statutory approach which examines regulations in South Tangerang City related to digitalization of management at the Waste Bank. The results of the study indicate that regulations related to waste management in South Tangerang City regarding the Waste Bank do not yet have concrete regulations. The regulations governing waste management in South Tangerang City include South Tangerang City Regulation Number 13 of 2019 concerning Amendments to Regional Regulation Number 3 of 2013 concerning Waste Management.*

**Keywords:** *Legal Politics, Role Models, Waste Bank*

### ABSTRAK

Penelitian ini dilatarbelakangi oleh program Bank Sampah yang menjadi alternatif mengatasi permasalahan sampah yang menjadi masalah nasional. Bank sampah merupakan salah satu solusi untuk pengelolaan sampah rumah tangga. Pengelolaan sampah yang efisien merupakan prasyarat utama untuk mencapai keberlanjutan karena setiap dihasilkan sampah dan sudah menjadi masalah nasional yang membutuhkan perhatian dan penanganan secara khusus. Dengan demikian, intervensi pemerintah dan masyarakat sudah perlu menawarkan bantuan yang menjanjikan untuk mengurangi limbah/sampah individu/keluarga dan mendukung peran bank sampah sebagai salah satu solusi pengelolaan sampah. Bank sampah yang sudah beroperasi sejauh ini masih menggunakan sistem manual dalam pengadministrasian sehingga layanan terhadap nasabah bank sampah kurang efektif dan efisien. Sistem administrasi pengelolaan sampah berbasis digital sebagai salah satu upaya untuk mengoptimalkan layanan nasabah bank sampah diharapkan mampu memfasilitasi kegiatan pengelola sampah dan layanan nasabah bank sampah. Metode penelitian ini adalah yuridis normatif dengan pendekatan perundang-undangan dimana mengkaji regulasi di Kota Tangerang Selatan terkait digitalisasi pengelolaan di Bank Sampah. Hasil penelitian menunjukkan bahwa regulasi terkait dengan pengelolaan sampah di Kota Tangerang Selatan terkait Bank Sampah belum ada secara konkrit peraturannya. Peraturan yang mengatur mengenai pengelolaan sampah di Kota Tangerang Selatan diantaranya Peraturan Daerah Kota Tangerang Selatan Nomor 13 Tahun 2019 Tentang Perubahan Atas Peraturan Daerah Nomor 3 Tahun 2013 Tentang Pengelolaan Sampah.

Kata Kunci : Politik Hukum, *Role Model*, Bank Sampah

## Introduction

The waste bank is a community-based waste management system that allows the community to actively manage waste in their environment (Wijayanti & Suryani, 2015). Singhirunnusorn, Donlakorn, & Kaewhanin (2012) in their research found that the application of a waste bank system significantly reduces waste piles, helps communities manage dry waste properly, helps overcome health problems, and produces a better living environment. According to (Asteria & Heruman, 2016), waste banks teach the public to carry out waste segregation activities, raise public awareness to process waste wisely so as to reduce waste transported to TPA. Efficient waste management is a key prerequisite for achieving sustainability because waste is generated every day (Stöckert, A., & Bogner, FX, 2020). Therefore, the existence of a waste bank also provides economic benefits to the surrounding community such as creating jobs, additional sources of income, while the city government can reduce waste handling and disposal costs for the local area (Singhirunnusorn, Donlakorn, & Kaewhanin, 2012).

Related to the legal politics of waste management Ratmaja, BAK, & Yusa, I.G stated that legal politics is related to everything regarding the administration of the state and government, in order to seek and maintain power, politics is needed to direct policies to the community as activities related to the formulation and implementation of public policies. The formation of regional regulations is a form of embodiment of article 18 paragraph (6) of the 1945 Constitution of the Republic of Indonesia. In his research related to the legal politics of waste management in the City of Denpasar, it was found that the legal politics of Regional Regulation Number 3 of 2015 Denpasar City have the goal of realizing comfort, order, and certainty. law. The active role of the community for waste management by recycling waste and establishing a waste bank or TPST.

StudyRiswandi, BA (2020) with hThe research results show that people are still not aware that plastic waste pollutes the environment because plastic-based packaging cannot be decomposed naturally, and can cause various kinds of diseases that interfere with public health. The fact that the issuance of Circular Letter (SE) of the Ministry of Environment and Forestry Number S1230/PSLB3-PS/2016 Concerning Prices and Mechanisms for Implementing Plastic Bags has not been able to have implications for

reducing the use of plastic bags in the City of Balikpapan, so it is necessary to develop Regional Regulations that can reduce the use of plastic bags. plastic bags and is expected to help reduce environmental pollution.

Garbage is the product or result of the activities of living things that no longer have economic value, so they are considered useless goods (used goods/garbage). Garbage needs special attention and handling so that the general public does not perceive this waste as a source of disease or something dirty and disgusting. Instead, it can change the paradigm that waste can also be a source of additional income to improve the family's economy. Waste that is managed effectively and efficiently is not only a source of additional income but can also help reduce the volume of waste in society. Alternative waste management programmed by the government, namely waste banks, is a way of managing waste by actively and creatively involving residents in changing goods that are not of economic value into goods of economic value. Amid these conditions, there is hope that the waste problem can be resolved with public interest in establishing a waste bank.

The presence of a waste bank is felt to be very effective because of the active involvement of residents in the hope that the volume of waste can be reduced. As of 2021 South Tangerang has 333 of them spread across 7 Districts. The amount of waste managed reaches 540 tons or an average of 1.47 tons per day. The amount is only reduced by organic waste. The high public awareness of the waste problem and the existence of a waste bank are expected to be able to overcome the waste problem while creating a clean environment. The presence of a garbage bank is a form of local wisdom. The community already has awareness and concern for turning waste into more economical value. The presence of the garbage bank program is also a form of concern considering the condition of the city which looks rundown by the sight of garbage

Waste management policies in urban areas are regulated in Law Number 18 of 2008 concerning Waste Management. This is a new milestone for the community for solutions to handling waste problems. This means that, with the issuance of this law, each regency city has the authority to regulate and manage its waste so that waste is not considered a source of disaster but rather waste as a source of blessings. The authority to determine waste management policies is part of regional autonomy. Waste management is focused on two activities, namely:

1. Waste reduction (waste minimization), which consists of limiting the occurrence of waste (reduce), reuse and recycle
2. Waste handling which includes the following activities:
  - a. Sorting, namely grouping and segregating waste according to the type, amount, and/or nature of the waste.
  - b. Collection is the collection and transfer of waste from waste sources to temporary storage sites or integrated waste processing sites.
  - c. Transportation, namely carrying waste from sources and/or from temporary waste storage sites or from integrated waste processing sites to final processing sites.
  - d. Management is a process of changing the characteristics, composition and amount of waste

The community in waste management applies the 3R strategy (Reuse, Reduce, Recycle) which is the basic or simple way of managing waste. If every member of the community had the will and ability to implement the 3R strategy, the waste problem would not be as complicated as it is today. The description of 3R can be explained as follows:

1. Reduce or what we can call reducing is our effort in life in reducing the goods or materials we usually use. Because by minimizing it will be able to reduce the waste it produces.
2. Reuse or reuse is by buying items that can be reused or items that are not disposable. The development of an increasingly advanced era creates disposable items to lighten our work, but the resulting impact is very dangerous, because it will cause the accumulation of waste from these items.
3. Recycle is recycling, now there are many ways to be able to use waste to become valuable recycled goods, in this way we can reduce waste and make it a valuable item.

The concept of the waste bank program is social engineering to encourage people to sort waste. The implementation of the waste bank program is able to provide real manifestations for the community in the form of job opportunities while saving the

community's environment in the management of waste bank operations and investments in the form of savings (Ministry of Environment, 2011). The Waste Bank program is a joint movement to create a clean city and is a door of access to align the South Tangerang City Government program for dealing with waste. The problem is, to what extent can the effectiveness of this waste bank help overcome waste problems? Because with the continuous increase in waste banks, in fact there are still many piles of waste in public places, roadsides, river banks and so on.

As an effort to accelerate the development of South Tangerang City to realize South Tangerang City as a smart city, the government must make policies that synergize government programs with the private sector and the community, together to achieve goals. Because urban development is not only the responsibility of the government but also the responsibility of all levels of society.

**Research methods**----It's only one paragraph, Doctor? What I want to develop, I don't understand the normative juridical method

This research method is normative juridical with a statutory approach which examines regulations in the City of South Tangerang regarding digitalization of management at the Garbage Bank. (Susanto, S., 2018).

## **Results and Discussion**

### **Garbage Bank in South Tangerang City.**

Waste management in general only focuses on how to manage waste, while the aspect of waste generation has not been taken seriously. That is, in this case humans as sources or producers of waste seem to be left alone without any firm action from the government. Public awareness and concern for maintaining cleanliness and environmental sustainability is still very low, while people are increasingly carried away by consumptive currents.

The complexity of the waste problem that continues to increase, Yepi Suherman as the Head of the Garbage Division of the South Tangerang Municipal Government's Environmental Service managed to spark and introduce the waste bank program to the public. The waste bank is a waste management program with an integrated waste

management system, namely reducing the volume of waste (reduce), reuse (reuse), and (recycle) or often abbreviated as 3R. The waste bank program has been started in the South Tangerang City environment since 2012. The waste bank that has been formed is given guidance and technical guidance on waste bank management, recycling and urban farming. The South Tangerang City Government also facilitates the completeness of the activities of each waste bank with waste scales, customer savings books and neon boxes as the identity of the waste bank.

A waste bank is an institution that works almost the same as a bank institution, by collecting waste from the community in the form of unused haban or non-organic waste, which has economic value to mobilize community participation in behaving wisely in managing waste, especially sorting waste and adding to the economic value of waste. . The waste bank is a program that aims to form partnerships and empower the community with a managerial system whose operations are carried out by the community itself. So that the waste bank can become a program to invite the community to change people's behavior to care more about and appreciate the waste they produce

A waste bank can also be described as a place used for the waste sorting process to be deposited by waste craftsmen or collectors. It is said to be a garbage bank because the management system is like a bank, meaning that those who deposit garbage are called garbage customers and are given a savings book. The waste bank adopts bank management, with the method of empowering people to care about environmental cleanliness and health. The reference to reduce, reuse and recycle as stipulated in the Regulation of the Minister of Environment of the Republic of Indonesia number 13 of 2012 is also a waste bank.

The waste bank is conceptualized in such a way as to provide benefits including: 1) helping to overcome waste problems; 2) an alternative source of additional family income from the waste saved; 3) turning waste into economic goods; 4) make people aware of the importance of cleanliness; 5) growing entrepreneurship in waste recycling; and 6) making the environment cleaner and healthier. Apart from the enormous benefits, the waste bank also has the following objectives: 1) creating a clean, healthy and comfortable environment; 2) minimize the volume of waste to the Final Disposal Site

(TPA); 3) changing people's habits to behave economically; 4) educating people who care about a clean, healthy and comfortable environment; and 5) provide waste-producing benefits

The existence of a waste bank received a positive response from the community. Waste banks are considered effective in waste management because they actively involve residents. With active community involvement, it shows community awareness and this really helps to overcome the waste problem. And more importantly, besides being able to transform waste so that it has economic value, the waste bank is a joint movement to create a clean and smart city. The waste bank is a door of access to align the South Tangerang City program in waste management. Waste management is the responsibility of the local government and the community.

Under the control of Forkas, waste becomes easier to sell because buyers come directly to the location. Garbage that has been sorted by the community is directly weighed for sale. Community involvement as a partner of the South Tangerang City Environmental Service and an active role in participating in the waste bank can help create a healthy, clean and creative city.

### **Legal political orientation in the formation of Regional Regulations Concerning Waste Management in the City of South Tangerang**

Indonesia is a constitutional state as stated in Article 3 paragraph (1) of the 1945 Constitution of the Republic of Indonesia. The task of promoting, implementing, protecting and fulfilling human rights is the responsibility of the state, which is carried out through government agencies. Legislation is very much needed to realize a number of things that are aspired to by the role of government institutions as policy makers and this effort is of course very important given the dense and rapid growth of the City of South Tangerang.

One part of human rights is to get a good environment and order in environmental management. Conditions in a good environment will become a basis for the community to improve the quality of life, and be able to carry out life in an orderly manner in



accordance with the vision, namely the Realization of an Independent, Peaceful and Beautiful South Tangerang City

Population density and increasing levels of public consumption have had a negative impact, especially on the emergence of various types of waste, including plastic waste which is very difficult to decompose by natural processes. Many people, especially in South Tangerang City, still do not pay attention to waste and are only seen as useless leftovers, as well as a lack of public awareness that they still dispose of waste carelessly and not in a designated place. Of course this can have a negative impact on the cleanliness and health of the community and the environment.

Related to this vision, especially becoming a beautiful city is closely related to its waste management capabilities. TPA (Final Disposal Site) remains the focus of waste management in Denpasar City by collecting waste and then officials transporting it to the TPA. This is not necessarily justified because TPA can produce methane gas (CH<sub>4</sub>) which is certainly very dangerous because it has an impact on global warming due to emissions of dangerous greenhouse gases. The habit of this final approach certainly has a negative impact so it needs to be abandoned and replaced with a new method or approach, thus reducing the costs incurred and the long term in managing waste, especially disposable waste.

The community is expected to turn waste into a resource that has economic value and the utilization of this waste is a new paradigm, such as being used as compost, fertilizer and industrial raw materials. The waste approach is carried out in a comprehensive manner by taking into account the flow of waste from or before the production of an item as waste, both in terms of the materials used and the method of recycling the waste, so this must be taken into account. so that the waste returned to the environmental media is safe. Being aware of waste management is of course something that we have often heard about, but the movement to do so is very difficult to do, for example by limiting the use of products that can cause environmental problems, you can also reuse or recycle. rubbish,

Regulations related to waste management in South Tangerang City already have the South Tangerang City Regional Regulation Number 13 of 2019 concerning



Amendments to Regional Regulation Number 3 of 2013 concerning Waste Management (Perda 13/2019). The orientation in Perda 13/2019 includes the availability of waste processing sites, of course, the community must use it as a means to reduce or prevent waste accumulation, and this also supports the policies contained in article 16 of Perda 13/2019. The process of making decisions, implementing and supervising in the field of waste management, and coaching the community regarding the implementation of good waste management with an environmental perspective is contained in Article 21 and Article 22 of Regional Regulation 13/2019. Arrangements regarding Garbage Banks in Perda 13/2019 include Article 7,

Waste management must be supported by all existing sectors, both from the government and from the community, it is often seen that the obstacle that arises is a lack of coordination, and sometimes there are setbacks in waste management, or even mutual insults. the problems that occur. The community is given the opportunity to make the best use of it because this is good in the context of reducing and resolving existing problems in the city of Denpasar regarding waste management. things like these should be used, especially in conjunction with advanced technology. Community participation is one of the factors to increase the quality of public awareness and support for public policies in an area. If an agency gets a lot of complaints, that's not necessarily a bad thing.

### **Garbage Bank as a Role Model for Waste Management**

The waste bank according to the Regulation of the State Minister for the Environment No. 13 of 2012 is a place for sorting and collecting waste that can be recycled and/or reused which has economic value. The Garbage Bank is an alternative to inviting residents to care about waste, whose concept might be developed in other areas. Basically a waste bank is a concept of collecting dry waste and sorting it and has management like a bank, but what is saved is not money but garbage. A waste bank is an institution that works in much the same way as a bank institution, by collecting waste from the community in the form of unused material or non-organic waste. have economic value to mobilize community participation in behaving wisely in managing waste, especially sorting waste and adding economic value to waste. The waste bank is a program that aims to form partnerships and empower the community with a managerial

system whose operations are carried out by the community itself, so that the waste bank can become a program to invite the community to change people's behavior to care more about and appreciate the waste produced (Gunartin, 2019). The waste bank is conceptualized in such a way as to provide benefits including: 1) helping to overcome waste problems; 2) an alternative source of additional family income from the waste saved; 3) turning waste into economic goods; 4) make people aware of the importance of cleanliness; 5) growing entrepreneurship in waste recycling; and 6) making the environment cleaner and healthier. Apart from the enormous benefits, the waste bank also has the following objectives: 1) creating a clean, healthy and comfortable environment; 2) minimize the volume of waste to the Final Disposal Site (TPA); 3) changing people's habits to behave economically; 4) educating people who care about a clean, healthy and comfortable environment; and 5) provide waste-producing benefits. The concept of a waste bank adopts bank management in general. 4) educating people who care about a clean, healthy and comfortable environment; and 5) provide waste-producing benefits. The concept of a waste bank adopts bank management in general. 4) educating people who care about a clean, healthy and comfortable environment; and 5) provide waste-producing benefits. The concept of a waste bank adopts bank management in general.

The waste bank is a community-based waste management system that allows the community to actively manage waste in their environment (Wijayanti & Suryani, 2015). Singhirunnusorn, Donlakorn, & Kaewhanin (2012) in their research found that the application of a waste bank system significantly reduces waste piles, helps communities manage dry waste properly, helps overcome health problems, and produces a better living environment. According to (Asteria & Heruman, 2016), waste banks teach the public to carry out waste segregation activities, raise public awareness to process waste wisely so as to reduce waste transported to TPA. Efficient waste management is a key prerequisite for achieving sustainability because waste is generated every day (Stöckert, A., & Bogner, FX, 2020). Therefore, the existence of a waste bank also provides economic benefits to the surrounding community such as creating jobs, additional sources of income, while the city government can reduce waste handling and disposal costs for the local area (Singhirunnusorn, Donlakorn, & Kaewhanin, 2012).

Changes in the community's paradigm regarding waste must be carried out in a sustainable manner. Educating residents' awareness and skills in waste management by applying the principles of reduce, reuse, recycle and replant (4R) is important to do to overcome waste problems through waste management from the start. A waste bank based on women's participation is social capital in managing community waste. (Asteria, D.;&Heruman, H., 2016).

Basically a waste bank is a concept of collecting dry waste and classified waste and they have management like a bank, but what is saved is not money but waste. The person who saves (sends garbage) also he is called a client and he has a savings book and you can borrow money that will be paid back later with trash for loan money. The waste that is saved will be weighed and given a prize with a certain amount of money, then it will be sold at the factory price that has collaborated with the waste bank.

Approaches that are appropriate to the community context and in accordance with community needs are the key to change. While Purba et al. (2014) explained that the development of waste banking will also help local governments empower communities to manage community-based waste wisely and can reduce waste transported to landfill sites. Processing waste innovation with the waste bank program into grassroots innovations that can increase the income of the urban poor. (Winarso and Larasati, 2011).

The waste bank teaches people to classify waste, raises public awareness to treat waste wisely so that it can reduce the amount of waste transported to landfills. In addition, neighbors who deliver garbage get additional income for the economic independence of the residents, which can be used for savings and loan businesses such as cooperatives, with low interest so that the waste bank finances can be played and developed, as well as the realization of the health of the surroundings. Citizen development has demonstrated the capacity of citizens to mobilize communities to play an active role in managing waste in the environment while simultaneously exercising social control in their communities.

The formation of a waste bank that is integrated with education on the 4R principles has become basic knowledge for residents to manage waste from its source, namely household waste. Empowering residents to build the knowledge and skills of residents so they are able to classify organic and non-organic waste. The benefit of

residents' ability to manage waste by applying the 4R principle and saving in a waste bank has provided direct benefits, not only financially, but also the realization of environmental health, with clean, green, comfortable and healthy conditions.

The development of waste banks will be more integrated with the support of the local government, local communities and local entrepreneurs, which is very important. Basically, local government intervention is needed to support the proper development of activities and the role of local companies/entrepreneurs is required to increase the economic value of waste processing in society.

### **The Urgency of Digitizing Garbage Banks in Waste Management in South Tangerang City**

Waste problems in South Tangerang City are not only the responsibility of the government but also support from the community in the form of disciplined behavior in waste management. Households generate a lot of waste, therefore waste management should also start from the household. The minimal waste from household program programmed by the government should be implemented and obeyed so that the program can run according to the purpose of launching the program. The minimal waste program in question is the behavior of people who are aware of the dangers of increasing waste volume by minimizing waste in such a way that the presence of waste becomes minimal.

The minimal waste program can be carried out by separating organic and non-organic waste from the start. Organic waste can be chopped into small pieces and added with a small amount of water mixed with bio-compound to make compost, while non-organic waste can be separated by type, such as plastic, cans, glass bottles or paper to be deposited in a waste bank in exchange for money. So non-organic waste with a waste bank besides reducing the volume of waste also makes waste have economic value so that it can be turned into money.

Observing the consumptive behavior of the people and the rate of population growth in South Tangerang City which is quite rapid and these two things are part of the triggering factors for the increasing volume of waste in South Tangerang City, prompted researchers to conduct a study on waste management through waste banks after several

regulations have been launched, such as the imposition of tax for super market consumers by charging Rp. 200,- for plastic bags and a minimal waste program that starts from the household.

The waste bank is one of the solutions for household waste management. Efficient waste management is the main prerequisite for achieving sustainability because every waste is generated and has become a national problem that requires special attention and handling. Thus, government and community interventions need to offer promising assistance to reduce individual/family waste/garbage and support the role of waste banks as a waste management solution. Waste banks that have been operating so far are still using a manual system in administration so that service to waste bank customers is less effective and efficient. The digital-based waste management administration system as an effort to optimize waste bank customer service is expected to be able to facilitate waste management activities and waste bank customer service. To solve this problem, a digital-based waste management administration system model can be used as a solution. The digital-based waste management administration system model is a waste bank management application and its customers in carrying out the waste tube process.

Application according to Dhanta quoted from Sanjaya (2015) is software made by a computer company to do certain tasks. According to Jogiyanto in (Yulistiyanti, D., Farkhatin, N., & Mustari, D., 2021).an application is an application, storing something, data, problems, work into a medium or media that can be used to apply or implement existing things or problems so that they turn into a new form without losing the basic values of data, problems, and the job itself. So the application is a transformation of a problem or work in the form of things that are difficult to understand to be simpler, easier and understandable for users. So that with the application, a problem will be helped more effectively and efficiently. Application has the meaning of solving problems that use one of the application data processing techniques which usually races on a desired or expected computation or expected data processing. While digital according to Hertandi is a picture of a number condition consisting of the numbers 0 and 1 or off and on (binary numbers), and all computer systems use a digital system as their data base. Therefore. a ready-to-use digital application program that can be used to execute commands from the user of the application with the aim of getting more accurate results according to the purpose of

making the application. (Ruliff, I., 2015). a ready-to-use digital application program that can be used to execute commands from the user of the application with the aim of getting more accurate results according to the purpose of making the application. (Ruliff, I., 2015). a ready-to-use digital application program that can be used to execute commands from the user of the application with the aim of getting more accurate results according to the purpose of making the application. (Ruliff, I., 2015).

### **Conclusion ---what is the conclusion**

Conclusions describe the answers to the hypotheses and/or research objectives or scientific findings obtained. The conclusion does not contain a repetition of the results and discussion, but rather a summary of the findings as expected in the objectives or hypotheses. If necessary, at the end of the conclusion you can also write down the things that will be done related to the next idea of the research.

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