WASTE BANK PROGRAM ANALYSIS THROUGH OPTIMIZATION OF THE ROLE OF INSTITUTIONS BASED ON COLLABORATIVE GOVERNANCE (CASE STUDY OF PEMATANG PUDU BERSIH WASTE BANK, MANDAU DISTRICT)

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ABSTRACT

This study aims to determine the process of collaborative governance in implementing the waste bank program and the inhibiting factors in implementing the waste bank program in Mandau District. This study uses qualitative research methods with descriptive data assessment in the form of observation techniques, interviews, and documentation. This study uses the theory of Ansell and Gash (2007). The results of the research show that the management of the Pematang Pudu Clean Waste Bank and the government are increasing and promoting waste management for the community through the waste bank program because many people are reluctant to become waste bank customers due to a lack of knowledge regarding the waste bank mechanism.

INTRODUCTION

The Pematang Pudu Clean Trash Bank was established in 2015 and collects non-organic waste such as bottles, plastic, paper, and cardboard of various types (Widayat, 2021). The Pematang Pudu Clean Waste Bank (BS-PPB) is a non-governmental organization engaged in the environmental sector by managing and recycling household waste. Starting from environmental concerns for Karang Taruna Village, Pematang Pudu Village, and Mandau District, together with local youths, they are working to create a clean, healthy, and self-sufficient environment. It was through the youth's creativity and their participation that the Pematang Pudu Clean Garbage Bank was born. Unlike the Berseri Garbage Bank, it is under the auspices of the Bengkalis Regency Environmental Service (DLH), which has been established since 2013. The Pematang Pudu Clean Garbage Bank program aims to increase residents' income as well as efforts to maintain environmental cleanliness in Pematang Pudu Village, Mandau District (Riauin, 2018). This institution was inaugurated on July 5, 2021, by the Regent of Bengkalis, namely Kasmarni (Mayasari, 2021).

Since the establishment of the Pematang Pudu Clean Trash Bank, there have been several ways to attract residents to want to save waste in the waste bank so that the environment can become cleaner and residents can also get income from saving waste. Every Thursday in Mandau District, there is a Thursday movement clean, where each sub-district rotates to carry out cleaning activities that will later collect the collected waste to be taken to the waste bank. This activity has been running for more than 2 years with the aim of introducing a waste bank not only for the Pematang Pudu sub-district but also for all sub-districts in Mandau District. Not only that, but also the government and NGOs have approached schools in the Mandau District, starting from kindergarten to high school (Widayat, 2021). The programs implemented by the government and NGOs are to teach about the Pematang Waste Bank mechanism. Clean Pudu (Lidia, 2022);

1. Segregate waste according to its type from the source at home,
2. Segregated waste can be deposited into the waste bank to be weighed and recorded in the waste savings book. To become a member or customer of the Pematang Pudu Clean Waste Bank (BS-PPB), it is enough to bring segregated waste.
3. In the recycling process, the waste that has been deposited in the waste bank will then be taken to the recycling factory for further processing.

As for the activities of the Pematang Pudu Clean Garbage Bank (BS-PPB) program, it needs support from the government and the community, who can become enthusiastic about running the program so that it is successful in achieving goals for a clean environment. Collaboration between the government, the private sector, and the community aims to manage waste into something of
economic value and to make the environment clean through the waste bank program.

Collaborative governance is one way to respond to the wishes of stakeholders to be involved in the implementation of development and to limited government funding that cannot keep up with developments in community demands for better government performance. The goal is to obtain resources for implementing development according to the expectations of these stakeholders.

These resources are owned by these stakeholders (Sambodo, 2016). Gray et al. (Qalby, 2018) The principles and concepts of good governance that have been implemented in various countries or regions are relatively the same. The difference lies in the sector, objectives, structure, process, and impact. With these differences, it becomes a special attraction to be understood and studied more deeply, especially in cases that occur at the district or city level. Trust, commitment, and authority among stakeholders in each region or city always have their own dynamics. Garbage is something that humans don't want; it is the result of human activities that are no longer needed in all aspects, such as household activities, markets, offices, lodging houses, homes, restaurants, industry, debris of building materials, and scrap metal from motorized vehicles. Not worth using. Garbage is a byproduct of human activities that have been used. If waste cannot be managed properly, it will have a very bad impact on health or the environment. Good and correct waste management is very important to do to maintain health and a clean and healthy environment (Pratiwi D., 2018).

Garbage is the remaining solid waste from human activities that have a direct impact on human life. It is generally a complicated problem in urban areas. TPA (final disposal site) is the last place for the flow of waste, which is increasing in number, and even TPA is experiencing an overload. This problem requires preventive steps by the community at large through appropriate and environmentally sound waste management in order to be able to reduce the amount of waste generation and the negative impacts it causes (Putra, 2020). Waste management refers to all activities carried out to handle waste from the time it is generated to its final disposal. Broadly speaking, waste management activities include waste control, waste collection, transportation, processing, and final disposal (Suryani, 2014).

The large number of waste problems in urban areas has given birth to a policy, namely the Garbage Bank, which aims to make people aware of the environment, create a healthy, clean, and tidy environment, and deal with unlimited amounts of waste to turn waste into something of value in society. In general, people still see waste as useless goods and not as leftovers that can be reused; they only focus on final disposal sites (TPA). It is time for the community's paradigm towards waste management that relies on TPA to be abandoned and the lifestyle of people who think that waste is something that is priceless and must be disposed of and has no economic value to be replaced with a new paradigm. The perspective on waste must be from a new paradigm, turning waste into a useful resource in the environment and society, such as organic waste into methane gas, compost, fertilizer, or other industrial raw materials (Pratiwi D., 2006).

The Garbage Bank is an alternative concept of waste management that adopts the banking system and the concept of saving waste. The Garbage Bank is focused on waste management aimed at community empowerment, which creates social engineering. The waste that is saved is then managed in such a way (recycled and/or reused) by the community that it has economic value (Putra, 2020). This was stated in the Regulation of the Minister of Environment Number 13 of 2012, which was later derived and implemented into Perda, or government regulations, for each region so that it becomes an environmental preservation program in cities and districts, one of which is Duri City, Bengkalis Regency.

Waste management with the waste bank program will be carried out well if the constraints that occur can be resolved, while the obstacles in implementing the waste bank program are the low participation of customers or the public in participating in the waste bank program, the lack of inorganic waste management to become handicrafts, having to compete on price with used goods builders, problems related to facilities and infrastructure in managing waste, and a lack of human resources or officers in waste segregation. The waste problem is not only related to production activities or their interrelationships; it is also caused by the ignorance of the community in sorting the types of organic and inorganic waste. Currently, public awareness about waste management is still relatively minimal; some people actually already know the basics of waste selection, namely organic, inorganic, and B3 waste (hazardous and toxic materials). However, the majority of people are still reluctant to do this, accompanied by several reasons such as lack of time to sort waste, ignorance of how to manage organic and inorganic waste, and ignorance of the community about the positive impacts arising from sorting waste both for themselves and for the environment. The Garbage Bank program will run well if there is cooperation between the government, the private sector, and the community. These three actors have a good impact on implementing a policy that has been made together.

**METHODS**

This study used a qualitative method with qualitative descriptive data assessment in the form of observation techniques, interviews, and documentation using Ansell and Gash's 2007 theory. The data sources in this study were primary data sources (data obtained from interviews with respondents who were used as research subjects, consisting of: the director of the Pematang Pudu Clean Waste Bank, Mandau District; craftsmen of the Pematang Pudu Clean Waste Bank, Mandau District; and representatives of the community and customers around Pematang Pudu Village, Mandau District); and secondary data sources (i.e., data obtained by researchers from existing sources or data that functions as a complement, such as the internet, websites, archives, and documents available at the relevant agencies and institutions). The data analysis technique carried out is the data reduction stage (data reduction means summarizing, choosing the main things, and focusing on the important things). Data reduction also means the first component in
Collaborative cooperation, the principal-agent relationship does not apply because the collaboration that occurs is cooperation between participles and particples. In this kind of cooperation, all parties involved in the cooperation still have their own autonomy. The collaborating parties are principals and at the same time act as agents for themselves. They agreed to work together because they have the same vision and goals to be realized together which might be difficult to achieve when each of them works alone (Dwiyanto, 2010)

According to Ansell and Gash 2008 in (Idris, 2022) the Collaborative Governance model has four variables, namely:

1. Starting Conditions
2. Institutional Design
3. Facilitative Leadership (Leadership)
4. Collaborative Process (collaborative process)

Alter and Hage in (Emerson, 2015) explain the need for collaboration arising from interdependence (relationships of interdependence) between actors, which is caused by each actor having different types and levels of technology and resources needed to fulfill tasks. Interdependence induces an increase in the frequency and intensity of communication between these organizations, which in turn forces decisions to be made jointly and actions to be undertaken collectively to a certain degree. Gray in (Emerson, 2015) explains three dimensions of effective collaboration, namely achieving client goals, improving inter-organizational relationships and organizational development. These three distinct dimensions reflect the dissimilar types of organizational goals sought from inter-organizational collaboration. There are many benefits that can be obtained from the process of collaboration between individuals or organizations, collaboration allows companies to achieve their goals more quickly because there is involvement from many parties that encourage companies to move forward.

Collaborative process in implementing the Pematang Pudu Clean Garbage Bank program in Mandra District.

1. Starting Conditions

The starting condition is the initial condition under which the collaborative governance process is carried out. In this case, the initial conditions are usually motivated by the same vision of the goals to be achieved and the benefits to be gained in the collaboration process. The word collaboration tends to be used when the process of getting work done crosses borders, sectors, and relationships. Collaboration means cooperation between two or more people or institutions who understand each other's problems and try to solve them together. Specifically, collaboration is intensive cooperation to address the problems of both parties simultaneously. There are various types of collaboration that differentiate how a collaboration between individuals or institutions works.

The government, NGOs, and community wish to create a program, namely the Pematang Pudu Clean Garbage Bank, which aims to keep the environment clean and help the income and economy of the residents. The Pematang Pudu Clean Trash Bank started with environmental concern by youth organizations for the importance of cleanliness in their homes and a sense of mutual cooperation between communities. Then an idea arose from youth organizations to develop a clean pudu bund
bank program; they hoped the government would participate in implementing the program. This activity has been carried out since 2012, but officially, the name Pematang Pudu Clean Waste Bank was used on December 1, 2015, as a notary deed and legal entity as the Pematang Pudu Clean Waste Bank Institution. The vision of the Pematang Pudu Clean Garbage Bank Program carried out by the government, NGOs, and the community is to make the environment clean and independent. The benefit of the collaboration carried out by the government, NGOs, and community is that it can help residents' income while keeping the environment clean.

### a. Resource

The resources available at the Pematang Pudu Clean Garbage Bank are capital resources in the form of land and soil and human resources. A land resource area of 30x50 meters located on Jl. Bakti Kopelapip Ujung, RT. 01, RW. 016, Mandau District, was provided by the government for the implementation of the Pematang Pudu Clean Trash Bank Program. Human resources are available from NGOs, namely as managers, and human resources are available from the community, namely as craftsmen or volunteers whose job it is to make handicrafts or convert waste that is still suitable for use into something of economic value that can be resold.

### b. Incentive

In every activity, incentives or awards are very useful to increase work motivation; this is also related to the implementation of the Pematang Pudu Clean Garbage Bank program in Mandau District. An interview with one of the managers of the Pematang Pudu Clean Garbage Bank stated that in commemoration of World Ozone Day at the provincial level on October 6, 2021, the Bengkalis Regency Government received a number of awards from the Governor of Riau. The award was given to the Regent of Bengkalis, namely Kasnarni, represented by Plt. Head of DLH Bengkalis Muhammad Azmir, one of which is the Clean City award at the level of Riau Province, which is ranked second due to the Clean Pematang Pudu Garbage Bank program.

### 2. Institutional Design (Initial Design)

The condition that must be met for a successful collaboration is broadly involving all stakeholders who are affected by or concerned about what is being implemented. As Relly (2001) argues, broad participation is not only evidenced by attendance but also by actively participating in the implementation of cooperation. Participation is at the heart of the legitimacy of the collaborative process, based on the opportunity for stakeholders to talk with others about policy outcomes and claim that policy outcomes constitute broad-based consensus.

#### a. Participation between government, the private sector, and the community in the implementation of the PPB

Waste Bank program in the initial design of the Pudu Clean Waste Bank, institutionally, it consisted of initiatives from three parties, namely the government, the private sector, and the community. The government played the roles of protector, adviser, and supervisor at the Pudu Clean Waste Bank. Meanwhile, the private sector, namely PT. Pertamina Blok Rokan, is also participating in providing support in the form of fully providing initial funding facilities for the clean-up of the Pematang Pudu Waste Bank program. The community plays the role of implementing the clean Pudu bund bank program.

#### b. External parties in the implementation of the PPB Waste Bank

The Pematang Pudu Clean Waste Bank program is not only managed or founded by three actors but also by external parties other than the three actors. There are several other actors apart from the three (government, NGOs, and the community), namely the Special Task Force for Upstream Oil and Gas Business Implementation (skkmigas), Pertamina Hulu Rokan (PHR), Chevron, the Education Office (UIR and UNILAK). The external party was also present to assist in the implementation of the Pematang Pudu Clean Garbage Bank program.

### 3. Facilitative Leadership

Leadership is a facilitator who is later able to bring the elements involved in the collaboration process together. Leadership is very important to be able to embrace, empower, and involve all elements involved so that the collaboration process can run as desired. The role of facilitation leadership is one of the most important things to do to empower the weak elements involved so that they can later adjust. Ansel & Gash (2007) argue that leadership plays an important role in embracing, empowering, and involving stakeholders and then mobilizing them to move towards success and promote collaboration. Mobilizing stakeholders in a collaboration process by itself is not easy; to make this happen, it requires a shared understanding of the benefits to be gained for each institution when carrying out a collaboration between groups in resolving conflicts. In carrying out a collaboration, there must be the equipment needed to achieve the goals that have been planned by stakeholders.

#### a. Facilities and infrastructure in the PPB Waste Bank

Facilities owned by the Pematang Pudu Clean Waste Bank are in the form of a hydraulic press machine (an industrial machine that has a hydraulic system that can work independently by using a pump that is located separately for each machine). This machine is used to press used cardboard, paper, cans, or plastic. The use of a hydraulic press machine is very important to reduce the volume of large materials and make it easier to process waste; a plastic chopping machine is used to cut or chop plastic waste so that it is cut into smaller pieces. There is a knife inside this machine, and the knife functions as a cutter for plastic waste that has been inserted into the machine hole, an organic chopping machine, and a paper chopping machine. As for all the facilities in the clean pudu bund bank, this was a gift from PT Pertamina Hulu Rokan. However, there are also transport cars provided by NGOs for the implementation of the BSPPB program.

#### b. Leader Policy

The sub-district as well as the government issued a policy, namely the activity of the Clean Thursday movement, where this activity is a cleaning activity where the collected garbage will be deposited in the Clean Pudu Bund Bank. In addition, there is a training policy for making ecobata paving
blocks from recycled plastic waste. Ecobata is a brick made from melted plastic waste mixed with sand. Ecobata has a denser texture than bricks made from used plastic, and this sand mixture is stronger than ordinary bricks. The training on making acobata at the Pematang Pudu Clean Waste Bank is very useful and aims to save the environment by utilizing plastic waste and educating all members of the waste bank and the community.

4. Collaborative Process (Collaborative Process)

The collaboration process describes a stage that will be passed by all members involved. Gray divides the collaboration process into three stages: problem setting, direction setting, and implementation. Where in the process there are interrelated variables. Face-to-face dialogue, namely face-to-face meetings, is often referred to as direct communication between related parties. So that there is interaction between parties to discuss a common interest, with direct communication, it is hoped that no party will feel disadvantaged. Trust building is building trust between the parties involved so that all parties involved have the same goal of taking the best policy for all parties. Trust is usually built through communication between related parties. A commitment to process is a commitment to carrying out a process in order to achieve the desired common goal. Then share understanding, namely sharing understanding and understanding in a collaboration that the mission and forum created are a shared responsibility.

Non-Governmental Organizations (NGOs) carry out socialization activities in schools such as kindergartens, elementary schools, junior high schools, and high schools that aim to invite students to save waste at the Pematang Pudu Clean Waste Bank by providing an explanation of the importance of sorting waste and making waste of economic value. Not only that, there was a training activity on converting inappropriate waste into something that could be used, which was attended by Head of Kesosbud Yoan Dema, Head of PMD Rudi Hartono, Head of Pematang Pudu Village Tasril Akmal, Head of Pematang Pudu Clean Waste Bank Lambas Hatabarat, representatives of PT. Chevron, representatives from Lancang Kuning University, and representatives of junior and senior high schools in the Mandau sub-district. For now, the Pematang Pudu Clean Trash Bank program is already running, but it still really needs community involvement in implementing the program.

People are still reluctant to sort waste and save waste, even though that is something that can generate money to help the economy. Many people still choose to burn waste instead of selling the trash. In an effort to build trust in the community, NGOs are assisted by the government to convince the public by introducing and inviting the surrounding community to understand the importance of sorting waste. NGOs are also trying to disseminate information about the Pematang Pudu Clean Garbage Bank mechanism through social media such as Facebook, Instagram, and YouTube. The collaboration involved in implementing the Pematang Pudu Clean Waste Bank program involves several actors who have their respective roles.

Figure 1. Role of BSPPB Collaborative Governance Actors

Source: Analysis Results, 2023

Inhibiting Factors in the Implementation of the PPB Waste Bank Program

Inhibiting factors are all things that have the nature of inhibiting, blocking, or holding something back from happening. An activity that is carried out does not always go smoothly, but there are obstacles that occur if something that is planned does not go well. In the implementation of the Pematang Pudu Clean Garbage Bank program, there are several obstacles. In this study, researchers looked at the inhibiting factors for the implementation of the Pematang Pudu Clean Garbage Bank Program from the interviews conducted. The mindset of the people that is difficult to change still thinks that waste cannot be sold and cannot be reprocessed, so people are still reluctant to save or sort and sell waste that is no longer used. Lack of socialization support that should have been held by the government because, until now, socialization had only been held by NGOs. There are no permanent officers at the Pematang Pudu Clean Trash Bank; there are only craftsmen who are volunteers. This makes the work or implementation of the clean pudu bund bank waste bank program not run optimally.

CONCLUSION

Based on research conducted at the Pematang Pudu Clean Garbage Bank, Mandau District, it can be concluded that the initial conditions for the formation of the Pematang Pudu Clean Garbage Bank originated from environmental concern by youth youth organizations about the importance of cleanliness in their homes, so the idea for the garbage bank program arose in 2012. There are sources. The resources in the Pematang Pudu Clean Garbage Bank are capital resources in the form of land or soil originating from the government and human resources in the form of managers, craftsmen, or volunteers from NGOs and the surrounding community. The Bengkalis Regency Government received the Clean City award at the Riau Province level, ranking second because of the Clean Pudu Pematang Garbage Bank Program, which was given to the Regent of Bengkalis, Kasimarni, represented by Acting Head of DLH Bengkalis Muhammad Azmir.
The initial design of the Pematang Pudu Clean Garbage Bank was designed institutionally to consist of the initiative of three actors: the government as protector and supervisor, PT. Pertamina Blok Rokan as the one who provided funding for the initial facility, and the community as the one who runs and implements the Pematang Pudu Clean Garbage Bank program. As for external parties besides the 3 actors, namely the Special Task Force for Upstream Oil and Gas Business Implementation (skkmigas), Pertamina Hulu Rokan, Chevron, Education Office: UIR, and Unilak, The leadership of the Pematang Pudu Clean Garbage Bank is led directly by the director of the Pematang Pudu Clean Garbage Bank under the supervision of the Mandau sub-district government. There are trainings held to support the performance of the Pematang Pudu Clean Trash Bank program; one form of the training is training in making ecobata paving blocks made from plastic waste and recycling. The facilities at the waste bank are hydraulic press machines, plastic chopping machines, organic chopping machines, and paper chopping machines.

The collaboration process in the implementation of the Clean Pudu Pematang Waste Bank program has been carried out to the maximum extent possible through socialization between the two actors, namely the NGOs and the community. Meetings of the three actors in the implementation of training regarding the mechanism for converting waste that is not suitable for use were attended by the government, the private sector, and also the surrounding community as customers of the Pematang Pudu Clean Waste Bank. In terms of efforts to build trust by introducing and providing information about the implementation of the waste bank program through social media such as Facebook, Instagram, and YouTube. The inhibiting factors in implementing the Pematang Pudu Clean Garbage Bank Program are the people's mindset, which is still difficult to change; the lack of socialization support that should be organized by the government; and the absence of permanent staff and only craftsmen or volunteers.

REFERENCES


