Collaborative Governance in The Management of Waste Bank in Pekanbaru City

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Article Info

Abstract: Waste banks are developing as a response to the worsening waste problem due to rapid urbanization and population growth. The development of waste banks is part of an effort to overcome the problem of urban waste. By reducing the amount of waste that pollutes the environment and helping to protect local ecosystems such as groundwater, rivers, and seas, from contamination and environmental degradation. Because waste management is complex, waste banks need to involve various parties, including the government, non-governmental organizations, the private sector, and the general public. The main problems in this study are the weak marketing of recycled products, the weak involvement of various parties in proper waste management to maximize recycling value and the lack of understanding of the benefits of recycled products among consumers. The main objective of this activity is to construct a collaborative governance model in the management of waste banks in Pekanbaru City. The method used is a qualitative approach. The results of the study show that the management of waste banks in Pekanbaru City has involved many parties from the Government, Industry, Society, and Universities, but the involvement that occurs does not yet describe the collaborative governance process in each stage, activities tend to run alone without any initiation by the government in the management of waste banks in Pekanbaru City. Therefore, the

government, through the legitimacy it has, should start by identifying which stakeholders can be involved and be involved and co-opted so that they can move together through one command in a collaborative path so that the management of waste banks in Pekanbaru City can run optimally and waste problems can be resolved.

INTRODUCTION

Waste bank management is a system that aims to collect, manage and utilize waste efficiently by involving community participation in the process (Dahlan et al., 2024; Giraldo-Almario et al., 2024; Mahamid, 2024). Waste banks usually provide facilities for the public to exchange sorted waste for money or other goods. (Emmanuel et al., 2024; Munandar et al., 2024; Rispoli & Ajibade, 2024). Waste collection, waste banks need an effective system to collect waste from the community (Dahlan et al., 2024; Giraldo-Almario et al., 2024; Munandar et al., 2024). The problem may occur in terms of irregular collection schedules, lack of public awareness to properly sort waste, or lack of adequate infrastructure to collect waste from hard-to-access areas.

One of the main challenges in waste bank management is waste sorting. The community needs to be given a sufficient understanding of how to properly sort waste to maximize its recycling value. Problems can also arise when waste management infrastructure and facilities are inadequate, such as a lack of recycling facilities, environmentally unfriendly waste processing, or a lack of efficient technology. Waste banks must be kept clean and safe. Cleanliness problems can arise due to a lack of public awareness to maintain the cleanliness of the waste bank area or a lack of facilities such as sufficient trash bins or inadequate waste collection schedules. Security is related to waste theft or security for workers at the waste bank.

One of the main objectives of a waste bank is to utilize waste to be processed into products that have economic value. However, there are several problems faced in the management of waste banks in Pekanbaru, including:
1. Insufficient marketing of recycled products, including a lack of broad market access in Pekanbaru City.
2. Limited involvement of various parties in the management of waste raw materials, leading to a public understanding that is still lacking of how to properly sort waste to maximize its recycling value.

Hafis et al. (2025). Collaborative Governance in The Management of Waste Bank in Pekanbaru City.

3. A lack of awareness regarding the benefits of recycled products among consumers.

The goal of the research study was to examine how the collaborative governance process was implemented, along with the challenges in managing waste banks in Pekanbaru City. The approach to addressing research problems related to waste banks in Pekanbaru City utilizes a collaborative governance strategy. (Ansell & Gash, 2008a); stakeholder theory (Clarkson, 1995; Grimble & Wellard, 1997) and challenges in collaborative governance (Ansell & Gash, 2008b; Biddle & Koontz, 2014; DeSeve, 2007; Gordon et al., 2020; Gray & Purdy, 2018; NEWMAN et al., 2004; Zurba, 2014) as an analytical tool for the problem being studied.

State of the art or excellence and novelty in this study compared to similar studies lies in the model plan that will develop collaborative governance that will be developed starting from various approaches that do not only focus on one collaborative governance approach alone but also through stakeholder approaches, and factors that influence the implementation. In addition, researchers assess that the research that has been carried out so far has only focused on waste management and waste banks without looking at studies from a collaborative governance perspective, and even if a study is carried out from a collaborative governance perspective, the theory used only focuses on the theory without building a clear model. The research approach is carried out through a qualitative approach to dig up in-depth and comprehensive information. The collection of all available data is continued by analyzing the problem through a collaborative governance approach and stakeholder theory and factors that influence the implementation of collaborative governance, a model is recommended that is by the developing problems so that the final goal in solving waste management problems that have been implemented can be solved through the approach and model plan that will be constructed. For a clearer view of the research studies that have been carried out so far, it can be seen in the Vos Viewer & Publish or Parish image below:

Source: Researcher's processing, 2025

The image on the side, was obtained from the publish or Paris application and visualized from the Vos Viewer application using 500 sources of national, international, and non-accredited journals regarding waste banks that have not shown much about waste banks through a collaborative governance approach. So researchers are interested in discussing more deeply about waste management through the Collaborative Governance perspective from various perspectives.

RESEARCH METHOD

The approach that will be implemented in this study is through a qualitative approach by conducting discussions and in-depth information gathering with related parties in terms of collaborative governance to parties who have been involved in the process of managing waste banks in Pekanbaru City. It is expected that through this method, the information that will be obtained will be more complex and holistic so that the team can accept and formulate a picture of the existing problems and formulate the right model in terms of collaborative governance in managing waste banks in Pekanbaru City (Creswell, 2016; Sugiyono, 2014; Taylor, S. J., Bogdan, R., & Devault, n.d.; Yin, 2018).

RESULTS AND DISCUSSION

Collaborative Governance Process of Waste Bank Management in Pekanbaru City

Waste management in Pekanbaru City is a major challenge due to population growth and increasing waste volume. To overcome this problem, the Collaborative Governance approach is a solution that involves various parties such as the government, private sector, community, and universities. According to (Ansell & Gash, 2008b) The success of Collaborative Governance is influenced by five main indicators: face-to-face dialogue, trust building, commitment to process, shared understanding, and intermediate outcomes.

1. **Face-to-Face Dialogue**

Face-to-face dialogue is essential in building effective communication between stakeholders. In Pekanbaru, the city government held a discussion forum and workshop involving the sanitation department, waste management companies, community organizations, and academics. This dialogue helps in conveying the problems faced by each party. In addition, the function and role of face-to-face dialogue can identify solutions that can be implemented together. As well as building a shared understanding of waste management policies. In Ansel and Gash's theory, face-to-face dialogue accelerates the process of aligning goals and reducing misunderstandings between stakeholders.

2. **Trust Building**

Trust is the main basis of Collaborative Governance. In Pekanbaru, trust building is done through transparency in the preparation of waste management policies by involving various stakeholders. Another thing that

can be done is to be consistent in implementing regulations, such as waste bank management and cooperation with the private sector in waste management. In addition, active community participation in the cleanliness program organized by the government. If we look at the view (Ansell & Gash, 2008b), building trust takes time and must be done gradually through real actions that show the commitment of each party.

3. Commitment to Process

The success of waste management through Collaborative Governance in Pekanbaru depends on the commitment of each stakeholder. This commitment is demonstrated through government actions in establishing strict regulations related to waste management and supporting incentives for parties that contribute to waste reduction. The role of the private sector plays a role in the innovation of waste processing technology and industrial waste management. In addition, the community is committed to sorting waste and supporting recycling programs and universities contribute to research and innovation of more efficient waste management solutions. According to (Ansell & Gash, 2008b), commitment to process ensures that all parties remain involved in the long term and do not stop when facing challenges.

4.   Shared Understanding

Shared understanding is important to ensure that all parties have the same vision and goals in waste management. Efforts made in Pekanbaru include socialization activities of waste management policies to the community through seminars and social media. Implementing cooperation between universities and the government in research on community consumption patterns and their impact on waste production. And by strengthening regulations that support sustainable waste management. In Ansel and Gash's theory, shared understanding encourages policy alignment and reduces conflicts of interest among stakeholders.

5.   Intermediate Outcome

As an initial indicator of success, several achievements in waste management in Pekanbaru include increasing the number of waste banks and community participation in recycling programs, in addition to reducing the volume of waste disposed of in landfills due to community-based waste management programs. Finally, there is the implementation of waste processing technology by the private sector that produces renewable energy. According to Ansel and Gash, intermediate outcomes motivate stakeholders to continue participating in the collaborative governance process.

The Collaborative Governance approach in waste management in Pekanbaru involves various stakeholders with key indicators developed by (Ansell & Gash, 2008b). Face-to-face dialogue, building trust, commitment to the process, shared understanding, and interim results are key factors in the success of waste management. By continuing to strengthen cooperation and commitment between parties, Pekanbaru can achieve more sustainable and environmentally friendly waste management.

Stakeholder yang Terlibat Pengelolaan Bank Sampah di Kota Pekanbaru

In the implementation of waste bank management in Pekanbaru City, there are several stakeholders involved, including the government (Environmental & Sanitation Service; State Electricity Company), the community, universities (Universitas Islam Riau, Universitas Riau, Universitas Lancang Kuning and Universitas Muhammadiyah Riau) and the private sector (pawnshops). For more clarity on the stages of the process, see the explanation below:

1.   Face-to-Face Dialogue

Face-to-face dialogue is a direct interaction between stakeholders that aims to build effective communication in managing waste. In the Ansell and Gash model, direct interaction is important to reduce misunderstandings and create a productive discussion space. At this stage, Stakeholder Involvement includes:

- Government: Should act as a facilitator in regular meetings with the community, private sector, and academics.
- Private sector: Waste management business actors such as recycling companies and cleaning contractors need to sit together with the government to discuss effective regulations and business models.
- Community: Residents and communities who care about the environment need to be invited to the dialogue forum so that they can convey their aspirations and obstacles faced in waste management.
- Universities: Academics play a role in providing scientific studies, policy recommendations, and innovations in waste management.

Currently, dialogue between stakeholders is still limited and tends to be sectoral. The government often makes policies without in-depth consultation with the community or academics. Private sector participation is also more profit-oriented without much collaboration with environmental communities. Intensive and routine dialogue needs to be strengthened so that all parties can understand each other's needs and challenges.

2. Trust Building

Trust is the main foundation of collaborative governance. Without trust, stakeholders will hesitate to work together and will prefer to go their own way. Ansell and Gash emphasize that trust takes time to build through transparent and consistent interactions. At this stage, Stakeholder Involvement includes:

- Government: Must be transparent in waste management policies, including in the procurement and management of cleaning funds.
- Private sector: Expected to show commitment to environmental interests, not just business profits.
- Community: Needs to be encouraged to believe that the government and private sector really care about environmental cleanliness, not just formalities.
- Universities: Can be neutral parties that bridge the interests of all parties with data and academic studies.

Trust between stakeholders is still low. Many people are skeptical of government policies related to waste, especially in terms of transparency in

the management of cleaning fees. The private sector is often considered to only seek profit without clear social responsibility. The government also does not involve academics enough in policy formulation. As a result, waste management is often hampered by conflicts of interest and lack of trust.

3. Commitment to Process

The success of collaboration depends on the extent to which each party is willing to engage sustainably in the waste management process. Ansell and Gash emphasize that collaboration is not just an initial agreement, but also a long-term commitment. At this stage, the involvement of stakeholders includes:

- Government: Must commit to implementing agreed policies without inconsistency.
- Private sector: Must remain involved in waste management despite regulatory or economic challenges.
- Community: Must have the awareness to continue sorting waste and support existing policies.
- Universities: Must remain active in research and evaluation of waste policies.

Commitment to the process is still weak. Many waste management programs only run temporarily or die midway due to a lack of coordination. The government often only focuses on short-term targets, while the private sector can withdraw if the policy does not benefit them. Public awareness is still fluctuating, especially due to the lack of supporting facilities such as adequate waste sorting facilities.

4. Shared Understanding

For collaboration to be successful, all parties must have a shared understanding of the problem at hand and the proposed solution. Ansell and Gash emphasize the importance of agreeing on a common goal. At this stage, stakeholder involvement includes:

- Government: Must ensure that regulations are clear and understood by all parties.
- Private sector: Must understand that the waste business is not just about profit, but also environmental sustainability.
- Community: Must understand that waste management is a shared responsibility, not just the government's job.
- Universities: Must help create understanding based on data and research.

There are still many differences in perception between stakeholders. The government often sees waste management as an administrative matter, while the community sees it as a public service that must be provided unconditionally. The private sector tends to focus on profit, and academics often only play a role in research without real implementation. Shared understanding needs to be strengthened through more intensive socialization and dialogue.

5. Intermediate Outcomes

Short-term success can be an indicator of whether collaboration is going well. Ansell and Gash said that these intermediate results could be increased trust, improved policies, or changes in community behavior. At this stage, stakeholder involvement includes:

- Government: Can assess success by increasing the effectiveness of waste management policies.
- Private sector: Can see whether there is an increase in the efficiency and profitability of sustainable waste businesses.
- Community: Can feel the changes through a cleaner environment and better services.
- Universities: Can see the impact of research applied in real policies.

Some positive results are starting to appear, such as the existence of waste bank initiatives in several sub-districts. However, major challenges still exist, such as the lack of adequate waste management infrastructure and low public awareness of sorting waste. If there is no increase in collaboration, these results could stagnate or even regress.

From the presentation of the results presented above, if discussing waste management in Pekanbaru from a collaborative governance perspective, it still faces various obstacles. Such as face-to-face dialogue is still not intensive enough, trust between stakeholders is low, commitment is inconsistent, mutual understanding is still weak, and intermediate results are not significant enough. For waste management to be more effective, the government needs to increase transparency and communication with other stakeholders. The private sector must be more responsible for environmental aspects. The community must be more active in sorting and managing their waste, and universities must be more involved in formulating data-based policies. In other words, if this collaboration can be strengthened, waste management in Pekanbaru can be better and its impact will be sustainable.

Collaborative Governance Challenges in Waste Bank Management in Pekanbaru City

Waste bank management in Pekanbaru City faces various challenges in the context of collaborative governance, especially related to aspects of face-to-face dialogue, trust building, commitment to the process, shared understanding, and intermediate results. The following are some of the challenges identified:

1. Face-to-face dialogue: Direct interaction between the government, community, and private sector is still less than optimal. This hinders the creation of effective communication and solid collaboration in waste management.
2. Trust Building: The level of public trust in the government in waste management is still low. Lack of good communication and delays in information cause the public to feel less trust in government efforts.
3. Commitment to Process: Not all parties have shown a strong commitment to carrying out their roles and responsibilities in waste management. This results in a lack of consistency and sustainability of the waste bank program.
4. Shared Understanding: Differences in perception and understanding between the government, community, and private sector regarding their respective roles in waste management cause a lack of coordination and synergy in program implementation.

Hafis et al. (2025). Collaborative Governance in The Management of Waste Bank in Pekanbaru City.

5. Intermediate Outcomes: The lack of clear and measurable performance indicators makes it difficult to evaluate the success of the waste bank program. This hampers future improvements and development of the program.

Overcoming these challenges requires more intensive collaborative efforts between the government, community, and private sector to create an effective and sustainable waste management system in Pekanbaru City.

CONCLUSIONS AND RECOMMENDATIONS

To overcome the challenges in managing waste banks in Pekanbaru City, the strategic step that needs to be taken is to strengthen collaboration between the government, the community, and the private sector. More intensive face-to-face communication must be a priority to build greater openness and synergy. In addition, public trust in the government must be increased through information transparency, ongoing education, and consistent policy implementation that supports environmental interests. With a stronger commitment from all parties, the waste bank program can develop into a sustainable solution to overcome waste problems in this city.

In the future, there needs to be clear standards and performance indicators to ensure that every step taken in waste management can be measured for its effectiveness. Education and socialization programs that actively involve the community must be intensified so that understanding and awareness of the importance of waste management increases. With closer synergy and innovative steps, Pekanbaru has the potential to become a model for a sustainable city that successfully manages its waste with an effective collaborative approach.

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