



Collaborative Governance and Stakeholder Dynamics in Improving the Quality of Life of Coastal Communities amidst the Coastal Waste Crisis in Bandar Lampung

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ARTICLE INFORMATION	A B S T R A C T
<p>Received: September 17, 2024 Revised: April 06, 2025 Available online: April 30, 2025</p>	<p>This study aims to examine the condition of waste management on the Sukaraja Coast, Bumi Waras District, Bandar Lampung City and analyze the extent to which collaboration between stakeholders has been established in waste management efforts in the area. The method used is descriptive qualitative with data collection techniques through interviews and digital media sources. The results of the study indicate that the Sukaraja Coast faces a complex waste problem, caused by a combination of waste sent from rivers that flow into the coast and waste disposal activities by the surrounding community. Collaboration between stakeholders, especially between the Bandar Lampung City Government, Lampung Provincial Government, WALHI, and local communities, has not been effective. The absence of specific regulations governing collaboration mechanisms and the lack of ongoing commitment hinder the formation of effective joint governance. Mass beach clean-ups that have been carried out have only been able to create short-term impacts, because the root of the problem in the form of weak institutional design and low public awareness have not been seriously addressed. In conclusion, it is necessary to strengthen institutional design based on collaborative governance, increase the capacity of government institutions, and educate and empower coastal communities in a sustainable manner so that waste management on the Sukaraja Coast is more effective and has long-term impacts.</p>
<p>KEYWORDS</p>	
<p>Coastal Waste, Collaborative Governance, Multi-Stakeholder Collaboration, Sukaraja Beach, Institutional Design</p>	
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INTRODUCTION

The integrity and robustness of the aquatic ecosystem are pivotal to the prosperity of a nation (Peng et al., 2024). The quality of life of coastal communities is highly dependent on the resources they obtain from the surrounding environment, especially the sea and coast (Hamka et al., 2019). Coastal areas not only function as economic and social spaces for the community, but also play an important role as ecological fortresses that protect land areas (Rideng et al., 2022). Maintaining the sustainability of coastal areas is an urgent need that must receive serious attention, especially in coastal areas of Indonesia, including in Bandar Lampung City (Susanti, 2023). Sukaraja Village, located in Bumi Waras District, is one of the coastal areas in Bandar Lampung City that has a fairly long coastline. As an area that directly borders Lampung Bay (Cantika Al Marfuah, Yudha Rahman, 2023), Sukaraja has marine-based economic potential, where most of the population works as fishermen, fishery business actors, and seafood traders. This profession has been passed down from generation to generation and has become the socio-economic identity of the local community (Hendrawaty et al., 2023).

However, along with the increasing population activity and urbanization in coastal areas, environmental problems are increasingly emerging, especially the coastal waste crisis that has not been resolved to date (Jyantri & Ridlo, 2021). Development activities, minimal waste management facilities, and the culture of throwing waste into the sea have exacerbated the accumulation of waste in the coastal area of Sukaraja (Situmenang & Manurung, 2025). Garbage that accumulates on the shoreline not only damages the aesthetics of the environment, but also reduces the quality of the marine ecosystem and has a direct impact on decreasing fishermen's catches (Saputra, 2024).

According to WALHI Lampung, the pile of garbage around the Sukaraja Fish Market has reached a thickness of up to 3 meters, dominated by household waste. This condition is further exacerbated by tidal floods that often hit coastal areas, causing waste to be carried back to residential areas (Hendrivan, 2020). The lack of waste management infrastructure, such as limited Temporary Disposal Sites (TPS) and the absence of an effective waste transportation system, encourages people to dump waste directly into the sea (Agung et al., 2021). This shows that the coastal waste problem in Sukaraja is not just a technical problem, but also concerns weak environmental governance and fragmentation of responsibilities between actors. The Bandar Lampung City Government has involved the community and environmental organizations in waste management movements several times, but these initiatives tend to be ceremonial and unsustainable. WALHI Lampung has even recommended the formation of a local community-based Waste Task Force, referring to the successful model of the "Orange Troops" in DKI Jakarta, but this proposal has not been seriously adopted. The phenomenon of the Pandawara Group which made the condition of Sukaraja Beach viral as the second dirtiest beach in Indonesia also shows that this issue has become a wider public concern, emphasizing the need for a new approach that is more inclusive and collaborative (Idam, 2023).



Figure 1. Beach cleaning by the Pandawara group
 Source: Idam (2023)

The problem of waste is indeed not an easy matter that can be solved with one activity, support and cooperation across stakeholders are needed so that this waste problem can be handled sustainably (Silolongan & Apriyono, 2019). The impact of waste management can affect the level of public health so that the role and process of collaboration in waste management requires synergy from policy makers to implementers of existing activities responsible for waste management (Idris et al., 2021).

The fundamental problem faced by Sukaraja Village is not just the accumulation of coastal waste, but the failure of environmental governance that involves multiple parties effectively and sustainably. Local governments tend to work alone, while communities and environmental organizations are only involved partially and momentarily. In fact, effective coastal waste management requires collaboration across actors, from the government, community, business actors, to environmental organizations, in a collaborative governance framework that is planned and oriented towards the long term. Research conducted by Masrohatun (2022) shows that coastal waste management is carried out by creating waste banks and turning them into items that are suitable for use. In addition, research conducted by Kurniawan et al (2022) where coastal waste management is carried out by making regulations in Regency Regulations and Regent Regulations. Research conducted by (Milligan & O'Riordan, 2007) shows that coastal waste management requires a partnership between the government and the community.

Most studies related to coastal waste management still focus on technical approaches, such as waste management and waste processing technology innovation (Laureti et al., 2024). Research that comprehensively examines the roles and dynamics of stakeholders within the framework of collaborative governance to address the coastal waste crisis is still very limited, especially in the context of urban coastal areas such as Sukaraja Village, Bandar Lampung City. In fact, the complexity of coastal waste problems in this area shows that effective solutions require sustainable and participatory cross-actor synergy. The gap between the technical approach that has been widely studied and the need for an inclusive collaborative governance approach is an important gap that needs to be bridged. Therefore, this study is here to fill this gap by analyzing the application of collaborative governance in handling the coastal waste crisis as an effort to improve the quality of life of the community in Sukaraja Village, Bandar Lampung City.

The results of this study are expected to provide theoretical contributions in the development of the concept of collaborative governance in coastal areas as well as practical contributions for local governments and local communities in designing inclusive and sustainable coastal waste management policies and

programs. By prioritizing the principles of collaboration, participation, and transparency, this study is expected to be able to offer alternative solutions that can improve the quality of life of coastal communities while maintaining the sustainability of coastal ecosystems in Bandar Lampung City.

Therefore, there needs to be a change in paradigm and working methods to jointly overcome the waste problem. Collaborative governance is an initial prerequisite for realizing a harmonious and aligned government. Collaborative governance will be a governance strategy that directly involves stakeholders outside the government. The goal is to implement public policies and public programs, and is oriented towards consensus and deliberation in the collective decision-making process.

Collaborative Governance is used as a method so that a program or activity can run by gaining strength both in terms of finance and resources because it involves more stakeholders who have the same goals (Wibawa et al., 2024). The collaborative governance model consists of the parameters of Starting Condition, Facilitative Leadership, Institutional Design, and collaboration process (Ansell & Gash, 2008). According to Mukhlis et al (2019) initial conditions are one of the key factors that determine the success of collaborative governance as measured by aspects of equality of power and resources, the level of trust between collaborators. Leaders who have the capacity to drive collaborative activities are leaders who are able to establish relationships between actors and maximize the utility of each actor's knowledge (Muslim et al., 2022). Institutional design can be identified as a structural component of collaborative projects. This design reflects a set of formal and informal rules that guide interactions and seek to align them with project objectives (Breughel et al., 2023). The collaboration process in the paradigm of four sub-face-to-face dialogue, building trust, commitment to the process, and shared understanding (Doberstein, 2016). The purpose of this study is to see how collaborative governance is implemented in efforts to improve the quality of life of the community and solve the waste problem in the Sukaraja Village Coast of Bandar Lampung City.

METHOD

The research method used is descriptive qualitative. The qualitative method is a method with a research process based on perceptions of a phenomenon with an approach whose data produces descriptive analysis (Sahir, 2021). The reason for choosing this method is to provide an overview of the implementation of collaborative governance in efforts to improve the quality of life of the community and solve waste problems on the coast of Sukaraja Village, Bandar Lampung City.

The types of data used in this study are primary and secondary data. Primary data is data as the first information collected by oneself which comes from a person or the results of experiments in research subjects (first hand) (Abdullah et al., 2022), in this study primary data was obtained from informant interviews. Secondary data is data obtained indirectly from research objects (Sekaran & Bougie, 2016) in this study secondary data from journals or news articles that support the research.

The selection of respondents used purposive sampling techniques. According to Priadana & Sunarsi (2021) purposive sampling is a sampling technique in research that is based on certain considerations. Data collection uses primary and secondary data, where primary data is obtained through

interviews and secondary data comes from journals or news articles supporting the research.

Data analysis techniques are a process of processing data into new information (Ulfah et al., 2022). In this study, the data analysis techniques used are data reduction, data presentation and drawing conclusions. According to Zulfirman (2022) Data reduction is the process of selecting or selecting, focusing attention or focusing and simplifying all types of information that support research data. Data presentation is an explanation of information in the form of complete descriptions and narratives (Nur & Saihu, 2024). Drawing conclusions is an effort to find or understand the meaning, regularity of explanatory patterns, causal flows or proportions (Fadli, 2021).

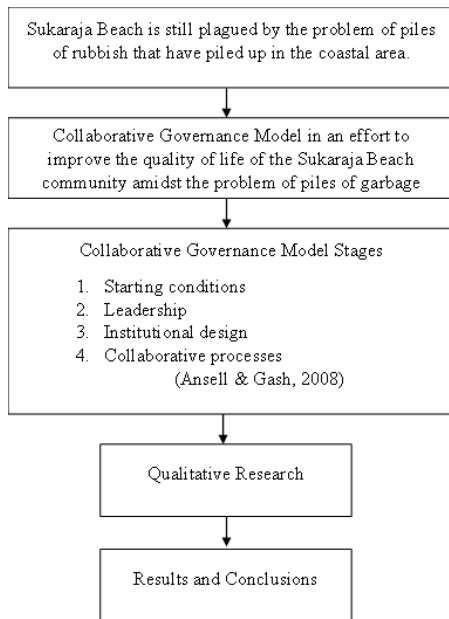


Figure 2. Research flow

RESULTS AND DISCUSSION

The waste problem on the coast of Bandar Lampung City, especially in Bumi Waras District, Sukaraja Village, is a chronic problem that continues to recur and has not been resolved until now. The area grew and developed on layers of garbage that had settled for years, making waste management in this area increasingly complex. The Sukaraja Coast even became a matter of widespread concern when more than a thousand people from various circles, ranging from provincial and city governments, communities, students, nature lovers, to residents from outside the city, took part in a beach clean-up action initiated by the Pandawara Group, a group of young people from outside Lampung (Hadiyatna, 2023). However, less than a year since the action, the condition of Sukaraja Beach was again filled with piles of garbage, reflecting that the fundamental problem had not been completely resolved (Jaya & Putri, 2023).



Figure 3. Sukaraja Beach Coastal Condition in May 2024

This condition is very concerning because after becoming the center of attention and being included in various news reports, similar conditions quickly returned. It cannot be denied that this problem does not only occur because people around the beach litter, but the trash is trash from other areas that end up on the Sukaraja Coast. The condition of the piles or mountains of trash along the Sukaraja Coast is very close to the settlements and daily activities of the community, which is depicted as follows:

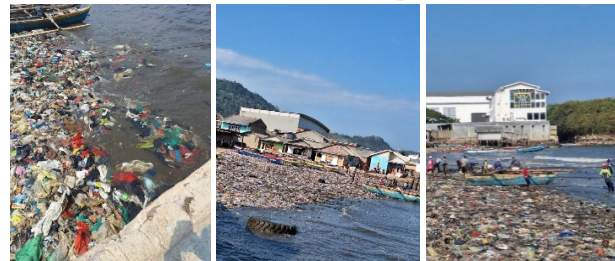


Figure 4. Condition of Garbage, Settlements and Activities of Sukaraja Coastal Residents

Therefore, this problem is a shared responsibility and requires serious commitment from many parties to be able to collaborate in formulating concrete, impactful and sustainable policies. The quality of life both on land and sea must be inherited in good condition, to realize this, a collaborative government is needed. The term collaborative as a way of overseeing government that specifically includes partners exterior the government or state, which is arranged towards agreement and pondering within the collective decision-making (Arma et al., 2024).

Collaborative Governance Model

Collaborative Governance is used as a method so that a program or activity can run by gaining strength both in terms of finance and resources because it involves more stakeholders who have the same goals (Wibawa et al., 2024). The collaborative governance model consists of the parameters of Starting Condition, Facilitative Leadership, Institutional Design, and collaboration process (Ansell & Gash, 2008).

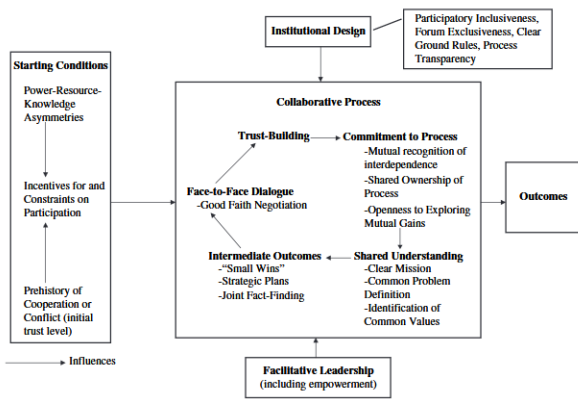


Figure 5. Collaborative Governance Model
Source: Ansell & Gash (2008)

Analysis of the findings in the field related to the implementation stage of collaborative governance, namely that;

1. Starting Condition

According to Mukhlis et al (2019) initial conditions are one of the key factors that determine the success of collaborative governance as measured by aspects of equality of power and resources, the level of trust between collaborators. Based on the results of interviews and observations conducted, it was found that efforts to build collaborative cooperation between the Bandar Lampung City Government and various stakeholders, especially non-governmental organizations (NGOs), were initiated in 2014. At that time, the Indonesian Environmental Forum (WALHI) Lampung was involved in the process of formulating public policies related to environmental management in the coastal areas of Bandar Lampung City. The involvement of WALHI as one of the representatives of civil society shows the initial awareness of the City Government regarding the importance of input from non-government actors in designing more participatory and responsive environmental policies. These results are in line with research conducted by Agustina (2023) in Municipal solid waste (MSW) there is no integrated concept for stakeholder involvement in MSW management.

The form of participation carried out by WALHI at that time was the preparation of a policy brief containing technical and strategic recommendations related to more sustainable coastal waste management. The policy brief was submitted to the Bandar Lampung City Government as a form of WALHI's substantive contribution in encouraging the birth of policies based on field evidence (evidence-based policy). The preparation of this policy brief reflects the initial potential for the implementation of collaborative governance, where the policy process is not merely top-down, but opens space for dialogue between actors across sectors. However, the policy brief submitted by WALHI was never accommodated or followed up in real terms by the Bandar Lampung City Government. The policy brief was not integrated into official government planning and policy documents, either in the form of priority programs or technical policies at the regional level. The absence of this follow-up shows that the collaborative efforts that had been built in the early stages had not yet developed into an ideal form of collaborative governance, namely collaborative governance marked by the active involvement of all parties from the formulation to the implementation of policies in a sustainable manner.

2. Facilitative Leadership

Leaders who have the capacity to drive collaborative activities are leaders who are able to establish relationships between actors and maximize the utility of each actor's knowledge (Muslim et al., 2022). Based on Law Number 1 of 2014 concerning Management of Coastal Areas and Small Islands, especially Article 14, the authority to manage coastal areas, including coastal waste management, is under the Provincial Government. This means that the Lampung Provincial Government through the Lampung Provincial Environmental Service (DLH) has the main authority in planning, coordinating, and supervising coastal environmental management programs, including in the Sukaraja Beach area.

However, the results of the study obtained through interviews and observations indicate that the facilitative role that should be carried out by the Lampung Provincial Government has not been running optimally. In the context of facilitative leadership, the provincial government should ideally function as a Mediator and communication bridge between stakeholders, including city governments, coastal communities, the business world, and civil society organizations (NGOs), a Driver of cross-actor collaboration through facilitating strategic meetings and creating inclusive coordination forums. Provider of policy and technical guidance in the form of operational regulations and implementation guidelines that regulate the roles and responsibilities of each party. These results are in line with research conducted by Irawan et al (2022) where the facilitative role has not been effective between government institutions in the Jabodetabekjur area.

These functions are not running effectively, as seen from the lack of cross-actor coordination forums that specifically discuss the issue of coastal waste on Sukaraja Beach. The Provincial DLH is more passive and has not shown the initiative as a proactive facilitative leader in building sustainable cross-actor communication. The absence of this facilitative function has led to fragmentation of roles and weak synergy between programs between institutions, both between provincial governments and city governments, as well as between the government and the community and non-governmental organizations.

3. Institutional Design

Institutional design can be identified as a structural component of collaborative projects. This design reflects a set of formal and informal rules that guide interactions and seek to align them with project objectives (Breugh et al., 2023). Based on the results of the study through interviews and observations, it was found that there was no formal institutional design or specific regulations that regulate the mechanism of cooperation and collaboration between parties in handling waste problems on the coast of Sukaraja Beach. The absence of this regulation reflects that the collaborative governance process as a management approach involving multi-actors (government, community, and non-governmental organizations/NGOs) has not been properly institutionalized. In contrast to the research conducted by Christensen (2024) in his research, the institutional design was regulated by the local government so as to create a collaborative framework. Ideally, in the collaborative governance model, there must be clear regulations regarding the division of roles and responsibilities between actors (government, private sector, NGOs, community). Coordination, communication, and joint decision-making mechanisms. Funding schemes and joint resources. Regular formal and binding coordination forums (Afandi et al., 2023).

However, in Sukaraja Beach, until now there are no legal products, regional regulations (Perda), mayoral regulations (Perwali), or decisions of the head of the agency that specifically serve as official references regarding cross-sector collaboration in coastal waste management. The collaboration that occurs, especially between the Bandar Lampung City Environmental Agency and the Lampung Provincial Environmental Agency, is still sporadic and is more based on situational needs and not systematic and sustainable regulations.

4. Collaborative Process

The collaboration process in the paradigm of four sub-face-to-face dialogue, building trust, commitment to the process, and shared understanding (Doberstein, 2016). Based on the results of research through interviews and direct observation, it is known that the institutional design in collaboration in waste management on the coast of Sukaraja Beach has not been running optimally. In the context of collaborative governance, there are four main sub-criteria that are indicators of the success of a collaboration, namely face-to-face dialogue, building trust between stakeholders (trust building), shared commitment (commitment to process), and shared understanding (Faidati & Mutmainah, 2020). These four sub-criteria are interrelated and are an important foundation in building effective and sustainable collaboration in coastal waste management.

The results of the research at Sukaraja Beach regarding the four sub-criteria are summarized in the following table:

Tabel 1. Collaboration Process Subcriteria

Collaboration Subcriteria	Process	Findings on Sukaraja Beach
Face-to-Face Dialogue		Dialogues have been conducted but are not routinely scheduled and only occur incidentally. Dialogues do not produce real action and there have been several times of friction between stakeholders due to differences in perception and work approaches of each institution.
Trust Building		The level of trust between stakeholders is very low. The communication that is established is sectoral and has not involved all parties. There is no spirit of cooperation in solving the coastal waste problem.
Commitment to Process		There is no clear joint commitment. A Memorandum of Understanding (MoU) between the Bandar Lampung City Environmental Agency and WALHI existed, but it did not focus on coastal waste management. WALHI's 2014 policy brief was also never followed up.
Shared Understanding		There is no common understanding about the

	root of the problem and the solution. WALHI has submitted a scientific study related to the condition of coastal waste, but it has not been responded to seriously by the City or Provincial Environmental Services. Each institution has a different perception about the problem and solution of coastal waste.
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By considering all these findings, it can be concluded that the institutional design of collaborative governance in waste management on the coast of Sukaraja Beach is not yet effective. In contrast to research conducted by Tobin & Zaman (2021) collaborative governance in waste management carried out by IMC-WM's partnerships with the Australian government has been running optimally. To improve this condition, it is necessary to establish a permanent collaboration forum, formulate regulations that support collaboration, and strengthen the capacity of the community as the main actors in sustainable coastal waste management.

CONCLUSION

The results of the study show that the waste problem in the Sukaraja Coast, Bumi Waras District, Bandar Lampung City is a complex problem and has not been handled effectively even though it has received widespread attention, both from the government, communities, and the general public. This problem is not only caused by the behavior of the surrounding community who litter, but is also influenced by the flow of waste from rivers in Bandar Lampung City that flow into the area. Collaborative efforts between stakeholders, including the City Government, Provincial Government, and non-governmental organizations such as WALHI, have not been running optimally. The absence of specific regulations related to cross-sector collaboration and the lack of ongoing commitment between parties make handling efforts tend to be sporadic and reactive. The fact that large-scale cleaning actions involving thousands of people were only able to create a temporary impact indicates that the root of the problem has not been touched, namely weaknesses in institutional design, lack of collective awareness, and the lack of a shared understanding that this problem requires a sustainable collaborative approach. For further research, it is recommended to develop a more in-depth study related to the ideal institutional mechanisms and designs to effectively manage multi-stakeholder collaboration, as well as conduct a more comprehensive community participation study to identify socio-cultural barriers that influence the behavior of coastal communities in waste management. With this approach, it is expected to produce more applicable policy recommendations that are based on real needs in the field.

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