

COLLABORATIVE GOVERNANCE IN OVERCOMING LAKE TOBA POLLUTION DUE TO FLOATING NEEDLE CANES (CASE STUDY IN SILALAH I III VILLAGE SILAHISABUNGAN DISTRICT DAIRI REGENCY)

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ABSTRACT

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Floating net cages (KJA) are a container for fish maintenance in the form of a net bag that is located floating on the surface of the water, the large amount of fish feed used every day without waste management, causes the cultivation industry in the waters of Lake Toba to be an environmentally unfriendly fish cultivation industry, In accordance with Presidential Regulation Number 81 of 2014, Dairi Regency as zone A3.1 is not allowed to carry out floating net cage cultivation, the Dairi Regent formed an Integrated Team for Controlling Floating Net Cages. The research method in this study is qualitative research with a descriptive approach. Data collection used interview, observation, and documentation techniques. The data obtained were analyzed qualitatively with the Collaboration Process theory approach According to Ansell and Gash (2007) namely 1) Face to Face, 2) Trust Building, 3) Commitment to Process, 4) Share Understanding, 5) Intermediate Outcome. The results of the study show that in the collaboration process carried out by the Environmental Service, Tourism Service, PT Tua Ganda, and the Silalahi community, the owners of floating net cages, namely: 1) Face to face dialogue that has been implemented in the Zero floating net cage program has been running well and has been maximally attempted. 2) Trust building for each activity actor has not been carried out continuously and no trust has been built. 3) Commitment to process has not been running well, there is no responsibility from the tourism service and the community for the program. 4) Shared understanding has not been running well, information is only in the form of data on the names of the cage owners. 5) Intermediate outcomes were the dismantling of 200 plots, but there has been no follow-up regarding evaluation and monitoring in the field.

1. INTRODUCTION

Lake Toba is a lake located in North Sumatra Province, has a surface area of 112,400 ha, a volume of about 256.2×10⁹ m³ and a maximum depth of 508m. The community around Lake Toba utilizes water for daily life such as in the economic field, one of which is by utilizing the waters of Lake Toba as a tourist destination with the beauty presented by the waters and views of Lake Toba.

Lake Toba waters have begun to be polluted since 1986, which was caused by the growth of floating net cages, then in 1998 until now there has been a rapid development of KJA (Silaban & Silalahi, 2021) which is the main factor in the occurrence of Lake Toba pollution which causes a decrease in the quality of Lake Toba Waters is the presence of fish cages / farms in the Lake Toba area (Lubis, 2020).

The Dairi Regency Government issued a Decree of the Dairi Regent Number 622 of 2021 concerning an integrated team for the control of cages, where the integrated team for the control of floating net cages in Silalahisabungan waters, the team involved is the Environment Office, the Tourism Office, the Floating Net Cage Entrepreneurs and the KJA Owners. The team has tasks including applying for assistance to the Ministry of Environment and related Ministries to conduct a

study of the transfer of cages to land including compensation and sustainability of the replacement inland fisheries program, inventory of the fish trade chain starting from feed sources, seed sources, and reviewing business alternatives for affected cultivators. The direction of this policy is to create a zero floating program.

Collaboration carried out to succeed the zero floating program involves two government agencies, namely the Environmental Agency, the Tourism Office, this collaboration only involves one floating net cage entrepreneur, namely PT Tua Ganda because in Silalahi there is only one private company, so the relevant agencies only collaborate with one entrepreneur. This collaboration also involves involving the community, where the community involved is only the community of KJA owners, where every community that has KJA is involved in collaboration to realize the Zero Floating Program.

The lack of communication between the Environmental Agency, the Tourism Office, PT Tua Ganda and the community of cage owners is the main cause of constrained collaboration to curb floating net cages in Silalahisabungan sub-district, where collaboration is carried out by cutting cages, where the community of cage owners participates in providing some boxes from their cages in stages to be cut,

where for one box unit a compensation of Rp. 5,000,000,-, which is sourced from the APBD. As published in *mistar.id*, the environmental agency submitted a higher budget to the government for the conversion of fish production businesses, because the Dairi APBD in 2024 was insufficient.

These problems show that the agency and entrepreneurs do not have the same information regarding the budget for dismantling floating net cages, and immediately carry out dismantling so that they carry out dismantling without thinking about the available funds, so that people who have had their property dismantled do not get business function expert funds. This has caused disappointment in the Silalahi III community, causing community distrust of this zero cage program.

2. METHODS

This research uses a qualitative research approach. According to Wijaya (2018) qualitative research is a research method used to research on natural object conditions, and the researcher himself as the key instrument, the data collection technique used is triangulation, the data obtained tends to be qualitative data,

This research is located in Silalahi III Village, Dairi Regency, Silahisabungan District, The technique of determining informants carried out by researchers in this study is purposive sampling technique, Researchers reasoned using purposive sampling, namely to find and collect valid data by interviewing an informant who is considered capable and knows or masters an expertise in his field. The data analysis technique used in this research is the Miles and Huberman model. Miles and Huberman model. According to Miles and Huberman in Sugiyono's book (2018: 246) qualitative research data analysis is carried out during direct data collection and after data collection is completed in a certain period. data collection directly and after data collection is complete within a certain period.

3. RESULTS AND DISCUSSION

A. Face To Face Dialogue

According to Ansell and Gash (2007), face-to-face dialog is not merely a negotiation. This direct dialogue can minimize antagonism and disrespect from the stakeholders involved. Where face to face is not just for face-to-face meetings but to make all parties involved work together and achieve the expected goals, The Environmental Agency, Tourism Agency, PT Tua Ganda and Community Cage Owners also conduct face-to-face meetings in designing and running activities with the community. The face-to-face dialog conducted based on the interview said:

“As for the meeting, we have scheduled the meeting 2 to 3 times a year, not often because each agency also has a lot of activities, so we cannot be forced to continue to meet” (interview with Mr. Rickson Panggabean as the Head of the Environmental Planning and Management Division at the Dairi Regency Environmental Service Office on July 11, 2024).

Face-to-face dialog is a means of meeting directly at one table between stakeholders and the community and the private sector. The Environmental Agency, Tourism Agency, PT Tua Ganda and the community of cage owners conducted the face-to-face dialog stage. This is done to unite the vision and mission to match the expectations and ideals of the vision

of the Dairi Regency, namely Optimizing potential management. The Environmental Agency, Tourism Agency, PT Tua Ganda and the Community of Cage Owners also conducted direct meetings in designing and running activities with the community and the community.



Figure 1. Meeting to Control Floating Net Cages

In its implementation, the discussion process went well, this is evident from the differences of opinion between the community, the Environmental Agency, and PT Tua Ganda after the face-to-face meeting, which resulted in the demolition of the first phase, which based on the meeting has avoided antagonism and disrespect from the stakeholders involved. Where the community voices the results of the meeting between floating net cage owners and the agency approves the results of the face-to-face meeting with the community. At this stage, although it is starting to run, it still needs to be done consistently and efforts to increase regular meetings.

B. Trust Building

The collaboration process has a core of trust, the existence of trust between the parties involved is the starting point in collaboration. Negotiation is not the only center of collaboration but building trust between parties. Building trust is a phase used to form a process of mutual understanding between the parties involved in order to create a commitment to carry out collaboration.

The lack of stakeholder involvement in building trust has led to hesitancy from the community in implementing the program. “Actually so far there is nothing, but seeing from Simalungun, whose regent even supports the people who own the cages, we are thinking whether only dairies are being removed, this is really to remove the cages as a whole or not, if not all cages on Lake Toba are removed, of course we don't want it, and do not trust the agency, at this time we also doubt the agency, especially now that the removal of the cages suddenly stops, like playing games, automatically we are also silent, even better it does not need to be removed” (interview with Mr. Rustam Pintubatu as Silalahi III Community at Mr. Rustam's house on July 12, 2024)

Efforts to build continuous trust between stakeholders involved based on this publishing process are not appropriate, where in building trust the Environment Agency only makes one effort to build trust where it also does not make the community believe in these efforts, the community only appreciates the decision of the government to dismantle by believing that the dismantling is only partially carried out, coupled with the absence of involvement from the tourism office in efforts to build trust in running this zero floating cage program makes the Silalahi community even more hesitant to run this program.

The community doubts the work of the Environment Agency and Tourism Agency and feels that the program will

harm the community. For this reason, building trust cannot be seen as a separate stage from the face-to-face dialog indicator. In addition, in this collaboration process, based on the results of the research, that trust between the sectors involved can be built is also due to the level of seriousness and commitment of each sector involved in running this zero floating net cage program.

C. Commitment To Process

Building commitment is one of the most important steps in the collaboration process. Commitment relies on trusting each party involved to respect the perspectives and interests of the other. The mutual commitment that is created is a form of common goal to achieve mutual benefits. Commitment is built on the awareness of interdependence between each agency involved and on the realization that goals will be easily achieved if collaboration is carried out rather than being carried out only by each agency alone.

The tourism office does not have a commitment in carrying out its duties to provide education and counseling to the community, where the community does not get education and counseling in this collaboration process so that the community in committing also believes that these cages will be partially reduced, where the community only holds on to their beliefs to commit to running this zero floating cage program, so the tourism office has a big role in providing education and counseling to the community so that the collaboration process of this zero floating cage program can run well.

Commitment is the motivation to engage or participate in collaborative governance, based on the statement above that during the collaboration process the zero floating program has not gone well, where the lack of involvement of stakeholders has been ratified, which is in accordance with the Guidelines of the Dairi Regent Decree, the Environmental Service has carried out its duties in collecting data and dismantling the first stage, PT Tua Ganda approached the community, the community was voluntarily willing to dismantle some of the cages, but the Tourism Office has no responsibility in providing education and counseling, this shows that there is no attitude of participation from the tourism office to run this program.

Collaboration is inseparable from indicators of face-to-face dialogue and trust between each other, commitment to the process is also due to the success of this collaboration in conducting face-to-face dialogue and building trust between each other so as to create a sense of interdependence to work together to run the program. The more dependent an actor is in the collaboration process, the stronger the commitment to the relationship.

D. Share Understanding

Knowledge is information that is understood by actors, making it useful to them. Knowledge that is not well distributed can confuse the collaboration actors, due to the ambiguity of the information obtained. In collaboration, knowledge is mostly distributed at joint meetings. In the meeting, there is a delivery of the results of the achievements of each actor, then discussion and joint decision-making which is important and needed knowledge.

Shared understanding is also defined as the process of equalizing understanding related to information needed in overcoming a problem faced as explained in the interview results: "Of course, all data and information is made openly,

so that everyone understands each other and there are no misunderstandings about this program later. Moreover, Silalahi and Sidikalang are close together, so there is nothing to hide, in our portal there is already news related to these cages, be it the demolition, the number of remaining cages, everything is already in our portal" (interview with Mr. Rickson Panggabean as Head of the Environmental Management and Planning Division of Dairi Regency at the Dairi Regency Office on July 11, 2024).



Figure 2. WhatsApp Grup Asosiasi KJA SS

Indicators of sharing understanding can work well if each sector involved in this collaboration process has a sense of dependence on each other and an understanding of common goals. In the process of sharing information has been carried out by each related field. As carried out by the Environmental Service, they provide information or data that is not immediately shared, but the data or information is re-examined for the suitability of existing data and facts that occur. With the crosscheck of data, the recipient of information or data is not wrong in making decisions, from PT Tua Ganda and the community with the formation of the SS Association Group through Whatsapp, so that all information and data can be accessed through the group, and the community can easily access data and information that has been shared in the group. Thus, in carrying out their respective duties, the relevant stakeholders can run according to the agreed vision and mission.

The process of shared understanding or information sharing has not been implemented optimally, where in providing information and data related to the curbing of silalahi cages, only data and information on the number of cages is not related to the budget regarding the dismantling of cages between the Environmental Service, the Tourism Office, and the Silalahi Community of floating net cage owners, preferably from this process of mutual understanding can produce solutions to the needs and know the objectives of each party involved, and can complement the shortcomings and advantages of the parties involved.

E. Intermediate Outcome

Intermediate outcomes are explained as an important process used to be able to provide the results of success for a collaboration. This success will be able to provide feedback on the collaboration process, as explained in the interview results that:

"At the time of the first dismantling, the tourism office also came to witness, there has indeed been a reduction, in the first stage alone 200 cages were cut, that this program should be able to run smoothly" (interview with Mrs. Nova Monalisa Situngkir as Head of Tourism of Dairi Regency at the Dairi Regency Tourism Office on July 11, 2024).



Figure 3. Phase I Cage Demolition

The zero floating cage program in Silahisabungan waters is an unexpected temporary impact, which is in accordance with the opinion of the Environmental Service which states that this program can actually run, this can be proven by the first phase of dismantling that has been carried out, but there are obstacles related to the lack of budget and lack of communication between the stakeholders involved, such as the absence of commitment from the Tourism Office to socialize and educate the public regarding Silahisabungan free from cages, and the lack of strategy from the Environmental Service in building trust among the Silalahi community causing obstacles to the zero floating net cage program in Silahisabungan waters.

The results of the collaboration process show that there are still many obstacles experienced in the success of this program and people who are not willing to dismantle the cages, which where this Floating Net Cage is a good cultivation if utilized properly and in accordance with lake levels, where Smart Floating Net Cages as an innovative environmentally friendly cultivation system in lake and reservoir waters and have been adopted in the Jatiluhur Reservoir, West Java, where no complete dismantling is carried out, but adopting KJA Smart. KJA SMART is a water management system with recirculation and aquatic plants as an innovation to existing conventional KJA, where this technology utilizes plants to improve water quality so that KJA continues to run without causing conflict. Where this shows that conducting a comprehensive dismantling is not the only way to reduce Lake Toba pollution due to floating net cages, but by adopting KJA Smart can be an alternative to making cages remain, so that the community's economy is maintained, opening up jobs, and water quality is maintained.

4. CONCLUSION

Based on the research that has been conducted, the Collaborative Governance process in Overcoming Lake Toba Pollution due to floating net cages in Silalahi III Village, Silahisabungan District, Dairi Regency. face-to-face meetings have been held between the relevant stakeholders, where a decision was made to carry out the first stage of dismantling carried out by all involved. Building or building trust in each activity actor has not been carried out continuously and intensely and there has been no delivery of a clear understanding of the purpose and objectives of the zero floating net cage program to the Silalahi community, so there is no trust built. Commitment formed in the Silalahi community and PT Tua Ganda is a sense of respect for carrying out the Program that has been made by the government, but the Tourism Office does not have Commitment To Process because there is a sense of not having the responsibility to run the Floating Net Cage Program because the program is not in accordance with the Tourism Office. The main problem that becomes an obstacle in realizing a clean Lake Toba is the absence of regulations related to the licensing of floating net cage cultivation. Licensing for the cultivation of floating net cages (KJA) is

important to avoid damage to marine space and ensure that marine space utilization activities are carried out according to regulations. When there are no licenses to build cages, the collaborative process can be more complicated and lengthy due to legal and regulatory uncertainty. In these situations, the success of the collaboration relies heavily on the strong commitment of each stakeholder to stay engaged and work towards a solution.

Based on State Administrative Law, the State has the function and authority to control, regulate, supervise and even manage production resources in the territory of Indonesia. This is the duty of the state as one of the preventive measures in reducing environmental damage as a result of economic development. Through its power, the state utilizes all of its instruments to achieve citizens' rights to a good and healthy environment. By granting a license, the government allows a person or business entity that submits an application for a license to carry out a certain action or activity, whether it is an action or activity that is prohibited or not prohibited. This relates to the imposition of an action of the person or business entity which, in the public interest, requires special supervision over it. This is a broad description of the meaning of a license.

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