

The Influence of Stakeholder Roles on Environmental Sanitation Management in Coastal Settlements of North Sumatra

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ABSTRACT

Sanitation is an important factor in public health. One area that has a high level of difficulty in sanitation management is the coastal area. According to the World Health Organization (WHO), Indonesia occupies the third position of countries that have poor sanitation. The purpose of the study was to determine the effect of stakeholder roles on environmental sanitation management in coastal settlements in North Sumatra. This research uses an analytical descriptive approach with a cross-sectional study design, this type of research is Quantitative research with the type of data used is primary data and data collection methods by random sampling. The population used in this study were 107 respondents. After surveying respondents, the data were analyzed descriptively categorically by looking at the frequency distribution, mean value (mean), standard deviation, then statistical testing through the Spearman Rho correlation. It is known that the results of research on the role of stakeholders on environmental sanitation management with a correlation value of 31.2% which can affect environmental conditions. Based on the results of statistical analysis and tests, it can be concluded that there is an influence of stakeholder roles on environmental sanitation management.

Keywords: Stakeholders, sanitation management, coastal settlements

INTRODUCTION

The degree of human health is an important element in efforts to increase the Human Development Index (HDI) of the Indonesian people, which is not only determined by health services, but also dominant are environmental health conditions and community behavior.¹ In 2011 global sanitation coverage reached 64%. The sanitation problem in Indonesia is still one that has a major impact on public health and environmental balance. Based on data from UNICEF in 2010, poor sanitation accounts for 88% of child deaths from diarrhea worldwide.² According to the World Health Organization (WHO) in 2017, Indonesia is the third country with poor sanitation.³ according to research conducted by Misdayanti (2021) the scope of proper sanitation is the availability of facilities and services for clean water and disposal of human waste.⁴

Based on research conducted by Gustiani & Dwiningtias Environmental sanitation is the health status of an environment that includes housing, storage of feces or feces, provision of clean water, means of garbage disposal, and sewerage this is also commonly

referred to as basic sanitation. basic sanitation. Basic sanitation is very important to do in order to maintain the quality of clean and healthy environmental sanitation. With good and healthy environmental sanitation, the community will not be easily affected by disease. Environmental conditions that are not clean and healthy are a major factor in people contracting diseases. Especially environment-based diseases, such as diarrhea. Diarrhea is one of the diseases that can be caused by a dirty environment that triggers germs, viruses, fungi, and so on. Diarrhea disease has 3 dominant factors, namely clean water, fecal disposal and waste.

Indonesia is an archipelago with 70-75% of its territory in the form of sea waters with a length of 81,000 km. when compared to other countries, Indonesia's water area is the second largest after the United States. In addition to being an archipelago, Indonesia is also said to be a maritime country. Based on article 46 of the United Nations Convention on the Law of the Sea, an Archipelagic State means a State consisting entirely of one or more islands and may include other islands. Furthermore, it is emphasized in article 2 paragraph (1) of Law of

the Republic of Indonesia No. 6 of 1996 concerning Indonesian waters. The Republic of Indonesia is an archipelagic state. The entire Indonesian sea area (Total Indonesian Water) is 5.8 million km. As mandated in the Preamble of the 1945 Constitution of the Republic of Indonesia that the purpose of the establishment of the Republic of Indonesia, among others, is public welfare, and Article 33 paragraph (3) of the 1945 Constitution of the Republic of Indonesia "The land and water and the natural resources contained therein shall be under the control of the state and shall be used for the greatest prosperity of the people".¹⁴

Coastal is a place or area where land boundaries with seawater, in the direction of land that still smells with the properties of the sea, such as dry and watery land, tides, sea breezes and salty water, while towards the sea which is still influenced by natural processes that occur on land such as the flow of fresh water caused by humans on land such as pollution and deforestation.¹⁴ Coastal areas are the meeting point between marine and terrestrial areas, where this area is an area of interaction between terrestrial ecosystems and marine ecosystems that are very dynamic and mutually influencing, this area is very intensively utilized for human activities such as: government centers, settlements, industry, ports, aquaculture, agriculture and tourism. Beaches have a dynamic balance that tends to adjust the shape of the profile so that it is able to destroy the energy of incoming waves. Normal waves that come will be easily destroyed by the beach mechanism, while large waves / storms that have large energy even though they are short will cause erosion.¹⁵

According to research conducted by Nurmaisya & Susilawati (2022), coastal areas are areas that have the potential to experience high pollution impacts because most human activities are in this area.⁵ Coastal communities are defined as groups of people who live in coastal areas and whose economic livelihoods depend directly on the utilization of marine and coastal resources. The coastal area is a dynamic ecosystem, consisting of interrelated subsystems of land and coastal waters. Coastal areas also have the potential for productive natural resources, both biological and non-biological natural resources. But on the other hand, coastal areas also have several problems in their management, both in terms of environment and socio-economy.

Every human basically needs a healthy and conducive living environment. The environment is expected to be free from various forms of pollution. We need to know that basically environmental changes are

determined by human attitudes and protection of the environment. In the utilization of natural resources, both biological and non-biological, greatly affects the condition of the environment and can even overhaul the system of life that is already balanced between life itself and its environment. The community in this case certainly plays an important role in maintaining and protecting the environment. Humans in utilizing natural resources must of course pay attention to their purpose, and the effects caused by their use, which if left unchecked will have an impact on the growth ecosystem of each existing environment. We need to know that the environment plays a very important role in people's lives, where every community definitely needs a clean environment and away from pollution, one of the roles of the community in protecting and managing the environment is the creation of the Law on Environmental Protection and Management, hereinafter abbreviated as UUPPLH, which is a regulation made in order to ensure the fulfillment and needs of the right to the environment in its protection and management.⁶

In terms of running their lives, humans need a healthy and clean environment to create a comfortable environment. One of the legal products that can realize this and has been passed by the government is Law Number 32 of 2009 concerning Environmental Protection and Management. The law, which came into force in October 2009 and was recorded in the State Gazette of the Republic of Indonesia in 2009 Number 140, replaced the role of Law Number 23 of 1997 concerning Environmental Management.⁷

Environmental management that includes prevention, control of damage and pollution, and restoration of environmental quality requires the development of various policies and programs, as well as activities supported by other environmental management support systems. The system includes institutional stability, human resources and environmental partnerships, in addition to legal and regulatory instruments, information availability and funding. One of the objectives of environmental protection and management as contained in Article 3 of Law Number 32 of 2009 concerning Environmental Protection and Management, hereinafter abbreviated as UUPPLH, is to ensure the fulfillment and protection of the right to the environment as part of human rights.⁷

According to Law No. 32 of 2004 concerning Regional Government, in the context of implementing regional government in accordance with the mandate of the 1945 Constitution of the Republic of Indonesia, regional governments regulate and manage

their own government affairs to accelerate the realization of community welfare through improvement, service, empowerment and community participation. Nationally, a healthy Indonesia will be achieved if the provinces are healthy, districts and cities are healthy. Furthermore, if the districts and cities are found to be healthy, healthy sub-districts and villages will be achieved.⁸

In realizing a healthy Indonesia, it is very dependent on several things, including the readiness of all village government officials or stakeholders who play an important role for the allocation of this. In designing a village, there will be constraints from various stakeholders involved, namely primary stakeholders, key stakeholders, and secondary stakeholders. In this case, all village government officials act as key stakeholders who have legal authority in all decision-making matters. As we know, apart from the village government apparatus, the community also has a very important role by providing participation in everything that has been planned or arranged by the village government apparatus. In general, community participation can take the form of all community activities such as identifying problems, making decisions, providing alternative solutions through thoughts, time, materials and all activities related to the program. Community participation is included in primary stakeholders because stakeholders are directly affected both in terms of positive and negative things from a plan.⁹

Apart from the village government apparatus and community participation, private institutions, self-help organizations, banks and other supporters are also included in one of the stakeholders that play an important role. The institutions mentioned above included in secondary stakeholders where these stakeholders are parties who do not have a direct interest in a plan but have a very large concern for the development process.

From the above statement, the researcher is interested in conducting research on the influence of the role of stakeholders on environmental sanitation management in coastal settlements in North Sumatra. which aims to determine whether or not there is a role for a stakeholder in environmental sanitation management. In this study, researchers focused on one area in Percut Sei tuan District, Deli Serdang Regency, North Sumatra Province.

Percut Sei Tuan Sub-district is a 17,079 km² (6,594 sq mi) sub-district located just east of Medan city, which at the 2010 Census had 384,672 inhabitants; and at the 2020 Census had 402,468 inhabitants, making it one of the

most populous districts in Indonesia. It consists of twenty 'villages' (mostly suburbs of Medan), which are listed below with their areas and populations at the 2010 Census and 2020 Census.

METHOD

This study used an analytic descriptive approach with a cross sectional study design. This research was conducted in Percut Sei Tuan District, Deli Serdang Regency, North Sumatra Province which was carried out in November 2022.

The population used in this study were 107 respondents from the community of Percut Sei Tuan District, Deli Serdang Regency, North Sumatra Province. The sampling technique used by researchers is random sampling, where each respondent has the same opportunity to be selected.

The type of data used in this research is primary data. Data taken directly in the field through face-to-face interviews with the community. Primary data is needed to see or validate and obtain information related to the influence and role of stakeholders on environmental sanitation management in coastal settlements in North Sumatra, especially Percut Sei Tuan sub-district.

After surveying respondents in the Percut Sei Tuan District area, Deli Serdang Regency, North Sumatra Province, the data was transferred into a statistical-based application by passing the data management stage according to the following steps: cleaning, coding, editing, and processing. After going through these 4 stages, the data were analyzed descriptively categorically by looking at the frequency distribution, mean, standard deviation, then statistical testing through the Spearman Rho correlation.

RESULT AND DISCUSSION

From the data on the characteristics of respondents in table 1, the highest is from the age range 16-25 years, totaling 33 respondents or around 30.8%, while the lowest is from the age range 56-65 years, totaling 1 respondent or around 0.9%. Regarding the level of education of the respondents, the highest was high school, totaling 74 respondents or around 69.8%, while the lowest level of education was elementary school, totaling 5 respondents or around 4.7%. Regarding the occupation of the respondents, the highest was housewives (housewives), totaling 50 respondents or around 46.7%, while the lowest was entrepreneurs, totaling 1 respondent or around 0.9%.

Table 1. Age, Education, and Occupation Distribution (n=107)

Variabel	N	%
AGE		
16 - 25 Years	33	30.8
26 - 35 Years	25	23.4
36 - 45 Years	22	20.6
46 - 55 Years	26	24.3
56 - 65 Years	1	0.9
EDUCATION		
Elementary	5	4.7
Junior High	16	15
High School	74	69.2
S1	12	11.2
OCCUPATION		
Civil Servant	5	4.7
Teacher	6	5.6
Self-Employed	12	11.2
Entrepreneur	1	0.9
Farmer	4	3.7
Student	10	9.3
Housewife	50	46.7
Not Working	6	5.6
Laborer	3	2.8
Entrepreneur	10	9.3

Results of the Role of Stakeholders on Environmental Sanitation Management in Coastal Settlements

The average community feels good about environmental sanitation management (mean = 119.06). Furthermore, it is known that the role

of the private sector is on average quite good (mean = 112.80). Judging from the influence and role of the private sector with the government, the average is in the good category in carrying out all the cooperation and programs that have been arranged with each other (mean = 120.09). (Table 1).

Table 2. Distribution of Stakeholder Roles

Variabel	Mean	Std. Deviation
Government Role	119.06	436.43
Role of Private Sector	112.80	473.00
Role of Private and Government	120.09	525.12

The results of the Spearman Rho statistical test state that overall the variables, namely the role of government, the role of the private sector, the role of the private sector with the government, have a significant relationship with environmental sanitation management in coastal settlements with a p-value = 0.065 < 0.05 (sig α = 5%) with the highest positive correlation direction of 0.312, it can be said that there is an influence and role of stakeholders on environmental sanitation management in

coastal settlements in North Sumatra. The above is also in line with research by Manalu et al. (2023) showing that the Ulumaham Village government controls and manages the environment by strengthening community harmony through mutual cooperation activities.¹⁰ In addition, the village government also utilizes existing natural resources to be managed into tourist attractions so that it can drive the economy of local residents. (Table 3).

Table 3. Spearman rho Correlation Statistical Test Results (n = 107)

Variabel	Coefficient Correlations	P-Value	Std.Error	95%CI
Government Role	0.181	0.065	0.094	0019-0.112
Role of Private Sector	0.263	0.019	0.099	0.000-0.044
Role of Private and Government	0.312	0.000	0.100	0.000-0.028

It is known that the study results on the role of stakeholders on environmental sanitation management with a correlation value of 0,312 which can affect environmental conditions. the next stakeholder variable shows the result of the role of the private sector of 0.263 and the lowest variable of 0.181 regarding the role of the government. This is in line with the research of Rahman & Lestario (2020). According to them, the government is trying to carry out programs to improve the capacity and quality of sanitation management in the regions, especially to avoid the impact of poor sanitation conditions in Indonesia.¹¹

Maghfiro (2013) mention that the role of government is seen in five main forms, namely. 1. As a Modernizer, the government acts to lead a developing society towards modernization and abandon traditional ways and lifestyles that are no longer following the modern way of life. 2. As a catalyst, the government must be able to take into account all factors that influence national development. Controlling negative factors that tend to become obstacles so that their impact can be minimized, and can recognize factors that encourage the pace of national development so that they can attract the maximum benefits. 3. As a Dynamist, the government acts as a provider of guidance and direction to the community aimed at attitudes, actions, behavior, and good ways of working that can be used as role models for the community in carrying out development. 4. As a Stabilizer, the government is a stabilizer that maintains national stability so that it remains stable and under control so that the policies that have been set can be implemented properly and plans, programs, and operational activities will run smoothly. 5. As a pioneer, that the government does not only carry out its function as a policy formulator and preparation of development plans, but also as an innovative development implementer who is able to solve various existing challenges and limitations.¹²

The environment is space and all objects, forces, conditions and organisms, including humans and their behavior, affecting the livelihoods and welfare of humans and other living things. Environmental management is an integrated effort to preserve environmental functions which includes the wisdom of structuring, using, developing, maintaining, restoring, monitoring and controlling the environment.

The purpose of environmental management is to achieve a harmonious relationship between humans and the environment with the aim of building Indonesian people as a whole, controlling the wise use of

resources, realizing Indonesian people as environmental builders, implementing environmentally sound development for the benefit of present and future generations, protecting the country from the influence of activities outside its territory.

In environmental management, the government is obliged to: 1. Realize, grow, develop, and increase awareness and responsibility of environmental management decision makers; 2. Realize, grow, develop, increase awareness of the rights and obligations of the environmental management community; 3. Realize, grow, develop and increase partnerships between communities, businesses and government efforts to maintain the carrying capacity and capacity of the environment; 4. Formulate and implement national environmental management policies, ensuring that carrying capacity is maintained and environmental capacity Development and application of prevention tools, Preventive and proactive efforts to prevent the loss of environmental support and capacity; 6. Utilization and development of environmentally friendly technologies Life; 7. Carry out environmental research and development; 8. Provision and dissemination of environmental information to the public; 9. Reward individuals or institutions that contribute to environmental field projects.

Koesnadi Hardjasoemantri in research by Fadhillah H et al (2020) states that the right to the environment is a subjective right owned by everyone. The realization of the right to a good and healthy environment is actually an effort to realize the fulfillment of other human rights, especially the right to life, the right to a decent standard of living, the right to health, and other rights whose fulfillment is closely related to good and healthy environmental conditions. Siti Sundari Rangkuti also stated that the juridical interpretation of the right to a good and healthy environment must be realized through the establishment of various legal channels, as an effort to protect the law for the community in the environmental field.⁷

Environmental protection is necessary because the earth's population is increasing every year. Increased population means increased demand for water, food, timber and other resources from the natural environment. Increased demand can drive resource exploitation, even in areas protected by conservation laws. To this end, successful conservation efforts often rely on shared responsibility between communities, organizations and governments. The Village Government plays a role in the management

and administration of the Village to realize the village economy.

The Village Government is absolutely responsible for what has been done to the community to fulfill its duties, authorities, and obligations as stipulated in laws and regulations, including in terms of providing a good environment. The relationship between the role of the village government and the environment in this study is emphasized on environmental protection efforts.¹⁰

The next factor that is very instrumental in the management of environmental sanitation is the role of the community must exist in every matter, including in maintaining environmental sanitation. Environmental pollution and all its problems can be overcome if all existing components want to care and want to take responsibility. Community participation can be started from public awareness of information about the environment, both the benefits and impacts that occur.

The above is also corroborated by Rahman & Lestari (2020) that in fact every citizen from early childhood education to adulthood has received socialization and internalization of clean living values. Children are taught to throw garbage in its place or trash cans that have been provided, jointly clean the class, and clean the school yard, so the process has been going on since they started socializing with the surrounding environment.¹¹

Thus, efforts to fulfill access to participation to the community in environmental management is a prerequisite in the fulfillment of the right to a good and healthy environment as mandated in the Law of the Republic of Indonesia. as mandated in the 1945 Constitution of the Republic of Indonesia. However, on the other hand, although the government has made various efforts, the government's efforts will not be implemented and realized properly if they are not supported by the awareness of the surrounding community. People should participate and support the government's efforts to create a clean and healthy environment. Start from yourself to throw garbage in its place, if you see garbage we throw it away even though it is not our garbage, do community service regularly, or can also plant green plants so that the environment becomes cooler and more comfortable. Even if it is only from small things, our actions can trigger other people to realize the importance of environmental cleanliness. others to realize the importance of environmental cleanliness.⁷

Based on the results of research and the results of several previous studies cited, the implementation of environmental management

activities in an area must be carried out effectively and efficiently, in the sense that each party involved can carry out their duties properly and responsibly.¹³ This was also stated by Kusuma Diah Sintia, et al, coordination and collaboration between stakeholders are needed in the running of a program. Coordination between stakeholders can create a balanced collaboration.

CONCLUSION

Based on Law No. 32 on Protection and Environmental Management in 2009. Protection and Management Environment is a systematic and integrated effort, carried out for the function of the environment and preventing pollution or environmental damage. environment and prevent pollution or environmental damage including planning, utilization, control, maintenance, monitoring and enforcement. Based on the results of research on the influence of the role of stakeholders in the management of environmental sanitation in the coastal areas of North Sumatra, it is concluded that in the management of environmental sanitation, the government is good enough to carry out its role as a facilitator, catalyst and coordinator for communities in the coastal areas of North Sumatra.

The results of the Spearman Rho statistical test state that overall the variables, namely the role of government, the role of the private sector, the role of the private sector with the government, have a significant relationship with environmental sanitation management in coastal settlements with a p value = 0.065 < 0.05 (sig α = 5%) with the highest positive correlation direction of 0.312, it can be said that there is an influence and role of stakeholders on environmental sanitation management in coastal settlements in North Sumatra.

The level of public awareness and participation in carrying out programs provided by the government and participating in planning, implementing, utilizing the results and evaluating the community in the North Sumatra coastal area is good enough to maintain environmental sanitation. Good cooperation between the government and institutions or the private sector is also very helpful in the management of environmental sanitation sourced from funding assistance, community empowerment and direct participation in activities or health services that have been provided.

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