

Influences of Environmental Pollution on Socio-Economic Factors in Coastal Areas Pahlawan Village, Tanjung Tiram District Batu Bara Regency

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Abstract: *The polluted environment will cause a variety of adverse effects such as the death of flora and fauna, poisoning, and pollution of water, air and land. Therefore, we must make the environment occupied by the people to be beautiful and without pollution. This research is to analyze the impact of environmental pollution on socio-economic factors in coastal areas. To find out the environmental pollution that will be studied is on water pollution, air pollution and soil pollution. Whereas the socio-economic factors that will be seen are quality of life, social relations, education level, social position, access to capital, business and technology, income and expenditure. The results of the study were able to find out which variables are needed to overcome environmental pollution against socio-economic factors. In fact, their social position remains marginal in the process of unequal and exploitative economic transactions so that as producers, fishermen do not get a large share of income. The luckiest parties are large-scale fish traders or intermediary traders. These traders actually became economic rulers in fishing villages. This condition continues to this day which afflicts fishermen without having to know how to end it. This has given birth to a number of crucial socio-economic problems in the fishing community in the Heroes Village.*

Key Words: *Environment, Pollution, Waste, Socio-Economic Factors.*

1. INTRODUCTION.

Development will continue and cannot be stopped, because development is directly proportional to the increase in population and the number of community needs. The more population, the more land that must be used to make settlements where they live. This means that more and more residents, the more the need for basic materials that cause development will be more numerous and growing. According to Azwar in Fatimah [1] states that sociologically coastal communities have social characteristics that are different from other communities, due to differences in the characteristics of the resources faced. The economic well-being of coastal communities is highly dependent on fisheries resources both capture fisheries in the sea and aquaculture, which until now access is still open (open access), so the environmental conditions of coastal and marine areas determine the sustainability of their socio-economic conditions [2].

Economic activity and increasing population cause problems in coastal areas and in the waters. Damage to natural resources (SDA) is caused by the occurrence of power imbalances which are characterized by the inequality of interests in the management and use of natural resources. Pollution in the coastal areas of Batu Bara Regency is one form of the ecological crisis and one form of damage to sea water resources caused by the disposal of household waste into the sea. Waste from households thrown into the sea by the community causes environmental pollution of the coastal area. Access and supervision of the community towards the close natural resources is the reason why people dispose of garbage around their homes and the sea where they live [3]. The perception that the sea is a no-man's-land whose flow will carry their waste is lost from the view of making the behavior of throwing garbage carelessly into the culture of the surrounding community from generation to generation [4].

When viewed the size of the population and the high growth rate are the most important factors in environmental problems. Both challenges, both the population and the high rate of population growth try to be overcome by development in all sectors. The environmental aspect has become one of the emphasis in the concept of sustainable development in Indonesia and to achieve the development goals it requires a clear picture of the conditions and problems that occur in the environment so that environmental management can be carried out maximally [5].



Figure 1. Problem of Influence Pollution.

The results of preliminary observations were made, that in order to be able to restore the balance of the damaged environment it is important to create diversity in the environmental system. The more diverse the contents of the environment the more stable the system [7]. The variety of contents in the environment will increase the carrying capacity of the environment to accommodate disturbances. Development essentially creates diversity and diversification in economic activities. The more diverse economic activities the greater the country's economic capacity to grow fast and stable. However, diversity in economic activities must be in line with efforts to diversify environmental systems. This is only possible if the environment has been calculated in the development process and harmonization between the development of a diversity of economic activities and the development of a diversity of environmental systems has been sought. This research can be a benchmark for the success of the government in carrying out various strategies to improve the coastal area [8]

2. LITERATUR REVIEW.

2.1. Pollutions.

Environment is an inseparable thing from our lives because it has an important role for living things. The polluted environment will cause a variety of adverse effects such as the death of flora and fauna, poisoning, and pollution of water, air and land. Therefore, we must make the environment occupied by the people to be beautiful and without pollution.

Environmental pollution is one of the biggest problems being faced in Indonesia, especially in coastal areas. According to Kemp, in Santos's book [13] that pollution is habitat contamination, the utilization of natural resources that cannot be decomposed. Every use of natural resources that exceeds the natural capacity to restore itself can result in environmental pollution. Pollution is one of the things that becomes an environmental problem. If the solution to this environmental problem is not sought, the sustainability of people's lives will be worrying because nature is a source of fulfillment of all human life needs such as water, air, food, medicine, aesthetics and others. Natural damage is the same as the carrying capacity of human life.

2.2. Socio-Economic Factors.

The social categories of fishermen in Desa Pahlawan are mostly traditional fishermen or labor fishermen. They are the main contributors to the quantity of capture fisheries production in their villages. In fact, their social position remains marginal in the process of unequal and exploitative economic transactions so that as producers, fishermen do not get a large share of income. The luckiest parties are large-scale fish traders or intermediary traders. These traders actually became economic rulers in fishing villages. This condition continues to this day which afflicts fishermen without having to know how to end it [9].

This has given birth to a number of crucial socio-economic problems in the fishing community in the Heroes Village [10]. However, the structural shackles in trade activities are not the only factors that can cause social problems in fishermen, other factors that are synergistic, such as the increasing scarcity of fisheries resources, damage to coastal and marine ecosystems, and limited quality and capacity of technology arrests, low quality of human resources, inequality of access to fisheries resources, and weak policy protection and two development facilities for fishing communities are still factors that cause problems [11].

The deteriorating condition of social welfare in fishermen is felt in coastal villages whose waters experience overfishing (catching more) so that the catch or income earned by fishermen is fluctuating, uncertain, and decreases over time. In this situation, fishermen households will always face three very crucial issues in their lives, namely:

- (1) Fight to meet the needs of everyday life
- (2) There is no fulfillment of educational needs for their children
- (3) Their limited access to health insurance.

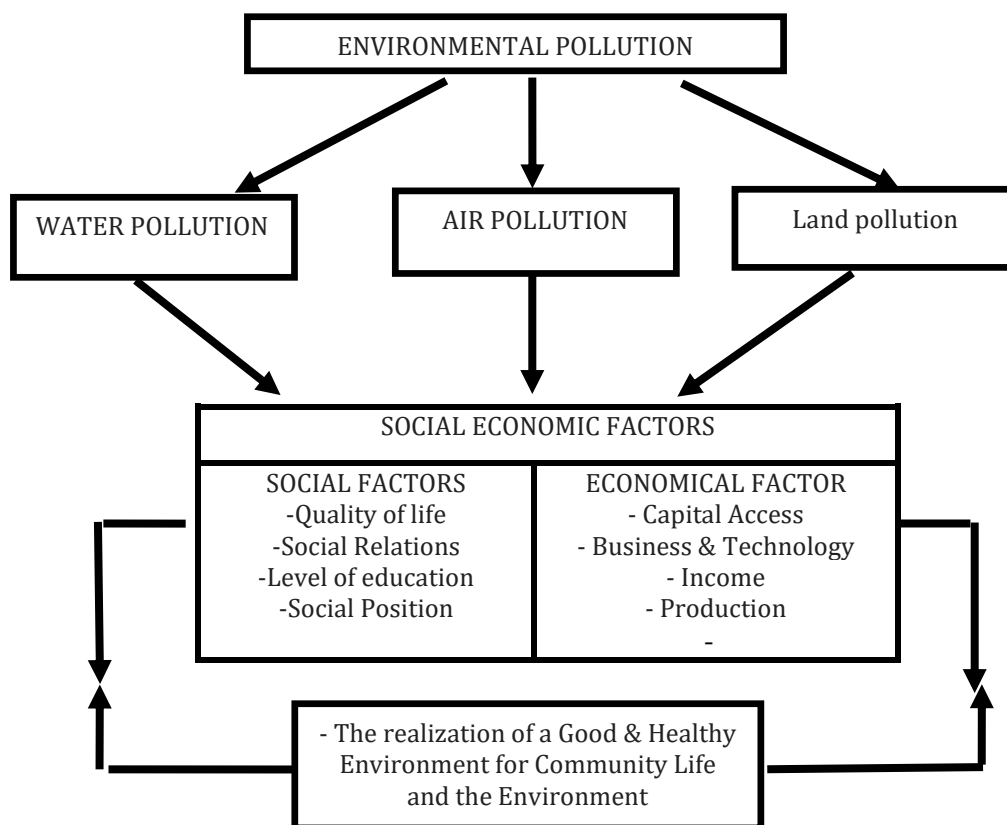
The three accesses above are the most basic necessities of life in fishermen households, which are often not fulfilled optimally. With such realities of life, it is very difficult to formulate and develop the quality of fishermen's community resources, so that they can have optimal capabilities in managing the potential of existing coastal marine resources. Lack of or lack of creative ability of fishing communities to overcome socio-economic conditions in their regions will encourage them to enter prolonged underdevelopment tools so that they can disrupt the achievement of the objectives of development policies in the field of marine and fisheries. For this reason, it is necessary to think of alternative strategic solutions to overcome the problems of socio-economic life faced by fishing communities. In this case, a formally designed social security program is one of the strategies that should be considered to overcome the socio-economic crisis that afflicts the lives of fishing communities [12].

3. METHOD OF RESEARCH.

The material that will be used in this study is related to knowing the environmental pollution that will be studied is on water pollution, air pollution and soil pollution. Whereas the socio-economic factors that will be seen are quality of life, social relations, education level, social position, access to capital, business and technology, income and expenditure. The results of the study were able to find out which variables are needed to overcome environmental pollution against socio-economic factors

3.1. Research Concept Framework

The research concept can be seen in the following picture:



Figures 2. Paradigm Research.

4. ANALYZE RESULT

Sustainable development currently being carried out is environmentally sound as a basic and planned effort, integrating the environment including resources in the development process to ensure the ability, welfare and quality of life of the present generation to future generations. Preparing resources is as an element of the environment consisting of human resources, both natural and non-biological natural resources and artificial resources. By making efforts to prevent pollution, it must look at the matter of dealing with environmental quality standards, which are limits or levels of living things, substances, energy or components that exist or there must be an element of pollution which tolerates its existence in a certain resource as element of the environment. Where environmental pollution is the entry or inclusion of living things, energy substances or other components into the environment by human activities so that the quality drops to a certain level which causes the environment cannot function in accordance with its designation.

The negative impacts that have been generated from this pollution not only can endanger the life of the biota and the marine environment, but also can endanger human health or even cause death, reduce or damage the aesthetic value of the coastal and marine environment and cause socio-economic losses. Land and sea, with land boundaries covering parts of the land, both dry and submerged in water which still have the influence of marine properties such as sea winds, tides, seepage of sea water (intrusion) characterized by distinctive vegetation, while coastal boundaries towards the sea covers the outer part or boundary of the continental shelf, where the characteristics of these waters are still influenced by natural processes that occur on land such as sedimentation and freshwater flow, as well as processes caused by human activities on land such as deforestation forest and pollution.

Table 4.1. Distribution of Respondents Based on the Community's Understanding of Environmental Pollution

| Categories | Frequency | Percentage (%) |
|--------------------|------------|----------------|
| Very understanding | 30 | 24,39 |
| Understand | 18 | 14,63 |
| Understand | 45 | 36,59 |
| Do not understand | 30 | 24,39 |
| Very Understand | - | - |
| Total | 123 | 100 |

From the data above, it can be seen that the public's understanding of environmental pollution, which answers less understanding, is 45 respondents or 36.59%. While those who answered were very understanding and did not understand each of them had 30 respondents or 24.39%. And those who answered did not understand the meaning of environmental pollution as many as 18 respondents or 14.63%. The lack of understanding of the community to maintain sea conditions is one of the problems that must be addressed immediately by the local government to be able to explain and understand so that the awareness of the people of the Village of Heroes arises about the importance of the sea. The solution is to put the maritime curriculum for basic to secondary education is one form of understanding for the younger generation to safeguard the marine and coastal resources of the sea in a good way and will bring love to the sea

Tables 4.2. Distribution of Respondents by Type of House Owned

| Categories | Frequency | Percentage (%) |
|--|------------|----------------|
| Permanent (walls and concrete) | 35 | 28,45 |
| Semi permanent (wood, board and wall) | 70 | 56,92 |
| Not permanent (wood, bamboo and roaming) | 18 | 14,64 |
| Total | 123 | 100 |

From the data above, the type of house owned by the community is semi-permanent (wood, board and wall) as many as 70 respondents or 56.92%. While permanently (walls and concrete) there are as many as 35 respondents or 28.45%. The rest have 18 types of non-permanent house types (wood, bamboo and roaming) or 14.64%. The building of the villagers of Pahlawan village seemed quite dense. Where a number of house buildings whose walls stick together from one house to another. There are also a number of house buildings that have only a few centimeters between the walls of the house. The front of the house on the side of the road is usually given a fence, while those that are far from the road rarely have a fence. This, among others, is to be more free or relieved because the space due to the narrow yard. Some of the villagers' houses do not have a yard. Even if there is, the page is relatively narrow. As a result, the place to play and dispose of garbage feels inadequate. The result of the pollution to the environment that is of concern is the important impact on the environment which needs to be accompanied by a basis for consideration, namely the assessment of the importance of environmental impacts related to the size of the business plan or activities that are effective and useful. If the planned business or activity is carried out based on the impact of the business or activity on one of the environmental aspects or on and its relation to other environmental aspects within the specified boundary area. Keep in mind the impact on the environment on the basis of the possibility of a positive impact or negative impact should not be seen as a factor that each stands alone, but must be taken into account its weight in order to consider the reciprocal relationship to make a decision.

5. CONCLUSIONS.

Water pollution can have a very broad impact, for example, it can poison drinking water, poison animal food, cause imbalances in marine ecosystems, forest destruction due to acid rain and so on. The explosive growth causes the oxygen that should be used together by all aquatic animals / plants to be reduced. When the water plant dies, its decomposition absorbs more oxygen. As a result the fish will die and bacterial activity will decrease. Damage to air quality caused by various sources, both biological and non-biological sources. The narrowing of green land in urban areas also worsens the condition. Even so, it is possible for environmental pollution to occur in the countryside, because air pollution can occur everywhere. Pollution can be caused by a variety of ingredients. Both in the form of solid, liquid, or gas. Likewise with pollution that occurs in this land. this land pollution can be caused by various materials. The materials that cause this soil pollution can be materials stored in the soil itself, as well as materials that are outside the soil itself. The social relations that occur within the fishing community are the result of interactions with their environment. This can be reflected in the settlement patterns that cluster with close proximity, visible mutual cooperation attitude when making houses, repairing fishing nets, repairing boats, and fishing gear and at traditional ceremonies, when fishing will also be carried out jointly cooperating at sea. The fishing community generally has a low level of education, causing their lack of knowledge so that it impedes the progress of the fishermen themselves, including the difficulty for the government to provide assistance in the form of counseling and modernization of equipment.

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