

Poverty And Climate Change Awareness: A Lesson From Pekalongan

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Abstract. Pekalongan coastal communities are the ones most affected by the continued decline in land surface. In conditions of such widespread information disclosure, why doesn't climate change information trigger them to know about it? This article provides a discourse on poverty and awareness of climate change in the Pekalongan Community. The method used in this research is an ethnographic study. People living in poverty tend to focus more on meeting basic needs rather than thinking about the long-term impacts of climate change. In addition, poor people have limited access to education, thereby hampering knowledge about climate change. This research is useful for handling climate change in Pekalongan which must be in accordance with the needs and context of the community. Efforts to increase awareness of climate change must be carried out through targeted policies, education and social campaigns.

Keywords: Poverty, coastal area, climate change, Pekalongan

1 Introduction

Pekalongan is one of the cities affected by climate change. There was an unpredictable tidal flood that disrupted people's lives, especially in coastal areas. CNN Indonesia stated that Pekalongan was one of several areas on the north coast of Java that was quite badly affected by tidal flooding [1]. Tidal floods in Pekalongan are caused by subsidence of land levels and rising sea levels [2]. The Reef Resilience Network and Climate Science state that rising sea water is caused by two factors, namely thermal expansion where sea water warms and expands and also the increasing melting of the world's ice layers such as glaciers, ice sheets and sea ice. These two factors are caused by global warming [3], [4].

The poor are a group that falls into the vulnerable category. The vulnerability of poor communities is becoming increasingly severe due to the impact of climate change. This negative impact will be felt by the poor, making their vulnerability even greater [5]. Further climate change could trap more people in poverty. Studies of poverty in Africa suggest that poverty has made African populations highly vulnerable to climate change [6]. In the same study, it was

stated that poor people are the group most vulnerable to the impacts of climate change, such as rising sea levels which cause damage to coastal areas, and droughts caused by heat waves.

In efforts to prevent climate change, awareness about climate change is needed. The United Nations [7] stated that efforts to prevent climate change can start from each of us. All levels of society must initiate behavior that supports climate change prevention, including poor community groups. Moreover, poor people are the group most vulnerable to climate change. The researcher's initial finding was the discovery of waste management problems in the community where this article was researched. Tidal floods that inundate residential areas are often littered with plastic waste that comes with the tidal floods. This portrait is an illustration of a problem that should be solved as an effort to prevent climate change. Changes in human behavior are an important key in preventing climate change. This can start from individual actions that pay attention to how we travel, food, waste and even electricity use. However, to achieve this action, there needs to be awareness from humans themselves, which in this case is awareness about climate change.

A study conducted by Reswita, Mulyasari and Reflis [8] found that there is a relationship between poverty and environmental degradation. However, the causes of environmental degradation are not solely caused by poverty, but rather indirect things such as human activities in utilizing the environment. Meanwhile, research conducted specifically on fishermen on the coast of Central Java and Bengkulu conducted by Mulyasari et al [9] found that there was a relationship related to understanding climate change on poverty and vulnerability in the lives of fishermen on the coast of Central Java and Bengkulu. Poverty alleviation will have a big impact on other global goals in the SDGs such as good health, quality education and green energy [10]. Priyono [11] states that awareness of environmental issues is having knowledge regarding environmental problems and an understanding of the actions needed to find solutions to these problems. In psychology, consciousness includes perception, thoughts and feelings [12]. Benjamin Bloom [13] divides human behavior into three dimensions, namely cognitive, affective and psychomotor (behavior). In more detail, indicators of human awareness of an issue are knowledge, attitudes and practices [14].

Knowledge as the first indicator of human awareness is the result of sensing a particular object, whether material, issue, topic or anything that can be sensed with our five senses. Knowledge has six levels in the cognitive domain, namely know, understand, application, analysis, synthesis and evaluation [15]. Knowledge is a very important dimension that can shape individual behavior or actions. Behavior that is based on knowledge will last for a longer period of time than behavior that is not based on knowledge [14].

Attitude is a response to certain stimuli which are still within the individual's internal domain. Attitudes have various levels ranging from accepting, responding, appreciating, being responsible [14]. Newcomb [14] explains that attitude is readiness and willingness to do something or respond to something, but attitude is not yet action. Attitude is a predisposition to act a behavior.

Action is an activity or behavior carried out by an individual or group as a response to a situation or stimulus. Action is the next level of attitude. Actions also have various levels, namely perception, guided response, mechanism and adoption [14]. Action is the crystallization of attitudes that are manifested in decisions made in real terms by individuals or groups.

Individuals or groups who can act to contribute to preventing climate change must have awareness about climate change. In short, individuals or groups must have knowledge and attitudes about climate change in order to take action to prevent climate change. In conditions of such widespread information disclosure, why doesn't climate change information trigger them to know about it? In addition, the condition of poor people directly experiences the impacts of climate change such as tidal floods, heat waves and other damage. This article provides a discourse on poverty and awareness of climate change in the Pekalongan Community. This research is useful for handling climate change in Pekalongan which must be in accordance with the needs and context of the community.

2 Method

The method used in this research is a qualitative method with an ethnographic study where the researcher stayed for some time to observe and interact with poor communities in Pekalongan City. The ethnographic study method is used as a way to understand the worldview and culture of a society. In an ethnographic approach, researchers not only study society, but also learn from interactions and experiences with that society [16].

In this case, researchers focus ethnographic studies on public awareness about climate change. The data sources for this research are observation, unstructured interviews, and documentation studies. The place of research and data collection for this research is in Nggodang Village, Kauman, East Pekalongan, Pekalongan City. Data collection was carried out during May - July 2023. Informants for this research were selected using purposive sampling, which means that informants were chosen deliberately because they met predetermined criteria. The criteria are people who live or reside in slum areas or poor communities affected by climate change, in this case tidal floods. The data analysis technique used is thematic data analysis technique combined with time, source and technique triangulation validation techniques. Data analysis was carried out from the results of observations and interviews obtained from the field and then organized well. The thematic analysis technique is one method that can be used to analyze qualitative data, in the form of texts such as observation reports, verbatim interviews, and others [17].

At a glance, Nggodang Village is in the regional government administration of Pekalongan City, Kauman Village, East Pekalongan District. Data from the P2KB Social Service [18] East Pekalongan District has 30,826 poor residents. Nggodang Kauman Village was chosen because it has several unique characteristics, such as the strategic geographic location of Nggodang Kauman Village, being in the middle of the city, near the main square and the economic center of Pekalongan City, approximately 3.5 km from the nearest beach but still affected by tidal flooding, due to the overflow of the Loji River (Pekalongan River) west of Nggodang village. From observations and preliminary research data, it was found that tidal floods often come from midday to dusk. Nggodang Village also has dense residential characteristics, there is almost no distance between houses, the majority of residential road access is only one meter wide and there is minimal sunlight.

3 Results and discussion

Poverty has an influence both directly and indirectly on climate change awareness. A weak and vulnerable economy hinders participation and awareness in efforts to prevent climate change. One of the main explanations for this phenomenon is that individuals living under the stress of poverty prioritize their basic needs such as food, shelter, sanitation, and decent work. These basic needs are a more urgent priority than the issue of climate change. They become more focused on the 'now' rather than long-term issues such as climate change. When everyday life expectancy becomes a challenge, attention to environmental issues is often neglected.

In more detail, this phenomenon can be explained from the psychological perspective of Maslow [19] who put forward the theory of needs. Maslow explained that needs at lower levels must be met first or at least sufficiently fulfilled so that needs at higher levels become motivating things to be fulfilled. Maslow created a hierarchy of human needs starting from the lowest needs, namely physiological needs, the need for security, the need for belonging and affection, the need for esteem and the final level is the need for self-actualization [20].

This phenomenon makes sense when poor people prioritize basic needs in the form of food, drink, sleep and shelter. Physiological needs, which are needs at the most basic level, must be met first before meeting needs at the higher level. Maslow further stated that physiological needs are the most basic and greatest needs that serve as the foundation for fulfilling all needs above them [21]. Hungry humans will always be motivated to eat, not to seek friends, respect, or reputation. Humans will suppress or ignore all other needs until their physiological needs are met. So it makes sense that poor people prioritize their basic needs in the form of food, drink, sleep and shelter over attention to environmental issues.

In an article examining the analysis of the needs of communities affected by tidal floods in Pekalongan conducted by Ismanto et al [22] it is explained that the priority needs of communities affected by tidal floods in Pekalongan City are the need for baby equipment and needs, clothing, sanitation, blankets, sleeping mats, medicines, clean drinking water, rice, toilet facilities and food. Apart from that, priorities for worship were also found in the form of a clean place to worship and also tools for worship such as sarongs and mukenas. Furthermore, the article also raised the hopes of the people of Pekalongan City who were affected by the tidal floods for the Pekalongan City Government in the form of relief from electricity payments (PLN), relief from payment of property tax (PBB) and relief from PDAM payments. These findings further strengthen that the needs of the people of Pekalongan City who were affected by the tidal floods are all basic needs.

This was discovered during data collection in the field. It was seen that while the researchers were out in the field, observing and talking with several community members, not a single individual talked about climate change when talking about tidal floods, even though we discussed this with our feet submerged in tidal floods. They are interested in discussing economic matters such as wages, clean water difficulties, government, religiosity and social relations. This happened to all informants with various age ranges, however, when asked about climate change, informants with a productive age range knew about it, but their knowledge was limited and did not seem interested in talking about climate change.

Apart from the priority scale having to shift due to economic conditions, poor people often do not have adequate access to education and information [23]–[25]. A deep understanding of climate change is needed to raise climate change awareness, which is obtained through education and access to adequate information resources. Individuals living in poverty have less opportunity to gain this knowledge. Researchers found that in the elderly age range, it is easy to find individuals who have dropped out of school or have not even received an education and do not know what climate change is. Meanwhile, in the younger age range of productive age, they have knowledge about climate change, although not as good. This is because currently the distribution of information is so wide and massive that in the younger age range of the productive age they have televisions, they all have smartphones and internet access in the Kampung Nggodang Kauman area is smooth which makes access to information equally fast. The problem that arises next remains the same, namely returning to the priority of their needs. Even though they have knowledge about climate change, they do not interpret it as important, do not take it and act seriously enough.

This is also reinforced by our field findings which found related to the waste problem in residential areas. Due to narrow road access for waste trucks or carts to pass through, people who live in narrow streets which are very densely populated collect waste at a certain point to be picked up by waste managers. However, because the road access is quite difficult, the waste is collected no more often than the waste on the road where there is adequate access for cars or rubbish carts to enter and transport it. This gives rise to a quite strong smell of rubbish because it emits gas from decay, and what's more, if tidal floods come, the rubbish is often washed away by tidal floods.

Even though the public has access and obtains information about climate change, this has not been able to generate action in the context of preventing climate change. In terms of awareness theory, in this case society is only at the level of knowledge that just 'knows', has not yet moved on to 'understanding' let alone 'applying' because their basic needs still need to be met based on Abraham Maslow's theory of needs.

A further finding is that the community's response to the tidal floods experienced as one of the impacts of climate change is a response from a religious perspective. We often find religious responses in the form of submission to God, considering that the tidal flood disaster was God's destiny, to jokes or jokes that people often pray by saying "Ya Rabb, Ya Rabb" so that it becomes "rob" and finally they are given rob (Ya Rabb means Ya God which when pronounced is 'ya rob'). Research conducted by Fair [26] found that religious understanding can be an obstacle to climate change action in the Pacific Islands. However, with the finding that religious understanding can be an obstacle to climate change action, this information and knowledge should instead be used to propose and design alternative approaches that adapt to the context, culture and needs of society so that education is efficient and right on target.

All of these findings are in line with the findings of research conducted by Lee et al who analyzed and found that the factors that influence the level of public awareness of climate change are economic conditions as well as education and the media [27]. Further in the article it was also found that respondents who live in countries with higher GDP tend to have a higher awareness of climate change as well. Meanwhile, education and the media have an important role in shaping the level of awareness and perception of climate change. Respondents who had

a higher level of education or who received information about climate change had a higher level of awareness about climate change [27].

Overall, the issue of poverty and climate change awareness is very complex and depends on various factors such as geographic, social and economic context. However, it is important for us to understand that individuals and communities struggling to meet their basic needs require a special approach in efforts to increase climate change awareness and participation in mitigation efforts.

4 Conclusion

Poverty contributes to climate change awareness, both directly and indirectly. Climate change information does not trigger poor communities to take action to prevent climate change because a weak and vulnerable economy means that communities are less able to participate in efforts to prevent climate change. Basic needs, such as food, shelter and decent work, are a top priority for poor individuals, while the issue of climate change tends to be neglected. Daily needs dominate their attention, and long-term issues such as climate change are often marginalized.

Apart from shifting priority needs, individuals in poor economic conditions also often have limited access to education and information, especially in the older age range. Some poor individuals in the productive age range may have knowledge about climate change, but they often do not give this issue enough priority. Discussions about climate change are often overlooked, even though they actually know about it, even though it is not in depth. People are more likely to discuss economic issues, wages and other basic daily needs. Community responses to the impacts of climate change such as tidal floods are often religious. Some individuals seek comfort in religious beliefs and see disasters as God's destiny. This can hinder concrete action in addressing climate change.

The problem of poverty and climate change awareness is a complex and very contextual problem. Efforts to increase climate change awareness and participation in mitigation need to look at and consider the social, economic and cultural aspects of communities that are struggling to meet their basic needs. This can be a note about the importance of addressing this problem with an approach that is able to adapt to local situations.

5 Impact and suggestion

It is hoped that this article will be able to contribute to the description of poor communities with the characteristics that have been determined so that the information and knowledge obtained can be used by policy makers to take appropriate steps to prevent climate change and alleviate poverty.

It is important for us to understand that individuals and communities who struggle to meet their basic needs require a special approach in efforts to increase climate change awareness and participation in mitigation efforts so that policy makers or related stakeholders can design and carry out appropriate and appropriate interventions. For example, the government can hold training to recycle waste into more selling value, provide capital assistance for waste recycling businesses, and assist with sales distribution through special business entities or cooperatives so

that understanding about climate change awareness can go hand in hand with improving economic quality and wages. Or through educational programs to increase understanding and awareness about climate change which is narrated with religious understanding, such as the story of Noah's great flood, for example. So that the message conveyed can be received, close and connects scientific and religious understanding.

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