



# The Impact of Environmental Degradation on The Socio-Economic Conditions of Coastal Communities in Palopo City

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**Abstract.** This study aims to explore the impact of environmental degradation on coastal communities, focusing on socio-economic conditions in Palopo City. Using a qualitative descriptive approach, this study was conducted through field methods (field research). To collect objective data, researchers applied observation, interview, and documentation techniques. Data analysis includes several steps, including data collection, reduction, presentation, and drawing conclusions. The results of the study indicate that environmental degradation among coastal communities in Palopo City is reflected in the practice of mangrove felling and air pollution. The negative impacts of this degradation include the destruction of flora and fauna habitats and decreased air quality, which contribute to the decline in coastal community livelihoods. However, there are also positive impacts, where environmental degradation is utilized by the community through the construction of a ring road. This has contributed to the absorption of labor energy with the emergence of various businesses along the road, encouraging local economic growth, and reducing poverty by creating job opportunities. The increase in the economic income of the community, especially for traders around the ring road, is also seen from the increase in their daily income due to visitors. In addition, the presence of cafes, stalls, and food vendors along this road plays a crucial role in increasing social interaction, creating space for social exchange between local communities and visitors.

**Keywords:** Environmental Degradation, Mangrove Trees, Socio-Economic Conditions.

## 1 Introduction

The success of development is not only measured by how far the development can run, but also includes failures that can arise, one of which is environmental damage. Often, the development paradigm only focuses on economic growth without considering other aspects, such as welfare, environmental desires, and social justice. Sustainable development becomes a relevant alternative, the pressure of a balanced relationship between social and economic characteristics. The pillars of sustainable development include economic, social, and environmental sustainability, all of which must develop in a balanced manner; otherwise, development can be trapped in a conventional model that only focuses on economic growth [1].

Currently, we are witnessing a balance between economic growth and environmental conditions. The government needs to consider this balance so that the

negative impacts of future development can be minimized [2]. One way to achieve this is through environmentally based sustainable development.

Ongoing economic development has had a major impact on natural resources. The impact of environmental damage is now beginning to be felt by the community. The main thing is the public Coastal area. Coastal area is the transition sea and land. Conditions the usually causing coastal areas get pressure from various activities and phenomena that occur on land and at sea [3]. Sustainable development emphasizes mechanisms that take into account the relationship between development and local natural resources. Real examples of environmental degradation include air pollution and mangrove deforestation, both of which have serious consequences for coastal ecosystems. Mangroves are important ecosystems that protect the coast from erosion, provide habitat for fish, and absorb carbon. The loss of mangroves contributes to the decline in biodiversity.

The impact of mangrove deforestation also directly affects the socio-economic conditions of coastal communities that depend on the ecosystem. Many communities rely on fish catches and other marine resources associated with the existence of mangrove forests. The loss of these resources can threaten their livelihoods, weaken poverty conditions, and create economic damage. In addition, the destruction of this ecosystem can cause conflict between communities competing for increasingly limited resources. The main causes of mangrove forest degradation often originate from socio-economic factors in the community, such as land clearing for industrial areas and fish farming [4].

Based on observations, researchers found that mangrove felling occurred due to the development of Micro, Small and Medium Enterprises (MSMEs) around Tanjung Ringgit, Palopo City. The activities of these MSMEs cause environmental pollution due to environmentally unfriendly waste, so that the sea air is polluted and the quality of the scenery decreases. This can reduce customer interest in visiting. In order to attract visitors, a clean environment and creativity are essential. In facing the development of MSMEs in the modern era, many have begun to implement green economic strategies in the products offered [5]. In addition, the development of understanding of green economy in MSMEs is also influenced by the digitalization of business activities [6]. The green economy is now not only focused on products, but also on the implementation of green management, especially in the context of human resources that support work efficiency and effectiveness in a friendly environment [7].

The formulation of the problem in this study is about the positive and negative impacts of environmental degradation due to mangrove felling and air contamination on the socio-economic conditions of coastal communities in Palopo City. Therefore, the purpose of this study is to identify the positive and negative impacts of the issue.

Several previous studies related to the role of Bappeda include those by Aceng Hidayat and Dessy Rachmawatie who discussed the deforestation of the mangrove ecosystem on Tanakeke Island, South Sulawesi, and Yohan F Rumwaropen, Bambang Nugroho, and Anton Sinery who studied the impact of the conversion of mangrove forests on the economy of the community in Telaga Wasti Sowi I, Manokwari, West Papua. In this study, researchers not only discuss the impact of environmental degradation, but also explore the positive and negative impacts from the perspective of the community's socio-economics.

## 2 Literature review

The following is a summary of relevant previous research, which will be used as a reference in compiling this research:

Eva Damayanti in her research entitled *The Urgency of Understanding and Concern of MSME Actors in the Implementation of the Green Accounting Concept in Palopo City*, used a qualitative approach. This study collected primary data through interviews, observations, and documentation, as well as secondary data from previous studies. The results showed that the understanding of MSME actors regarding the implementation of the green accounting concept was relatively low, due to the difficulty in understanding the concept. However, the level of concern of MSME actors, especially in the tofu and tempeh business, was quite good in terms of caring for the environment in accordance with existing theories.

Nurul Ismi conducted a study entitled *Analysis of the Potential for Implementing the Green Economy Concept in Café Businesses in the Tanjung Ringgit Port Area of Palopo City*. This study aims to disseminate the potential for implementing the green economy concept in cafe businesses in the area, as well as identifying inhibiting and supporting factors. The methodology used is qualitative, with data collection techniques through interviews, observations, documentation, and literature studies. The results of the study indicate that the green economy concept has the potential to be implemented, which includes three indicators: low carbon emissions, resource efficiency, and social inclusiveness. However, public awareness, especially cafe business actors, of environmental cleanliness is an inhibiting factor. On the other hand, supportive natural conditions and the ability of cafe owners to reduce environmental impacts are supporting factors in implementing this concept.

Muh. Yasir conducted a study entitled *Directions for Controlling the Utilization of Street Vendor Business Space in Coastal Areas (Case Study of Ring Road)*. The methods used include descriptive analysis, spatial analysis, and multiple linear regression. The results of the study indicate that the characteristics of street vendors are very diverse, with a linear distribution pattern and permanent services. The development of street vendors began in the Tanjung Ringgit Port area and extended to the East Ring Road. Visibility is the main factor influencing location selection with an influence of 57.02%. Directions for this control include relocating street vendors to more suitable zones, as well as considering existing policies and regulations such as the arrangement and granting of business permits and supporting facilities.

## 3 Research methods

This study uses a descriptive qualitative approach. This type of qualitative research is used to determine the impact of environmental degradation on the socio-economic conditions of the community by selecting the condition of a natural object where the researcher is a key instrument [8]. With this approach, the study aims to describe, understand, and explain the impact of environmental degradation on the socio-economic conditions of the coast in Palopo City. Qualitative methods allow the author to present more in-depth information through interviews and direct observation.

The data sources in this study consist of primary and secondary data. Primary data were obtained through interviews with MSME actors, especially coastal communities in Palopo City and documentation related to the impact of environmental degradation on the socio-economic conditions of coastal communities in Palopo City. Meanwhile, secondary data includes time series archival data (time series) from the Palopo City Environmental Service and other relevant sources. Data analysis was carried out through four stages, namely data collection where data was collected related to environmental degradation that occurred and its impacts, then data reduction was carried out which can also be interpreted as a research process that selects and focuses on simplifying and transforming the raw data obtained. After the data is reduced, the next steps are to present the data. In the process of presenting the reduced data, the arrangement of the data to be organized and arranged in a relational pattern to make it easier to access the presentation of data and draw conclusions.

#### 4 Research Results and Discussion

Residents living in the Palopo City ring road area revealed that many mangrove trees were cut down to build various businesses, especially cafes, along the road. With the strategic location of the area, many individuals take advantage of this opportunity to open a business, encouraging them to establish cafes in the location. The following is data on cafe owners located in the coastal area of Tanjung Ringgit Port, Palopo City:

**Table 1.** List of Names of Café Owners in the Tanjung Ringgit Coastal Area , Palopo City

| Owner Name     | Business Name  | Year of Business Start |
|----------------|----------------|------------------------|
| Guslia         | Beach Terrace  | Year 2017              |
| Niar           | Algae Café     | Year 2017              |
| This           | 69 cafes       | Year 2017              |
| kiki           | Kiki's café    | Year 2017              |
| Andi Iqbal     | Kiran Café     | Year 2017              |
| agile          | Algae Café     | Year 2017              |
| Patmawati      | Beautiful Café | Year 2017              |
| Sister Wahyuni | Ananda Café    | Year 2017              |
| Niar           | Dy Café        | Year 2017              |
| Lucy Evayanti  | Dela's Café    | Year 2017              |
| Rosdiana       | Blue Sea       | Year 2017              |
| Hasnia         | Bonaya Café    | Year 2017              |
| Nadia          | Seruya Café    | Year 2017              |
| India          | Desi Café      | Year 2017              |
| Yudi           | New Dy         | Year 2017              |
| Fika           | Doraemon Café  | Year 2017              |
| Wandi          | Bigos Café     | Year 2017              |

|        |                 |           |
|--------|-----------------|-----------|
| Tasya  | Tasya's Café    | Year 2017 |
| Andi   | Solata Café     | Year 2017 |
| Ariel  | Nurmi's Café    | Year 2017 |
| Diana  | Dian's Café     | Year 2017 |
| Sun    | Surya Café      | Year 2017 |
| Adelia | Adelia Café     | Year 2017 |
| Oh     | Uun Cafe        | Year 2017 |
| Pride  | Violet Café     | Year 2017 |
| Tiara  | Blue Pearl Café | Year 2017 |

Based on the table above, it can be seen that there are around 27 MSMEs in the area, which indicates the low economic growth driven by the local community. The strategic location for establishing this business has a positive impact on the socio-economic conditions of the surrounding community. Unfortunately, business actors often establish businesses without considering environmental conditions, which leads to environmental degradation in the area.

The community now realizes that this action damages the mangrove ecosystem because it requires cutting down trees. On the other hand, environmental pollution also occurs due to business activities, such as dumping waste into the sea. This raises concerns about the decreasing number of mangrove trees and the decreasing quality of the coastal environment, so it is important to carry out better conservation and management actions to protect the mangrove forest and ensure the coastal ecosystem on the Palopo City ring road.

Previous research suggests that business actors contribute to managing and maintaining the environment around their businesses, as well as creating a balance between the environment and business activities. Increasing awareness of environmental degradation is important, because its impacts are not only felt by humans, but also have long-term impacts on the survival and needs of the community. Environmental conservation has great benefits for local communities [9].

**Table 2.** Impact of Environmental Degradation on the Socio-Economic Conditions of the Community.

| N<br>o. | Positive impact                                                            | Negative impact                           |
|---------|----------------------------------------------------------------------------|-------------------------------------------|
| 1       | Workforce refinement                                                       | Destroying the habitat of flora and fauna |
| 2       | Increasing economic income                                                 | Deterioration of sea water quality        |
| 3       | Creating space for social exchange between local communities and visitors. | Fishermen's livelihoods are declining     |

From the existing table, it can be seen that the negative impacts of environmental degradation include damage to flora and fauna habitats, decreased water quality, and decreased income of fishermen. This was also conveyed by research that impact from

degradation the surrounding environment Coast is the disappearance mangrove forests utilized by the community as a need like wood burn, and opening land. Besides it also happened pollution waters the coastline caused by disposal rubbish out of place, thing This due to lack of awareness public to cleanliness environment and humanity There is assumption that sea as place large trash [10].

On the other hand, there are positive impacts such as increased employment, economic growth, and the creation of social interaction. Previous research by Nurul Ismi [11] also showed that the cafe business in the area has provided employment opportunities for the community, including young people and mothers. However, this type of work is generally temporary and cannot be considered sustainable or environmentally friendly, because its contribution to human development and poverty reduction is still limited [11].

Environmental degradation that occurs, such as the felling of mangrove trees by coastal communities in Palopo City, has negative impacts such as damage to marine habitats that threaten biodiversity and reduce air quality. The damage to mangrove trees has a negative impact on the livelihoods of coastal communities. However, the socio-economic conditions of the community also show positive impacts, where environmental degradation actually opens up job opportunities and increases income in coastal areas, thanks to the emergence of various businesses along the Palopo City ring road. This initiative stimulates local economic growth and reduces poverty by opening up jobs in various sectors. The income of local people, especially for traders around the ring road, has increased. In addition, the presence of cafes, stalls, and food vendors along the road also contributes to building social interaction, creating space for social exchange between local residents and visitors.

## 5 Conclusion and Suggestions

Environmental degradation that occurs, such as the felling of mangrove trees by coastal communities in Palopo City, has a number of negative impacts. This has the potential to damage the habitat of marine flora and fauna, as well as threaten biodiversity and reduce air quality. This impact also has an impact on socio-economics, because coastal communities often depend on mangrove trees for various needs, including as a source of raw materials and food. Damage to mangrove trees has an impact on the livelihoods of local communities.

However, this environmental degradation has also triggered the emergence of new businesses along the Palopo City ring road, which contribute to the absorption of labor and increasing community income. The presence of cafes, stalls, and food vendors along the road plays an important role in social interaction, creating space for exchange between local people and visitors.

Collective balance is essential to maintain coastal ecosystems for long-term well-being. Business actors are expected to educate their consumers about the importance of maintaining marine cleanliness, while the Palopo City Government should provide trash bins in every business in the coastal area to facilitate access and maintain environmental cleanliness.

Suggestions from this study include: (1) Communities around the ring road need to be more concerned about preserving mangrove trees and the environment, by

reducing tree felling for business development purposes such as cafes. Collective awareness is needed to maintain coastal ecosystems; (2) The Palopo City Government needs to increase supervision of activities that damage the environment in coastal areas. The implementation of strict regulations regarding mangrove felling and campaigns to maintain environmental cleanliness are very important; (3) It is hoped that further research will be conducted to analyze the long-term impacts of environmental degradation on coastal biodiversity and ecosystems, so that it can provide a deeper understanding of the consequences of human behavior on the environment.

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