

SUSTAINABLE DEVELOPMENT MODEL IN PETOAHA DISTRICT, KENDARI CITY

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ABSTRACT

This research was conducted to determine the existing conditions of environmental, socio-cultural and economic development in coastal areas in PETOAHA District, Kendari City. Identifying factors that influence environmental, socio-cultural and economic development of coastal areas in PETOAHA District, Kendari City and creating a model for developing sustainable environmental, social-cultural and economic development of coastal areas based on the environment in Kendari City. This research is a qualitative research study using 5 informants who have an understanding of the sustainable coastal area settlement development model in Kendari City. The research results showed that the environmental, socio-cultural and economic development model for environmentally based sustainable coastal areas in Kendari City is focused on PETOAHA District with coastal areas consisting of Petoaha Village, PETOAHA Village, Sambuli Village and Tundungeu Village. The environmental, socio-cultural and economic development model in Petoahan Village shows a linear pattern along the coastline with potential for Petoaha beach tourism. PETOAHA Village has clustered and spread environmental, social and cultural and economic development, with tourism potential at PETOAHA Beach, Sambuli Village and Bungkutoko Village have a linear environmental, social and cultural and economic development model with the potential for developing ports and LPG gas terminals as well as beach tourism. And Tundungeu Village has a model of environmental, socio-cultural and economic development in groups located on the coast with the potential of the area as a fishing port.

KEYWORDS: Development of environmentally based sustainable development, socio- cultural and economic

1. INTRODUCTION

Development carried out in each region involves the community/residents, including development in coastal areas which tend to be dense and close together with neighbors who are very close, causing environmental impacts. Most residents in coastal areas work as fishermen with an uncertain income. People only sail on certain days. And when the moon is full the fishermen stop sailing because there are no fish. This has resulted in fishermen being unemployed and choosing side jobs. Coastal residential areas are residential areas where the majority of the population works as fishermen.

Environmental, socio-cultural and economic development in an area is sometimes circular or rectangular, as occurs in coastal areas, as a result of the condition of beaches that are elongated according to the length of the coastline, meaning that people live in groups along coastal areas. This is caused by the residents' working conditions as fishermen

and the community's culture of life. Fitria (2022) said in her research that the development of housing and settlements often occurs if existing road infrastructure increases due to the attraction of quickly and easily reaching the location. This shows that there is regional development when there is population growth and activity in an area.

Residential areas in the development of a region are used as one of the links in the chain whose development is taken into account in addition to economic growth and improving community welfare. This is because housing is a basic human need where they live and interact socially with others (Agustina, 2010).

Three main principles in sustainable development (Mc Intyre, 1993: 10): (a) Ecological Sustainability, namely ensuring that development is carried out in accordance with ecological processes, biology and the diversity of existing ecological resources. (b) Social and Cultural Sustainability, namely ensuring that the development carried out has a positive impact on the lives of the surrounding community and is in accordance with the culture and values that apply to that community, and (c) Economic Sustainability, namely ensuring that the development carried out is efficiently economy and that the resources used can survive future needs.

The development of sustainable environmental, socio-cultural and economic development is faced with environmental conditions (Ecological Sustainability), namely development that is carried out in accordance with ecological, biological processes and the diversity of existing ecological resources. (b) development of environmental, socio-cultural and economic development from the aspect of Social and Cultural Sustainability, supporting development that has a positive impact on the lives of surrounding communities and is in accordance with the culture and values that apply to that community, and (c)

development of environmental development, social, cultural and economic from the aspect of Economic Sustainability, which is carried out economically efficiently and that the resources used can survive for future needs.

The environmental, socio-cultural and economic development model in coastal areas is related to their livelihoods which depend on the sea, so fishing communities choose to live in coastal areas. The diverse potential and natural resources in coastal areas attract people to fulfill their daily needs, resulting in the formation of coastal settlements that vary according to the community's level of livelihood (Hariyanto in Sutigno and Pigawati 2015).

The village/sub-district area in PETOAHA District, which was newly expanded in 2017, is an area directly facing Kendari Bay which is still marginalized compared to other villages/sub-districts in Kendari City. The PETOAHA District area consists of: a) Tobimeita Village b) Petoaha Village c) PETOAHA Village d) Bungkutoko Village e) Sambuli Village f) Tondonggeu Village. The area of PETOAHA District is 25.32 Km². (PETOAHA District, 2021)

Territory is space. Regarding this space, there are two different views, namely subjective and objective views. The subjective view states that determining territory is a way of dividing space to achieve certain goals. Regional determination is a calcification method for arranging spatial groupings. Territory is seen as a tool to explain space that is defined according to certain criteria for certain purposes. Thus, if the criteria change, the territorial boundaries will also change (Nurzaman, 2012).

Regional planning is a development planning process which is intended to make changes towards better development for a community, government and environment in a particular area by utilizing or utilizing various existing resources and must have an orientation that is comprehensive, complete, consistent with on the principle of priority (Riyadi and Bratakusumah, 2003).

According to general agreement in the world, coastal areas are areas where land and sea meet, landward including land, both dry and submerged in water, which is still influenced by the characteristics of the sea, such as tides, sea breezes and salt water seepage. Seaward includes parts of the sea that are still influenced by natural processes that occur on land such as sedimentation and fresh water flows, as well as those caused by human activities such as agriculture and pollution (Abdullah Marlang, 2015)

Basically, development is the process by which individuals, groups, organizations, instruction and society improve their ability to:

1. Carrying out basic functions, solving problems, determining and achieving goals;
2. Understand and relate their development needs in a broad context and in a continuous way (Sinaga, 2006).

A region as a geographical unit has the potential for carrying out regional development and development activities. And a region is also a geographical unit that forms a unity. The definition of a geographical unit is space so that it is not just a physical aspect of land, but more than that includes other aspects such as economic, biological, social and cultural (Sinaga, 2006).

According to Sirojuzilam (2005), regional development is an increase in the value of regional benefits for the people of a particular area, as well as accommodating more residents, with an average level of community welfare improving, in addition to providing more facilities/infrastructure.

According to Law Number 1 of 2011 concerning housing and residential areas, namely that a settlement is part of a residential environment that consists of more than one housing unit that has infrastructure, facilities, public utilities, and supports other functional activities in urban areas or rural areas. Housing is a collection of houses as part of settlements, both urban and rural, which are equipped with public infrastructure, facilities and utilities as a result of efforts to provide livable houses. According to Hadi Sabari Yunus (Ariyanti, 2017), settlements can be defined as formations, whether man-made or natural, with all their accessories, which are used by humans as individuals or groups to reside, either temporarily or permanently, in order to carry out their lives.

Community settlements can be located in various areas, both urban and rural. Coastal areas are areas directly adjacent to the sea. Definitions of coastal areas can vary, because a patent term has not been found to define them. In accordance with Law Number 27 of 2007, coastal areas have been defined as transitional areas between land and sea ecosystems which are determined by 12-mile territorial boundaries towards the water and district/city boundaries towards the interior. According to general agreement in the world, coastal areas are transitional areas between land and sea.

2. RESEARCH METHODS

2.1 RESEARCH LOCATION AND TIME

The research location is a place for developing environmental, socio-cultural and coastal economic development in PETOAHA District, Kendari City.

2.2 TYPES OF DATA AND DATA COLLECTION TECHNIQUES

The type of data collected for analysis consists of primary data and secondary data.

a. Primary data

Primary data in this research is by conducting direct surveys in the field, including road geometric surveys and traffic volume surveys as well as creating and filling out questionnaires to explore references from respondents in environmental, socio-cultural and economic development of the community in the research area.

b. Secondary Data

Secondary data is in the form of supporting data collected through literature studies taken from related agencies such as the Public Works Department, BPS, Police, results of previous research, data from the internet and other references related to this research.

The data in this research was collected directly from the field by involving respondents using tools. The tools are:

- a. Questionnaire
- b. Mobile Phone to calculate Volume

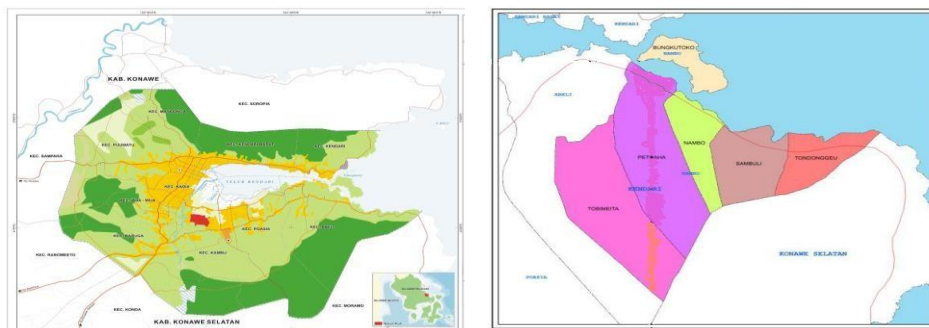
Other tools needed for collecting data in the field

2.3 DATA ANALYSIS TECHNIQUE

The data analysis technique used in this research is qualitative descriptive analysis techniques

3. DISCUSSION

The 2010-2030 Kendari city spatial plan places the development of coastal areas as a priority scale to support strengthening the economy of Kendari City by modernizing coastal areas into an environment that can be used and utilized by the public.



Picture 1. Kendari City Spatial Plan 2010-2030

Based on the Kendari City spatial plan, PETOAHA District is one of the priorities in the fisheries, tourism and industrial sectors. The current condition is that PETOAHA sub- district has a tourist area and an LPG gas port. However, it was also found that several areas were still slum and required future development planning.

Research on the Sustainable Coastal Settlement Development Model in Kendari City was carried out in the PETOAHA District area as one of the coastal areas with a complex environment between settlements on the sea and settlements on land anchorages. Or a community-made area. The research results found that there are four areas of PETOAHA District that are directly connected to the sea, such as Petoaha Village, PETOAHA Village, Sambuli Village and Tondonggeu Village. This is proof that Kendari City has a coastal area as presented in the following figure:



Picture 2. Coastal Area of PETOAHA District

Based on topographic maps, the PETOAHA District area is at an altitude of 0 – 100 m covered by lowlands with quite different ecosystems. Most land use is still focused on mangrove forests and other trees. Apart from that, the livelihoods of people in the coastal areas of PETOAHA District are dominated by fishermen, industrial workers and laborers. There are also other livelihoods for civil servants and others.

1. The existing condition of residential capital in coastal areas in PETOAHA District shows the existence of a residential space pattern with the characteristics of houses on stilts above the sea and anchoring/filling of the coast using coral rocks to build houses. The condition of settlements in the coastal areas of PETOAHA District according to sub-districts is presented as follows:



Picture 3. Environment of Petoaha Village, PETOAHA District, Kendari City.

Based on the existing conditions of the Petoaha sub-district, it was found that the residential area had been transformed into a rowing sports tourism destination area, but the environmental, socio-cultural and economic development model had not changed because the construction of stilt houses on the coast only emerged as a land area. This has an impact on the narrowing of the marine environment and the loss of some of the mangrove forests in the Petoaha sub-district environment. The residents in this sub-district are mostly Bajo people who have immigrated from other areas. The settlement pattern in this area is linear on the coast with the characteristics of semi- permanent houses and built on mooring land.



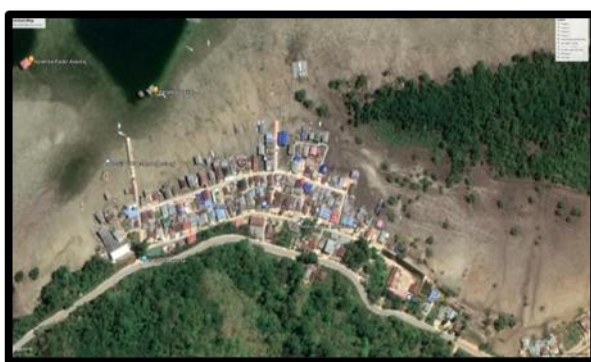
Picture 4. Environment of PETOAHA Village, PETOAHA District, Kendari City

Based on the existing conditions of PETOAHA sub-district, it was found that the residential area is still in a slum condition where there are settlements on the sea and man-made mooring areas for building settlements. Most residents work as fishermen and have more activities at sea. The settlement pattern in this area is concentrated on the coast with the characteristics of semi-permanent houses and built on mooring land.



Picture 5. Environment of Sambuli Village, PETOAHA District, Kendari City

Based on the existing conditions of the Sambuli sub-district, it was found that the residential area is still in a semi-permanent condition where there are settlements with man-made mooring areas for building settlements on the coast. Most residents work as fishermen and have more activities at sea. The settlement pattern in this area is concentrated on the coast with the characteristics of semi-permanent houses and built on mooring land.



Picture 6. Environment of Tondonggeu Village, PETOAHA District, Kendari City

Based on the existing conditions of the Tondonggeu sub-district, it was found that the residential area is still in a semi-permanent condition where there are settlements with man-made mooring areas for building settlements on the coast. Most residents work as fishermen and have more activities at sea. The settlement pattern in this area is concentrated on the coast with the characteristics of semi-permanent houses and built on mooring land.

The number of settlements in Bungkutoko Village from 2008 - 2018 changed on the island located in Kendari Bay with an area of 1,357 km² and a population of 2,171 people, most of whom work as fishermen and company employees. The density of settlements in the Bungkutoko Village area shows that there are slums and permanent settlements that are piled up into settlements with a centralized pattern. The urgency for the development of the Bungkutoko Village area is to become a tourist area, as in the following picture:

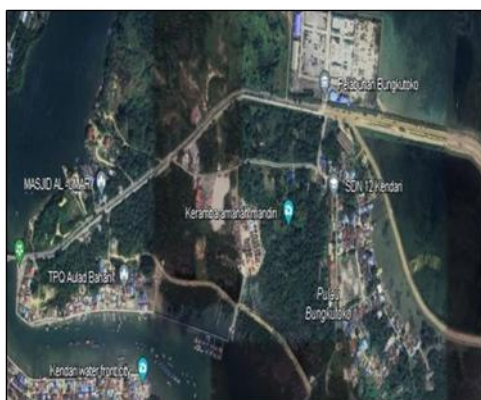


Figure 7. Settlement Conditions in the Coastal Area of Bungkutoko Village

The condition of coastal settlements in the southern region of Bungkutoko Island and facing Petoaha Village and PETOAHA Village. Bungkutoko Village has tourism potential and an Indonesian port company.

Based on these findings, it can be stated that residential areas in coastal areas have the characteristics of stilt houses and moorings so that the beach area becomes narrow and has an impact on coastal environmental pollution. Most of the coastal residents are immigrant groups from other areas and live on the coast of PETOAHA District. In an interview with the Head of Petoaha Village, he said that most of the residents in this area had migrated from Saponda Luar Island and the area around Kendari City, especially residents of the Bajo tribe.

2. Factors that influence environmental, socio-cultural and coastal economic development in PETOAHA District, Kendari City

Factors that influence coastal settlements in research found include:

a) Non-Physical Factors

The population in coastal areas continues to increase, including residents of PETOAHA District spread across Tobimeita Village, Petoahan Village, PETOAHA Village, Sambuli Village and Tondonggeu Village, totaling 11,489 people. Consisting of 5,860 men and 5,629 women

b) Socioeconomic Factors

The current job opportunities are fisheries, industry and services, which the community continues to increase in these three employment sectors. Communities are related to ethnicity and regional origin, such as in Petoaha sub-district there are the Bajo and Buton tribes, in PETOAHA sub-district there are Tolaki and Muna tribes, in Sambuli sub-district and Tondonggeu sub-district there are Muna and Tolaki ethnic communities. This is proven by the characteristics of houses built on additional land along the coast. This is different from the Bajo tribal community which built houses on stilts in the Petoaha sub-district area but these have been covered with landfill by the Kendari City government.

c) Cultural Factors

The cultural factor is the inclusion of community groups of residents who live in an area, as is the case in Petoaha Village, most of the Bajo Tribe comes from other areas such as the outer Saponda area and other areas which makes them settle on the coast of Petoaha Village. Urbanization is the movement of residents from villages to cities. In this research, it was found that residents were highly urbanized in the coastal areas of PETOAHA sub-district and Sambuli sub-district.

3. Creating a model for sustainable environmental, socio-cultural and coastal economic development in Kendari City.

The environmental, socio-cultural and economic development model in coastal areas is implemented with the condition that the land is owned by several people in one location, usually agricultural land that is bought and sold randomly, the land is then built/occupied by the owner, usually the land is irregular in shape or lacks infrastructure. Such as environmental roads, parks and pedestrians, the owner wants to arrange the land to improve the quality of housing and land prices, the overall land arrangement is adjusted to the proportion of 70% -30%, namely 70 for the owner and 30 for facilities (roads and parks), carried out jointly with the agreement of all parties. The research results showed that the environmental, socio-cultural and economic development model for environmentally based sustainable coastal areas in Kendari City is focused on PETOAHA District with coastal areas consisting of Petoaha Village, PETOAHA Village, Sambuli Village and Tundonggeu Village. The environmental, socio-cultural and economic development model in Petoahan Village shows a conceptual model with the development of settlements along the coastline with the potential for Petoaha beach tourism. PETOAHA Village has clustered and spread environmental, social and cultural and economic development, with tourism potential on PETOAHA beach, Sambuli Village has a linear environmental, social and cultural and economic development model with the potential for developing LPG ports and terminals as well as beach tourism. And Tundonggeu Village has a model of environmental, socio-cultural and economic development in groups located on the coast with the potential of the area as a fishing port.

4. CONCLUSION

The conclusions and research include:

1. The existing condition of residential capital in coastal areas in PETOAHA District shows that there is a pattern of residential space with the characteristics of houses on stilts above the sea and coastal anchoring/filling using coral rocks to build houses.
2. Factor affecting environmental, socio-cultural and coastal economic development in PETOAHA District, Kendari City Non-physical factors, socio-economic factors and cultural factors.
3. The development model for sustainable environmental, socio-cultural and economic development in coastal areas based on the environment in Kendari City is focused on PETOAHA District with coastal areas consisting of Petoaha Village, PETOAHA Village, Sambuli Village, Tundonggeu Village and Bungkutoko Village. The environmental, socio-cultural and economic development model in Petoahan Village shows a linear pattern along the coastline with potential for Petoaha beach tourism. PETOAHA Village has clustered and spread environmental, social and cultural and economic development, with tourism potential on PETOAHA beach, Sambuli Village has a linear environmental, social and cultural and economic development model with the potential for developing LPG ports and terminals as well as beach tourism. And Tundonggeu Village has a model of environmental, socio-cultural and economic development in groups located on the coast with the potential of the area as a fishing port.

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