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Zoning In Sabu Raijua Regency, East Nusa Tenggara Province, Indonesia In Maintaining Coral Reef Ecosystem Conservation And Sustainable Coastal Management

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Abstract: LThe benefits of coral reef ecosystems consist of economic, ecological and socio-cultural benefits. Coral reefs are an ecosystem that plays an important role in coastal areas. Anthropogenic and natural pressures then influence the condition of coral reefs. Changes in coral reef ecosystems will have an impact on the availability of fish resources. Damage to coral reefs due to inappropriate fishing activities can reduce the amount of fish resources available. This research adopts a qualitative method of collecting data through in-depth interviews. The approach method used is empirical juridical, analytical descriptive research specifications, the data used is primary and secondary data and analysis uses qualitative methods. Research objects include data and information about the development of tourist areas, coral reef conservation, sustainable coasts, as well as legal materials and other supporting data. The study results help local governments, coral reef tourism managers, communities in developing coral reef tourism and help provide a frame of reference for policy makers to consider in developing sustainable tourism areas and coral reef conservation. The coastal ecosystems are increasingly threatened by coastal development and climate change. Coral reefs provide vital climate change mitigation and adaptation ecosystem services, but have experienced widespread decline throughout tropical regions requiring conservation efforts. Tourism and related human activities have become a stimulus for coastal erosion. Coral reef ecotourism can be developed, which is one form of implementing coral reef conservation. Utilization of the potential and development of coral reefs as tourist attractions as well as conservation land, which is managed through collaborative partnerships between local governments and fish farmers, traders, boat operators and community members. Coral reef ecosystem tourism can bring additional income benefits to local communities and indirectly preserve coral reef ecosystems and sustainable coastal planning.

Keywords: development, tourism, coral reefs, conservation, coast

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1. Introduction

Coral reefs are a typical ecosystem in coastal waters in tropical regions. Corals are small individuals called polyps. Coral reefs are structures on the seabed in the form of calcium carbonate deposits produced mainly by coral animals. (Nabil Zurba, 2019: 1) Coral reefs are structures on the seabed in the form of calcium carbonate deposits in the sea which are produced mainly by coral animals. Corals are invertebrate animals that belong to the Phylum Coelenterata (hollow animals) or Cnidaria. One individual coral or what is called a coral polyp varies in size from the very small 1 mm to the very large, namely more than 50 (Nabil Zurba, 2019: 1)

The benefits of coral reef ecosystems consist of economic, ecological and socio-cultural benefits. Coral reefs have a function that supports human life and livelihoods so they are economically important. (Nabil Zurba, 2019: 57) Humans use coral reefs as a source of protein, fishing grounds, building materials, tourist attractions, souvenirs and medicines. Coral reefs provide a source of food and livelihood for coastal communities. Coral reefs have important value as a source of food, habitat for various marine biota which have quite high economic value, as a provider of natural services in marine tourism activities, as a place of protection for other marine animals from predators, and a place to find food and breed for fish. -reef fish and as a barrier for coastal areas from the impact of waves. (TNC Savu Sea, 2011)

Coral reefs are an ecosystem that plays an important role in coastal areas. (Nabil Zurba, 2019: 2) Coral reefs are also a collection of coral communities (animals), which live at the bottom of the waters, which are limestone rocks (CaCO3), and have a strong enough ability to withstand the force of sea waves. Coral reefs have been identified as having high conservation value such as rainforests because they are biologically diverse, aesthetically attractive, and function as reserves of genetic diversity. (Nabil Zurba, 2019: 57) Ecosystem diversity is an important indicator of the sustainability of a region. Regions that have more diversity have more resilience in their role of protecting coastal areas. The existence of protected species in an area is one of the urgencies in managing conservation areas, so that their existence can be maintained and avoided extinction. (Nabil Zurba, 2019: 2)

Coral reefs are vulnerable to changes both internal and external. Along with rapid economic growth, pressure on Indonesia's coastal and marine areas is increasing, including the use of coral reef ecosystems, causing some to be threatened. (Nabil Zurba, 2019: 58) destructive activities on coral reefs cause the rate of coral reef damage to accelerate. in South Pacific countries, they are generally threatened by negative pressures, overfishing, coastal development, sedimentation and pollution from agriculture and logging, tourism, climate change and ocean acidification. (Nabil Zurba, 2019: 58) Damage to coral reef ecosystems is caused by several factors, both natural and human activities. The damage and degradation of coral reef ecosystems due to human activities (anthropogenic) is very large (Siringoringo, 2007). This damage is due to the extraction of biological resources that are not environmentally friendly (Endean, 1976: Ikawati et al, 2001).

Anthropogenic and natural pressures then influence the condition of coral reefs. Changes in coral reef ecosystems will have an impact on the availability of fish resources. Damage to coral reefs due to inappropriate fishing activities can reduce the amount of fish resources available. (Nabil Zurba, 2019: 58) To control every activity so that economic and ecological aspects continue to run in balance, sustainable management is needed to maintain coastal sustainability. (Nabil Zurba, 2019: 65) Coral reef resources must be maintained and preserved so that they can be benefited from in the future. (Nabil Zurba, 2019: 58) Coral reefs in the Savu Marine National Park are one of the marine conservation areas known to have abundant marine biodiversity, including various types of cetaceans (whales, dolphins, etc.) and Sirenians (Dugong) located in East Nusa Tenggara Province is found scattered in the waters of coastal villages with a concentrated distribution, especially in Rote Ndao Regency and Sabu Raijua Regency.

The Savu Sea Water Area has many no-take areas which are regulated through various customary regulations and the customary instruments contained therein. (Indonesian Maritime Affairs and Fisheries Ministerial Decree no 6/Kepmen-KP/2014: 60) based on secondary data including legal regulations,

development plans, and literature review. The purpose of writing is to explain maintaining coral reef conservation ecosystems and sustainable coastal planning in Sabu Raijua Regency, NTT Province. Marine conservation areas for coral reefs in Indonesia are managed by both national and local governments, as well as local communities. Coral reefs have many benefits and functions, and are an ecosystem that plays an important role in coastal areas. Changes in coral reef ecosystems will have an impact on the availability of fish resources. Therefore, we must maintain and conserve coral reef resources so that they can still be benefited in the future.

2. Theoretical Overview of the Main Concepts

A spatial arrangement, as defined in article 1, paragraph 1, of Law No. 26 of 2007 on Space Planning, is a container that covers land, ocean and air space, including inland space as a territorial unit, where humans and other creatures live, carry out activities, and maintain their survival. According to D.A. Tisnaamidjaja, space is the physical existence of the territory in geographical and geometric dimensions that is a container for humans in carrying out their life activities in a decent quality of life. (Juniarso Ridwan, 2008)

Space as a place for human life, as well as as a natural resource is one of the gifts of God to the people of Indonesia. Thus, the space of the territory of Indonesia is an asset that should be able to be used by the Indonesian people and society in a coordinated, integrated and as effective as possible, taking into account other factors such as economic, social, cultural, environmental sustainability to promote the creation of a harmonious and balanced national development.

The Indonesian Agrarian Act, in article 15, states that the maintenance of land, including enhancing its fertility and preventing its damage, is the duty of any person, legal body, or body having legal relations with the land, taking into account the weak economic side. This provision gives the state the right to possess all the natural resources of Indonesia, and gives the obligation to the state to use as much as possible for the prosperity of the people. The phrase contains the meaning, the state has the authority to conduct the management, taking and utilizing natural resources for the benefit of the well-being of people desired.

Efforts to implement wise spatial planning are key in the implementation of space planning so as not to damage the living environment, in the context of state domination on the basis of natural resources. In order to further optimize the concept of spatial planning, legislative regulations have been widely published by the government. One of the regulations of legislation that regulates the design of spaces is the Law No.26 of 2007 on the Design of Spaces. The existence of such legislation is expected in addition to as a basic legal concept in the implementation of space planning, it is also expected to be used as a government reference material in the design and preservation of the living environment. (Juniarso Ridwan, 2008)

Based on the principle that space planning under Law No. 26 of 2007 on Space Planning includes: 1) Compliance; 2) Compatibility, flexibility, and balance; 3) Sustainability; 4) Disclosure and efficiency; 5) Transparency; 6) Equality and partnership; 7) Protection of the common interest; 8) Legal certainty and justice; and; 9) Accountability;

Space planning needs to be accessed in the planning, implementation and monitoring process. This is because the arrangement of space is very touching on all aspects of society's life. The basic concept of space law is contained in the Opening of the 1945 Basic Law, paragraph 4, stating “Protecting the entire Indonesian nation and the entire bloodshed of Indonesia and to advance the common well-being, enlighten

the life of the nation, and participate in the implementation of the world order". Article 33 (3) of the Basic Law of 1945 states that "the land and water and the natural resources contained therein are under the control of the State and are used to the greatest extent for the prosperity of the people". (Darmawan, D. A. et al., 2023)

In order to the purpose of the State, in particular to improve the general well-being and enlighten the life of the nation means that the State must be able to carry out development as a support in achieving such a goal with a careful and directed planning. The Law No. 26 of 2007 on the Planning of Space in consideration of consideration states explicitly that: "The territory of the United States of the Republic of Indonesia, which is an island state of Nusantara, both as a unit of containers covering land, marine space, and airspace, including inland space, as well as as as a resource, must be improved its management efforts wisely, efficiently, and successfully used by guiding on the principle of the planning of space so that the quality of the national territory space can maintain its sustainability for the realization of the general welfare and social justice in accordance with the constitutional foundations of the Constitutional Law of the State of the Republik of Indonesia of 1945". (Urip Santoso, 2012)

Furthermore, in the General Explanation of Law No. 26 of 2007 on Space Planning, it was stated, among other things, that "the territory of the United States of the Republic of Indonesia, both as a unit of containers covering land, marine space and airspace, including inland space, and as a resource, is a gift of the One God to the people of Indonesia which needs to be thanked, protected, and managed continuously for the greatest prosperity of the people in accordance with the mandate contained in Article 33, paragraph 3, of the Basic Law of the State of the Republik of Indonesia of 1945, as well as the meaning contained within the philosophy and principles of the state of Pancasila. In order to realize the guarantee of Article 33 (3) of the Constitution of the National Law of that year, the Law on the Designation of Space states that the State organizes the designation of space, the exercise of which is carried out by the Government and local governments with respect to the rights of each person". (Bhakti, C. et al., 2023)

According to Boedi Harsono, that space is also in it, where the earth and the water contain energy and elements that can be used for the efforts to maintain and develop the fertility of the earth, the water and the wealth of nature and other things related to it (Boedi Harsono, 2003). Article 167 of Government Regulations of RI No. 15 of 2010 on the Maintenance of Space Planning, states that the procedure for granting permits for the use of space is established by the Government or the Regional Government in accordance with its authority, the granting of permits is granted by the authorized official with reference to the plan of spatial planning and zoning regulations. The provisions concerning the guidelines for the granting of permits for the use of space are regulated by the Ministerial Regulations.

The authority to control the use of spatial planning under the Law No. 26 of 2007 on Space Planning is in the government as the implementer of the construction. In its process and implementation, the government plays a public role in controlling the use of this space. In carrying out this obligation, the government has several powers with the following provisions: (Agus Parmono, 2018)

1. The right to the land (Bundles of Right) The power to regulate the right to land, the legal relationship between persons/ bodies with land and legal acts concerning the land;
2. The power of regulation and control (Policy Power) Policy power is the power in applying legal regulations to improve public health, moral security, and well-being. This authority also includes

the authority to arrange, oversee, and control the construction of land and the activities of humans inhabiting it.

3. The supreme possession of the land may be exercised when the public desires and for reasons of public interest, the use of the existing land can be carried out by acts of acquisition or defence of the right to the land.
4. Taxation Taxation is a burden of legal obligation to individuals/groups, but such imposition is only for the public and is used for the general interest, not forced, forced and non-discriminatory.
5. Public Purchasing/Investment Authority (Spending Power).

Based on the above, it can be identified that the authority of the government in relation to the zoning regulations is: (Agus Parmono, 2018)

1. Central Government: disseminate information related to the zone regulation directives for the national system that is prepared in order to control the utilization of the national area; and
2. Provincial and District/City Regional Government: Disseminate the information relating to the Zoning regulation instructions for the system of provinces and districts/cities that are prepared for the purpose of controlling the use of the area of the province and district/city.

3. Methodology

Finding a legal rule, legal doctrine, or legal principles to address the legal problems under study is the task at hand.(Dewata&Achmad, 2013) Primary and secondary data that served as supporting information were the study's materials. (Soekanto&Mamudji, 2015) Research objects include data and information about the development of tourist areas, coral reef conservation, sustainable coasts, as well as legal materials and other supporting data. Numerous law books and periodicals used as reference materials for the examination of these issues.

4. Discussion

4.1 POTENTIAL AND DEVELOPMENT OF CORAL REEF TOURISM IN SABU RAIJUA REGENCY

Sabu Raijua is one of the districts belonging to East Nusa Tenggara Province, Indonesia, the district capital is located in Seba. This district was inaugurated by the Indonesian Minister of Home Affairs, on October 29 2008 as a result of the expansion of Kupansdg District. Sabu Raijua Regency is an Autonomous Region that was only formed in 2008 based on Law Number 52 of 2008 dated 26 November 2008, namely the expansion of Kupang Regency, East Nusa Tenggara Province, where Sabu Raijua Regency is the 21st Regency in East Nusa Tenggara Province. Sabu Island is also known as Sawu or Savu. The residents of this island themselves call their island Rai Hawu, which means Land of Hawu and the Sabu people themselves call themselves Do Hawu. The official name used by the local government is Sabu. The people of Sabu explained that the name of the island comes from the name Hawu Ga, namely the name of one of their ancestors who is thought to have first visited the island (BKKPN Kupang, 2015). The highest utilization activities for the coastal ecosystem of the surrounding community are seaweed cultivation and fishing.

The Savu Sea is an area that has the potential for coral reefs with very high diversity. The Sawu Sea National Park, which is part of the Lesser Sunda Eco-region, is recorded as having a total of 532 coral species and 11 endemic and sub-endemic species and is home to around 350 types of coral fish. Coral reefs in the Savu Sea National Park are found scattered in coastal waters throughout all districts within the Savu

Sea National Park area with a total area of 63,339.32 ha (Munasik, 2011). (TNC Savu Sea, 2011). The Savu Sea Marine National Park (TNP) is a marine conservation area (KKP) located in East Nusa Tenggara (NTT) Province. This MPA is known to have abundant marine biodiversity, including various types of cetaceans (whales, dolphins, etc.) and Sirenians (Dugongs).

The deep water habitat of the Sawu Sea TNP consists of deep sea thresholds, straits, oceanic islands and satellite islands. Deep sea thresholds are underwater embankments that can limit the flow of deep water between two seabeds. Meanwhile, a strait is a narrow channel that connects two larger water masses. This area is important as a migration route for cetaceans and other large marine fauna. Ocean islands are remote islands surrounded by deep sea. In the Sawu Sea TNP area itself, the ocean island is Dana Island in Sabu Raijua Regency.

Coral reefs in the Savu Sea TNP are found scattered in the waters of coastal villages in Kupang Regency, Rote Ndao Regency, East Sumba Regency, Central Sumba Regency, Southwest Sumba Regency, Manggarai Regency and West Manggarai Regency and their distribution is concentrated mainly in Rote Ndao Regency and Sabu Raijua Regency. The Savu Sea is also rich in various coastal ecosystems which are sourcesblue carbonespecially mangroves and seagrass beds, as well as coral reef ecosystems. Tourism activities are still very low, even though coral reefs have good resource potential to be developed as tourist areas, especially for marine tourism.

This area also provides many benefits for the surrounding community, especially from the fisheries and tourism sectors. Tourism potential in the waters of the Sawu Sea TNP includes marine mammal observation tourism, diving tourism, surfing tourism and other beach tourism. At least, more than 30 potential tourist locations have been identified in the Sawu Sea TNP (BKKPN Kupang, 2015), including the coastal/water areas of Sabu Island.

Efforts to utilize Sabu Rajua Regency as part of the Sawu Sea TNP that can be developed are aquatic natural tourism activities, considering that the Savu Sea TNP area has unique and quite diverse natural aquatic tourism attractions such as observing large marine biota such as the cetacean group (whales and dolphins).), Dugongs, Manta Rays and Turtles, supporting tourist attractions such as beach activities, snorkeling, diving and fishing are often found in the waters of the Sawu Sea.

Tourism is one of the new industries that is capable of providing rapid economic growth in terms of employment opportunities, income, standard of living and in activating other production sectors in tourist receiving countries. Tourism as a complex industry, which includes other industries such as the hotel industry, restaurant industry, craft/souvenir industry, travel industry and etc. As stated in Presidential Instruction no. 9 of 1969 Chapter II Article 2 in Soekadijo (1997:26) states that tourism development aims to increase foreign exchange earnings in particular and the income of the state and society in general.

The economic aspect is an aspect that is considered important and gets the most attention in the tourism sector because people pay money to make a trip, whereas in areas visited by tourists they can receive money from tourists through people who provide transportation, provide various services and attractions. etc. This economic benefit is one of the goals of tourism development. Indonesia is one of the countries in the world that has a lot of natural potential, both land and sea (coast). The fertile land conditions make Indonesia the center of attention for human groups to settle and develop their respective

businesses, while the potential of waters in the form of oceans and beaches is one of the tourist attractions that is much loved by domestic and foreign tourists.

This matter can because Indonesia is a tropical country, apart from that it also has tropical seas, clean white sand beaches and clear blue sea water. So many foreign tourists come expectcan enjoy the fresh air and beauty of the beach, apart from that, you can also do water sports activities such as water surfing, water skiing, diving, and so on. The large number of high-intensity tourists visiting Indonesia is one of the advantages that can increase foreign exchange for the development of the nation and state. However, on the other hand, it should be realized that economic development in general and tourism development in particular, based on experience, not only produces prosperity and progress but can also cause changes to the environment and natural resources that are unexpected and undesirable. These changes sometimes appearun planned and Tourism continues to be a major industry with far-reaching effects on the economy. The beauty produced by coral reef ecosystems can be used as an attractive tourist attraction so that it can increase the income of the people living around it. efforts to improve the economy in order to support increased knowledge of the importance of preserving and managing coral reef ecosystems among coral reef ecosystem management strategies.

The concept of ecotourism is very important to apply to marine tourism. Ecotourism is a concept and term that connects with conservation. Ecotourism is often understood as environmentally friendly tourism and is a form of alternative tourism that emphasizes responsibility towards the environment. Ecotourism has developed as a potential tourism destination for the benefit of sustainable tourism.

For this reason, marine ecotourism management is implemented with a management concept that prioritizes sustainability and utilizes the community's natural and cultural resources. The concept of ecotourism management is not only oriented towards sustainability but more than that, namely maintaining the value of natural and human resources.

The growth of ecotourism is thought to be faster than other types of tourism. The average growth of ecotourism is 10 percent per year (World Travel Tourism Council 2004) exceeds the average annual growth in tourism in general, which only reaches 4.6 percent per year. Ecotourism as a type of tourism based on environmental conservation has several missions, namely:

1. Develop tourism that is based on nature while maintaining natural sustainability,
2. Elevating local culture as cultural tourism that supports natural tourism,
3. Develop tourism in an integrated manner between nature and culture,
4. Community empowerment to increase environmentally friendly tourism.

The concept of marine ecotourism will shift the concept of mass tourism into a new type of tourism that emphasizes satisfaction and looking for attractions, not just sightseeing. It is hoped that the development of natural aquatic tourism in Sabu Rajua Regency with an ecotourism approach can further ensure the sustainability of the community's economy, ecosystem and local culture.

Regions that have more diversity have more resilience in their role of protecting coastal areas. The existence of protected species in an area is one of the urgencies in managing conservation areas, so that their existence can be maintained and avoided extinction.

Coral reefs are one of the marine resources that have great benefits or services for humans and the

environment. The role and benefits of the coral reef ecosystem consist of economic, ecological and socio-cultural benefits. Coral reefs have been identified as having high conservation value such as rainforests because they are biologically diverse, aesthetically attractive, and function as reserves of genetic diversity. Many coral reefs in Indonesia are used for various activities, one of which is marine tourism activities. Coral reefs have a function that supports human life and livelihoods so they are economically important.

Coral reef ecosystem management strategies on Panjang Island: 1) community-based management; 2) forming a Supervisory Community Group (Pokmaswas); 3) designate the Panjang Island waters as a regional marine conservation area; 4) Co-Management based management; and 5) efforts to improve the economy in order to support increased knowledge of the importance of preserving and managing coral reef ecosystems.

The low level of public knowledge regarding the importance of coral reefs and the lack of supervision of destructive activities on coral reefs causes the rate of coral reef destruction to accelerate. Given the importance of coral reefs in South Pacific countries, they are generally threatened by negative pressures, overfishing, coastal development, sedimentation and pollution from agriculture and logging, tourism, climate change and ocean acidification.

4.2 DETERMINATION OF ZONING FOR SABU RAIJUA REGENCY TO MAINTAIN THE CONSERVATION OF CORAL REEF ECOSYSTEMS AND SUSTAINABLE COASTAL PLANNING

Good management is one that thinks about future generations being able to also enjoy the resources that now exist. Coral reef management must preserve, protect, develop, repair and improve the condition or quality of coral reefs for the benefit of all levels of society and with future generations in mind. (Bengen, DG 1999) Comprehensive coral reef ecosystem management really needs to be developed, namely management that is prepared by taking into account the balance and harmony between the needs of regional economic development and local communities, ecosystem sustainability. Management is in accordance with considerations of safeguarding between exploitation efforts and environmental conservation efforts (Bengen, DG 1999)

To control every activity so that economic and ecological aspects continue to run in balance, sustainable management is needed to preserve the coast and sea. Coral reef ecosystem management strategies include encouraging community awareness, participation and cooperation/partnership in planning and implementing coral reef management. (Bengen, DG 1999) Conservation Efforts To prevent further damage to coral reefs, coral reef management is needed. Management is essentially a process of controlling human actions so that the use of coral reefs can be carried out wisely with environmental sustainability in mind. Agardy (1997); Barr et al. (1997) in Arifin (2008) To prevent more severe loss of marine resources, it is necessary to take protection (conservation) efforts as stated in PP Number 60 of 2007 concerning Conservation of Fish Resources explaining by setting aside locations that have the potential for diversity of animal species as well as plants, uniqueness and natural phenomena, along with the ecosystem into several zones, namely the core zone (no-take area), sustainable fisheries zone, utilization zone and other zones.

One of the conservation efforts is the concept of establishing Marine Protected Areas (KKL). Agardy (1997); Barr et al. (1997) in Arifin (2008) This determination, apart from protecting remaining resources, also provides an opportunity for the ecosystem to recover from damage. In order to achieve the

sustainability of marine natural resources, one step that is considered appropriate is the establishment of Marine Protected Areas (KKL), with the assumption that when users of marine resources are limited in their rights and authority over marine and coastal potential, efforts to minimize damage to marine resources can be achieved. . The coral reef ecosystem management strategy on Panjang Island determines the waters of Panjang Island to become a regional marine conservation area.

Marine conservation areas have areas (zoning) that have specific functions and objectives. One of the zoning areas within a marine conservation area which has very important functions and objectives is the Marine Protected Area (DPL) which functions as a core zone or protection zone for the biological resources within it. In general, the DPL applies a zone prohibiting fishing activities by fishermen. Determining the DPL will ensure sustainability for coastal and marine ecosystems, and will have an impact on the welfare of fishing communities.

RZWP-3-K is expected to be able to realize sustainable development in coastal and marine areas, as well as guaranteelegal certainty in investment. Concept of establishing Marine Protected Areas (KKL). Agardy (1997); Barr et al. (1997) in Arifin (2008) explains that KKL has the following main roles:

1. Protecting biodiversity as well as the structure, function and integrity of ecosystems, conservation areas can contribute to maintaining biodiversity at all trophic levels of the ecosystem, protecting food web relationships and ecological processes in a system.
2. Increasing fisheries yields, conservation areas can protect spawning areas, grow-out areas, places to find food, increase reproductive capacity and fish resource stocks.
3. Providing recreation and tourism areas, conservation areas can provide places for recreation and natural tourism activities that have ecological and aesthetic value. Protection of special places for recreation and tourism purposes (such as the regulation of boat/ship docks, anchorage areas and shipping lanes) will help safeguard the richness and diversity of recreation and tourism areas available along the coast.
4. Expanding knowledge and understanding of ecosystems, conservation areas can increase public understanding and awareness of coastal, marine and small island ecosystems, provide relatively undisturbed places for long-term observation and monitoring and play an important role in public education regarding the importance of marine conservation and impact of human activities on marine biodiversity.
5. Providing socio-economic benefits for coastal communities, conservation areas can help coastal communities maintain their economic base through optimal and sustainable use of environmental resources and services.

Added by Westmacott et al. (2000), that marine conservation areas play an important role in the preservation and management of coral reefs by:

1. Protecting undamaged areas of coral reefs that could be a source of larvae and as a tool to aid recovery.
2. Protect areas that are free from human impact and suitable as substrates for coral attachment and regrowth.
3. Ensuring that coral reefs continue to support the needs of local communities who depend on them.

Sabu Raijua Regency Regional Regulations Number 3 Year 2011 regarding Rencana Tata Ruang Wilayah Kabupaten Sabu Raijua on Article 28 stated that:

(1) The tourism designated area as intended in Article 22 letter f, consists of:

a. area designated for cultural tourism; And
b. area designated for natural tourism.

(2) The natural tourism designated area as intended in paragraph (1) letter b, consists of:

a. Biu Beach area in East Sabu District;
b. Loko Eimada area in East Sabu District;
c. Seba Beach area in West Sabu District;
d. Bodo' Beach area in West Sabu District;
e. Eimada Bebae area in Central Sabu District;
f. Menia Beach area in West Sabu District;
g. Lie Ma Dira Cave area, Daieko Village in Hawu Mehara District;
h. Raerobo Beach area in Sabu Liae District;
i. Bali Beach area in East Sabu District;
j. Lederaga area in Hawu Mehara District;
k. Wadu Mea/Merabhu area in Sabu Liae District;
l. Dahi Ae area in Hawu Mehara District; And
m. Ege Beach area, Sabu Liae District;
n. Uba Daramaka-Gelanalalu Beach area in Wadumeddi Village, Hawu Mehara District;
o. Eimau Beach area in Eimau Village, Central Sabu District; And
p. Hala Beach area in Kolorae Village, Raijua District

General Provisions for Zoning Regulations for Protected Areas Article 39 (9) General provisions for zoning regulations for marine national park areas as intended in paragraph (1) letter h, are prepared taking into account:

a. use of space for research, education and natural tourism;
b. provisions prohibiting activities other than those referred to in letter a;
c. provisions prohibiting hunting of protected marine biota; And
d. provisions prohibiting the destruction of coral reefs and marine ecosystems.

It is hoped that this national policy on coral reef management will take into account that management of coral reefs as part of coastal ecosystems cannot be separated from efforts to manage various other resources such as mangrove forests, seagrass beds and other wetlands. Coral reef management policies in Indonesia must be designed to answer two main interests, namely;

1. The need to protect and conserve coral reef resources;
2. The need to manage coral reef resources rationally, resolve utilization conflicts and achieve a balance between utilization and sustainability.

It is important to maintain, establish and even revitalize this local policy so that the community can participate in supporting efforts to protect coastal and marine resources in coastal villages in the Sawu Sea TNP area. The use of local wisdom can revive community participation in the process of implementing conservation programs in the Savu Sea TNP so that environmental conservation develops again in people's lifestyles (Indonesia Marine Rapid Ecological Assessment Program for Coastal Biological Resources Savu Sea National Park 2014)

Local Wisdom Zones are needed to protect areas that have important cultural-traditional values and accommodate the local wisdom of the community that is found and spread in each area within the Savu Sea National Park area which is unique and supports conservation efforts such as Lilifuk, Nempung Cama, Watuweri, Mehing Parotu, Mini Parotu, Luat, Manita, and other local wisdom. (Indonesian Maritime Affairs

and Fisheries Ministerial Decree number 6/Kepmen-KP/2014: 59).

5. Synopsis of the Main Research Outcomes

To control every activity so that economic and ecological aspects continue to run in balance, sustainable management is needed to preserve the coast and sea. Coral reef ecosystem management strategies include encouraging community awareness, participation and cooperation/partnership in planning and implementing coral reef management. (Bengen, DG 1999) Conservation Efforts To prevent further damage to coral reefs, coral reef management is needed. Management is essentially a process of controlling human actions so that the use of coral reefs can be carried out wisely with environmental sustainability in mind. Agardy (1997); Barr et al. (1997) in Arifin (2008) To prevent more severe loss of marine resources, it is necessary to take protection (conservation) efforts as stated in PP Number 60 of 2007 concerning Conservation of Fish Resources explaining by setting aside locations that have the potential for diversity of animal species as well as plants, uniqueness and natural phenomena, along with the ecosystem into several zones, namely the core zone (no-take area), sustainable fisheries zone, utilization zone and other zones.

One of the conservation efforts is the concept of establishing Marine Protected Areas (KKL). Agardy (1997); Barr et al. (1997) in Arifin (2008) This determination, apart from protecting remaining resources, also provides an opportunity for the ecosystem to recover from damage. In order to achieve the sustainability of marine natural resources, one step that is considered appropriate is the establishment of Marine Protected Areas (KKL), with the assumption that when users of marine resources are limited in their rights and authority over marine and coastal potential, efforts to minimize damage to marine resources can be achieved. . The coral reef ecosystem management strategy on Panjang Island determines the waters of Panjang Island to become a regional marine conservation area.

Marine conservation areas have areas (zoning) that have specific functions and objectives. One of the zoning areas within a marine conservation area which has very important functions and objectives is the Marine Protected Area (DPL) which functions as a core zone or protection zone for the biological resources within it. In general, the DPL applies a zone prohibiting fishing activities by fishermen. Determining the DPL will ensure sustainability for coastal and marine ecosystems, and will have an impact on the welfare of fishing communities.

6. Conclusions

One of the ecosystems that plays an important role in coastal areas, the benefits of coral reefs include economic, ecological and socio-cultural benefits. Coral reef ecosystem management strategies include community-based management which is prepared by taking into account the balance and harmony between the needs of regional economic development and local communities, ecosystem sustainability and consideration of local community wisdom values.

Status of Local Wisdom in the Savu Sea National Park in Sabu Raijua Kowa hole district, Panadahi, Active status. Revitalization efforts are absolutely necessary, this is important to revive local content based on culture and policies that participatively involve the community so that the process of implementing environmental conservation can grow and develop again in the pattern of community life. By revitalizing local wisdom, the community can participate in supporting efforts to protect coastal and marine resources

in coastal villages in the Savu Sea area.

The Local Wisdom Zone is needed to protect areas that have important cultural-traditional values and accommodate the local wisdom of the community that is found and spread in each area within the Savu Sea National Park area which is unique and supports conservation efforts such as Lilifuk, Nempung Cama, Watuweri, Mehing Parotu, Mini Parotu, Luat, Manita, and other local wisdom.

7. Limitations, Implications, and Further Directions of Research

Status of Local Wisdom in the Savu Sea National Park in Sabu Raijua Kowa hole district, Panadahi, Active status. Revitalization efforts are absolutely necessary, this is important to revive local content based on culture and policies that participatively involve the community so that the process of implementing environmental conservation can grow and develop again in the pattern of community life. By revitalizing local wisdom, the community can participate in supporting efforts to protect coastal and marine resources in coastal villages in the Savu Sea area.

The Local Wisdom Zone is needed to protect areas that have important cultural-traditional values and accommodate the local wisdom of the community that is found and spread in each area within the Savu Sea National Park area which is unique and supports conservation efforts such as Lilifuk, Nempung Cama, Watuweri, Mehing Parotu, Mini Parotu, Luat, Manita, and other local wisdom

References

[1] Agus Parmono. (2018). *Urgensi Pengaturan Zona Dalam Upaya Pengendalian Pemanfaatan Ruang Daerah Berkelanjutan*. http://trtb.pemkomedan.go.id/artikel-707-urgensi-pengaturan-zona-dalam-upaya- pengendalian-pemanfaatan-ruang-daerah-berkelanjutan.html#ixzz4ulNha5Si

[2] Bhakti, C., Samudra, A. A., & Suradika, A. (2023). Impact and Resolution of Land Conflict Cases on Rempang Island, Indonesia. *Journal of Law and Sustainable Development*, *11*(12), 5. https://doi.org/10.55908/sdgs.v11i12.2146

[3] Boedi Harsono. (2003). *Hukum Agraria Indonesia (Hukum Tanah Nasional)* (Revisi, Vol. 1). Djambatan.

[4] Darmawan, D. A., Soetarto, E., Asnawi, Y. H., Mahasari, J., & Sukmawati, A. (2023). The History of Agrarian Reforms in Indonesia: A Sociological Perspective. *Journal of Law and Sustainable Development*, *11*(11), 12. https://doi.org/e2196. https://doi.org/10.55908/sdgs.v11i11.2196

[5] Juniarso Ridwan. (2008). *Hukum Tata Ruang*. Nuansa.

[6] Urip Santoso. (2012). *Hukum Agraria; Kajian Komprehensif*. Kencana Prenada Media Group.