Formosa Journal of Science and Technology (FJST)
Vol. 2, No. 4, 2023: 1049-1062

Conditions and Management Strategies for Mangrove Ecosystems as an Effort to Improve the Economy of Youtefa Bay Coastal Communities, Jayapura City

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A R T I C L E I N F O

Keywords: Strategy, Management, Mangroves, Community Economy

Received : 19, February
Revised : 16, March
Accepted: 20, April

A B S T R A C T

This study aims to find out Conditions and Management Strategies for Mangrove Ecosystems as an Effort to Improve the Economy of Youtefa Bay Coastal Communities, Jayapura City. The method used is a type of library research. Data were obtained from various literature sources, such as: journals, books, proceedings, online platforms and other sources deemed relevant to the research topic. Data analysis is done through; data reduction, data presentation, data verification, and drawing final conclusions. The findings of this study show that the mangrove forests around Youtefa Bay are still degrading. In addition to environmental pollution, which includes function conversions caused by various development goals. Mangrove management with community involvement can contribute to improving the community's economy and public awareness to maintain its sustainability.

DOI: https://doi.org/10.55927/fjst.v2i4.3835
ISSN-E: 2964-6804
https://journal.formosapublisher.org/index.php/fjst

INTRODUCTION

Indonesia as an archipelagic country has abundant natural resources. One of them is the existence of mangrove forests which are scattered in various parts of Indonesia. We can easily find mangrove plants in almost all the islands in Indonesia. Mangrove forests are usually found growing in groups in coastal areas. According to Pramudji (2019) the coastal area is a transitional area between land and sea, with landward boundaries covering parts of the land, both dry and submerged areas, and are still influenced by the characteristics of the sea, such as tides, and are marked by the presence of mangrove vegetation. Furthermore, it is stated that the mangrove ecosystem has an important war against the marine biota that lives associating in it. no exception for people who live around the mangrove forest area. Communities in coastal areas make mangrove forests a source of livelihood in order to fulfill family needs.

As an archipelagic country, Indonesia is said to be a country that has the largest mangrove forest in the Southeast Asian region, even the largest contributor to the world's mangrove ecosystem. This mangrove plant grows in the western part (Sumatra) to the eastern part of Indonesia (Papua). The area of Indonesia's mangrove forests is around 3,490,000 million hectares of the total world mangrove forest area of 16,530,000 million hectares, or approximately 21% of the world's mangrove area. Nevertheless, the existence of mangrove forests in Indonesia continues to experience a decrease in area. Based on the press release of the Ministry of Maritime Affairs and Fisheries of the Republic of Indonesia, an area of 1.82 million hectares or around 52% of Indonesia's mangroves is in a damaged condition (KKP, 2020). Therefore, bearing in mind the importance of the function of mangroves for society and the global ecosystem so that there is a need for efforts to rehabilitate mangrove forests in order to achieve a balance of functions; as an economic zone and environmental function where mangroves are a life support in coastal areas (Alwidakdo in Lisna et al., 2017). Launching from the mediaindonesia.com site, Member of the People's Legislative Assembly of the Republic of Indonesia [DPR-RI] Andi Akmal Pasluddin said that the mangrove rehabilitation being carried out by the government was still centered around the island of Java, even though mangroves outside the forest area of eastern Indonesia also experienced quite high damage, for example, the mangrove damage that occurred in East Nusa Tenggara (NTT) was 32% in critical condition, Sulawesi 29% in critical condition, Maluku and North Maluku 7.3% critical and Papua, around 1.6%, is in critical condition (Hanum, 2021).

The existence of mangroves has many benefits for the community. Referring to Zonaphan (2021) it is said that Mangroves also have benefits in other sectors, one of the uses that often has a lot of impact on coastal communities is the economic benefits of mangrove ecosystems. Even in certain areas, people who live around coastal ecosystems use this ecosystem as their main source of livelihood.Likewise, the existence of mangrove forests in the coastal area of Youtefa, Jayapura City has an important meaning in the lives of the surrounding community. Mangrove forests are like mothers who provide

livelihood for the local community. Forests have many benefits that are not only interpreted ecologically, but also socially, culturally and economically.

The beneficial value of mangrove forests is very important especially for fisheries especially in Youtefa Bay because it functions to support abundance fish, shrimp, shellfish and other biota in the coastal area of Jayapura City which became source of livelihood for the community around the area (Paulangan, 2014). Furthermore, Paulangan (2014) that based on the Service Report Fisheries and Maritime Affairs Regional Government of Papua Province in 2007, that livelihood community in the Youtefa Bay Tourism Park area, which is around 64% as fishermen, followed by other jobs 18% (farmers, shell seekers, entrepreneurs, retirees) as much as 18.2%, then civil servants and those who do not work each 9.1%. This shows that the dependence of the people in the Youtefa Bay area on the ecosystem mangroves are very large.

Departing from the description above, this study intends to look further into the conditions and management strategies of mangrove ecosystems in order to improve the economy of the people in the coastal area of Youtefa Bay, Jayapura City, Papua Province. Given the existence of mangrove forests as conveyed byPapua Natural Resources Conservation Center (2020) that the community's attachment to the Youtefa mangrove forest area is very strong, including in terms of earning a living for everyday life. Since the time of their ancestors, they have been close to Youtefa Bay and all its potentials, such as mangrove forests, seagrass beds, and various marine biota. Therefore, if it is not controlled, the community's dependence on the Youtefa mangrove forest is quite vulnerable to causing a threat to the sustainability of the area.

THEORETICAL REVIEWS

Management Strategy

Strategy is a plancomprehensively integrates all responses and capabilities that have a long-term goal of winning competence (Naway, 2016: 6). Meanwhile, Umar (2015) Strategy is a careful plan of identifying activities to achieve special target. From the understanding above, it can be drawnthe conclusion that strategy is a process in determining the direction to be followed so that goals can be achieved.Strategy has multifunctional consequences or multidivisional and in its formulation it is necessary to consider internal factors and external factors faced by the company (Racmat, 2014: 14).

Meanwhile, management is the process of structuring activitieswhich will be carried out through management functions is of course useful as a benchmark to determine success as a form of achieving agreed common goals (Naway, 2016: 9). According to Dethan (2019) Management is a series of activities or tasks starting from planning, organizing, directing and controlling or supervising by utilizing existing potential in achieving certain goals.

Departing from the above understanding, the management strategy can be interpreted as a series of basic decisions and actions made by top management and implemented by all levels of an organization in order to achieve the goals of the organization (Siagian, 2015: 15). According to Saputro et al., (2014) strategic management is a process or series of basic and

comprehensive decision-making activities, accompanied by a determination of how to implement them, made by top management and implemented by all levels within an organization, to achieve its goals.

Mangrove Ecosystem

Referring to Mulyadi et al., (2010) Mangrove forests are forests that grow in river estuaries, tidal areas or seaside. Mangrove plants are unique because they are a combination of the characteristics of plants that live on land and in the sea. In general, mangroves have a prominent root system called the breath root (pneumatophore).The mangrove ecosystem functions as a feeding ground, spawning ground, nursery ground and breeding ground for various aquatic biota such as fish, shrimp and shellfish. Mangrove forests are a habitat for various types of animals, both as a primary habitat and as a temporary habitat, producing detritus and as a sediment trap that comes from the mainland (Ely et al., 2021). In ecology, mangroves are defined as plantsused for shrubs and trees growing in shallow intertidal and subtidal areas in tropical and subtropical tidal swamps (Mulyadi et al., 2010). According to Syah (2020), Mangrove forest is a general designation used to describe a variety of tropical coastal communities dominated by certain species of trees or shrubs that have the ability to grow in salty waters.

METHODOLOGY

This study uses library research methods. The data were obtained from various literature sources, such as: journals, books, proceedings, online platforms and other literary sources considered relevant to the research topic. This literature review is part of qualitative research, except that in library research interviews and observations are not carried out, but text and discourse analysis is carried out by moving the field setting into the library room (Hamzah, in Sapioper et al., 2022).

According to Mirshad, in Sari & Asmendri (2020) there are four activities in library research, namely recording all findings, combining all findings, analyzing all findings and criticizing. Furthermore, at the stage of data analysis carried out, through; data reduction, data presentation, data verification, and final conclusion (Miles & Huberman, in Ilham et al., 2020).

RESULTS

Condition of Mangrove Ecosystem in Youtefa Bay Area

As a coastal resource, the widest distribution of mangrove forests is in eastern Indonesia. Kusmana in Handono et al (2014) states that the widest distribution of mangrove forests in Indonesia is in the Cenderawasih Papua region, which has an estimated area of up to 1.6 million hectares. However, in the current condition, the existence of mangrove forests in the Papua and West Papua regions continues to decrease in area due to anthropogenic factors (change in land use) and natural factors (Budiman et al., 2020). For example, damage to the mangrove ecosystem which has an impact on decreasing the area also occurs in the coastal area of Youtefa Bay, Jayapura City, Papua Province. In general, the density of mangroves in the Youtefa Bay area is dominant in the

medium density category and the health of the ecosystem is classified as good. but from the aspect of mangrove area it has decreased (Hamuna et al., 2018). Referring to Alfons (2018) it is stated that the area of mangrove vegetation has decreased in the Youtefa Bay areadue to the rampant logging activities of mangrove forests, the sale of customary land rights by indigenous peoples, stockpiling for development purposes, solid waste disposal, and the lack of supervision from the Balai Besar KSDA Papua I [Center for Conservation of Natural Resources] as the party that manages this conservation area. Based on this, development activities that are not environmentally friendly are considered to be one of the contributing factors to the damage to the mangrove ecosystem which has an impact on decreasing the area of mangroves in the Youtefa Bay area.

Seeing the rapid population growth of Jayapura City has triggered the expansion of infrastructure development which is taking place increasingly rapidly to target the coastal areas of the Youtefa Bay area. It should be recognized that infrastructure development is one of the important keys in driving the community's economy. In general, the development of Jayapura City which has been realized through the development of urban areas has a positive influence on all residents of Jayapura City, especially for residents who have business units or certain business fields, both on a large and medium scale, but the development of urban areas is very rapid in Basically, it has more negative effects on the local population and the environment of the coastal area than the positive ones (Jouwe & Agus, 2012).

The above conditions can be proven by the conversion of several conservation areas, including protected forests and mangrove forests, residential areas of local residents, marginalization of local residents accompanied by small and simple business opportunities, damage to marine ecotourism, worsening environmental sanitation of settlements with all the consequences without recognized by the local people (Jouwe & Agus, 2012). As it is known that the mangrove forest area in Youtefa Bay does not only function as a disaster controller, but is like a mother who provides a livelihood for the local community (Tobati, Enggros and Nafri). The existence of mangrove forests is a place to look for local food ingredients in the form of shellfish which in the local language is called "*bia*". Searching for shells in the mangrove forest has become a tradition that has been passed down from one generation to the next, and is firmly attached to the lives of the people who live in the Youtefa Bay area. Mangroves have become an inseparable part of the local community's customs and even their lives have become one with nature.

Refer Utomo (2018) states that respect for nature is related to the human obligation to maintain, protect and preserve nature and its contents, humans are not allowed to damage or destroy nature and all its contents without justifiable reasons morally. Development policies carried out for the purpose of increasing the economy should heed the local wisdom values that are held by the community. Nibras Fadhillah from the People's Coalition for Fisheries Justice sees that so far development projects carried out in coastal areas have not been able to prosper coastal communities, but instead have taken lands that

are used as fishing grounds (YLBHI, 2019). Like the development of development in the coastal area of Jayapura City, it has an impact on decreasing the income of local people who depend on the mangrove forest for their lives.

In addition, according Jouwe & Agus, (2012) that the development development of Jayapura City has also resulted in cultural changes, in which residents accept culture that comes from outside resulting in changes in people's lifestyles, even so the people of Jayapura City still adhere to ancestral traditions. This can be proven by the existence of mangrove forests, in principle, specifically reserved for women. Even this forest later became known as "Women's Forest", which was guarded and cared for based on the local wisdom of the local community. The tradition of guarding the forest by women is an ancestral tradition passed down from generation to generation.

In the current condition of mangrove forests, the change in function is very dangerous for the sustainability of the environment because mangroves are important in protecting the Youtefa Bay area from the threat of waves that face directly the Pacific Ocean, including pollution that also threatens people's livelihoods. Therefore, it is hoped that the enforcement of the Jayapura City Regional Regulation regarding waste and waste must be strictly implemented, regulations regarding waste and waste management are regulated in Jayapura City Regional Regulation Number 13 of 2017 concerning cleanliness. Launching *pinktravelogue.com,* Komala (2020) also hopes that the women's forest will continue to be maintained and preserved, despite threats such as the 2021 PON Papua [National Sports Week] rowing venue construction project, he hopes that the mangrove forests can be maintained and not overhaul the mangrove forest area, besides that, trash will also become a problem for women in the mangrove forest who usually come from cities and beaches.

Environmental observer who is also the executive director of Walhi Papua, Aiesh Rumbekwan said that if the effects of damage to the ecosystem in Youtefa Bay had caused a "degradation of cultural values" for the Women's Forest which had become the "essence of life" for the people living in the bay, now they have to face conditions of urgency so how then have to survive in the midst of the current clash of changes (Amindoni, 2021). Publichope that the women's forest can continue to be maintained, cared for and protected so that its sustainability is maintained, came from the conscience of the Enggros women. They do not want mangrove forests as a source of livelihood for the people, and the traditions in them which are ancestral heritage must be lost due to human activities.

Utilization and Economic Value of Youtefa Bay Mangrove Forest

ExistenceMangrove forests have an important role for the survival of the people around them. Mangrove forests are a habitat for various types of animals that live in association with these ecosystems.The existence of mangrove forests on the coast of Youtefa Bay, Jayapura City, Papua is not only limited to having a function as disaster controller. However, it is like a mother figure who provides a livelihood for the local community. The mangrove ecosystem resources in the Youtefa Bay area are evenly distributed in the customary areas of Tobati, Enggros and Nafri Villages (Lewaherilla, 2007). The

existence of mangrove forests is an inseparable part of people's lives. The division of areas for work, between women and men has existed since ancient times, where men earn a living at sea and women are given mangrove forests to look for food in order to meet family food needs.

Mangrove forest areas have helped maintain the availability of fish resources. These resources can be utilized by the community as a source of livelihood. Ridwan (2022) said that the mangrove ecosystem provides continuity for various living things below and around it: there are fish and crabs between their sturdy roots, there are also various insects and birds in the shady branches, including being one of the economic sources. public. Same with the mangroves in the Youtefa Bay area,referring to *pinktravelogue.com* it is stated that women look for food from women's forests such as; shellfish, shrimp, mangrove crabs, and fish, for shells there are around 114 species that can be found in the region, but the most abundant is bia noor (Komala, 2020). The study of Randongkir et al., (2019) regarding the types of marine biota used by the people of Tobati, Enggros and Nafri Villages as food ingredients that live in association with mangrove ecosystems, can be seen in table 1.

Table 1. Types of Marine Biota Utilized as Food Ingredients People in Youtefa Bay

Biota	Species	Local Name	Indonesian Name
Shell	*Modiolus micropterus*	Hwatari	Lola shells
	Anadara granosa	Twuad	Noor shells
	Scarpharca pilula	Ree	Noor shells
	Glyemeris reevei	Hwandek	Lola shells
	Clonus planorbis	Wenggop rimesi	Long shells
Crab	*Scylla serrata*	Hrook	Black Crab
	Scylla olivacea	Hos-hos	Red Crab
	Scylla paramamosain	Yabruki	Green Crab
Fish	*Mugil cephalus*	Rar	month
	Chanos chanos	Romant	Milkfish
	Siganus sp.	Rindin	Samander
	Lutjanus cempachalus	Anar	Red snapper

Source: Randongkir et al (2019)

The results of a study of economic value by Handono et al., (2014) show that the conversion of mangrove ecosystems for the construction of transportation facilities (flying bridges) has an effect on economic losses, both from environmental and societal aspects. If calculated based on economic value, the role of the Youtefa Bay mangrove forest is quite high in the lives of the local community. However, until now it has resulted in a decrease in people's income from 5.65 billion to 3.61 billion per year, resulting in a decrease of 2.05 billion.

DISCUSSION

Mangrove Ecosystem Management Strategy as an Effort to Increase the Community's Economy

Rehabilitation of mangrove forests is one of the strategies currently being carried out by the government in order to improve the community's economy. Based on the Regulation of the Minister of Forestry Number 03/MENHUT-V/2004 Mangrove forest rehabilitation is an effort to restore the function of mangrove forests that have experienced degradation, to conditions that are considered good and capable of carrying out ecological and economic functions. Mangrove rehabilitation aims to restore damaged mangrove forest areas, increase mangrove forest cover and improve the economy and welfare of the community (BPMI Setpres, 2021). The successful restoration of mangroves will also have an impact on community welfare. If mangroves are in good condition, they will become a habitat for fish, crabs, and so on. These conditions will ultimately bring prosperity to coastal communities (Biro Hubungan Masyarakat KLHK, 2020).

Youtefa Bay Mangrove Forest Rehabilitation

The condition of the mangrove forests in the Youtefa Bay Area has attracted the attention of various parties. Like the nature campaign entitled "Jayapura #RawatBumi2019: Save Youtefa Bay Mangrove from Damage" which took place in 2019 assisted by Jayapura Forest Protection Volunteers including 21 participants joining the action. Replanting of mangrove forests is carried out in several areas, such as; Enggros and Mendug Beach are one of them the location cleared for the construction of the Hamadi-Holtekamp road.

Head of Komnas HAM [The National Commission on Human Rights] Papua Office, Pnt Frits Ramandey and his colleagues have also done this direct monitoring and recording a number of points regarding the condition of the mangrove ecosystem in the Youtefa Bay area which continues to be degraded due to the wheels of development, based on this monitoring and investigation found 28 (twenty eight) points of damage to mangrove forests and sago forests, of which there were 16 (sixteen) points which were threatens the sustainability of the mangrove forest ecosystem starting from the Youtefa Bridge towards Holtekamp, then there are 12 (twelve) points of extermination of the sago forest area (Ade, 2021). Concerned about the condition of the Youtefa Bay mangrove forest, the Papua River Basin Office and the Jayapura Community Forum, also joined by Protect Jayapura Forest volunteers, held a mangrove planting action at Mendug Beach, Youtefa Bay on July 28 2018, this activity was in commemoration of World Mangrove Day which also involves Koya Koso Junior High School 14 students (Rizka, 2018). Including, the Caring and Environmental Lovers community in Jayapura City took part in planting mangroves in the Youtefa Bay Nature Tourism Area, an activity initiated by the Jayapura Mangrove House.

Including administratorsbhayangkari, Papua, which also planted 200 mangrove tree seedlings on the coast of Mendug Beach, Youtefa Bay as a series of the 40th Anniversary of the Kemala Bhayangkari Foundation in 2020, the planting was carried out in the hope of bringing great benefits to the

surrounding environment (Rumgit, 2020). Apart from Bhayangkari administrators,The Jayapura City Police Resort also showed commitment to environmental preservation, especially mangrove forests, planting phase II mangrove seedlings of 250 trees was again carried out in the Mendug beach area of Youtefa Bay, at the same location previously planting was also carried out.as much1,500 thousand mangrove seedlings during the Green Tour on 7 January 2020. The planting of 1,550 tree seedlings in 4 (four) different locations was also attended by the Mayor of Jayapura, Benhur Tomi Mano, during the Green Tour. (Faizal, 2020). In commemoration of the National Waste Care Day, the Jayapura City Government is again carrying out clean-up actions and planting mangroves in the tourist area of Youtefa Bay which took place on Friday, 21 February 2020.

Media *mongabay.co.id* in his report, the Mayor of Jayapura, Benhur Tomi Mano revealed that along with the development of the times as a result of modernization it has brought changes not only to social life, but includes a shift in customary values, art and culture of society, the role of Historically, cities and coastal areas have changed their status and function (Abubar, 2012). Through the National Movement for Mangrove Care, Watershed Recovery and prosperous green village, the Work Cabinet Era Solidarity Action Organization planted 5,000 mangrove seedlings in the Tanjung C'Beery area of Jayapura City in 2019. This activity, according to the Mayor of Jayapura Benhur Tomi Mano is a manifestation or form of commitment from the central government as well as the provincial government of Papua and Jayapura City to rehabilitate the mangrove forests affected by the construction of the Hamadi-Holtekamp bridge road (Pratiwi & Simbar, 2019).

Head of the Mamberamo Protected Forest Watershed Management Center, Bontor H Sitohang, said that as many as thousands of rhizopora and bruguiera mangrove seedlings had been planted in an area of 1.5 hectares in the Tanjung C'Beery area. The reason for choosing the location was because there was a change of function so that rehabilitation was carried out again with the hope that it would become a breeding ground for marine biota and flora and fauna, including as a place for education, nature tourism and others for the community (Pratiwi & Simbar, 2019). The government is committed to continuing to rehabilitate mangrove forest areas where there has been a conversion of function. Just to note, the Youtefa Bay Area is known for its natural beauty and marine resources, this area was later designated as a Nature Tourism Park which was marked by a Decree of the Minister of Agriculture Number 372/KPTS/UM/6/1978 dated 9 June 1978.

A number of environmental activists in Jayapura City are also concerned about the condition of the mangrove forests in the Youtefa Bay area. Their concern for the environment is marked by their trash raiding activities Youtefa Bay Natural Tourism Park. These environmental activists are involveda number of youth communities as well as cooperating with Ocean Defender with the theme "Caring for the Remaining", the sentence is considered simple but contains such a deep meaning. It means, Mangrove forests, which have an important meaning for women, are currently experiencing pressure after

pressure. According to Naser (2021) stockpiling, construction and waste in the form of garbage are part of the role that contributes to the damage to the mangrove ecosystem which is a "kitchen" for women in three villages, Enggros, Tobati, Nafri which are used every day as a place to to look for food (shellfish, bia and fish).

Caring for the Left, is one of the efforts to maintain mangrove ecosystems in mangrove forest areas carried out by environmental activists in Papua. Efforts to protect mangrove forests have received support from various parties, the Jayapura Mangrove House Community apart from carrying out trash raids is also active in looking for seeds and replanting mangroves to reduce the rate of degradation (Putra, 2022).

Important Aspects in Mangrove Forest Rehabilitation

Mangrove rehabilitation activities are one of the government's current priority activities with the aim of increasing forest and land cover as well as improving environmental quality. This rehabilitation must still be able to increase economic value and welfare for the community, as well as increase the stability of the landscape which plays an important role in national geostrategy, geopolitics and geo-economy. There are three aspects that must be worked on so that the mangrove rehabilitation program can be implemented properly. Acting Director General of Watershed Control and Forest Rehabilitation of the Ministry of Environment and Forestry of the Republic of Indonesia, Helmi Basalamah as quoted from Waseso (2021) stated that some of these aspects are as follows:

The first is the management of the area aspect, namely completing information related to the location of mangrove ecosystem rehabilitation lands that will be carried out throughout Indonesia. Second, the diversity of locations and characteristics of mangrove rehabilitation sites such as in abrasive areas, former ponds, and others, including in border areas of the country. These areas must be approached by considering the various physical, biological and social aspects. Third, in the institutional aspect, mangrove rehabilitation must be carried out by involving the community, including prioritizing the role, as well as the local community whose life and livelihood is very dependent on the existence of the mangrove ecosystem. Among others through the development of tourism, fish farming and so forth. In line with Lugina et al., (2016) that current management of mangroves is felt to lack the involvement of local communities whose livelihoods depend on the presence of mangrove forests.

Several existing forms of mangrove management by the community such as mangrove management by the coastal community of Youtefa Bay can be used as reference material in implementing mangrove management plans, this form of management applies local wisdom that applies in the community and can provide income for the community while still implementing the principle of sustainability. Finally, aspects of technology, assistance, and so on, namely in order to ensure the continuity and sustainability of mangrove rehabilitation results.

Regarding mangrove management, according to Lugina et al., (2016) management policies and strategies are important to consider people's

perceptions and dependence on mangrove ecosystems. Mangrove management with community involvement will contribute to improving the community's economy and public awareness to maintain its sustainability. In line with Harahab & Graziano (2011), community-based management of mangrove forests is a management strategy that can improve efficiency and fairness in the utilization and management of natural resources. An important indicator in the successful management of mangrove forests is community participation.

CONCLUSIONS AND RECOMMENDATIONS

The mangrove forests in the Youtefa Bay area continue to experience degradation. Apart from environmental pollution, including the result of the conversion of functions for various development purposes. Rehabilitation of mangrove forest areas affected by development is one of the efforts made by the government. To support the government's efforts, various groups of environmental activists and several other stakeholders have also participated in replanting mangrove seedlings in damaged areas, both in areas where function conversion has occurred as well as damage to mangrove areas by natural factors.

Mangrove forest rehabilitation is carried out with the obligation to continue to increase economic value and welfare for the community. Therefore, as a recommendation for policies and management strategies it is important to consider the perceptions and dependence of the community on the mangrove ecosystem. Mangrove management with community involvement can contribute to improving the community's economy and public awareness to maintain its sustainability. For example, the form of mangrove management by the coastal communities of Youtefa Bay can be used as reference material. This form of management is by applying local wisdom that applies in the community and can provide income for the community while still implementing the principle of sustainability.

ADVANCED RESEARCH

This research is a literature review, where data is obtained from various existing literature sources, such as; journals, proceedings, books, and online platforms. Because it is dynamic so that it allows for new developments when this article reaches the hands of its readers. Remember, the data obtained may not meet research needs because it was collected by other people. Therefore, it is hoped that there will be field research that examines similar matters with the aim of strengthening the existing facts.

ACKNOWLEDGMENTS

Thank you to the writing team to all parties involved in writing this article.

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