

A WOMEN'S EMPOWERMENT MODEL IN MANGROVE FOREST MANAGEMENT IN TAPAK KUDA VILLAGE, TANJUNG PURA DISTRICT, LANGKAT DISTRICT

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Abstract. This research examines the model of empowering women in managing mangrove forests in Tapak Kuda Village, Tanjung Pura Regency, Langkat Regency as sustainable managers of mangrove forests. The existing conditions that have occurred so far show the inability of the government and stakeholders to synergize through mangrove forest management programs that involve local community participation in a sustainable, synergistic and systemic manner, so that implementation often experiences overlap. This multi-stakeholder uncertainty can be minimized if it is based on a model of empowering women in communities living around mangrove forests and stakeholder involvement in mangrove forest management that has been carried out, so that this research can become a reference for the government and stakeholders in systemic and sustainable mangrove forest management. The objectives of this research are: to determine the form of women's involvement as mangrove forest managers, to analyze the obstacles faced in efforts to empower women, to design a model for empowering women in sustainable mangrove forest management. Research Method uses a qualitative approach with descriptive analysis techniques to analyze the form of women's involvement in mangrove management, analyze the obstacles faced by women in managing mangrove forests, and design a model for women's empowerment in managing mangrove forests in a sustainable manner.

Keywords: mangrove forest management; women empowerment; stakeholders; systemic and sustainable

I. INTRODUCTION

Indonesia is a fertile country with a wealth of natural resources on land and at sea. Indonesia is an archipelagic country with long beaches that surround each island, providing added value to the aquatic environment that can be explored and improved, especially in the fisheries sector. Coastal areas are resources that support many communities living in these areas, including fishery resources, both fishing and cultivation. The method is to be lowered directly from the water, directly into the open sea, to catch the catch. Aquaculture is the practice of cultivating fish or shrimp in ponds. When these fishery resources are used optimally, they will improve their socio-economic status or welfare, allowing them to live comfortably. Increased production can lead to increased welfare because nature provides sufficient food. Tapak Kuda village is a village on the coast of the Malacca Strait, where the population generally earns their living as fishermen. The distance to the sub-district capital from Tapak Kuda village is around 19 km but due to the poor road conditions it takes around 1 hour by motor vehicle to reach the sub-district capital. According to BPS data in 2015, there were around 97 families in Tapak Kuda village who did not have electricity. Mangrove forests in Langkat Regency, North Sumatra Province have an area of 28,702,0402 Ha. [1]. The area of mangrove forests is suspected to experience uneven fluctuations. This inequality is caused by mangrove logging activities which are increasing from year to year. There are various reasons that encourage people to carry out logging

activities, including mangrove wood being used as raw material for charcoal. Men often collect mangrove wood to make charcoal, some of which is sold and some of which is used by coastal women for their daily cooking needs.

Apart from that, the use of mangrove forests as pond areas and the conversion of land into oil palm plantations are rational choices for local communities to survive. The lack of local community knowledge about the ecological function of mangrove forests means that exploitation has the potential to cause damage to mangrove forests in Langkat Regency. The minimal role of women on Tanakeke Island due to the low knowledge and skills of coastal women in utilizing mangroves. Low education level, limited skills and lack of awareness of mangrove resources. The involvement of coastal women in the management and use of mangroves can be seen from their contribution of energy, thoughts, time and even materials. Coastal women naturally have a higher level of concern for the natural environment than men. This condition is seen in coastal women in Marind Imbuti, Payum village. They are tasked with providing mangrove seeds for planting. Coastal women do not even spend money to buy mangrove seeds from other parties. [2]. As a coastal area, Tapak Kuda Village, Tanjung Pura District, Langkat Regency has a long history of managing mangrove forests. Mangrove forests have become an identity for coastal communities who have experienced the dynamics of ups and downs. The existing condition of mangrove management in Tapak Kuda Village is currently still faced with wood encroachment activities aimed at selling

it as raw material for making charcoal. In addition, the mangrove wood encroachment activity carried out is an illegal act aimed at converting the land into an oil palm plantation. Data collected from Dberita.id encroachment on mangrove conservation forests was carried out in the Paluh Pagar area of Tapak Kuda Village using heavy equipment/excavators. [3].

In fact, the encroachment of mangrove forests is accompanied by the closure of Anak Paluh and the enclosing of the area by creating embankments to retain sea tides which can cause mangroves to be degraded and fishermen's catches to decrease. The results of field observations show that empowerment is important in increasing women's roles and opportunities. In the context of coastal area development, women's empowerment is a transformation process that responds to various changes in the allocation of economic resources, distribution of benefits and accumulation of increased production and household income. [4]. Empowering women is also able to increase their potential to be able to be independent and work, alleviating oppression due to discriminatory behavior from various parties. This condition encouraged researchers to design a model for empowering women managing mangroves in Tapak Kuda Village, Tanjung Pura District, Langkat Regency, which is most relevant to the existing rate of deforestation. The model for empowering coastal women is offered by involving them in mangrove management, so that they receive strengthening of social institutions in a participatory manner in the development of coastal areas.

II. RESEARCH METHODS

This research uses a qualitative approach with descriptive analysis techniques to identify and analyze forms of women's empowerment as mangrove forest managers, government involvement in mangrove forest management and the design of women's empowerment models in sustainable mangrove forest management. Descriptive analysis techniques are carried out to explore data and information about the process or mechanism of relationships between research subjects, present basic data, create new categories and classifications based on conceptual order or analyze diverse data and information into interrelated phenomena. [5]. Researchers will enter social conditions based on the community's perspective (emic view) in a comprehensive and holistic manner through involved observation (participatory observation) and in-depth interviews with mangrove management activities carried out by existing stakeholders. [6]. This activity will provide forms of multi-stakeholder involvement in the mangrove management network.

This research will be carried out in Tapak Kuda Village, Tanjung Pura District, Langkat Regency. Determining the research location was based on the consideration that this village had developed mangrove conservation behavior through community-based mangrove forest area management. However, this village has not shown an increase in community welfare through conservative and significant community behavior in systemic and sustainable

mangrove forest management. The results of temporary observations actually show the involvement of external parties as actors who act as mangrove managers, without having to involve external elements of the village.

III. RESULTS AND DISCUSSION

Condition of Mangrove Forest in the Coastal Area of Langkat Regency

Langkat Regency has coastal and marine areas between districts/cities in North Sumatra Province. The geographical location that stretches along the east coast of North Sumatra makes this area ideal for the growth of the mangrove ecosystem. The existence of mangroves is a potential natural resource that is useful for the sustainability of life. There are various vegetation distributions and types of mangroves in the Langkat coastal area. As a function of economic sustainability and environmental resilience, mangrove forests play a role in mitigating disasters in coastal areas. Global warming which often occurs in coastal areas is caused by a reduction in the number and area of mangroves, so that the potential for climate change is felt by coastal communities where environmental conditions become arid and when the wind season blows, residential areas around the coast have the potential to be damaged because they do not have a protective layer. wind from the presence of mangroves. [7]. Globally, the government's priority program in overcoming climate change in coastal areas is through coastal conservation activities through mangrove rehabilitation which will be encouraged until 2030. With the hope that carbon emissions will reach 40% from mangrove rehabilitation activities in coastal areas. [8]. The hope of reducing carbon emissions is not the only goal in managing mangrove forest areas on the coast of Langkat Regency. Mangrove forests also provide a buffer area for the lives of coastal communities in Langkat from the threat of abrasion. Apart from that, mangrove forests also have an economic function for local communities who make a living as fishermen in determining fishing zones that do not have to go far out to sea to catch fish.

The existing condition of mangrove forests in Langkat Regency experiences ups and downs in terms of the area of mangrove cover. The change in the area of mangrove forests in Langkat Regency is motivated by mangrove management activities carried out by local communities who continue to cut them down for the charcoal, firewood and building scaffolding industries. The change in mangrove forest areas into non-forest areas is caused by human activities which convert land into aquaculture and oil palm plantations. The results of BPDAS Wampu Sei Ular measurements (2006) showed that the conversion of mangrove land into ponds increased to 7,397.47 ha [9]. Degradation of the quality and quantity of mangrove forests in the coastal areas of Langkat Regency has had a negative impact on the survival of the community. The incidence of abrasion is increasing, fishermen's fishing zones are getting farther away, the number of coastal fisheries catches is decreasing, and seawater intrusion onto land is increasing. The case of the sinking of

Tapak Kuda Island, Tanjung Pura District, Langkat Regency is concrete evidence of the destruction of mangrove forests in Langkat Regency. [9]. In fact, 30% of the total area of mangrove cover in Langkat Regency has been lost in the past 30 years and 57.6% of damaged mangrove forests in Indonesia. [10]. Even though the sustainability of mangrove forests continues to be threatened, the frequency of various encroachment activities which result in damage to mangrove forests is still ongoing and at certain times the intensity of the damage has even increased. In fact, this activity has an impact on reducing the catch of fish species by fishermen, resulting in a decrease in the income of the fishing community.

Tapak Kuda Village, Tanjung Pura District, Langkat Regency

Tapak Kuda Village is a village where many mangroves are planted. The position of the village is part of the village community's ability to contribute to reforesting mangroves. Tapak Kuda Village is one of the coastal villages in the Tanjung Pura District area, originally Tapak Kuda Village was located off the East Coast of Sumatra Island, precisely on the edge of the Malacca Strait. In 1981, waves from the Malacca Strait were so high that they almost drowned Tapak Kuda Village at that time. The Tapak Kuda Village Government through the Tanjung Pura District Government proposed moving the location of the village to higher ground, so in 1984 the settlement of residents from the old Tapak Kuda Village to the new Tapak Kuda Village began in stages. The total displacement was only felt in 1990 as the entire population of Tapak Kuda Village had moved to the new settlement. At that time Alm. Pak Ismail is the village head.

Forms of Social Networks and the Role of Stakeholders (Actors and Institutions) in Mangrove Management

Tapak Kuda Village is an isolated and remote village located at the very edge of the sub-district, so access is difficult and the quality of the roads are damaged and potholes. The majority of the population is poor and works as farmers and fishermen. Based on these conditions, slowly the village government and community began to take the initiative to develop the tourism sector as a way to develop the tourism sector as a village development strategy. This is because the area has natural and cultural potential that can be developed to become a tourism destination. It's just that access to Tapak Kuda Village is still very bad because the roads are damaged so many people don't know the beauty of tourism in Tapak Kuda Village itself. However, it cannot be denied that the existing conditions are not what they used to be. Mangrove forest destruction has reached an alarming point. Based on the results of interviews with informants in mangrove conservation areas, they expressed the opinion that mangrove damage was caused by illegal logging which had been planted and cared for properly, so it took a long time for mangroves to carry out their ecological functions. The damage that occurred to the Mangrove Forest in Tapak Kuda Village was actually none other than because there were several parties who chose to destroy the Mangrove for personal gain. In Tapak Kuda Village there is a tradition where when there is a

wedding, the residents will work together to take wood from the mangrove forest, and of course the wood has been sorted beforehand and not carelessly cut down. Then after that it will be replanted so that the mangrove forest is not damaged and lost. "It takes a long time for mangrove forests to recover. "Replanting is needed, so that mangroves can function as before"

The ecological function of mangrove forests has experienced degradation to the point of eliminating their function as buffer forests. Communal agreement is needed to protect mangrove forests, so that it has an impact on the socio-economic life of the community. In this scope, the form of social networks can be understood to determine access rights and management rights and management of mangrove forests. Involves social and institutional relationships through community participation. In the mangrove forest land ownership system, the Tapak Kuda Village community recognizes that the area is owned by the government through social forestry with the principle of partnership. The community can access mangrove resources with existing regulations. The use of mangrove forests is of course through various actions that still pay attention to existing conservation aspects.

Government Involvement in the Mangrove Forest Management Stakeholder Network (Actors and Institutions).

One of the problems with mangrove forest management in Indonesia is that the total area of mangrove areas is decreasing, which results in a decline in the ecological function of mangroves. Various parties stated that conservation and rehabilitation of mangrove forests is an important job for local governments to maintain the ecological sustainability of mangrove forests, so that rehabilitating mangrove forests becomes a responsibility, not a burden. Efforts to rehabilitate mangroves are like racing with the level of damage increasing every year. The different socio-economic conditions of the community regarding the value and function of mangrove forests among policy makers and the community often cause inconsistencies with the goals achieved. The Langkat Regency Government has a serious commitment, is ready to preserve mangrove forests and supports the central government to repair damaged mangrove forest areas in the Langkat area. This commitment has been conveyed by the Regent of Langkat in support of the policies of the North Sumatra Provincial Government and the Central Government through the Ministry of Environment and Forestry. The large mangrove area owned by the Langkat Regency Government encourages them to always maintain and support the improvement of mangrove forests in the Langkat area, in accordance with central government instructions. The direction and policies of the Langkat Regency Government relating to mangrove management are currently contained in Langkat Regency Regional Regulation No. 4 of 2022 concerning Mangrove Tourism Management focuses on developing mangrove ecotourism. By considering aspects of mangrove management planning, including: spatial and non-spatial aspects, inventory of mangrove tourism potential, determination of mangrove tourism objects and

preparation of management plans for superior mangrove tourism objects.

The Langkat Regency Government has adopted a collaborative policy with stakeholders. The collaboration currently being built involves elements of the Tapak Kuda Village Government with several government, non-government, private and tertiary institutions in terms of mangrove rehabilitation in Tapak Kuda Village through planting mangrove seedlings. Planting of mangrove seedlings has begun when aid has entered the village through the mangrove forest area rehabilitation program. This program was initiated by the government through BRGM (Peat and Mangrove Restoration Agency) through replanting involving all elements of society. Village officials, BPD and local communities jointly planted mangroves for joint activities. However, in the current situation, the mangroves that were planted are being cut down again to be used as charcoal or converted into oil palm land.

IV. CONCLUSION

Based on the description and analysis in the previous chapter, the following conclusions can be drawn: 1. Mangrove fruit is usually used by coastal women to make seeds and planted in their mangrove land or sold. Mangroves are also used by coastal women in Tapak Kuda Village as firewood or material for making mangrove charcoal (squid'). 2. Internal factors that become obstacles for coastal women in utilizing mangrove resources such as the level of education of coastal women in Tapak Kuda Village is still very low, the knowledge of coastal women in Tapak Kuda Village in utilizing mangroves is still limited, lack of awareness of coastal women, low skills to develop the creative economy, limitations capital and the indifferent attitude of coastal women to utilize mangroves. 3. External factors that become obstacles for coastal women in utilizing mangrove resources, such as lack of outreach and training activities regarding mangroves, limited facilities, limited access and information, lack of strengthening of social institutions or the formation of coastal women's groups as a forum for their participation in developing coastal development, especially the involvement of women in supporting the use of mangrove resources which can improve the local economy. 4. The coastal women's empowerment model offered in utilizing mangrove resources in Tapak Kuda Village is to involve coastal women so that they can always utilize mangrove resources, starting with the formation of a mangrove women's group. In forming this group, coastal women can receive reinforcement from social institutions so that they can carry out nursery activities or productive activities making processed food made from mangroves.

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