EDUCATION OF VILLAGE POTENTIAL POST-PANDEMIC IN THE CONTEXT OF COASTAL COMMUNITY ARRANGEMENT IN SURYABAHARI VILLAGE, TANGERANG REGENCY

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Abstract

Tangerang Regency spans an area of 377.40 km2 of sea and 298.52 km2 of coastline. The ongoing pandemic has impacted the social systems of villages, particularly in terms of resource governance, including Suryabahari Village in Tangerang Regency. This community service aims to quickly identify the economic potential of coastal communities and raise awareness of the importance of rearranging the village's social system in light of recent changes brought on by the pandemic. The methods employed in this activity include discussions, interviews, and focus group discussions. Discussions were held with the Pakuhaji Sub-District Government and the Suryabahari Village Government to understand the village's potential and challenges. Interviews were conducted with a number of village community leaders to swiftly map the village's potential. Focus group discussions involved representatives from the sub-district government, village government, and the community. The results indicate that a majority of the community demonstrates a high level of resignation towards the changing environment, primarily due to a lack of awareness and available solutions. However, after receiving education, people began to recognize the environmental threats and the need for change.

Keywords: Village Potential, Community Arrangement, Coastal Area.

INTRODUCTION

The 2020-2024 Medium-Term Development Plan (RPJMN) aim at accelerating village economic development. The intervention program focuses on building the capacity of key actors in villages and their surroundings, so they can capitalize on economic opportunities and maximize the use of village resources to spur village economic growth. Accordingly, strategies, programs, and activities that foster sustainable mechanisms to ensure sound planning and implementation of village resources for economic growth are encouraged.

The landscape of Indonesia as a sprawling archipelago, boasts the second longest coastline in the world after Canada. However, the management of these coastal areas has not been optimized. Only 55 percent of the existing resources' potential has been utilized. The development in various sectors along the coast has resulted in marginalizing local

communities, who are typically traditional fishermen and neglecting the conservation of environmental ecosystems and natural habitats. Living in a country with the longest coastline in the world is a blessing for the Indonesian people as the length of the coastline represents the length of the community's socio-economic life chain (Triyanti et al., 2016) (Poernomo & Heruwati, 2011).

According to Law No. 1 of 2014, which amended Law No. 27 of 2007 on the Management of Coastal Areas and Small Islands, coastal area is defined as a zone that influenced by both land and sea ecosystems and located between these two environments. The use of coastal spaces and small islands must have a management permit.

There are four main issues facing coastal communities, including poverty, damage to coastal resources, low independence of village social organizations, and inadequate infrastructure and environmental health in settlements. Mapping these issues can aid in developing problem-solving strategies. The complexity of these problems needs to be understood so that priority can be given to addressing the most pressing ones and effective solutions can be found (Ulfa, 2018) (HAMTA, 2016).

According to the Ministry of Marine Affairs and Fisheries (2022), as a tropical country, this country is rich in biological resources, which are expressed by a high level of biodiversity. Of the 7,000 species of fish in the world, 2000 are found in Indonesia. The sustainable potential of Indonesia's marine fishery resources is approximately 6.4 million tons per year, originating from small pelagic, large pelagic, lobster, squid, and reef fish, not including the potential for fish cultivation through the availability of an area of 2 million ha, and the potential for marine biotechnology has great opportunities to be developed as a source of industrial material for food raw materials, natural feed ingredients, and other untapped sources of raw materials.

At the end of 2019, the world was hit by the Corona Disease (COVID-19), which posed a health threat to the global community, including Indonesia. The pandemic also has broad economic consequences beyond the spread of the disease itself. Its magnitude has the effect of causing high unemployment rates and decreasing economic resilience, which in turn results in increasing pressure on natural resources and thus has the potential to exacerbate the impact of climate change. The accumulation of other serious problems is the result of the changing social order.

The life of fishermen in coastal areas, although they are still able to carry out their work routines individually, has experienced market failure due to the difficulty in marketing their catches and crops because there are no buyers or middlemen (off-takers) who enter coastal villages, not to mention the problem of the supply chain for diesel fuel and the sedimentation of coastal areas.

Coastal-based livelihoods, theoretically, can be defined as: (1) high dependence of local communities on coastal and marine resources can lead to unsustainable resource use, exploitation, and use of other destructive methods; (2) the lack of integrated ecosystem-based adaptation in development activities; (3) the lack of a collaborative management framework for the LMMA network in general, causing efforts for sustainable livelihoods to be ineffective; and (4) women play an important role in small-scale fisheries and the utilization of coastal ecosystem goods and services (Fama, 2016) (Sabarisman, 2017).

Tangerang Regency, as part of Greater Tangerang, is the only area that has an area of

water in the form of oceans, covering an area of 377.40 km2 with a coastal area of 298.52 km2 based on sub-district administration in Tangerang Regency, which consists of 7 sub-districts and 23 coastal villages consisting of Kronjo District, Mauk District, Kemiri District, Sukadari District, Pakuhaji District, Teluk Naga District, and Kosambi District (Tangerang District Government, 2013).

Several sub-districts in the coastal area of Tangerang Regency have been experiencing damage to coastal resources in the past decade. The condition of mangrove forests in several districts has decreased every year. The death of mangrove growth is generally caused by natural and human factors. Natural factors that can cause this are friction and abrasion. Changes that occur in the mangrove area will affect the zoning of the mangrove areas in the area. Human activities around mangrove areas and in the upstream watershed can be a cause of damage to mangroves in coastal areas. Coastal damage is due to human activities, including those of fishermen and industrial and economic activities in general. The consequence of this dense activity is a decrease in the carrying capacity of coastal areas.

Suryabahari Village is one of the coastal areas in Tangerang Regency that has experienced a very drastic change in the coastal environment. Sedimentation and abrasion continue to occur in coastal areas, resulting in shoreline changes. Marine damage in coastal areas has had an impact on decreasing the productivity of fishermen's catches. Damage to mangrove areas as a result of human activities in the area and upstream watersheds has changed the zoning of the mangrove area. And what is no less important is that the COVID-19 pandemic has affected economic conditions in the region.

Based on this background, this community service aims to carry out: (1) a quick mapping of the potential of the village, both economic and social systems, resources, and technology; (2) education about the need for a new approach in dealing with drastic changes that have occurred in the environment in coastal village areas. This is because the impact of environmental changes in the Suryabahari Village area has threatened the lives of the village community.

IMPLEMENTATION METHOD

The stages of implementing community service include (1) planning, (2) preparation, (3) implementation, and (4) evaluation. All of the stages of this community service activity have been carried out from August 1 to. December 30, 2022.

Planning

At the planning stage, activities have been carried out, including the formation of a Community Service Team (PKM) consisting of a combination of lecturers and students from the Faculty of Economics and Business and the Faculty of Social and Political Sciences. Next, the team compiled the service idea and put it into an activity proposal. The proposal for this activity was submitted to the Research and Community Service Institute (LPPM) of Syekh Yusuf Islamic University to obtain funding support.

Preparation

The preparatory phase begins with observation activities in villages in the coastal area of Tangerang Regency. The scope of the observation includes the study of documents and statistical data on the life of the coastal area of Tangerang Regency, the lives of the residents of the coastal area, the activities of fish auctions and village markets, and environmental conditions in the coastal area. Based on the results of discussions with the Pakuhaji District Government, it was decided to carry out community service activities in Suryabahari Village.

Implementation

The implementation phase consists of several activities, namely: (1) discussions with the Pakuhaji District Government regarding the problems faced by the coastal area in Tangerang Regency; (2) discussions with the Suryabahari Village Government regarding the problems faced by the village related to environmental changes and the impact of the pandemic; (3) interviews with community and village leaders regarding village potential, social, economic, and environmental situations due to changes in weather and the impact of the pandemic; and (4) focus group discussions with the sub-district government, village government, and community in the context of educating the need for innovative steps in dealing with the impacts of climate change and the influence of urban area expansion projects and environmental damage to coastal areas.

Evaluation

The evaluation is carried out by comparing the conditions before and after the education program and awareness creation. The evaluation is primarily based on several indicators, including community participation and involvement in educational programs; government support; changes in awareness of the problems in the village, and a desire to make changes.

RESULTS AND DISCUSSION

According to data from the Tangerang Regency Central Statistics Agency (2021), it can be seen from the table below that the structure of family life in Tangerang Regency's coastal towns is highly reliant on marine life.

Table 1 Number of Fishery Households and Fishery Labor Households by Type of Business, 2018–2020 Tangerang Regency

Kind of Fisheries Business		2018		2019
		RTP	RTPB	RTP
Fish catching				
	Fisherman	3.439	8.543	3.439
	Public sea waters	180	180	180
Fish processing		448	1.850	490
Fish cultivation				
	Stank	965	2.039	965
	Fishpond	3.454	3.978	3.000
	Rice field	-	-	-
	Japung	150	300	150
	Marine cultivation	250	500	-
Total		8.886	17.390	7.734

Source: Tangerang Regency in Figures, 2021

Observing the series of numbers above regarding the household businesses of coastal communities in Tangerang Regency, the highest percentage is dominated by fishing laborer households. This condition is a paradox with the availability of biological and marine resources that should be the basis of their livelihood. This data shows the vulnerability of the economic sustainability of fishermen in coastal areas because it is very dependent on the owners of capital (Hapsoro & Buchori, 2015) (Soeriadiredja, 2019).



Figure 1. Discussion with The Suryabahari Village Government about The Problem Faced by The Village.

The results of community service activities indicate a decrease in the quality of the environment in the coastal area of Suryabahari Village, which is evident in sedimentation, abrasion, and garbage accumulation. These factors negatively impact marine life and the coastline, ultimately leading to reduced productivity for fishermen who must venture further out to sea to catch fish. The causes of this environmental decline include excessive and uncontrolled activities in the upper reaches of the river and watersheds, expansive development in urban areas, and weak resource governance in coastal areas. The village infrastructure has not improved, and sedimentation on wharves, market failure, environmental threats, and shoreline changes due to abrasion and accretion are hampering spatial planning systems and limiting authority. Community welfare has not been achieved through institutions or land use.

One of the recognized challenges is the impact of climate change, which includes rising temperatures, sea levels, and land subsidence. Climate change has confused coastal land ownership, the conversion of terrestrial ecosystems to aquatic ecosystems or vice versa, and the disruption of critical habitat and environmental services (Putuhena, 2011) (Rustam et al., 2021).

Other findings indicate that the community is powerless to address changes in the local environment. This is due to a passive mindset and behavior, which assumes acceptance of circumstances is the best response. This passive attitude is prevalent in traditional Indonesian village communities. The villagers' lack of knowledge and skills to find solutions is another factor. Additionally, the government does not actively promote community involvement and collaboration in decision-making, causing the community to feel excluded from the development process.

The Institution of Village Deliberation (MUSDES), which should be a forum that brings together all elements of society to discuss and make decisions on strategic issues that occur in

the village, has not been carried out according to its function. The community is only involved as listeners and is not involved in providing ideas for the work program to be implemented. If this continues to be cultivated, there will be no progress in the village because what is discussed in the MUSDES has already been prepared on one side, namely the village apparatus.

The main challenge in implementing community service is the absence of collaboration between village officials, community members, and the district government in village development. Also, the community faces challenges in obtaining information about the potential and challenges of coastal communities. A lack of public awareness of the threats to coastal areas is also a hindrance. However, some factors support the implementation of this community service, such as strong support from the sub-district government and the eagerness of the village community to strive for a better life.



Figure 2. Focus Group Discussion to Educate Coastal Communities in Suryabahari Village

This community service activity has educated not only the villagers but also the sub-district and village governments on the importance of systematic and participatory village development planning. An open village government that encourages community participation is crucial for the villagers to express their aspirations effectively and according to their needs. The preparation of village planning should align with the Tangerang Regency Government's Medium-Term Development Plan, which includes a program called "Gerbang Mapan" or a coastal community development movement. This program aims to develop infrastructure and promote the blue economy while conserving mangroves to improve water quality and attract tourism. The Tangerang Regency government is implementing this program through the Integrated Coastal Management (ICM) approach under the PEMSEA framework, which serves as a guideline for sustainable development programs by the central and local governments.

The evaluation results of the FGD activities indicate that community participation in discussions is increasing. During the FGD activities, 75 residents, along with the sub-district and village governments, participated, which is a significant improvement compared to when the service activities first started. Residents are now beginning to understand the impact of changes in the local environment and are starting to form an awareness of how to create a better future for their village with its natural wealth. They are open to receiving input, ideas,

and suggestions from the community service team for the development planning of Suryabahari Village, particularly its coastal area.

The education provided covered the following topics: (1) the village strategic planning system, including long-term planning and preparation of medium-term village development plans; and (2) the effects of climate change and urban expansion on the environment. Evaluation results after the FGD process showed that 60% of FGD participants understood the material presented and considered the FGD topic highly relevant to the village situation. It means 45 of 75 participants showed an increased understanding about FGD issues.

The solutions that can be offered to relevant parties include: (1) Comparison of regions; (2) Assistance in preparing a blueprint for the arrangement of coastal areas, including assisting in the preparation of potential mapping instruments; (3) Helping the community and village officials prepare village development plans; (4) Enhancing the community's understanding of the potential and issues in the village; (5) Raising awareness among community and village officials of the future threats faced by coastal communities; (6) Establishing synergies between academics, the community, and village officials in development (Yahya & Latjompoh, 2019) (Pomalato et al., 2021) (Imaniar & Agustina, 2021).

CONCLUSION

The coastal communities in Suryabahari Village are facing a double challenge due to the effects of climate change and environmental degradation, compounded by the ongoing global pandemic. This has a significant impact on not only the environment in coastal areas but also the social and economic situation of the village. Initially, the community's response to this situation was passive, and they felt hopeless. This was due to their low awareness of the consequences of environmental degradation and a lack of knowledge about alternative solutions. However, after the education provided through community service activities, the villagers have become more engaged, and their awareness has increased, leading them to take action towards improving environmental quality and their lives.

To overcome the challenges faced by coastal communities in Suryabahari Village, multiple actors must work together to implement a comprehensive strategy that involves change management, capacity building, and government action. This includes: (1) Change Management: A comprehensive strategy should be developed and implemented to address social problems and improve the situation; (2) Capacity Building: The government and community organizations should work together to create jobs and stimulate business activities; (3) Government Action: The local government must be proactive in reviewing existing coastal area plans and implementing spatial planning and environmental protection measures. This includes implementing a review of the existing coastal area plans and making changes as necessary to improve environmental protection and sustainable development.

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