

DYNAMICS OF SOCIO-ECONOMIC CHANGES IN COASTAL FISHING COMMUNITIES IN PENAGAN VILLAGE, BANGKA REGENCY

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ABSTRAK

Unconventional mining (IT) practices are not foreign to the people of Bangka Belitung, including in Penagan Village. IT practices which are also carried out at sea certainly have an effect on the coastal fishing communities in Penagan Village. The dominant change is seen in the social and economic dynamics of the Penagan Village community. Social dynamics can be subdivided into aspects of education, health, and government policy. Meanwhile, economic dynamics can be further grouped into aspects of capital, access to and use of fishing technology, fishermen's income, and fishermen's lifestyle. In this study, we found IT to have a number of positive and negative impacts. However, the negative impact turned out to be more dominating for the coastal fishing community of Penagan Village.

Keywords: Dynamics of Socio-Economic Change, Coastal Fishermen Communities, Unconventional Mining (IT).

INTRODUCTION

Coastal fishing communities are groups of people who occupy a coastal area in an area (Gustika et al., 2023). Where the people who inhabit it have characteristics that in terms of livelihood and income patterns are in the coastal realm (Huliselan et al., 2017). While fishermen are individuals who carry out fishing activities as their livelihood, either directly (such as stockers, fishing, fishers, net spreaders and so on). Or indirectly (such as helmsman boats or other activities related to the coastal realm). Coastal fishing communities also have vulnerable socioeconomic conditions, so they are often characterized by poor communities (Yunita, 2018).

Most of the coastal fishing communities still work as traditional fishermen and labor fishermen. Even though they are one of the main lines in the production of capture fisheries in each respective region (. But in reality, their socioeconomic position remains in a vulnerable zone in the process of economic turnover which is sometimes often unfair and exploitative (F. Pelu & Christianty, 2022). Thus, fishermen who should be the main party do not get a larger share of income. In fact, the most beneficiaries are large-scale fish traders or intermediary traders. And it is proven that it is these traders who actually monopolize the economy in fishing villages (I. E. A. S. Pelu et al., 2022). This situation continues to occur in fishing communities without them being able to speak out or having to know how to deal with it.

Not only that, there are still many problems that are often faced by coastal fishing communities, such as the problem of poverty levels (economic vulnerability), damage to the coastal environment which is the source of their livelihood, environmental health, and the use of marine areas for fishermen (open access and limited open access) (Pelu, Christanty, 2022;) (Sumara et al., 2017), (Agustang et al., 2021). The main problems faced by coastal fishing communities are the independence of village social organizations, lack of infrastructure and environmental health problems of rural communities (Firdaus et al., 2016).

Based on current conditions, the life of coastal fishermen in Bangka Belitung on average is vulnerable to poverty (Putri & Wulandari, 2020). This is very contrary to the potential of Bangka Belitung's abundant coastal and marine natural resources (Kurniawan et al., 2021). Then, with the low human resources and traditional fishing equipment that is still used by fishermen, it greatly affects the way of catching, limitations in understanding technology, making the quality and quantity of catches not improved. Various efforts have been made by coastal fishing communities to improve their welfare conditions. However, it still needs to be guided and supported by programs from the government in an appropriate and sustainable manner (Scott & Rajabifard, 2017).

Penagan Village, Bangka Regency, Bangka Belitung Islands is one of the coastal village areas where initially most of the people worked as fishing fishermen who still use traditional equipment and limited knowledge (Gordon, 1954). Over time, in addition to fishing activities, Penagan Village is also one of the village areas that has abundant natural resources, namely tin. This is in line with the famous natural resources of Bangka Belitung, namely tin mining (Nugraha & Makalew, 2020). So that in Penagan Village there are many active unconventional tin mining (IT) locations and rows of former tin mining land (kolong).

With the rise of active unconventional tin mining (IT) activities from decades ago until now, it has given birth to various drastic changes for the people of Penagan Village in general, and coastal fishing communities in particular (Rini, 2020). One of the dominant changes seen is a change in people's mindset and a drastic shift in livelihood (McCabe et al., 2010). Which in turn causes various new problems in society itself (Downs, 2016). These various changes and new problems then want to be identified and explained how the Dynamics of Socio-Economic Changes in the Coastal Fishermen Community in Penagan Village, Bangka Regency, which has been hit by significant changes either with the times, the rise of tin mining activities, or from the internal aspects of the coastal fishing community itself.

METHOD

The approach or method used, according to the title of this study, researchers use a descriptive qualitative approach. Citing Kirk and Miller as quoted by Moeloeng, who state that qualitative research "seeks to reveal certain phenomena or traditions that are deeply dependent on human observations within one's own region and relate to those people in their language and terminology".

While the relevant research subjects who became resource persons consisted of, Penagan Village Government (1 person), Community Leaders (1 person), Youth (2 people), Fishermen (3 people), Fishermen who turned their professions into tin miners (3 people).

The main object of study in this study is the social and economic dynamics of coastal fishing communities in Penagan Village, Bangka Regency. Social objects consist of (education level of

coastal fishing communities and rural communities, human resources (HR) of coastal fishing communities, access to fishermen's health, and government policies), while economic objects consist of (fishermen's business capital, fishing gear technology, fishermen's income, fishermen's family lifestyles, and professional transition of coastal fishing communities).

In order to obtain accurate and valid data results in this study, the author uses several approaches or data collection techniques including observation, interviews and documentation. The data that have been collected through observation, interviews, field notes and documentation are sorted, and organized into categories or subjects and then analyzed and described according to existing theories.

RESULTS AND DISCUSSION

The research was conducted in Penagan Village including in the area of West Mendo District, Bangka Regency, Bangka Belitung Islands Province (Murni et al., 2022). Socio-economic life in the fishing community, especially in Penagan Village, where their current situation is in a very weak position even most of them are still classified as labor fishermen or small fishermen who live in a cycle of poverty and are difficult to achieve a prosperous standard of living.

As for efforts made to increase production productivity in the field of fisheries for fishing communities, it certainly cannot be separated from the ownership of fishing gear (Nirzalin et al., 2018). With the availability of adequate fishing gear, it will certainly affect the level of productivity of the catch. Catch technology is the key to fishermen's success in increasing catches. The catch of traditional fishermen in Penagan Village that has been obtained is still very low for the level of productivity influenced by mastery of capture technology. The fishing gear used by the fishing community of Penagan Village generally still relies on traditional equipment such as nets which of course the catch will not be able to produce a large number of catches.

Basically, the problems that occur in fishing communities cause fishing communities to live in an environment that is quite difficult in terms of economy because they are always overwhelmed with uncertainty in running a fishing business. In addition, the famine season that always comes every year and the end of the season is unpredictable, making fishing communities have to be able to face various kinds of complex problems. Social dynamics of coastal fishing communities in Penagan Village. In this study, the social dynamics of the community can be seen from several aspects, namely aspects of fishermen's education level, fishermen's human resources, health access and government policies related to the development of fishermen's activities, as follows:

1. Education Level

The education level of the fishing community in Penagan Village is mostly graduates of elementary, junior high school and a small number of high school and college education. Being able to read, write and count for them is enough. With a modest level of education and knowledge, it is quite a problem because they will be left behind with technological developments, especially fishing technology that supports their profession as fishermen.

Basically, the level of education plays an important role as an effort to achieve the results of every activity carried out which greatly affects the level of fishermen's productivity. Most fishermen in Penagan Village think that education is not needed and its role is not too important for the profession they are in. But until now there is still a great desire for them to send their children to school even to college. Because for them, sending their children to school is a must

and the obligation of parents in fulfilling the right of a child, namely to get an education. They do this so that in the future their children do not have the same fate and can live more prosperously than them.

2. Access to Health

Generally, health is one of the problems often experienced by fishermen and their families. The health problems they experience are disorders of the eyes, skin, muscles, digestion, nutritional problems, accidents in fishing and other bad habits such as alcohol, smoking which they still often do on the sidelines of fishing work and lack of cleanliness so that the weakening of their body resistance and as a result are susceptible to disease.

If there are fishing communities in Penagan Village who are attacked by disease, they tend to ignore it because they think the pain suffered is still mild and quite treated by buying medicine at the nearest store and some even still use alternative medicine. But if the disease does not go away and their health level is declining, then they will visit the nearest health center such as puskesmas or hospitals in their area.

3. Government Policy

Based on the vision and mission that has been regulated and set by the Bangka Regency government, the priority in development efforts is expected to increase the level of welfare for all communities including coastal fishing communities in Penagan Village.

In fact, even though the vision-mission has been established, it has not been fully realized, especially by the government. Until now, there has been no real action that has really been realized by the Bangka Regency government in prospering the community, especially the people of Penagan Village.

The big vision-mission should be realized in the near future so that the fishing community will reach a better standard of living than before. It is known that the development of Penagan Village is more devoted to building from the sea because the sea is an economic source that stores marine natural wealth that is important for the people of Penagan Village. This condition underlies the creation of a cycle of structural poverty that is still experienced by the community, especially the people of Penagan Village, West Mendo District, Bangka Regency.

The existence of structural poverty that occurs in the Penagan Village community can be seen from the lack of facilities and infrastructure to support and develop businesses, which ultimately become adequate job opportunities for the people of Penagan Village. As for coastal fishermen, Penagan Village is a supporting facility to carry out activities as seafarers who are always a source of income from the sea in the form of boats and fishing equipment.

Social problems and inequalities that occur are not able to connect the community with available resources, both provided by nature, government and the surrounding community. Fishermen's poverty is often very technical in the field of fisheries, namely how to increase catch production, but poverty must be viewed holistically because the problems that occur in community dynamics are more complex.

Therefore, the importance of social policies in which fishermen regulate the problem of poverty of fishermen so that it can be handled quickly so that it can be a form of solution they need, especially people who work as fishermen. In addition, the district government's activity program is more targeted and targeted according to the needs and existence of coastal communities.

Economic Dynamics of Coastal Fishermen in Penagan Village in this study, namely, the economic dynamics of fishing communities in Penagan Village can be seen from the aspects of capital, fishing gear technology, fishermen's income, and fishermen's lifestyle, as follows:

a. Capital

Capital problems for fishing communities are needed in the development of their business and fishing activities. At least with sufficient access to capital, fishermen can survive and develop well and dynamically. The capital needed by fishing communities is capital for the production process and operational costs of their activities every day. In addition, capital to support facilities and infrastructure such as buying catch support equipment, namely ice baskets and debriefing when going to sea.

b. Fishermen's Fishing Equipment Technology

Catch technology is the key and support for the success of fishermen in fishing activities. For fishing communities, the most important thing is to get as many catches as possible. However, the level of productivity for fishing communities, especially in the field of fisheries is still very low. The low level of productivity is influenced by the low mastery of fishermen's fishing technology, so some of them still rely on traditional equipment.

In general, fishermen in Penagan Village use traditional fishing gear such as nets and makeshift fishing rods. The use of traditional fishing gear certainly results in low catch production, this has an impact on the level of income obtained by fishermen.

The existence of efforts to empower fishing communities, especially those related to catch technology, has not been fully carried out by the local government. The assistance provided is only traditional fishing equipment, while for business capital to increase the resources of fishermen until now has not been fully given. Of course, this needs attention in terms of empowering catch technology as an alternative effort to overcome the problem is to increase the role of field extension workers and conduct socialization in the fisheries sector which can be carried out regularly through fishermen institutional forums in coastal villages, especially in Penagan Village.

This is expected to create an independent community and make the most of the assistance provided by the government to improve the quality of fishermen's catch production which will indirectly affect the increase in fishermen's income in their efforts to meet their daily needs. In addition, it can certainly improve the degree and achievement of a more prosperous standard of living for fishermen.

1.1. Fishermen's Income

Income is one of the benchmarks of success in seeing community welfare. The business income of capture fishermen is the difference between revenue and fishing costs incurred by fishermen in carrying out fishing activities. In addition, the cost also determines the activity of the fisherman to go to sea or not so that it affects the income of the fisherman. In addition, spending large amounts of costs does not necessarily guarantee to get a lot of catches because it is influenced by various factors, one of which is the season, and also the climate and weather that often change.

Therefore, fishermen's income does not always generate a large amount, it adjusts to the preparation of fishermen in terms of fuel, equipment and adequate supplies by fishermen in

Penagan Village, but the factor that has a major influence on fishermen's income is natural factors.

1.2. Fishermen's Lifestyle

Fishermen's income generated from fishing activities will always run out quickly due to the daily expenses needed by fishermen's households which are getting bigger day by day. Daily family food needs are certainly not something that is ignored, because these needs are the main things that must be met, not to mention meeting children's school needs and other social needs. In addition, most fishermen in Penagan Village choose to live together with large families so that the food needs needed are also very large. In the life of the fishing community, the average number of members in one family consists of five (5) to seven (7) people.

Even in an effort to meet their daily needs, they only depend on the head of the family, thus requiring the head of household in their family to work hard to meet the needs of their family. Even though they have worked hard, sometimes their needs are still often not sufficient because their income is low and not comparable to their needs which are getting more and more day by day, not to mention to pay for their children's schooling which requires a lot of expenses.

Other factors that make fishermen unable to meet their needs are during the season of large waves, strong winds, not to mention their erratic health and marine support equipment that can be damaged. Sometimes, this does not prevent them from going to sea and tends to neglect their own safety in order to earn income every day.

Penagan Village is generally still faced with poverty problems and socio-economic pressures that are high enough to interfere with work mobility and income stability of the people in the village. Sometimes some of them try to find other loans in an effort to cover the shortfall in terms of their daily needs who cannot only rely on erratic fishing income.

1.1.1 Impact of Unconventional Tin Mining (IT) on the Community of Penagan Village

The potential of natural resources in the realm of tin metal mining owned by the Bangka Belitung Islands Province is indeed very important for the livelihood of its people which can also be the main commodity in industrial needs in the future. So that it can be used as one of the economic products that have high economic value. However, these abundant natural resources are still minimal to be processed effectively by the community in Bangka Belitung.

This is in line with the many unconventional tin mining in Penagan Village, West Mendo District, Bangka Regency. Which is generally the location of unconventional tin mining is quite useful for the community to meet their daily needs. The existence of unconventional tin mining (IT) in Penagan Village eventually gave birth to various changes, one of which was a change in the mindset of the community, bringing out the destructive nature and exploitation of nature, and a sense of selfishness. In addition, there are social interactions that occur between fellow communities and coastal fishing communities with tin mining communities which sometimes have friction. Furthermore, the existence of unconventional tin mining gave birth to changes in livelihoods for local people, who initially worked as farmers and fishermen, began to switch to tin miners. Not spared also mothers, teenagers, and even children who participated in activities around the mining area. This can be seen with many mothers, teenagers, children around the mining site, either because they are selling, looking for the remaining tin (ngelimbang), or asking for rations given by miners (ngereman). And according to data in the tin mining field on the sea coast, there are several communities that are the introduction of miners across the sea to their unconventional mining pontoons.

Furthermore, the existence of unconventional tin mining (IT) in various regions has given birth to many impacts in various dimensions of human life, not only impacting on the socio-economic dimension alone, but touching the socio-cultural dimension and even the physical environment. The impact on these various dimensions is not only positive but also has a negative impact (Pelu, Christanty, 2022).

The positive impact felt by the people of Penagan Village and several neighboring villages in the welfare enjoyed economically was not followed by an increase in social, cultural life and environmental preservation. The most common social problems in the community when carrying out unconventional tin mining (IT) activities are present in an area, as well as cultural and physical environmental problems. It is undeniable that there are negative impacts that will also arise as a result of excessive exploitation of land or waters which have an impact on environmental sustainability and carrying capacity will decrease because tin mining activities have a close and strong relationship with the physical environment.

Therefore, conservation, social appreciation, and education efforts continue to be carried out so that the relationship between the two is sustainable. But when viewed based on reality, the relationship between the two actually raises conflicts.

1.1.2. Impact of Unconventional Tin Mining (IT) on Coastal Fishing Communities in Penagan Village

In general, the existence of unconventional tin mining (IT) in land or coastal areas is very influential for the activities of fulfilling the daily economic needs of the community, especially fishermen who have dual professions in fulfilling their living needs. Apart from being fishermen looking for fish, fishermen also sometimes change professions to become temporary miners or only join miners who have mining equipment.

Penagan Village is a coastal village where initially most of the people made a living as fishermen. Livelihood as a fisherman is the main occupation other than as a farmer. If the sea conditions are unstable for them to go to sea, then they will go to the forest or land to just harvest or plant that can be planted. Almost all communities have forests or land that they manage themselves. However, there are some fishermen whose economic activities are only for fishing.

Furthermore, the existence of unconventional tin mining (IT) does not reduce the enthusiasm of fishermen to continue carrying out their daily activities to go to sea. Although the existence of unconventional tin mining (IT) is promising for the economic activities of local communities, it is not a reason for fishermen to switch professions to other livelihoods.

It is known from the information that some informants in the field, they said that the existence of unconventional tin mining (IT) had a positive impact on the economic activities of the community and affected the change in mindset of the people of Penagan Village, but for fishermen, the existence of tin mining has a relative influence on their fishing activities or they even change professions. His presence does interfere with their activities as fishermen. This can be seen from the entry of tin mining into the coastal areas of the sea, which certainly affects the realm of fishermen's livelihood, namely the sea.

Based on the statement above, it can be concluded that the existence of unconventional tin mining (IT) in Penagan Village is quite useful and has a positive impact on the people of Penagan Village in developing their economic activities, but is related to the social and economic dynamics of the coastal fishing community of Penagan Village around the unconventional tin mining area

is quite influential or could be the cause of reduced catches in the future and The activities of coastal fishing communities in fulfilling the needs of life as fishermen who must survive from marine products.

CONCLUSION

In this study, it can be seen from the social aspect, that the fishing community in Penagan Village who have studied from elementary school to college is still relatively low. This is due to family economic factors where their income is low enough to be unable to pay for their children's schooling. In addition, the habits of the people there who only rely on and utilize the surrounding nature to fulfill life. In addition, the limitations of fishing equipment used are still traditional such as nets and fishing rods so that catches cannot be produced in large quantities and the available catch production equipment is considered inadequate, leading to low income of these fishermen. In terms of economy, coastal fishermen in Penagan Village need a lot of capital to develop their business. However, in reality, the capital they have is very minimal so that it affects the production process, purchases of fishing gear, and hampers their work activities to go to sea. Not to mention, the uncertainty and lack of attention of the local government with the fishing community of Penagan Village as an effort to improve the welfare of local fishermen.

Thus, the existence of unconventional tin mining (IT) in Penagan Village has a positive impact and benefits the community around Penagan Village. Where this also has a connection in the development of economic activities, where unconventional tin mining (IT) is the most preferred livelihood transition by the community, including people from outside Penagan Village, which indirectly supports the economy and can increase the income of local people living on the coast or unconventional tin mining (IT) areas. However, the existence of unconventional tin mining (TI) is a relatively influential barrier for coastal communities who work as fishermen, in this case fishing activities become a little difficult, because of the pollution of the marine coastal area environment which has been used as an unconventional tin mining area (IT). This affects the catch of fishermen, and also affects the interest and transition of the profession from fishermen to unconventional tin miners as well. This happens because of the urgency and economic needs of the people to meet their daily lives.

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