

Study on Disaster Mitigation in the Tambak Lorok Fisherman Village Community

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Abstract

There are many SMEs in the area of Tambak Lorok Semarang City that produce processed seafood products. Most of them have been using simple processing and packaging methods. This study aims to analyze the use of lamicro in the community of Tambak Lorok Fisherman's Village, Semarang City.

Keywords: lamicro, fishing village, disaster mitigation.

INTRODUCTION

Indonesia is the second largest maritime country in the world after Canada. However, this potential has not been utilized optimally. In 2015, there were 32.4% of Indonesian coastal communities that were still in poverty. As stated by (Logue et al., 2015), the typical coastal areas have various conveniences for local industries. Semarang City has coastal potential that has not been optimally managed yet. For instance, Tambak Lorok is a coastal area in the northern of Semarang City which is directly adjacent to the Java Sea (Wahyuningrum et al., 2017) has been experiencing the problems of flooding and tidal flooding and this resulted in

the development of economic, social, and environmental potential in the region. Tanjung Mas Village located in north district of Semarang is the largest slum residential area (Hariyanto, 2021).

Coastal areas are very vulnerable to climate change due to rising of the sea levels. This rising causes catastrophic tidal floods and is exacerbated during the rainy season. Nevertheless, the community in the Tambak Lorok Fisherman Village has been struggling to develop potentials of the marine into processed products having an added value (Indarto et al., 2020). Their businesses that are still small in scale (MSMEs) and faced problems in managing the business and in preparing bookkeeping that is still very simple. As a consequence, they are still in poverty.

Strategy is required to help the community to overcome the problem of poverty so that they can meet their needs especially during the crisis because of flood disaster and the Covid-19 pandemic recovery. This study aims to analyze the use of Lamicro in the Tambak Lorok Fisherman Village Semarang in mitigate the disasters.

LITERATURE REVIEW

A coastal area experiences a very fast population growth due to the attractiveness of a area to live, work and visit. 53% of the global population live in coastal areas in more than 4,285 coastal cities and agglomerations worldwide (Barragán & de Andrés, 2015). This trend is continuing due to the world urbanization prospect. It is projected that by 2050 there will be around 70% of the population live in cities.

The city of Semarang is the capital of the Province of Central Java. Astronomicvally, it is located in 6050'-7010' South Latitud, 109035'-110050' East Longitude, and is located on the northern coastline in adjacent directly to the Java Sea (Martuti et al., 2022). This makes

the city of Semarang a strategic point for development, trade, industry and commerce activities.

Tambak Lorok located in Tanjungmas Village, north district of Semarang, is the largest fishermen village in the Semarang City. The phenomenon of floods and poverty cannot be separated from the Netherlands who had lived in the area. The fishermen community comprises traditional fishermen who have low level of education.

In addition to these ongoing issues, sea level rise (SLR) is a tormenting aspect of anthropogenic climate change (Dahlem, 2019). Urban development along the coast is increasingly aggravating and significantly affecting the lives of people living in the coastal areas, especially in big cities in Asia.(Neumann et al., 2015).

The culture and civilization found in coastal cities are seriously threatened by this situation. Urban planning has an important role in encouraging sustainable adaptation in the face of rising sea levels (Hurlimann et al., 2014). But the concepts, methods, and assumptions that urban planners rely on are, so far, useful for protecting people, ecosystems, and physical structures.

Coastal communities have an adaptation strategy, one of which is in-situ adaptation which is defined as local adjustment to climate change and other environmental pressures. However, in-situ adaptation has received less attention when compared to other strategies, especially out-migration(Castells-Quintana et al., 2018). The causes of this are usually seen as subject to vulnerability, whereas the latter reduces it in the long run (Scheffran et al., 2012).

This study looks at the socio-economic characteristics of coastal communities from their livelihoods in the marine and fisheries sector. Identical coastal communities are known as people who have a low level of welfare.

METHODS

This study is a qualitative method using case studies. The case study was to understand deeper the phenomenon of poverty in fishermen communities in the coastal village of Tambak Lorok. It adopts a qualitative approach as it functions to have deepening understanding of human experience in different contexts (Erlingsson & Brysiewicz, 2017).

This research focuses on an in-depth study through data and fact search in the field, its relation to the socio-economic life of the community of Tambak Lorok Fishermen Village and its alleviation efforts in the midst of the flood disaster and after the Covid-19 pandemic. The primary data used in this study contains information on the socio-economic conditions and characteristics of the fishermen. The data was obtained through interviews and observation. The secondary data used in this study includes previous research on the community of Tambak Lorok. The informants used in this study were 5 people. For it is considered to be valid, this research uses data triangulation. The data were analyzed using interactive analysis techniques.

RESULTS AND DISCUSSION

Results

There are some positive activities conducted by the community. First, the establishment of study groups. Religious activities that provide many positive life values have an impact on people's awareness to change their bad behavior for the better (Heriza & Mulianingsih, 2023; Mulianingsih et al., 2023). Therefore the face of the village becomes more religious. Second, the school enrollment rate for children at the primary and secondary education levels is better than when this village was formed. Many educational institutions have been established here, both managed by religious and private foundations. The existence of a school is able to provide good positive life values for the younger generation. However,

the quality of education here is not as good as the quality of education in the city center. Third, restructuring the residential environment and improving infrastructure has changed the face of this area. A comfortable environment gives a positive impression for other people who will enter this area. Compared to the previous three decades of settlement in this area, there are many semi-permanent houses that give the impression of being rundown. However, the government's current arrangement has changed the social face of this village.

Economically, the people in this village are different from other areas in Semarang City. The people here develop their livelihoods from marine resources obtained from fishing activities. The developed coastal culture is a characteristic that distinguishes the economic activities of the people here from those of the agrarian Gunungpati area, as well as the center of Semarang City which develops trade and service business activities.

UMKM in Tambaklorok face limited resources and coaching staff. With this mentoring program, the Service Team also contributes to supporting the Government's efforts to help business actors prepare financial reports using the financial report application that has been provided and is the right solution to overcome the problems faced by business actors in preparing them.

Discussion

Smartphones are sophisticated technologies that are developing massively in society. The use of technology in everyday life has become a very vital necessity, especially for businesspeople. Most business actors use this technology for non-cash payments through e-money payment applications and have not fully utilized smartphone technology to record financial transactions including compiling financial reports.

Access to capital is the main means for increasing the ability of SMEs to develop. The main reason is because SMEs are economic organizations in terms of size (measured by the net worth of the entity) which is very small so that the risk of bankruptcy is also large. In the event of bankruptcy, it will affect liquidity and have an impact on the return of capital to third parties who provide loans such as banks. Due to their small size, SMEs are inconsistent in preparing financial reports. Meanwhile, financial reports are the main requirement for entities to obtain funding.

The Indonesian government is trying to create a conducive business for micro, small and medium enterprises. Likewise professionals and experts in accounting also try to support the government's efforts. Professional organizations such as the Indonesian Institute of Accountants have developed two financial accounting standards, namely SAK ETAP (entities without public accountability) and SAK EMKM (micro, small and medium entities) which are intended to make it easier for micro, small and medium enterprises to understand and be able to prepare financial reports in accordance with financial standards that apply in Indonesia.

The Government's efforts have actually been made by creating a user-friendly financial reporting application for micro, small and medium enterprises. Android-based applications that can be used anytime and anywhere and are easy to obtain through available play stores such as the Lamicro application (Micro Accounting Report) belonging to the Ministry of Cooperatives and SMEs and the Bank of Indonesia with an application called SI APIK (Information System Application for Recording Business Financial Information). Micro and Small). This application has been integrated with the Financial Accounting Standards for entities without public accountability (SAK ETAP) and Micro, Small and Medium Enterprises (SAK EMKM).

This mentoring program is carried out by collaborating with several SMEs in Tambaklorok which voluntarily participate in. This program involve lecturers and several students as assistants. Students will be provided with prior debriefing for using the Lamicro application.

The research team visited UMKM engaged in the marine product processing industry and explained a brief description of the Lamicro application, especially to introduce several feature terms that require experts as shown in Figure 1. Upon the SMEs willingness, an initial survey will be carried out by conducting interviews with the owner to obtain an overview previously used accounting information system.

Implementation of Lamicro and its socialization requires the support and integration of many government agencies. Collaboration and coordination efforts between institutions are expected to accelerate the implementation of Lamicro among micro, small and medium enterprises. It is hoped that this cross-agency collaboration effort will also reduce implementation and socialization costs and the work programs of each institution are on target and integrated.



Figure 1.Lamicro in the Tambak Lorok Fisherman's Village community

CONCLUSION AND IMPLICATIONS

Conclusion

The fishermen community in the Tambak Lorok area is a community that has social and economic vulnerability. Based on the level of income and environmental problems caused by the rising of sea level, the community presumably has a complicated living expenses and dynamics. Income sourced from the sea does not provide much prosperity for the family life. Seafood is uncertain or erratic depending on the season. This result is also reduced by operational costs, because the income earned is only mediocre. This income still has to be set aside for home renovation purposes due to environmental degradation. This kind of situation causes the Tambak Lorok community to be vulnerable. Efforts have been made to overcome these vulnerabilities by implementing the Lamicro application.

Recommendations

The government must handle seriously the efforts in relation to environmental issues in the form of providing better infrastructure because the rising of the sea level has damaged the infrastructure. The development of a coastal barrier (Indonesian: *talut*) is needed to resolve the sea rising. The government also needs to do efforts for improving the social and economic conditions of the community by for example providing provision of certain skills so that the community can survive economically during the flood and post-pandemic period.

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