### Resilience of Small Fishermen in the Development of Tambak Lorok Marine Tourism Village in Semarang City

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Abstract:

Tambak Lorok is one of the fishing villages in Semarang that has experienced environmental degradation due to coastal abrasion. This condition causes the Semarang City Government to develop a maritime tourism village as a solution to minimize the impact of coastal abrasion as well as to organize a slum of fishermen villages. However, this program raises new problems for the community, especially small fishermen in Tambak Lorok because many of their housing land and places of business are being displaced and their fishing grounds are becoming further away. This paper aims to explain the resilience of small fishermen in Tambak Lorok in dealing with social, cultural and economic problems due to the development of the marine tourism village program. By using qualitative research methods, this study seeks to explain data analytically. Data collection is done by the method of observation, interviews, and document studies, while data processing is done through the process of data inference, data reduction, data presentation, and drawing conclusions. The results showed that social, cultural, and economic problems experienced by small fishermen due to the development of their settlements to become maritime tourism villages can be overcome in various ways namely diversification of livelihoods, utilization of local resources for marine tourism, and participation of family members in meeting the needs of life. This research also underscores the resilience of small fish farmers in Tambak Lorok which is a combination of the strengths of Javanese cultural values, Islamic spiritual values, and the social institutions of small fishermen.

### 1 INTRODUCTION

Fishermen are one of the professions occupied by many Indonesian people, especially those who live along the coast. This is a logical consequence of Indonesia's territory which is an archipelago with a long coastline (Bailey, 1988; Duggan and Kochen, 2016). However, there are still many people who work as fishermen on the poverty line with a low level of welfare. Likewise, their living space and residential environment seem dirty, dirty and untidy which further degrades their quality of life (Béné & Friend, 2011; Wekke and Cahaya, 2015).

Many efforts have been made by the government to improve the quality of life of fishermen, both in the form of empowering the fishing community, as well as improving their environmental facilities and infrastructure (Amiruddin, 2014; Darsono, 1999). Empowering the fishing community in the form of

training in processing fish catches, improving the quality of fishing products, increasing the business of fishery products, providing educational assistance for fishermen's children, and improving the quality of the fishermen's human resources (Indarti and Wardana, 2013; Ratnawati and Sutopo, 2014; Samuel, Martono, and Susanti, 2015). Meanwhile, infrastructure improvements include the provision of fishing gear assistance, drainage and latrine improvements, construction of TPI and markets, improvement of road access, and structuring of fishing settlements (Habibah and Setyawan, 2017). With these efforts, many fishing communities have benefited to improve the quality of their lives, and there are even some fishing villages that develop their villages as tourist villages, especially those who live near urban areas.

One of the fishing villages arranged and developed as a marine tourism destination is Tambak Lorok. This area is located at the mouth of the river

Banger, Semarang City, Central Java, which is directly adjacent to the Java Sea to the north. Previously, this area was an area of milkfish and shrimp ponds, but since the 1950s the area was visited by small fishermen who moored their boats at the mouth of the Banger River and finally settled there. This condition causes the Tambak Lorok region to change its function to become a settlement.

Along with the development of the city of Semarang, especially the construction of the port of Tanjung Mas, this region is increasingly visited by people to live there. Not only those who work as fishermen, but also the wave of urbanization that wants to find work in the city of Semarang with various types of jobs. This resulted in the Tambak Lorok area becoming increasingly crowded and dirty (Kurniawati and Windraswara, 2017; Natalia and Alie, 2014). The decrease in the carrying capacity of the land and the increase in sea market waves has caused the region to be affected by coastal abrasion throughout the year. This condition has worsened the quality of life of Tambak Lorok people. There are many houses that are flooded with sea water so that they can no longer be used (Dimitra and Yuliastuti, 2012; Mussadun and Nurpratiwi, 2016). But since 2016, Tambak Lorok has become one of the fishing villages that get help from the Central Government through the Ministry of PUPR. This area has been reorganized by normalizing the river, constructing a coastal belt, arranging riverbanks, structuring residential settlements, and building infrastructure that can support the activities of residents.

However, the development which is packed with the concept of a marine tourism village has resulted in the Tambak Lorok community having to improve themselves and adapt to existing changes, including small fishermen. Many of them had their homes and business places displaced so they had to find a new location. Meanwhile, those who still survive in Tambak Lorok must prepare themselves to be the host to welcome tourists who will visit Tambak Lorok. In this regard, this paper will describe the resilience of small fishermen in addressing social and cultural changes due to the development of Tambak Lorok as a marine tourism village.

### 2 METHOD

This paper is the result of research using qualitative methods that base their explanations with analytic descriptive (Moleong, 2005). The reason for the qualitative method used in this study is to uncover in depth and holistically the socio-cultural reality that

occurs in the fishing village of Tambak Lorok. The depth of the data is also broken down using ethnographic methods as a combination of qualitative research. For this reason, data were collected using participatory observation, in-depth interviews, and document studies. After the data is collected, the next step is data classification, data reduction, data presentation, and conclusion drawing. The research location was in the fishing village of Tambak Lorok, Tanjung Mas Sub-district, North Semarang District, Semarang City, Central Java Province. The research subjects were small fishermen, while the supporting informants were RT heads, RW heads, Village heads, religious leaders and other general public. Data validation is done by source triangulation techniques and methods.

### 3 RESULT AND DISCUSSION

# 3.1 Tambak Lorok: From the Fishermen's Village to the Marine Tourism Village

Tambak Lorok is a fishing village located in the northern part of Semarang City with an area of 45.29 Ha consisting of a pond area of 10.89 Ha and a residential area of 34.4 Ha. Most of the residents earn a living as small fishermen and the rest work in the informal sector at the Port of Tanjung Mas and companies in the city of Semarang (Fama, 2016). This region is actually an arising land that used to be a fish pond and tiger shrimp area. Along with sluggish shrimp exports, many ponds are no longer in operation and are eventually sold to migrants from outside the city of Semarang. These migrants generally come from Demak and other districts around the city of Semarang who are looking for a living in the city of Semarang. The former ponds that they bought were later turned into residential land. Until now, this settlement in Tambak Lorok has been inhabited by a third generation of the early generation who settled here.

The settlement pattern in Tambak Lorok consists of several alleys with rows of houses that run from East to West, and face each other. In each alley, which consists of houses facing each other and separated by a small road with a width of approximately 1 meter, so that it can only be passed by motor vehicles only. the main street of Kampung Tambak Lorok or in the courtyard of a mosque, mosque or other public facilities.

Actually, The Tambak Lorok area exists in 2 (two) large villages, namely Tambak Rejo in the east and Tambak Mulyo in the west. In general, these two large villages have 5 RWs and 35 RTs, namely RW 12 with 4 RT, RW 13 with 10 RT, RW 14 with 6 RT, RW 15 with 9 RT and RW 16 with 6 RT. Prior to revitalization of river flows and settlements, the lorok pond area was the area most frequently affected by tidal floods. Almost every day people feel the flood tidal flood, especially during the rainy season when sea water becomes high tides and inundate people's homes. For this reason, every five years Tambak Lorok residents must enhance their homes to avoid tidal flooding. For residents who do not have enough money to enhance their homes, then they have to live in moderation with flooded housing conditions. The scenery also looks chaotic and dirty because there is a lot of garbage inundated at several points, poor drainage, which results in a decrease in the quality of life of the community.

After revitalization, the river channel is normalized, the beach belt is made, and the settlement is reorganized. This condition caused around hundreds of houses to be relocated to other places to widen roads and access to Tambak Lorok. This revitalization has been carried out since 2015 which is a project and budget from the center managed by the Ministry of Public Works and Pemali-Comal River Basin Agency. This project has made Tambak Lorok transformed into a Maritime Tourism Village marked by a monument at the entrance of Tambak Lorok. Several public facilities have been improved and added, such as roads, markets and fish auctions, fish landing places, floating houses, worship facilities, waste management sites, pedestrian areas, and children's playgrounds.

### 3.2 Problems Faced by Small Fishermen Due to the Maritime Tourism Village Program

The Tambak Lorok transformation from a fishermanvillage that looked dirty and dirty to a marine tourism village that was clean, healthy, and neatly organized also influenced the lifestyle and livelihood of small fishermen. The condition of the villages that were clean with adequate facilities made them begin to be aware of environmental sustainability. However, this transformation raises several problems for small fishermen such as economic problems, social problems, and environmental problems.

The economic problems faced by small fishermen in Tambak Lorok are things related to their income.

As a segment of the community that is still highly dependent on marine resources, these small fishermen have a volatile, uncertain income and are dependent on the weather and waves. But several informants explained that their average income could reach Rp.200,000 to Rp.500,000 in one day at a time. This catch is still a gross income because it does not include operating costs such as gasoline and their food supplies at sea. Usually the fishermen go to look for kijing (green kerrang) and shrimp in the morning at 06:00 WIB until 10:00 WIB, while to find fish, they leave in the afternoon from 17.00 WIB until 19.30 WIB. If they only rely on fish, their income cannot cover the operational costs they incur because the fishing distance is getting further and the number of fish is getting smaller. Sometimes they only get 2 kg of grouper and snapper in a day which they sell to Tengkulak with a price range of IDR 40,000 to IDR 60,000. For this reason, they cultivate green shells by making bamboo cages that they plug into the sea as houses for green clam. The cost of making a cage is around 2,000,000 rupiahs to 4,000,000 rupiahs which must be repaired every two years. Yields from green mussels that they harvest every day are the ones who can add to their income and cover their operational costs.

In the distribution of catches, small fishermen in Tambak Lorok are still very tied to middlemen. Giving capital and loans by middlemen makes them seem dependent and cannot be separated from middlemen. This results in small fishermen not being able to control the price of their catch, because the price has been decided by the middleman. With this condition, small fishermen sometimes disadvantaged but they cannot do much because of economic and social dependence on middlemen. This problem seems unable to be resolved because there is no fishing cooperative in Tambak Lorok as an institution that can guarantee the distribution of catches of small fishermen more equitably.

The government's attention to the economic problems faced by small fishermen in Tambak Lorok is quite high with the help of fishing gear in the form of nets and machines. With this help, they no longer have to spend a budget on fishing gear. However, the distribution of aid to fishing equipment is considered not evenly distributed and wrong target. Many of the small fishermen do not get fishing gear, while the residents whose main job is not as fishermen are those who get nets and machinery. These conditions make small fishermen in Tambak Lorok not get a better livelihood.

In addition to economic problems, fishermen in Tambak Lorok also face social and environmental

problems due to the existence of this maritime village program. Social problems generally occur in adolescents who are heavily involved in fights and drinking. This is influenced by the level of adolescent education in Tambak Lorok generally only up to senior high school level. After graduating from high school, many of them did not want to continue their studies at the tertiary level due to the cost and access to work. They prefer to find work in the Port of Tanjung Mas or in companies in the city of Semarang. This condition makes them very vulnerable to the influence of social interaction that tends to unsettle residents such as drinking and fighting.

On the environmental aspect, there are many Tambak Lorok residents, including small fishermen who have to experience relocation. The marine tourism village development program that requires open land for roads and other infrastructure has an impact on the use of community-owned land. For people affected by this route, their houses will be demolished and moved to another place with replacement money given by the government. Small fishermen whose houses were affected by the relocation project had to find a new residential location even though far from the beach. This makes them have to adapt to a new environment and look for other types of work. Meanwhile, for small fishermen who remain in Tambak Lorok, they also have to adjust their habits to the environment that has been arranged and prepare themselves to host marine tourism destinations in the city of Semarang. Although many infrastructure facilities have been built in Tambak Lorok, both as a barrier to coastal abrasion and as a means of supporting marine tourism. awareness of environmental maintenance and sustainable management has not yet become a collective awareness of residents, especially small fishermen.

## 3.3 Resilience of Small Fishermen in Facing the Maritime Tourism Village Program

Resilience is the ability of a person or community to adapt to the vulnerability of life and the powerlessness that they experience. In resilience, there is a complex and mutually influential relationship between individuals and their environment. to create a new system when the old system which includes social, cultural, economic and ecological is considered no longer sufficient to empower them

In Tambak Lorok, environmental, social, cultural and economic changes that occur along with the development of the marine tourism village program make small fishermen have to be able to adapt to the new environment. This adaptation process involves social systems that are owned by small fishermen, such as cultural values, religious values, social relations and kinship, social networks, and social institutions. The social system works actively and mobilizes small fishermen to be able to survive and deal with various problems that arise as a result of transformation in their village. In this case, the social system that is very dominant in forming resilience of small fishermen is Javanese cultural values, Islamic spirituality, and social institutions.

As a community that lives on the north coast of Java, small fishermen in Tambak Lorok are bound to Javanese cultural values. Almost all residents in Tambak Lorok are ethnic Javanese, especially Javanese coastal. They actualize Javanese cultural values in their daily lives and specifically deal with changes in the physical and social environment in their village. Some Javanese life attitudes that they hold in dealing with this situation are kamunangsan (a great sense of humanity), tepa slira (attitude to understand the situation of others), mawas diri (selfintrospection), and budi luhur (good behavior) (Marbangun, 1995). Actualization of the four attitudes of life can be seen in the attitude they showed when the river normalization revitalization of the marine tourism village began to be announced until now. Kamanungsan's attitude underlies the process of relocation of citizens where the community gets good treatment from the government and surrounding residents. Prioritizing the sense of humanity shown by residents makes this relocation process not cause fatal social turmoil.

In addition to the extinction, the attitude of tepa slira is also shown by the residents, especially small fishermen in facing any problems that occur due to changes in their villages. Mutual understanding of the conditions experienced by their neighbors causes them to help each other to solve it. This attitude is supported by mutual cooperation that they do for community activities and personal activities. If there are fishermen who are unable to carry out their obligations because they have to go to sea, then the residents take other measures so that the fishermen can be involved without having to neglect their main obligation in making a living. Their introspective attitude is actualized by always doing selfintrospection when there are problems they face. With this introspective attitude, they can find solutions to these problems without emotion and anger, so they can be resolved properly. Meanwhile, their nobility is actualized with good behavior in interacting with fellow human beings so that every

program in the development of this maritime tourism village can be implemented in harmony.

Besides being known by people who are still thick with Javanese cultural values, small fishermen in Tambak Lorok are also known as religious communities. They have a strong Islamic belief system of the existence of God as an almighty substance and influence all their activities as creatures. For small fishermen in Tambak Lorok, every activity they do is always supervised by God. It is this belief that underlies them to carry out a series of religious services and rituals so that they will receive strength, protection and salvation from the Lord of the universe. These religious rituals are personal and communal rituals. Personal rituals they usually do in their homes such as prayer, dhikr, alms and reading the Our'an. They also do personal rituals in the form of *slametan* when they acquire new items such as new boats, new homes, and other objects. For communal rituals, they usually do it in mosques, in residents' homes, and in open spaces. This communal ritual takes the form of recitation, yasinan (reading the Qur'an Surah Yasin), and sea alms. In connection with the changes in the physical and social environment due to the development of this maritime tourism village, religious rituals give them peace of mind, certainty of life, and the strength of social solidarity to deal with every problem that exists.

The next social system that makes small fishermen in Tambak Lorok able to adapt and deal with any changes that exist is the strong social institutions they have. Their village is divided into several RWs and RTs which in addition to regulating population problems, also become a mediation for residents in overcoming every problem they face. For example, the waste problem that used to be a big problem that cannot be resolved, can now be resolved by the existence of a garbage bank that is coordinated by PKK women in each RT. Likewise with mutual cooperation and village security activities, it is also coordinated by the heads of the local RT, so that when there are teenage fights can be resolved with the mediation of the RT heads and and the local community. In addition, the kinship between citizens also strengthens their social institutions.

### 4 CONCLUSIONS

Socio-cultural changes due to changes in the physical environment experienced by small fishermen in Tambak Lorok require them to be able to adapt to existing conditions. The many socioeconomic problems they faced when their fishing village was changed to become a marine tourism village demanded that they have to have a variety of ways to solve it. The complexity of the problem is not only related to the psychology of citizens personally, but also the psychology of the community as a community. The success of small fishermen in Tambak Lorok in overcoming the problem is caused by their resilience or survival skills. This resilience utilizes social systems that exist in society such as the actualization of local cultural values, the externalization of religious spirituality, and the strengthening of the social institutions they have.

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