# Development of Fishermen in Cultivating Catfish to Support the Economy of Coastal Communities

#### Hendri<sup>1</sup>, Ibrahim Chalid<sup>2</sup>, Richa Meliza<sup>3</sup>, Nanda Ameliany<sup>4</sup>, Rizki Yunanda

<sup>1,2,3,4</sup>Faculty of Social and Political Sciences, Malikussaleh University, Lhokseumawe, Aceh, Indonesia.

#### **Abstract**

Indonesia is known as the land of heaven, which means that there is such a rich nature, both land and sea. Therefore, it will support the economy of a more prosperous Indonesian society. The same is true for the people of Gampong Pasie Kuala Asahan, North Kluet District, South Aceh District. Where is the position of the village which is on the coast which requires the people of Gampong Pasie Kuala Asahan to work as fishermen, farmers and fish cultivators. In this study the authors used a qualitative research method with a life's history approach. Since 2019 the people of Pasie Kuala Asahan have had the initiative to restart catfish farming which is carried out next to their respective homes by making ponds as containers for raising fish. The pools used vary from 7x9 m2 with a height of 1.5 m2 and some are 3x3 m2, 4x5 m2 and 3x5 m2 in area. The fish that are kept by the Pesie Kuala Asahan community are catfish, the reason the Pasie Kuala Asahan community keeps catfish is because the capital required is less and the way to care for them is more practical. In addition, the community can work side by side, namely being farmers while raising fish to earn more income. The catfish pond is an economic staple for the Pasie Kuala Asahan community.

Keywords: Coastal Communities, Fishermen, Economic Support, Catfish Farming

#### INTRODUCTION

Indonesia is known as the land of heaven, which means that there is such a rich nature, both sea and land. The land owned by the Indonesian people is famous for its fertility. So that all kinds of plants will thrive on mother earth and produce abundant results.

Besides having a land area that is so fertile. Indonesia also has a larger sea area than land, therefore Indonesia is called a maritime country. Indonesia's marine wealth is very abundant, in the form of fish, shrimp, coral reefs, shellfish, and all kinds of other biotic species that live in the sea. Therefore it will support the economy of the Indonesian people and will make Indonesian people more prosperous.

Based on the demographic data of the 2021 RPJMK, the area of Gampong Pasie Kuala Asahan reaches 633 Ha, some of which is land used as a livelihood for the community to cultivate fish. The area used as a media for cultivating fish is 72,500 m2. The 72,500 m2 of land is in the form of ponds with an area of 50x50 m2 which is used by fishing communities for cultivation land.

Based on the author's interview with Mr. Abdul Malik as an informant and secretary of Gampong Pasie Kuala Asahan since 2017, ponds which are usually used as land for cultivating fish have become abandoned, with an area of 57,500 m2 of abandoned land because fisherman in the ponds do not have the capital to raise fish. Then since 2019 the people of Pasie Kuala Asahan have had the initiative to start cultivating fish again which is carried out next to their respective homes by making ponds as containers for raising fish. The pool used is 7x9 m2 with a height of 1.5 m2.

The fish that are kept by the Pasie Kuala Asahan community are catfish. The reason for the Pasie Kuala Asahan community to raise catfish is because the capital required is less and the way to care for them is more practical. In addition, the community can work side by side, namely becoming farmers. The Pasie Kuala Asahan community raises catfish as their main source of income, while to fulfill their daily needs they get it from farming.

According to (Koentjaraningrat, 1977: 23) in his introduction to Anthropology, society is a unit of human life that interacts according to a certain system of customs that is continuous, and which is bound by a sense of shared identity.

The above view shows clearly what the elements of society essentially have in common. Mention special units (Koentjaraningrat, Man and Culture, 1979:154) which are elements of

<sup>\*</sup>Corresponding Author: <a href="mailto:hendrianeukmak@gmail.com">hendrianeukmak@gmail.com</a>

society, namely: related to social categories, social groups, groups and associations.

The above view clearly shows clearly what the elements of society essentially have in common, namely related to social categories, social groups, groups and associations. Society essentially includes all relationships and groups within an area that have the same goal. Social relations between individuals and individuals and groups, and between groups and groups. Therefore, the sociality of human relations and social reality is the main discussion in society.

Improving people's welfare is the essence of national development. The level of community welfare reflects the quality of life of a family. Families with a higher level of welfare mean having a better quality of life, so that in the end the family is able to create better conditions to improve their welfare.

Welfare is a condition in which a person can fulfill basic needs, be it the need for food, clothing, shelter, clean drinking water and the opportunity to be able to continue their education and have adequate jobs that can support the quality of life so that their lives are free from poverty, ignorance, fear, or, worry so that his life is safe and secure, both physically and mentally. To obtain prosperity is not easy, but that does not mean it is impossible to obtain, we only need to pay attention to the welfare indicators.

Pond farmers are fish or shrimp farmers where these people obtain their main livelihood by carrying out activities in the field of fish or shrimp cultivation in ponds, while ponds are artificial ponds made by people who cultivate fish or shrimp, usually in coastal areas that make a container or pond then filled with water and used as a means of cultivation, especially fish, shrimp and shellfish.

Ponds are ponds made in tidal areas and used as a place to cultivate fish, shrimp and other aquatic animals that can live in brackish water. The term tambak also comes from the Javanese language "nambak" which means damming water with a bund so that it gathers in a place that has been made. The term tambak is used to describe a pond in a coastal area that contains brackish water or seawater, however, it is not called a "pond" because the term pond is specifically used for bund plots filled with fresh water in mainland areas.

#### RESEARCH METHODS

This study uses a qualitative approach with descriptive analysis method. The research location itself was conducted in Gampong Pasie Kuala Asahan, North Kluet District, South Aceh Regency, Aceh Province. The research informants included: Mr. Sulaiman, Mr. Muhammad Dani, Mr. Agus Maulana, Mr. Abdul Malik, Mr. Muhammad Kadafi. Data collection techniques in this study using the method of observation, interviews and documentation. While the data analysis technique uses data reduction, data presentation and drawing conclusions.

#### **DISCUSSION**

#### **Cultivation of Catfish by the Pasie Kuala Asahan Community**

Cultivation is an activity of rearing fish in a planned way which is carried out in an area for later profit. From the harvest obtained by the people of Gampong Pasie Kuala Asahan, they carried out catfish farming activities after not doing any fishery or milkfish ponding activities for a long time. Caused by several factors that require the local community to stop cultivating milkfish ponds.

Even though the Pasie Kuala Asahan community was once a cultivating fisherman, the cultivation that was carried out had a very significant difference. Cultivation which used to be carried out in ponds using saltwater and which were reared were saltwater fish, now a container is made as a place for their maintenance in the form of a pond. In addition to the different water containers used, they are also different, namely in the form of fresh water, because catfish is a type of fish that lives in fresh water.

## **Decision Making in Catfish Cultivation**

Basically, the people of Gampong Pasie Kuala Asahan have been very active in cultivating ponds, namely milkfish ponds, but the local community made the decision to deactivate the milkfish ponds and switch to catfish ponds next to their own housing, because milkfish ponds must have a large enough area, then coupled with the work process which is considered very complicated, getting seeds is also quite difficult, coupled with unsatisfactory yields and it is also difficult to sell

in large quantities.

The people of Gampong Pasie Kuala Asahan took the initiative to reopen ponds that had been neglected for a long time from 2017 to 2019. Previously, the local community cultivated milkfish and tilapia and then switched to cultivating catfish, because the work system is very easy and not too difficult to handle. do it and also do not require a large amount of money.

The local community started cultivating catfish next to their homes for the reason that it was easier to manage and coupled with a relatively easy work system, the results obtained by the community could be up to double the capital used depending on the selling price in each harvest period.

# Reasons for the Community of Pasie Kuala Asahan for Cultivating Catfish Land

In cultivating milkfish, the community requires a very large supply of land with an average size of milkfish ponds 50x50 m2 with a depth of 1.5 m2 to 2.5 m2. Whereas community catfish farming only requires land with an area of 3x5 m2 and 4x5 m2 with a height of 1.5 m2 and 2 m2. The results of the interview with Mr. Abdul Malik

#### **Diseases or Pests**

Most milkfish ponds are located in an open environment and far from human settlements so that it is easier for pests or fish-eating birds to take the fish in the milkfish ponds. The pests that come can harm milkfish cultivators. For farmers, these harmful pests are pests that are present to disturb, threaten, or compete with the fish being cultivated.

But it's different from the catfish pond that is made next to the house. Make it easier for people to protect their ponds from existing pests, with a small size the community can use nets to cover the pool from pest attacks that can be detrimental. A situation that allows pests to enter the pond environment. Pests that come can be detrimental to fish cultivators.

# Capital

Pond farmers in maintaining milkfish, the required capital is approximately 50 million. The seeds that were spread were in the form of tilapia tilapia seeds. To buy fish feed usually costs around 10 million, starting from nursery to harvest. With a very large amount of capital to cultivate milkfish, the people of Pasie Kuala Asahan stopped cultivating milkfish. Meanwhile, the capital needed for catfish farming is not much, the community only needs to prepare 3-5 million capital to build a catfish pond measuring 3x3 m2 and 4x4 m2. The 3-5 million capital also includes the purchase of seeds, feed, tarpaulin and tools. -Other tools for making catfish ponds.

#### **Lack of Attention From Government**

The development of fish farming which is managed by the community in the coastal areas of South Aceh Regency such as Gampong Pasie Kuala Asahan directly deserves support from the South Aceh Regency government. The reason is, if fish farming in Gampong Pasie Kuala Asahan is managed optimally, it will have quite promising potential. Fish farming is a potential business. In fact, of course this can have an effect not only on fish cultivators but for their own regions.

#### **Catfish Maintenance Process And Results**

#### **Catfish Maintenance Process**

The Pasie Kuala Asahan community in catfish farming first prepares a pond or container for fish cultivation. The seeds used by local people are still small, usually 2-3 cm in size. These catfish seeds were purchased from agents at a price of 35,000-40,000 per kilo. The Pasie Kuala Asahan community can also get seeds from other catfish breeders in Pasie Kuala Ba'u Village, it's just that sometimes they don't match the target we expect, things are different if we buy them from an agent.

## **Results of Catfish Cultivation**

Fish that have been harvested are then sorted again by the pond owner also assisted by agents and all working members in the pond. In this sorting process they move small fish to be recultivated, they only take fish that are ready to be marketed, large fish are then transferred to the piber and weighed again, usually if the big fish will increase 4-5 in 1 kg.

## **Development of Catfish Farmers**

At the beginning of 2019 the people of Gampong Pasie Kuala Asahan decided to cultivate fish next to their homes, for the first batch of 5 families who carried out cultivation, namely Mr. Sulaiman, Muhammad Dani, Agus Maulana, Abdul Malik, and Muhammad Gaddafi, from five This community is an experimental example of cultivating catfish next to the house. After nurturing and caring for it until the harvest season has arrived, which is for 3-5 months for the first nursery depending on the feeding. From these 5 communities managed to get quite a lot of profit, so that other people in the village of Pasie Kuala Asahan also wanted to do catfish farming beside their homes.

In the second wave, 10 families of Mr. Jamal, Kirajul, Karimuddin, Baihaki, Supriadi, Muniruddin, Samsul Bahri, Salman, Zazuli, and Mr. Hendra started to grow catfish and wanted to do catfish farming. for the seeds used by the second wave of people, they bought them from the first 5 people because they were successful in catfish farming.

Life's History 5 The Kuala Asahan Pasie Family Table 4.3.4 Catfish Cultivation Matrix

No	Informant	Acquisition Of	Motivation	How to Care	Modal	Allocation
		Knowledge		and Labor		Results
1.	Sulaiman	Mr. Sulaiman started his activity as a pond farmer from his father, he has been doing this job since he was 17 years old.	Becoming a pond farmer to provide for the basic needs of his family, as well as family savings.	The pond was built next to Mr. Sulaiman's house. So it's easy to see the development of fish and provide fish feed 2 times a day, namely in the morning and evening. The work in caring for catfish is also assisted by his son named Samsul.	For the first capital in opening the catfish pond used by Mr. Sulaiman, namely from the results of farming young plants.	At the time of harvest, Mr. Sulaiman sold the
2.	Muhammad Dani	Pak Dani obtained knowledge in caring for catfish from his friend, even though basically Pak Dani already has experience in fish farming, but in the field of milkfish cultivation.	Being a pond farmer is indeed very attached to Mr. Dani's soul, but with this catfish farming Mr. Dani feels his economy is greatly helped.	Pak Dani takes care of the catfish pond very practically, he only controls the water and the large catfish, commonly referred to as sangkuriang, if there are large catfish they will be moved immediately, Pak Dani is	Mr. Dani's first investment in catfish farming was from family savings, and also helped by his friends.	harvest to agents, food

		T				
3.	Agus Maulana	Mr. Agus got knowledge in caring for catfish by seeing from other people, then Mr. Agus started practicing it since 2019.	Pak Agus' motivation in cultivating catfish is to help the family's needs.	also assisted by his wife, namely Mrs. Mariani in caring for this catfish pond, starting from feeding as well as harvesting.  Mr. Agus takes care of the catfish pond. The water in the pond is still flowing, but the volume of water is on a small scale. Mr. Agus feels that with a continuously flowing water system, he doesn't need to replace the water every month. Pak Agus works alone in caring for his catfish	The capital used by Mr. Agus in cultivating this catfish, namely from his garden.	catfish harvest to agents and the other half is made into smoked
4.	Abdul Malik	Mr. Abdul Malik got this knowledge in catfish farming from observing catfish ponds in the Pasie Kuala Asahan community, and Mr. Abdul Malik became interested in catfish farming.	has become a hobby that is very attached to Mr. Abdul Malik, with this catfish pond he feels	Malik takes care of his catfish pond just like other people, but Mr. Abdul Malik in dealing with	Pak Abdul Malik's capital in cultivating catfish is from his salary as a village official.	Pak Abdul Malik's catfish harvest is sold to agents.
5.	Muhammad Khadafi	Mr. Gaddafi started catfish farming because he was interested in seeing other people who had	Mr. Gaddafi's motivation with the catfish farming that he did had a positive impact	in caring for the catfish, to	Pak Gaddafi's capital came from the garden and also	are sold to

success in catfish	in helping his	that eat fish,	from the	Ba'u agents,
farming. He		Mr. Gaddafi		· ·
_				3
started practicing	•	covers the		other
it himself and also		surface of the		people.
asked other		pond with		
people what he		coconut leaves,		
had complaints		and the feed he		
about.		uses is also		
		practical,		
		starting from		
		sago trees and		
		occasionally		
		•		
		he gives		
		chicken		
		stomachs. Pak		
		Gaddafi takes		
		care of his		
		pond with his		
		wife, Mrs.		
		Dinda.		

#### **CONCLUSION**

The Pasie Kuala Asahan community, which is located on the coast, generally works as fishermen, cultivators and farmers. Since 2015, the Pasie Kuala Asahan community has been very active in cultivating milkfish, but it has only been running for a few years. The milkfish ponds used by the Pasie Kuala Asahan community are neglected or have no active function. From 2017 to 2019 the community no longer cultivates milkfish because there are several causal factors that require the Pasie Kuala Asahan community to stop cultivating milkfish.

Since the end of 2019 the Pasie Kuala Asahan community has taken the initiative to reopen fish farming ponds, but this is different from the previous pond, which used to be a milkfish pond and has now changed its function to a catfish pond which is cultivated next to their house. The people of Pasie Kuala Asahan who opened a catfish pond next to their house saw that this catfish pond was easier to cultivate. Less capital is issued, and it is also very helpful to the economy of people who do catfish farming.

## **BIBLIOGRAPHY**

Bintarto. (1989). Interaksi Desa Kota Dan Permasalahannya. Jakarta: Ghalia Indonesia.

Goodneugh. (1974). Teori-Teori Tentang Budaya. American Antropologist.

Gunawan, I. (2014). Metode Penelitian Kualitatif. Surabaya: Bumi Aksara.

Koel Rengkov, Bakri, Edi Setiawan, Lailatul Qadri, Muhammad Angga, Faris Gayo, Roa Katiking, M. Khaerudin A, Hastoro. (2006). Buku Pintar Seri Senior, Jakarta: Pustaka Warga Negara.

Koentjaraningrat. (1979). Manusia Dan Kebudayaan. Jakarta: Djambatan.

Koentjaraningrat. (1986). Pengantar Ilmu Antropologi, Jakarta: Aksara Baru.

Koentjaraningrat. (1990). Manusia Dan Kebudayaan. Jakarta: Djambatan.

Koentjaraningrat. (2010). Sejarah Teori Antropologi. Jakarta: Penerbit Universitas Indonesia.

Lewis, Oscar. (1988). Kisah Lima Keluarga : Telaah-Telah Kasus Orang Meksiko Dalam Kebudayaan Kemiskinan. Jakarta : Yaysan Obor Indonesia

Ma'arif, Roisul dkk. (2018), Pemberdaayaan Msyarakat Nelayan Melalui Pengembangan Perikanan Tangkap Di Desa Majakerta, Indramayu, Jawa Barat, Prosiding Seminar Nasional Ikan ke 8. Jurnal 2018.

Moleong, Lexy J. (2011). Metodologi Penelitian Kualitatif. Bandung: Pt Remaja Prosda Karya.