The Ethnography of Female Fishermen in Paluh Merbau, Tanjung Rejo, Percut Sei Tuan District

Abstract-The purpose of this study is to determine the ethnography of the lives of female fishermen on the coast of Paluh Merbau, Tanjung Rejo Village, Percut Sei Tuan District. In general, it is done to find out the problems by female fishermen in the utilization of marine resources and the form of local wisdom in the use of marine resources on the coast of Paluh Merbau. This study uses an ethnographic method with the descriptive approach using data collection techniques through in-depth interviews related to the life history of fishermen and Forum Group Discussion (FGD). Lecturers and students stayed at 10 female fishermen houses. The results of the study showed that female fishermen sailed from 4:30 a.m. to 7:00 p.m. The equipment and technology systems used are still traditional, namely using two boards, a bucket, and a bottle of drinking water, bubu, and flat shoes. These hunters of marine ecosystem resources obtain catches in the form of shells, bare, king crabs (belangkas), crab, and shrimps with an average income of IDR 30,000-50,000/ day. The result of this income is exchanged or bartered into kitchen materials such as sugar, oil, rice, fish, and others. If sea water is high, generally women plant rice in the fields, making skills in the form of sticking cloth from mangrove processing, and other economic activities to supply the needs of their life.

Keywords-ethnography, female fishermen, Paluh Merbau

I. INTRODUCTION

Indonesia is an archipelago country surrounded by territorial sea with a coastline length of approximately 81,000 km. The scale shows how vast the ocean Indonesia has. This makes Indonesia have abundant marine resources. Of course, the management of marine resources depends heavily on the role of the fishermen. They become the spearhead in fulfilling the commodities produced by marine resources for the community. However, the abundance of marine resources turned out to be inversely proportional to the conditions of their economic welfare. Their low welfare and standard of living become a polemic faced by them.

The polemic is not only due to physical assistance problems, but also the mentality of the fishermen, as they still fully depend on fulfilling their living needs in the sea. So, if there is a storm or bad weather at sea, of course, their activity cannot be done and it has an impact on the absence of income at that time. In addition, this condition is exacerbated by fishermen who do not have other skills. The low interest in education in every fishermen’s family as well as the dependence on traditional fishing gear which is not competitive anymore with modern fishing gear, cause the lives of fishermen still in the poverty continuously.

The polemic for improving the welfare of fishermen is still struggling with traditional fishermen who still depend on their ability to catch fish and sea conditions such as in Paluh Merbau. The coastal area of Paluh Merbau is one of the parts of Sumatera coastal area. Paluh Merbau is situated in the territory of Deli Serdang Regency, North Sumatra and is adjacent to several other fishing villages such as Desa Bagan, Jaring Halus and Pantai Labu. The fishermen at Paluh Merbau are still classified as traditional fishermen due to the use of traditional fishing gear. Then, fishing is very dependent on weather conditions at sea. So, the problem in fulfilling the needs of life is always a polemic that is difficult to solve.

The polemic of Paluh Merbau fishermen turned out to have a major impact on the distribution of jobs in a family. Earning money is not only compulsory for men, but women also play a very important role to help to fulfill the family needs. If in the urban areas, many adult women play double roles as mothers working in the household and also carrier woman. Then, it happens towards women in the Paluh Merbau.

The demands to add to the cost of living necessities make the women involved as fishermen as well. They go down to the ocean to pick up and catch any seafood that can be sold only with the local knowledge they see directly in the field and what men have taught them. Double role is done as a wife who is required to take care of the family at home (domestic sector) and also become a fisherman who catches fish in the sea (public sector).

Basically, earning money is the duty of the husband. But in reality, the increasing of life needs makes a social condition that requires the wife to work. According to Wolfman in Helmi states that "In essence, women only play a role in the family, but at the present time, there are
many women who play a role in the world of work to earn a living"[1]. Perhaps, women who work for fulfilling family needs is now considered as common sense today. However, working by risking safety by becoming a traditional fisherman, like what women do in Paluh Merbau, is important to be observed and studied in depth. The study of the lives of female fishermen is part of the ethnographic scope. It will be able to help to extract deeper information and provide a clear picture to find out the problems of the lives of female fishermen in Paluh Merbau.

**Literature review and previous studies**

Ethnic culture is a reference framework developed by each ethnic group, which can be used as an identifying feature, which distinguishes one social group from another. The terms of reference are language systems or symbols, organizational systems, livelihood systems, religious systems, technological systems, and art systems [2]. The involvement of women as fishermen as an effort to help the family economy is one of the livelihood systems that exist in the community in the coastal area or in the family of fishermen. According to [3] on the role of coastal women in increasing family income describes that women in coastal areas can be a motor for the productive economy of coastal communities so that they can improve their function as a housewife to become a breadwinner as well. The results of her research in the coastal area of Mertasinga Cirebon District explained how coastal women in the region work as crab skin peeler.

As a told [4] on women fishermen in Tambakrejo Village, Malang Regency, they explain the strategies of women fishermen and arranged their living in their families. The livelihood strategy is divided into two patterns, namely a single livelihood pattern and a dual livelihood pattern. A single livelihood pattern means that women fishermen in fulfilling the needs of their families only become fishermen, while the dual livelihood patterns of women have other sectors in earning a living not only as fishermen but also those who are engaged in plantations or trading. In this study, they also explained that women fishermen allocate all their income to meet the needs of their families and conduct a savings strategy that is to save a portion of their income by buying gold jewelry with the intention of being easy to cash back.

In the study [5] regarding the role of gender in the families of traditional fishermen in the South Malang coastal area, it was explained that the role of fishing is entirely done by men, but women are very dominant in the marketing of the fish in place fish auction or tempat pelelangan ikan (TPI). In addition, the role of women is not only in the domestic sector, but the management of fish that have been captured and then processed into a food creativity that can then be resold. This division of labor occurs in almost all fishing families in the region.

According to [6] about the adaptation strategy of fishermen families in the fishing village of Seberang Medan Belawan, he explains that how it turns out that patron-client relations that occur in rich fishermen and ordinary fishermen also influence women in this area. The pattern of adaptation of women in dealing with economic conditions can encourage productivity in fulfilling family needs. The women regulate their primary needs in the family by becoming shellfish peelers or shrimp cleaners. However, the work must indeed be done on rich fishermen and cannot be brought home so that the family's domestic work is done before doing the work of peeling shells or cleaning the shrimp.

**Fishermen’s poverty**

Fishermen's poverty is a matter that often gets the spotlight by practitioners, NGO activists, local governments and the central government. Various government programs such as the Empowerment of Coastal Communities or Pemberdayaan Masyarakat Pesisir (PEMP), and the Development of Small-Scale Catch Fisheries or Pengembangan Usaha Perikanan Tangkap Skala Kecil (PUPUKSK), fishermen insurance, and various other CSR programs are being applied to fishermen. In some fishermen in certain areas such as fishermen in Sibolga City, Badan Penyelenggara Jaminan Sosial (BPJS) has implemented two programs namely work accident insurance and death insurance of IDR 16,800 per month. In the initial program, BPJS Ketenagakerjaan provided contributions for six months with the aim that fishermen have an awareness of the importance of social security to protect themselves from the risk of accidents while working. But poverty seems to be a binding chain that is difficult to break.

This situation is increasingly aggravated by the lack of facility development, the lack of public awareness of education, ships that do not sail due to capital shortages for refueling, or the inadequate condition of ships for fishing. Dependence on sea conditions and the absence of expertise in other fields of work are considered as polemic enhancer faced by fishermen. So, some residential areas or fishing villages in Indonesia are indicated as one area that has a low standard of living.

**II. MATERIALS AND METHOD**

This study employed ethnographic method with a life history and live in approach. According [7], fundamental research components in the academic discipline of anthropology (culture), so ethnography is a characteristic in anthropology. The life history approach is carried out by an in-depth interview with female fishermen and their families about their experiences. This life history approach model is strengthened by living together (life in) and following the activities of the female fishermen when they go to sea.

**III. FINDING AND DISCUSSION**

a. The ethnography of female fishermen’s life in Paluh Merbau

The fishing family in Paluh Merbau has been around since 1984. Some fishermen who settled in Bagan Percut moved to Paluh Merbau (Tanjung Rejo) one by one. Information from a tauke (boss) in Bagan was obtained...
which then sent dozens of other fishermen to Paluh Merbau. The area was formerly a swamp forest area. At that time, the area was experiencing widespread land clearing. Therefore, for anyone who wants to own land, it is permissible to open forest areas there. Dozens of fishermen finally decided to clear land. They first departed in early 1984 using boat boats carrying equipment such as machetes, axes and other necessities. Then, they began to set up huts as shelter and rest and slowly opened the land which had been divided into the same area as other fishermen. Everyday, they cut down trees and planted a few corners of land that were still muddy or flooded. Every once a week, the fishermen returned to Bagan, in turn, to visit the family and bought basic necessities during the land opening.

The opened land was planted with various kinds of food crops such as rice, spices, vegetables, and others. There were also types of plantation crops such as oil palm and types of trees such as lime. Initially, the fishermen in groups guarded the crops in the fields that had been opened, they also dug a lot of ground wells as a reservoir of water, especially when the dry season arrived. Slowly, one by one, the fishermen then began to bring the family and open a settlement in Paluh Merbau. Even though they have shifted their livelihoods as farmers or cultivators, they had never cut off the link in fishing in the fishing family. Although living in the vicinity of the fields, the coastal atmosphere is still very familiar, considering that naturally, Paluh Merbau is a coastal area that is located closely to the Indian ocean.

Paluh Merbau is located in Tanjung Rejo Village, Percut Sei Tuan District, Deli Serdang District. The distance is around 25 kms from Medan city. Not too far away, but the road is quite rocky and dusty, so it's a bit difficult to pass especially during the rainy season. The inhabitants of this region are not Malay ethnic as found in other coastal areas, but Javanese who has historical records tends to become contract laborers in Sumatra. Paluh Merbau community generally has a livelihood by relying on the marine ecosystem and the eastern coast of Sumatra. Now, they fight to survive by relying on natural conditions, together with working hard among other fishermen.

Female fishermen generally spend time at sea in the duration of 3-4.5 hours in one hunt, between 05.30-09.00 WIB and continue in the afternoon from 14.30-18.30 WIB. So that in one day, they can spend about 8 hours at sea. The hunted animals that can be resold are bare, shrimp, scallops, crabs, prunes, unam, ciput, snails, kipang (octopus), and other animals. In one catch, the number of hunted animals obtained cannot be estimated. It depends on the length of time to hunt, the number of animals available, and eye foresight in finding these animals. Even the hunters must be prepared if the fingers of the hands are pierced by sharp objects while hunting marine biota.

Some hunters before heading to the sea coast must prepare fishing tools and media used to be able to walk and balance the body on muddy roads. Generally, they prepare a bucket as a container to put the animals on, two 10 x 50 cm wood to hold the body resting on the bucket while the body walks on mud, shoes with typical geared hunting in the area, and 2 liters of drinking water. Even some of them generally bring one or two sachets of powder energy drinks in order to survive when catching the animals. A fisherwoman believes that the path that is not easy and very draining. Especially if you have to hunt for 4 hours at sea, so extra-energy drinks are needed to strengthen your body's stamina and so that your body's muscles don't get sick easily.

Slowly, the female fishermen direct their way on the vast expanse of the east coast of Sumatra, which was full of mud. The muddy situation has made them create a local wisdom to get through the road. The shoes carried are then used by the fishermen. This shoe is used so as to not easily get stuck in the mud and exposed to sharp shells in the mud. Even so, there are also female fishermen with an only cloth to cover their legs. This is because if you use shoes, walking will feel more difficult. The risk that is obtained sometimes is that the legs of the female fishermen must be willing to be cut into pieces of shellfish or glass shells (considering that the area is also downstream of the waste stream from upstream). After using shoes, then two large pieces of wood are placed on top of the mud and a bucket is in front of the wide wood. Next, they pushed the bucket while pressing it firmly so that the pedestal of the body was in the bucket, not on the wood used as a foothold. If the technique is not carried out properly, then the female fishermen will be trapped in the depth of the sea mud up to 1-1.5 meters. Especially if the foot is trapped in the glodok hole which is a large hole made by crabs while approaching the tubir (reef slope), then the body will be more difficult to get out.

The female fishermen who just started to become marine animal hunters, of course, many of them experienced conditions trapped in the mud. Some even decided not to continue as female fishermen. For those who survive, generally learning this technique takes at least two weeks. A female fisherman thinks that the difficulty is at the beginning, and all fishermen will definitely feel the same difficulty. But over time all become accustomed and easy. The greatness of the fishermen seemed to dismiss the existing social issues that fishermen are in problematic and poverty. Whereas in fact, fishermen accept the situation as it is with the condition of a house that is not electrified and a house with a ground, and a bathroom that does not have clean water.

Hunting routines have been passed and the time for fishermen to sell their prey. Hunted animals that are generally obtained are shellfish, bare, ciput, and crabs. Bare is the most common type of marine biota. The price per kilogram is sold to agents of IDR 5,000, while large-sized shells for IDR 13,000 per kg and mixed shells for IDR 9,000. The money obtained from some female fishermen were spent on basic food items in the form of rice, sugar, coconut oil, cigarettes, and side dishes. The
The conception of life that is attached to most female fishermen is to live for today, so whatever it must be enjoyed. Even so, there are still future-oriented fishermen. This can be seen from the effort to set aside money as savings. There are also female fishermen who use their savings to pay in installments such as large buckets, dispensers, gas stoves, dish racks, pots, rice cookers, and other household appliances. In the opinion of a female fisherman, the item that can be owned by fishermen through credit. This is due to the large price of goods if you have to buy in cash. The purchase of goods by means of credit also still cannot meet the needs of female fishermen. There are still some fishermen whose houses have not electricity and do not have bathrooms and clean water. Sentir lamp and the silence of the night became loyal friends of the female fishermen. For some female fishermen, the job of being a fisherman is a choice of work that is willing or not, but it must be undertaken. Because of by being a fisherman, life needs can be fulfilled. However, if the sea water level is high, of course, the female fishermen cannot hunt the marine animals. Therefore, some women plant rice in the fields both as landowners and workers. The routine at least helps female fishermen to get income from other sources.

b. The local wisdom when hunting marine biota in the reef slope of Paluh Merbau

One form of local wisdom that is still preserved by Paluh Merbau fishermen is the use of bubu when hunting crabs. It is a traditional fishing tool that is widely used by bubu user (pembubu) in Paluh Merbau. It is made of a cylindrical medang net that is tied using bamboo or small iron. It consists of two door holes as a place for crabs to enter and is plugged in on muddy soil around the roots of mangroves with a piece of wood at high tide. Before using a type of fishing gear, the fishermen in this area used angkul (nets that were tied in a rectangle and curved) and there was a piece of wood used as a handle. This system requires the crab catcher to always guard it. There are also other ways of hunting for crabs when the sea water recedes by looking for crabs nesting places and fishing crabs out using 2-3 meters of iron.

Unlike most male fishermen who dare to hunt game like crabs at night, female fishermen decide to look for it in the morning and evening. This condition, in fact, shows that at least the results of hunted animals in the form of crabs that can be obtained by female fishermen. So that for marine biota such as crabs more is produced by fishermen or male thugs. The reason is that sea water starts to tide at night, making more crabs roam the shoreline. Therefore bubu must be installed at night before sea water rises. It is filled with bait such as mujahir fish, and belanak fish which is then planted with mangrove branches that break into the bottom of the mud.

When installing a bubu at night, the sludge must be installed on a reef slope that has been flooded by sea water or in a mud hole that has a pool of water. If not, the traps will be destroyed by mangrove rats who want to steal bait. It must also be installed near mangrove roots because around the area the crabs will come out and look for food. Bubu which has been installed is left until 5:00 in the morning when the water begins to recede. The type of crab in Paluh Merbau is mud crab or scylla serrata. The crabs consist of several types which are characterized by the characteristic characteristics of the color of the shell or claws. There is a type of crab whose shell is brown-black with green claws patterned round. There are types of crabs that are red-purple. There is also a type of crab whose shell is green and has orange-reddish claws, and there are pale-colored crabs with reddish claws.

The types of crabs above are the types of crabs that have a sale value. For Paluh Merbau community, the classification of crab types above is measured from the size of the crab and also laying crabs. This type of female crab laying eggs is called Jumbo or Ice crab. This type is characterized by the presence of dense eggs if pressed from the top of the shell or seen from under the genitals. This type of crab, the weight is calculated starting from 2 ounces and above and has a relatively more expensive price. There are also super crab types. This type is a large and dense male crab, usually, this type of crab starts from ½ kg to 1 kg. If the size above 1 kg is also called the name AJ crab. There is also a double crab category, this type is based on size classification under the super crab type. The type of crab C (young crab) is the most sought. This crab code is marked from 1-2 ounces and is usually sold as the seed for captivity or cultivation of soft crabs (soka). In addition to the crab varieties above, in the Paluh Merbau coastal area, there are also types of sea crabs. This type lives a lot in the middle of the sea, not on the coast or swamp of mangrove forests.

Fishermen generally distinguish the size and type of crabs obtained. The fishermen don't even need a weighing device, but only use heavy estimates using hands. Fishermen with bubu fishing gear usually rarely get the catch of super crabs. Because according to one of the fishermen, this type is more often found in mud areas with sea depths reaching 1-2 meters and usually people in the region catch it using used car tires displayed in sea water, to become a nest for crabs large, and usually only taken every 3 days. The crabs live and nest around the reef slope or more precisely around the roots of mangroves by digging holes in the mud. In addition to the types of crabs, along with the banks of Paluh Merbau also live various types of marine biota such as mullnet, mujahir, and others. There are also various types of shellfish such as bare, panggang pulut, taram, and other types of biota.

Finding crabs is strongly influenced by climate, weather and season. There is a separate time regarding when the crabs can be many or very rarely obtained by the bubu user. According to the local knowledge of Paluh Merbau community, the best time to hunt for crabs is during the dry season which is marked by large tides of sea water. Eastern Perdani usually occurs in April-June, which is marked by a tidal wave of sea water during the day, which winds blow from the east and southeast. There
is also the designation of western civilization, the direction of the wind blowing from the west and north and the dominant tide of sea water occurring at night. Every year, *perdani* tide cycle is counted down following the month. In addition to the number of months and the direction of the wind, it is also marked from the high tide on the first day of farming. In *pasang perdani*, there are 7 dead pairs and at 8-22 days a month is called a black tide. Big tides usually occur 2 times a month. There is also a dry west season which usually occurs in January-March. In this season the crab catch is usually very little, different from other tide seasons.

c. The problems faced by fishermen in Paluh Merbau

Small catches are inseparable from the lack of marine resources that can be utilized today, in addition to depending on natural conditions as well as the environmental damage around Paluh Merbau. In the 1980s, the fishermen in two days could catch crabs around 70 kg, but currently not more than 5 kg. Crab populations and types of sea catches have been reduced due to the damage to their habitat. Many mangrove forests have been converted as ponds and oil palm plantations owned by investors from outside Paluh Merbau and other remaining encroachment of mangrove forests. Another big threat is the natural factor where the occurrence of coastal abrasion is getting worse every year. In addition, the threat of using trawl is also very troubling for traditional fishermen, where they have difficulty getting fish in shallow water, due to reduced habitat due to large ships (owned by investors) using trawl and reducing fish populations in Paluh Merbau water. Another thing that is very troubling for the community is the waste of large factories around Medan city and Deli Serdang that pollute along the river flow in Paluh Merbau thus it reduces habitat and populations of fish, shrimp, crabs, shellfish and various other types of marine biota.

IV. CONCLUSION

The various local knowledge was developed by female fishermen as an effort to adapt to the environment in which they live. Various problems are faced even though in the end the female fishermen must surrender and accept the reality of life as it is. Gathering among them in the routine activities of hunting marine life, farming, making various skills, in fact, increasingly made reinforcement among them. A sense of belonging on behalf of women unifies them. More and more, fishermen are not only women but also men and children and uncertain weather constraints are other problems that must be faced by female fishermen.

REFERENCES