Livelihood Strategies for Households of Bajo Ethnic Fishermen in Petoaha Village, Nambo District, Kendari City

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Abstract. This study aims to determine the livelihood strategy of the Bajo fisherman household in Petoaha Village, Nambo District, Kendari City. The determination of the research location was carried out purposively (intentionally) with the consideration that there are two groups of people living in the area, Petoaha Village and Petoaha Beach. The land petoaha people are generally inhabited by the Tolaki tribe (native farmers) while the coastal petoaha are generally inhabited by the Bajo tribe (seafarers-fishermen). Education and welfare in Petoaha are still minimal, especially in Petoaha Beach, so it is a special concern for the Kendari City government. Petoaha Village is a fishing area for ethnic Bajo whose income can decrease drastically when the famine season arrives (waves and strong winds). Bajo ethnic fishermen in this sub-district adapt to various livelihood strategies in meeting their daily needs. This research is a qualitative descriptive reearch, namely research that seeks to collect and explore data, both in the form of words and writings from the people observed to obtain the necessary data and then process and analyze it. The data collection method is by using literature as well as direct observation and interviews for facts based on the observations of researchers and documentation in the form of pictures or photographs. The research was carried out from July to August 2022 through in-depth interviews with 6 (six) fishermen as key informants. The determination of informants was determined deliberately based on the characteristics of the capital they owned, namely fishermen with large capital and boat owners (patrons), fishermen with medium capital, and fishermen with small capital (clients). The results of the study show that fishermen in Petoaha Village have different strategies for each fisherman. Fishermen who have large capital take on-farm strategies (patrons in fishing activities) and non-farm (owning kiosks). Capital fishermen are pursuing on-farm (fishing fishermen, shellfish collectors), off-farm (fish and shellfish sellers), and non-farm (construction workers) strategies. Meanwhile, fishermen with small capital take the strategy of on-farm (fishing fisherman) and off-farm (worker on board).

Keywords: Fishing Community, Bajo Tribe, Livelihood Assets, Livelihood Strategy.

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1 Introduction

The life of fishermen generally emphasizes poverty and economic uncertainty, because of the difficulties faced by fishermen and their families [1]. It can be said that the life of fishermen is not only inadequate, but also still underdeveloped, including in terms of education [2]. The social limitations experienced by fishermen do not manifest in the form of isolation, because physically the fishing community cannot be said to be isolated or alienated [3]. However, it is more manifested in their inability to take part in market economic activities profitably, which is shown by their weakness in developing organizations outside their relatives or local communities [4].

The picture of fishermen's poverty conditions can be seen in real terms from the physical condition in the form of the quality of their settlements. Generally, poor fishing villages are easily identified from the condition of their residential houses. Their houses are generally very simple, with bamboo walls, dirt floors, and limited household furniture and facilities. Apart from the physical appearance, other identifications that stand out among poor fishermen are the low level of education of their children, their daily consumption patterns and their income level. In fishing villages there are several houses that look magnificent with adequate facilities, these are the houses of boat owners, middlemen or fish traders [5].

The conditions of social limitations and poverty suffered by fishing communities are caused by complex factors [6]. These factors are not only related to fluctuations in fishing seasons, limited human resources, limited capital, lack of access, and fish trading networks which tend to be exploitative of fishermen as producers, as well as the negative impact of fisheries modernization which has led to rapid and excessive depletion of marine resources. as well as limited opportunities and population scientific periodicals [7], until opportunities for fishermen to diversify their work, especially outside fishing activities at sea. Several studies show that among fishing communities' various strategies have developed to maintain survival, including the existence of traditional institutions as collective actions that can be effectively used as strategies to overcome life's difficulties [8], such as the formation of savings and loan groups and social gatherings [9]. This activity is very simple, flexible, and adaptive to socio-economic conditions, and in accordance with the conditions of fishing communities, especially those who are less fortunate [10]. Another strategy is to diversify jobs, both jobs that are still related to fisheries activities such as fishing in the sea, as well as activities outside the fisheries sector such as farming, gardening, motorbike taxis.

Petoaha Village, Nambo District, is one of the villages located on the coast and belongs to the Bajo tribe, where almost the entire community depends on their livelihood as fishermen. Bajo fishermen in Petoaha Village have different capital. Based on capital ownership, fishermen in Petoaha Village consist of rich fishermen (owners of large capital/patrons), fishermen with medium capital, and poor fishermen (owners of small capital) [11]. Rich fishermen (owners of large capital) carry out fishing by forming groups, using people who do not have capital as workers, including fishermen who have limited fishing equipment so they prefer to become ship workers. Rich fishermen and their group members catch fish using the boats and equipment and capital they own.

Individual fishermen or fishermen with moderate capital carry out fishing activities individually using simple equipment such as boats that are propelled using oars so that the distance covered is only around the coast. The boats used can only accommodate one or two people, the fishing gear used is fishing rods, nets and seines. Meanwhile, poor fishermen (owners of small capital) are those who have very simple fishing equipment such as fishing rods and trawlers and don't even have boats so they only catch fish around the beach or dock and sometimes hitch a ride with their relatives who want to go to sea.

2 Method

This research is of a descriptive qualitative nature, employing a case study method on Bajo ethnic fishing households. The objective of this research was to create and conduct an overview (description) of the Bajo ethnic fishermen's households, with a particular focus on their livelihood strategies. The research provides a description of the social facts that occur in the field, thereby examining the processes that occur systematically based on facts in the field or ongoing. Research conducted within a natural setting, with the objective of interpreting the phenomena that transpire, is classified as qualitative research [12, 13]. Qualitative research is designed to comprehend human behavior from the perspective of the actor, emphasizing how the actor perceives and interprets activities from their viewpoint [14].

The research was conducted in Petoaha Village, Nambo Sub-district, Kendari City, from July to August of 2022. The determination of the research location was carried out using a combination of random purposive and deliberate methods, with the consideration that Petoaha Village, Nambo District is one of the villages whose inhabitants are ethnic Bajo, who adapt to various livelihood strategies to meet their needs. Informant retrieval or sampling techniques used were purposive. Purposive sampling is a sampling method in which the characteristics or properties of the population under study are already known to the researcher beforehand [15]. The data were collected through in-depth interviews, with a guide for interview questions administered to six fishermen who were selected as informants. Three of the informants were classified as key informants, while the remaining three were designated as main informants.

The selection of informants in this study was carried out purposively, namely based on the criteria of capital (assets) owned by fishermen so that 3 categories of key informants were selected, namely:

- Large capital owners (owning fishing boats)
- Medium capital owners (owning small/simple sized boats)
- Small capital owners (only own fishing gear and nets) who depend on handline fishing for their livelihood.

The unit of analysis in this study is key informant households consisting of rich fisher households with large capital (Mr. Ande), fisher households with medium capital (Mr. Ningka), and poor fisher households with limited capital (Mr. Kulau).

3 Results and Discussion

This research analyzes the livelihood strategies of three key informants, namely the "big" capital fisherman, namely Mr. Ande (43), the "medium" fisherman, Mr. Ningka (38), and the "small" fisherman, Mr. Kulau (55).

3.1 Bajo Fishermen's Assets in Petoaha Village, Nambo District, Kendari City

This research analyzes the livelihood strategies of three categories of fishermen based on the assets they own. The following are the assets owned by Bajo fishermen.

Table 1. Capital Assets of Fishermen in Petoaha Village, Nambo District, Kendari

No.	Assets	Type of Fisherman		
		Big Capital Fishermen	Medium Capital Fisherman	Small Capital Fishermen
1.	Human Capital	30 Years of Skills	- 20 Years Skills - Energy	45 Years of Skills
2.	Physical Capital	- 30 Ton Capacity Ship - Fish House 10 - Trawl 1	- Boat Kapastias 2 body - Fishing rod - Net - Serong	- Fishing rod - Fishing net
3.	Natural Capital	Ocean access up to 1,650 Miles	Sea access up to 200 Miles	Beach area access
4.	Social Capital	- Workers / Clients (16 People) - Company - Auction Dealer	- Patron - Fish subscription	- Patron - Family - Fish subscription - Market
5.	Financial Capital	- IDR 27,000,000 For long distance fishing - IDR 5,000,000 – IDR 10,000,000 For coastal fishing - IDR 3,000,000 For initial capital for the kiosk	IDR 30,000 for consumption/every time you catch if there is no equipment damage	IDR 20,000 For consumption/per time caught if there is no equipment damage

Table 1 shows that large capital fishermen have equipment in the form of a 30 ton capacity boat, fish house, trawler and 16 boat workers, so that with the facilities owned by large capital fishermen they can go to sea a distance of 1,650 miles and the catch is sold to the company. Meanwhile, fishermen with medium capital have equipment in the form of a boat with a capacity of 2 people, fishing rods, nets, seines and nets. With this capital, fishermen with medium capital can only sail up to 200 miles. The catch is sold to patrons and fish customers at the market. In contrast to large and medium fishermen, small fishermen have very limited capital assets in the form of fishing rods and trawls, as stated by Lingam 2005, that the hierarchy that exists in the household and the constraints created by the larger context of class, race, caste, ethnicity and gender ideology, so that small fishermen only catch fish in coastal areas and the catch is processed by themselves and sold to fish customers.

3.2 Livelihood Strategy for Ethnic Bajo Fishermen with Large Capital

The large capital fisherman is represented by Mr Ande as an informant. There are 2 livelihood strategies he pursues, namely *on farm* and *don't farm*.

Mr. Ande is a large fisherman in the research area. He has strong human capital, natural capital, social capital, physical capital and financial capital according to Ellis (2000) categories. Mr Ande's (43) human capital is a skill he acquired autodidactically during 30 years of earning a living by fishing. Natural capital is the vast expanse of the sea, social capital is a network of clients (workers) totaling 16 people. The physical capital is a fishing vessel with a capacity of 30 tons which can accommodate 16 crew members. Mr. Ande, from financial capital, had IDR 27,000,000 in cash which was prepared as a starting point for going to sea over a long distance, namely approximately 1650 miles from the coastal area of Petoaha Village. The money is used for all the necessities needed for going to sea, namely 8000 liters of diesel, 20 liters of petrol for lighting machines/generators, 20 ropes/bales, thread, nets, 300 blocks of ice, 2 sacks of rice, cigarettes, kitchen utensils, and other needs. to prepare for 7 days.

From the beach the time needed to get to the fish house is 24 hours. The fish house (FAD) in question is a place where fish gather. Fish houses are made with the aim of luring fish to gather in the house. The materials are buoys, mountain rocks, ropes, coconut leaves, so that the fish are attracted to gather by the abundance of food and moss attached to the place. Mr. Ande has 10 fish houses that can be used for 2 - 3 months at a material cost of IDR 2,000,000/piece. between various fish houses. Catching activities are carried out twice a month. If you are fishing in the coastal area, Pak Ande only needs to prepare IDR 5,000,000 to IDR 10,000,000 to catch in the coastal area for one night. Pak Ande and the crew (boat crew) will leave in the afternoon and return in the morning for the arrest. carried out 20 times a month. Arrests in coastal areas were carried out 4 times every night. The catch obtained from coastal areas is 200 kg to 1 ton. From July to September the types of fish are deho, catamba and mackerel.

Meanwhile, at long distances, fishing is carried out from March to June. The types of fish targeted are skipjack, scallops and baby tuna. The catch is sold in two ways First local system, namely directly to subscribers at the Kendari City Auction, second sold to fish companies in Samudra port. If there are a lot of fish, the ship will unload at the auction or at the ocean port. If the catch is low, the fish will be unloaded at the seaside and transported by car to be delivered to the company or auction in Kendari.

The arrest made by Mr Ande was a system Gae namely using a type of trawl Pursaine. Fishing is carried out by means of the ship surrounding the fish house area in a circle and the crew members stretching out the seine. One of the crew members provides lighting in the trawl area using a small boat so that the fish can gather in a bright area. After the fish caught in the trawl is lifted onto the ship by another crew member, after catching it in that place, they proceed to another area where Mr Ande's fish house is located.

The ship workers chosen by Mr Ande have sufficient skills and strong energy for heavy work. After making the arrest, he repaired all the tools that had been used in the form of boats, engines and fishing gear, then he returned to make the arrest. Pak Ande's natural capital is the sea as his main support for supporting his family. He has a wife and 3 children. Mr Ande's human capital is his skills from 30 years of being a fisherman so he has quite good experience.

Fishing in remote areas is carried out by stretching a trawl with a length of 700 meters, while fishing in coastal areas stretches a trawl with a length of 500 meters and does not use fish houses. Pak Ande's social capital is to become a patron so he is able to employ 16 fishermen with different wages according to their work. The salary system is given every 3 months, if the fish season is good, you usually get 10 to 20 tons every time you go to sea (7 days), if you get 10 tons with a selling price of IDR 20,000/kg then the catch gets IDR 200,000,000. The money is divided using the 50 system. % (Rp. 100,000,000) for ship fees and costs and other equipment, while 25% (Rp. 50,000,000) for Mr. Ande, and 25% (Rp. 50,000,000) to be shared among the crew members (ship crew). The crew's income uses a separate system, namely for cip/captain 1 person with 10 times the salary, 1 captain/deputy captain with double the salary, 1 person throwing ballast with double the salary, 1 fish cage person with double the salary, 1 machinists/mechanics with double wages, and 11 crew members or non-permanent workers with double wages who serve as trawlers and trawlers. However, getting 20 tons is very difficult, this depends on the condition of the fish, usually you only get 1 to 5 tons, even the amount spent is more than the results obtained if the fish season is bad.

Mr. Ande's fishing activities often experience various problems, namely damage to ships, ship engines and trawls and if this happens the fishing can be delayed for several days to repair the damage. If the ship's engine equipment needs to be replaced, Mr Ande has to go to town to buy the equipment so it will take 3 to 5 days to repair, the costs will reach IDR 20,000,000 to IDR 30,000,000. However, the most difficult obstacle to experience is during the lean season. In situations like this, fishing activities are stopped. To support the family, Mr. Ande reopened the kiosk owned and assisted by his wife (Mrs. Hadra) to look after and sell cakes in the morning, this is so that household needs can be met. Mr Ande's income from fishing activities can be seen in Table 2.

Table 2. Income from Fishing for Large Fishermen

No.	Season	Moon	Monthly Gross Income Results Before Sharing (Rp/month)
1.	Good (Harvest)	March – June	IDR 400,000,000
2.	Currently	July – September	IDR 80,000,000
3.	Paceklik	December - February	-

Based on Table 2, it can be seen that the income of large fishermen in the good season or harvest, namely March - June, is IDR 400,000,000/month, in that month the fish are in the depths of the sea so they are attracted to the fish houses that fishermen have installed. Meanwhile, in the moderate season, namely July - September, fish are found in coastal areas so it is difficult to find fish, this is because fish in coastal areas are disturbed by human activities so that the fish do not group together and during the lean season, namely December - February, there are no results. The catch was obtained from Mr. Ande, because during that month the conditions of the waves made it impossible to carry out fishing activities.

The results of the interview with Mr Ande are:

> *"If you don't go to sea, you just have to wait at the kiosk, you don't have much other experience if you want to do other work. If you want to do something else, you also need capital. If you go back to sea, it won't be taken care of anymore, so that's the way it is to repair the ship, repaint it, repair the engine and look after the stall, look after the stall too, unless the wife cleans the house, the rest is just idle."*

The results of the interview concluded that during the lean season, Mr. Ande expected economic income from the kiosk business and the work he did during the lean season, namely repairing fishing gear, and the rest he only spent time at home resting. The majority of fishermen's children are involved in earning a living, but in Petoaha Village, some parents' mindsets are starting to change, they are now concerned about their children's education.

The results of the interview with Mr Ande and his wife are:

> *"Hopefully our children will not have the same fate as us, hopefully they will be able to get better jobs. If it's a matter of paying for the children's school and college fees, it doesn't matter how much you try as long as you can continue going to school, if you need to borrow money, if it's not enough, the important thing is that your education doesn't end.".*

From the results of the interview it can be concluded that Mr Ande and his wife really care about their children's education. They want their children to continue going to school and complete their education well so that in the future their children will get good jobs. Based on the Elis 2000 framework, Pak Ande has strong capital (human capital, natural capital, social capital, physical capital and financial capital) so that a living can be fulfilled by using a livelihood strategy *on farm* namely income obtained by exploiting marine resources. However, during the lean season Mr Ande adopted a livelihood strategy *don't farm* namely the income obtained from kiosks to increase income to meet household needs. Income strategy *on farm* and *don't farm* can be seen in Table 3.

Table 3. On Farm and Don't Farm Livelihood Strategies for Large Fishermen

No.	Strategy Type	Ellis Category	Income	Information
1.	Seafaring Business	*On farm*	IDR 400,000,000	March – June
2.	Seafaring Business	*On farm*	IDR 100,000,000	July – November
3.	Kiosk Business	*Don't farm*	IDR 1,500,000	December – February

Table 7 shows that the livelihood strategy of "big" fishermen in March - November is implementing a livelihood strategy *on farm* by using the sea to catch fish as a source of income for the family, while in December - February they carry out a subsistence strategy *non farm* by running a kiosk business selling cakes in the morning and basic necessities which is helped by his wife to support the family economy.

3.3 Livelihood Strategy of Ethnic Bajo Fishermen with Medium Capital

Capital fishermen are being represented by Mr. Ningka as an informant. There are 3 types of livelihood strategies that he pursues, namely: *on farm, off farm* and *don't farm*.

One of the fishermen with moderate capital in Petoaha Village is Mr Ningka (38). From human capital, namely fishing skills. Pak Ningka started going to sea when he was a child. So he has many skills, having been a fisherman for 20 years. Mr. Ningka has a dependent family, namely a wife and 3 children who are still at school. From natural capital, the main source of income to support the family is marine products. Pak Ningka has physical capital in the form of a small boat, fishing rods, seine and snare. When going to sea, Mr. Ningka needs money for fishing equipment such as fishing rods, tackle, nets, consumption costs and cigarettes, the value of which is IDR 700,000. Almost every time you go to sea, fishing gear is damaged, this is because coastal fish have sharp fins so that nets and tackle are easily damaged. If it can no longer be repaired, he is forced to replace it with a new tool. Mr. Ningka's fishing was carried out using the oblique method, that is, wood was stuck into the shallow seabed or around the beach, then a net was spread across the poles extending to the tip of the oblique. It is made into a triangular shape and a trap is made at the end of the slant, so that fish that enter cannot come out. This slope is installed when the water is receding before high tide or installed in the afternoon. The next day Mr. Ningka checked the tunnel again to retrieve the trapped fish.

The number of fish caught is still small, only producing up to dozens of fish. Another way of catching Mr Ningka is by fishing. This is done by going to sea first, the maximum distance traveled is 200 miles from the coastal area. With a small boat, there is a big risk involved in fishing long distances from the coast. Mr. Ningka carries out fishing activities after morning prayers until the afternoon before sunset, sometimes he also leaves after evening prayer until before morning prayers. The types of fish caught are: boronang fish, katamba and white fish. The fish are sold to neighbors, or around the village and to customers from neighboring villages. Selling prices vary from IDR 10,000/pierce to IDR 20,000/pierce. If fish is difficult to find, Pak Ningka sells at a higher price. The best catches are obtained during the fishing season, namely July to November. Income from fishing and fishing is IDR 2,000,000 per month, whereas from March to June I can only earn IDR 1,500,000 per month. The following is an interview with Mr Ningka:

> "*It's also called going to sea, you don't know whether you'll get a lot or what God has arranged for you, we just have to search and pray and just try, if it's hard to catch fish, it's usually sold at a high price, but if it's easy to catch, the price is usually given to go down and down again a little, because it's here. There are also a lot of fishermen who sell it for a high price and then sell it if it's cheap and don't sell it. I have fish*, *But they will definitely sell at a higher price if it's difficult to catch fish."*

Thus, Mr. Ningka's selling price follows the fishing season. In the fishing season, the number of fish is large and income also increases, while in the lean season, the number of fish is small and income is also low. To meet household needs such as children's school fees, apart from expanding his catchment area, Mr. Ningka is looking for other work. If he makes an arrest at night, during the day he uses his time by looking for other work such as being a farm laborer, when called by his relatives, on a piece-work/daily basis. If the land to be cleared is large, the wages you will get will be more, namely IDR 200,000 (divided by 2) with relatives. Meanwhile, the daily wage is IDR 30,000/4 hours. If Pak Ningka comes home from work on a contract in the afternoon, he will make the arrest the next day after morning prayers. This is because he has to rest after returning home from work to maintain a healthy body condition. However, if the contracting is finished during the day, he continues the fishing at night after evening prayers. Mr. Ningka's income from fishing activities can be seen in Table 4.

Table 4. Medium Fishermen's Monthly Income

No.	Season	Moon	Monthly Income Results (Rp)
1.	Good (Harvest)	7 – 11	IDR 2,000,000
2.	Currently	3 – 6	IDR 1,500,000
3.	Paceklik	12 – 2	-

Table 4 shows that the income earned by a medium-sized fisherman, namely Mr. Ningka, is IDR 2,000,000 in the good season in July - November, because the sea conditions are calm at a distance of 200 miles from the coast, which helps in fishing. Meanwhile, in the "medium" season, namely March - June, the income earned is IDR 1,500,000, because the fishing distance is no more than 100 miles due to the wave conditions not supporting longer distances and in the lean season, namely December - In February, no income was earned, this was influenced by very bad weather conditions. If the peak season has big waves, it will be impossible for Pak Ningka to go to sea. Apart from risk factors, during the big wave season the number of fish that can be caught decreases. During the lean season and there was no income from working as a laborer, Mr. Ningka used his social capital to borrow Rp. 300,000 to his family, relatives and patrons. Especially for sudden needs such as children's school fees or urgent needs that require large amounts of money. However, the amount that can be borrowed is also limited because all fishermen are in a financial crisis due to the lean season. Work as a construction worker and farm laborer became the main source of income amidst debt. However, this work cannot provide more results, because it is difficult for society to develop in times of crisis (Khan, 2000& Kumar, 1996). Not to mention competition with other fishermen in finding work as laborers during the lean season.

Results of the interview with Mr Ningka:

"If it's hard to get any fish at work, friends usually call them when they have work, sometimes they work as laborers, work in people's gardens, the important thing is that they get paid so they can get money instead of being unemployed, the needs are also many.

It can be concluded that during the lean season various kinds of work are carried out by Mr Ningka to meet all household needs. Apart from Mr. Ningka, his wife (Mrs. Nuraini) is also important in making a living. After doing domestic work, Mrs. Nuraini looked for work to help supplement the family's living needs. The work she did was collecting shellfish and trading. Mrs. Nuraini's work is not only done during the lean season but on normal days within 2 to 3 days, but Mrs. Nuraini cannot produce enough results, this is influenced by the limited number of shellfish and competition from other fishermen's wives. in looking for shells, so it cannot be done every day. While trading cannot produce large amounts of money, this also means there is a lot of competition with other fishermen's wives in trading. The income obtained from shellfish is IDR 100,000/month and the income from trading is IDR 150,000/month.

Results of interviews with Mr Ande and Mrs Nuraini:

"When it comes to earning a living, it's just the two of us, the children usually come along on Sundays or holidays and even then because of their own will, I never ask them to work, at most I only deliver sales on market days, they just need to go to school, if there's a financial problem, we can do that. Look for the important thing - you really want to go to school."

From the results of the interview it can be concluded that Mr Ningka only involves his wife to help earn a living and their children are not involved in making a living. There has been a change in thinking about the importance of education for children among the residents of Petoaha Village. Children are no longer exploited to earn a living but are directed to go to school so that one day they will not suffer the same fate as their parents.

From the discussion above, it can be concluded that Mr. Ningka's limited physical capital and financial capital during the fishing season is sufficient for his daily needs, but he has to work odd jobs so that his family can make ends meet. However, in the lean season, sometimes Mr Ningka's family survives by borrowing money.

Mr. Ningka has limited physical capital and financial capital, so Mr. Ningka must take three livelihood strategies *on farm, off fram and non farm* to provide for his family, especially during the lean season [16]. Income strategy *on farm* namely income obtained by exploiting marine resources in coastal areas, while livelihood strategies *off farm* namely income obtained from the wages of agricultural laborers and in the lean season Mr Ningka uses a livelihood strategy *don't farm* namely income obtained from outside agricultural activities to meet household needs as a construction worker. Income strategy *on farm, non farm* and *don't farm* can be seen in Table 5.

Table 5. Strategy *on farm, off farm* and *don't farm* Average Fisherman's Livelihood

No.	Strategy Type	Ellis Category	Income / Month	Information
1.	Seafaring Business	*On farm*	IDR 2,000,000	July – November
2.	Seafaring Business	*On farm*	IDR 1,500,000	March – June
3.	Construction worker	*Don't farm*	IDR 2,00,000	December – February
4.	Agricultural Labor	*Off farm*	IDR 2,00,000	Twice/Month
5.	Collecting shells	*On farm*	IDR 100,000	Every Month
6.	Trading Cakes	*Off farm*	IDR 150,000	Every Month
7.	In debt	*Don't farm*	IDR 300,000	If needed

Based on Table 5, it can be seen that fishermen "medium" in March - November carry out livelihood strategies *on farm* by utilizing marine resources to catch fish as the main source of income, as well as a livelihood strategy *off farm* Pak Ningka and his wife work as farm laborers twice a month by collecting shellfish and then selling them to supplement the family's needs and in December - February they carry out a living strategy *non farm* by carrying out activities as a construction worker and borrowing money to support the family economy during the lean season.

3.4 Small Capital Bajo Ethnic Fishermen's Livelihood Strategy

Small capital fishermen were represented by Mr Kulau as an informant. There are 2 livelihood strategies that he pursues, namely *on farm* and *off farm*. Mr Kulau is a small-time fisherman in Petoaha Village, he has a wife and 5 children. Three of them are married and have their own homes. Mr Kulau has two dependent children who are still continuing their education. To support his family, he uses natural capital, namely the sea, as his main support. The human capital he has is fishing skills from experience as a fisherman for 45 years. Pak Kulau started going to sea when he was a child. He quit school to help his father who was also a fisherman.

Pak Kulau's physical capital is very limited to fishing equipment, he doesn't have a boat, he only has a fishing rod and a seine. Therefore, when fishing, he gives rides to relatives or neighbors who want to go to sea. If he doesn't take a boat, he fishes at the pier when the water is high, but if the water is low, Pak Kulau cannot catch by fishing at the pier area. Apart from fishing, Pak Kulau looks for fish by setting up seines around the beach. Because the fishing area is limited, the number and types of fish obtained are also limited, usually boronang.

The wife (Mrs Rani) sells the fish caught to customers (trader collectors and neighbors). If the fish is not sold out, some of it is kept for own consumption and processed into dried fish. The amount obtained from fishing and trawling is still limited to family needs. When the fishing season is good, the price of fish drops (cheap) because there is price competition with other fishermen who sell cheaper catches. As a result, Pak Kulau's economic situation is difficult to improve. During the fishing season, in a month Mr. Kulau earns IDR 1,000,000, whereas during the difficult fishing season (famine) the proceeds are IDR 700,000. The costs incurred for fishing every month reach IDR 400,000/month for consumption costs, cigarettes, fishing equipment and other needs.

When it was difficult to get fish in coastal areas, Mr. Kulau looked for another job, namely as a ship worker, even though he was no longer productive and had reduced energy, he never stopped earning a living even though he had to force himself to work to meet his living needs and his children's school fees can be fulfilled. Because if you only rely on catches from the coast, it will be difficult to meet all your family's needs.

Results of the interview with Mr Kulau:

> *"Now it's hard to find work, especially if you don't have a lot of skills, many other fishermen here are also looking for work. If I'm called to work as a laborer on a big boat, if there are members who don't leave/are unable to go, I'm usually called to go to sea. So there is also usually an additional amount for living expenses, even though the salary is small, you have to be grateful for it because there are a lot of people waiting to be called, because I have always been involved when my energy was still strong, so up to now he hasn't forgotten about me. "Right now, all I can do is help the crew disembark the trawls. When I lift the trawlers, I usually help but I get tired quickly because I'm old, so my energy is reduced."*

From the results of the interview, it can be concluded that when working as a ship worker, Mr. Kulau was paid a small amount and the work he did was not heavy, this was influenced by Mr. Kulau's advanced age.

During the lean season, so that the family's livelihood can be fulfilled, Mr. Kulau looks for other work such as making roofs made of thatch, the materials obtained are obtained from his relatives who are farmers, the roofs made are then sold using a profit sharing system with the owner of the materials, the money obtained from The roof yield is very small, only reaching IDR 70,000/month, the low price of roofs and roof users means that the production of thatched roofs is also reduced, these roofs are usually only bought by farmers for huts in their gardens. Another job that Mr. Kulau does is looking for shellfish with his wife. Because they are old, they cannot cover large areas and the results obtained are also small. Apart from age, another influencing factor is competition with other fishing families. Mr Kulau's income from fishing activities can be seen in Table 6.

Table 6. Monthly Income of Small Fishermen

No.	Season	Catching fish	
		Moon	Income / Month (Rp)
1.	Good (Harvest)	7 – 11	1.000.000
2.	Currently	3 – 6	700.000
3.	Paceklik	12 – 2	-

Based on Table 6, it can be seen that the income earned by a "small" fisherman, namely Mr. Kulau, is IDR 1,000,000 in the good season of July - November, because the sea water conditions are calm so that Mr. Kulau can cover a distance of 200 meters from the coast to catch by fishing fishing and trawling. Meanwhile, in the "medium" season, namely March - June, the income earned decreases, namely IDR 700,000, because in that month the wind conditions start to change (stronger) so Mr. Kulau shortens the time for fishing. Meanwhile, in the lean season, namely December - February, no income is earned due to the influence of very bad weather.

During the lean season, many fishermen also participate in collecting shellfish. The shellfish obtained are then sold for Rp. 150,000/month, and some of the shellfish obtained are kept for consumption. Due to limited financial capital, when their children at school needed money, Mr. Kulau only used social capital, namely by lending Rp. 150,000 to his relatives or the owner of a large ship/patron where he was a ship's worker, the money he had borrowed was returned when he became a ship's worker by deducting salary from the wages he earns, apart from borrowing, Mr. Kulau gets help from his children who are already married, even though the amount is small, it can help with some of his needs. Apart from these results, Mr. Kulau and his wife earn money by selling dried fish. The fish is sold at the market for the proceeds obtained from processed dried fish for IDR 50,000/month.

Results of the interview with Mr Kulau.

"When it's hard to fish, I stay at home most of the time, I'm old so I can't work much. In the past, I used to work as a construction worker, even in the city, I worked as a worker with my friends here. Now, if you can't do that, you usually just collect shellfish and make roof, if my child at school asks for money, he can only borrow it and usually give it to his older brother."

It can be concluded that during the lean season Mr. Kulau only collects shells with his wife and makes roofs because due to age limitations he cannot do various jobs. The explanation above can be concluded that apart from low physical and financial capital, another influencing factor is competition with other fishermen.

Mr. Kulau has limited capital (physical capital) and (financial capital), with limited capital so that Mr. Kulau pursues two livelihood strategies *on farm then off front* to make ends meet [16]. Livelihood strategy *on farm* namely income obtained by exploiting marine resources in coastal areas, while livelihood strategies *off farm* namely income obtained from workers' wages. Income strategy *on farm dan non-farm* can be seen in Table 7.

Table 7. Small Fishermen's Livelihood Strategy

No.	Strategy Type	Ellis Category	Income / Month	Information
1.	Seafaring Business	*On farm*	IDR 1,000,000	July – November
2.	Seafaring Business	*On farm*	IDR 700,000	March – June
3.	Ship Workers	*Off farm*	IDR 300,000	Every time you go to sea
4.	Making Thatched Roofs	*On farm*	IDR 70,000	December – February
5.	Collecting shells	*On farm*	IDR 150,000	Every Month
6.	Processed Dried Fish	*On farm*	IDR 50,000	December – February
7.	In debt	*Off farm*	IDR 150,000	If needed

Table 7 shows that Mr. Ningka as a "small" fisherman in March - November implemented a livelihood strategy *on farm* by utilizing marine resources to catch fish. In December – February, we carry out activities to make thatched roofs. Shellfish collecting activities are carried out every month. Meanwhile, the livelihood strategy *off farm* namely working as a ship's worker and borrowing money occasionally to supplement the family's economy due to physical limitations due to age.

3.5 Types of Fish Obtained by Fishermen Based on Catching Area

Each category of fishermen, based on the capital they have, has a different fishing area. Large fishermen with large fleets of capital and lots of workers are able to cover up to 1,650 miles from the coast. Fish are obtained in fish houses or in the middle of the deep sea. The types of fish consist of skipjack, kite and baby tuna. At a distance of 500 miles from the coast large fishermen catch Deho fish, catamba and mackerel. Meanwhile, fishermen with moderate capital in the form of small boats usually catch fish a maximum distance of 200 miles from the coast. The main types of fish produced by small-scale fishermen from their tools in the form of fishing rods and rods are baronang and catamba. Meanwhile, fishermen with small capital without boats catch fish with fishing rods and trawls in the coastal sea. The type of fish that is often caught is the rabbitfish. For details, see Table 8.

Table 8. Types of Fish Obtained by Fishermen Based on Catching Area

No.	Type of Fisherman	Catchment Area	Type of Fish
1.	Big	1,650 thousand	- Skipjack tuna - Kite - Baby tuna - Deho
		500 thousand	- Katamba - Mackerel
2.	Currently	200 thousand	- Boronang - The sword
3.	Small	100-200 ter	- Boronang

4 Conclusion

The livelihood strategy used by large capital fishing households is by: *on farm* (patron) and *don't farm* (kiosk) namely the results obtained from fishing and during the lean season the results obtained from the kiosk business. The livelihood strategies carried out by medium capital fishing households are: *on farm* (angler, shell collector), and *don't farm* (building worker). The livelihood strategy used by small capital fishing households is by: *on farm* (fisherman), and *off farm* (ship laborer).

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