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Income Analysis Of Fisherman Family In Village Kerasian Island, Laut Island District Kotabaru District Islands South Kalimantan Province

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Abstract

This study aims to analyze the income of fishermen's families, and find out the sources of income for fishermen's families in Pulau Kerasian Village, Pulau Laut Islands, Kotabaru Regency, South Kalimantan Province. This study used descriptive qualitative method. Data collection is done by observation, interviews and documentation. In this study the data sources used in data collection include primary data and secondary data. The analysis technique used is income analysis which includes cost analysis, fisherman income analysis, profit analysis, non-fisherman income analysis, fisherman family income analysis. The results showed that the income of the fishermen's family was Rp. 6,687,540 categorized as very high income. The high income is because some family members have jobs so that they help increase family income, the high income is also due to the fishermen's family spending a little compared to their income. Other sources of income for fishermen's families are carpenters, construction workers, traders, gardeners, entrepreneurs, farm laborers, and temporary employees and others. The other sources of income are carried out by the head of the family and family members such as the fishermen's wives and children as well as the fishermen themselves.

1. INTRODUCTION

More than two thirds of the earth's surface is covered by oceans. This aquatic ecosystem is a source of various kinds of products and services that are beneficial to humans and the earth's ecology. From the sea, humans can use it for commercial fisheries, recreational fisheries (including ornamental fish for aquariums), marine tourism, transportation services, controlling the earth's atmosphere and climate, as well as mining and energy sources. The vast sea surface stores vast amounts of energy in the Earth's ecological system. Marine resources provide employment opportunities for many people, especially in archipelagic countries that have large territorial waters. The nature of the sea which has open access makes the processing system more complicated and conflicts often arise between users. Sometimes the territorial waters of a country are not visible, so that residents of other countries enter, either intentionally or unintentionally.

A fisherman is someone who makes a living from marine products. In Indonesia, fishermen usually live in coastal or coastal areas. A fishing community is a group of people who make a living from marine products and live in coastal or coastal villages . The success and effectiveness of a fishing effort is determined by several factors, including the determination of the fishing area where fishing activities are carried out. Wulandari *et al.* (2017) explained that, fishing areas (DPI) are important for the sustainability of capture fisheries activities and each fishing area is not necessarily a potential fishing area.

Considering that Indonesia is an archipelagic country with around 17,504 islands, the decision to live in a coastal area is certainly very important. All coastal areas have biological and non-biological potential, natural and artificial resources, as well as environmental services that are very important for people's lives. The long coastline and potential fishing conditions

should be able to make a real contribution to the people who live in it. Judging from the fishing gear technology used, it can be divided into two, namely modern fishing and traditional fishing. Modern fishing uses sophisticated fishing techniques compared to traditional fishing. The degree of modernity is determined not only by the use of engines to propel the boat, but also by the size of the engines and the level of use of the fishing gear used. The difference in the modernity of fishing gear technology also affects the operational characteristics of transportation.

Coastal communities, most of whom work as fishermen , are still very concerned about their fate. Many fishermen are forced to make a living by breaking a cycle of poverty. If you think about it, Indonesia is a country with promising fisheries and marine potential.

The decline in catches is a serious problem for fishermen, especially small fishermen who rely heavily on fish stocks to meet their needs. One of the causes of the decline in catches is the phenomenon of climate change. Climate change causes changes in water temperature that can change the biological and ecological conditions of water bodies (Badjeck et al. 2010), and in addition to chemical elements in water bodies such as salt, oxygen overcomes these changes. Nazar, 2013).). Some of these changes affect ocean distribution and fish stocks. According to (Badruddin. 2013), climate change causes extreme events such as storms, high waves, and weather changes, affecting fishing activities and reducing fishermen's catches.

The decline in fisherman catches has a direct impact on fishermen's income. To overcome this problem, fishermen must be able to adapt to maintain their income. One of the adjustment strategies that must be taken to maintain and even increase income is to do alternative work.

Kotabaru Regency is one of the governments in South Kalimantan which consists of land, many small islands, and a fairly large sea. Kerasian Island, one of three inhabited islands in Pulau Laut District, Kotabaru Regency, South Kalimantan Province, which covers an area of only 6.75 km2. So that the main job of the people on the island of harmony is fishing.

Judging from the capture fisheries sector, Pulau Kerasian Village, Pulau Laut Islands District, Kotabaru Regency, South Kalimantan Province, with some of the community's livelihoods as fishermen. The welfare of fishermen is quite high. This happens because of high production and selling prices, so the income of fishermen is high. Family heads who work as fishermen also have jobs outside the fishing sector when they are not fishing, and some family members also have jobs to help increase the income of fishermen's families.

Fishermen develop adaptation strategies to meet the needs of their families, such as having a job outside the fishing sector or directing family members such as his wife to help find other sources of income (side) so that the needs of family life take place well and are met.

Based on the description above, the researchers tried to conduct research with the title "Analysis of Fishermen's Family Income in Pulau Ke rasian Village, Pulau Laut Islands District, Kotabaru Regency, South Kalimantan Province".

2. LITERATURE REVIEW

2.1 Fisherman Concept

Fishermen are often defined as people who do fishing at sea. Definitions are easy to make for the context of traditional societies. According to Law No. 45 of 2009 concerning the revision of Law No. 31 of 2004 concerning fisheries, Article 1, number 10 defines fishermen as fishing as their livelihood. While small fishermen Article 1, number 11 of Law No. 45 of 2009, states

that small fishermen are people whose livelihoods are fishing to meet their daily needs who use fishing boats with the largest size of 5 GT (*Gross Ton*) (Yolanda et al., 2010). 2007). In this fishery law, the definition of fisherman and fish cultivator is different. Article 1, number 12, states that fish cultivators are people whose livelihood is fish farming, and Article 1 number 13, states that small fish cultivators are people who cultivate fish to fulfill their daily needs. Regarding the definition of fishermen, the Directorate General of Fisheries (Kusnadi, 2013) defines fishermen as people actively working in fishing operations (other aquatic animals, aquatic plants). People who only do work such as making nets, transporting equipment into boats/ships are not categorized as fishermen. However, engineers and cooks who work on fishing vessels are included as fishermen, even though they indirectly make arrests. Similar to catching, in aquaculture activities categorized as fish farmers are people who carry out fish maintenance work, both household members and workers (labor).

According to Fatimah (200 9 : 45), stated that fishermen are people whose work is to catch fish in the sea su n gai or di sea. Fishermen as fish producers can be divided into three groups, namely:

1) Small fishermen group, with small capital or even with only labor.
2) Medium fishing group, with simple equipment such as small boats or nets.
3) The Highest Group of Fishermen, who have special equipment and equipment and are sophisticated enough to have a big way or business.

According to Sastrawidjaya (2002: 12) , Fishermen are people who live from seafood. Fishermen are those whose job is to look for fish in rivers or at sea with fishing tools and not capital in the form of fish seeds (Dahuri, 2018). In Indonesia, fishermen usually live in coastal or coastal areas.

From the above understanding it can be said that people who spend most of their time only catching fish or looking for fish either in rivers or at sea to earn income with certain sacrifices can be said to be fishermen. This definition includes a fishing system that uses various means that can support and provide convenience in the fishing process.

a. Fishermen in Community Social Classification

Rezal and Ratna (2019) explain that fishermen are divided into three based on social classifications in fishing communities, namely:

1) In terms of mastery of production tools and fishing gear (boats, nets and other fishing gear) the structure of the fishing community is divided into the categories of owner fishermen (production equipment) and labor fishermen. Labor fishermen do not own the means of production and in the activity of a boat unit, labor fishermen only contribute their labor services by obtaining limited rights.
2) Judging from the level of business capital investment scale, the structure of the fishing community is divided into the categories of large fishermen and small fishermen. Fishermen are referred to as big fishermen because the amount of capital invested in fishing businesses is relatively large, while small fishermen are the opposite.
3) In terms of the fishing equipment technology used, the fishing community is divided into the categories of modern fishermen and traditional fishermen. Modern fishermen use more sophisticated fishing technology than traditional fishermen.

b. Fishermen in terms of Capital Ownership

Wahyuningsih (2016) argues that fishermen are seen from the perspective of capital ownership, namely:

1) skipper fisherman .
   fisherman is a fisherman who owns boats and fishing gear that is able to turn the working fishermen into assistants in their efforts to catch fish in the sea. This fisherman owns land that is cultivated during the lean season. There are three kinds of skipper fishermen, namely marine skipper fishermen, land-based fishermen who control their business from land, and people who own boats, fishing gear and money but are not real fishermen, called tauke (toke) or cakong.
2) Working fisherman
   Worker fishermen are fishermen who do not have the means of production and capital, but have labor that is sold to skipper fishermen to help run the fishing business at sea, these fishermen are also called sharecroppers or mustard (fishing boat crew). This working relationship between fishermen applies to an unwritten agreement that has been carried out hundreds of years ago. In this case, the skipper is obligated to provide food and fuel for the purposes of fishing operations, and food for the family kitchen left behind during sailing. The catch at sea is divided according to certain rules which varies from one skipper to another after deducting production costs.
3) Owner fisherman
   Owner fishermen are underprivileged fishermen. These fishermen only have small boats for their own needs and simple fishing gear, therefore they are also called individual fishermen or poor fishermen. This fisherman has no land to cultivate during the lean season. From the above opinion, it can be explained that what is meant by fishermen are those who are always active in catching fish at sea and in fishing operations, adequate tools are needed so that fish catches are abundant.

Charles (Widodo and Suadi , 20 1 6: 29) divides the fishermen into four groups, namely:

1) Subsistence fishermen , namely fishermen who catch fish only to meet their own needs.
2) Indigenous fishermen (*native/indigenous/aboriginal fishers*), namely fishermen who more or less have the same character as the first group, but have the right to carry out commercial activities even though on a very small scale.
3) Recreational fishermen (*recreational/sport fishers*), namely people who in principle carry out fishing activities only for pleasure or sport.
4) *Commercial* fishermen , namely those who catch fish for commercial purposes or are marketed for both the domestic market and the export market. This group of fishermen is divided into two, namely small-scale fishermen and large-scale fishermen.

In addition to the division above, we also find other divisions such as the reach of the fishing fleet and fishing locations. We can mention, for example, coastal fishermen or can be called:

1) Coastal fisheries for small-scale fishing businesses with a fleet dominated by non-motorized boats or outboard motor boats
2) Offshore fishing for fisheries with an average boat capacity of 30 GT.

3) Ocean fisheries for large vessels, for example 100 GT with a single target fishery such as tuna (Taufik, 2017) .

c. Number of dependents of fishermen

The number of dependents of fishermen is not only on their wives and children but also parents and other relatives who are still dependents, so that the dependents borne by the heads of fishermen's families greatly affect the necessities of life that must be met. Dependents are people or people who are still related to the family or are still considered family related and their lives are also borne (Imron, 2003 : 12).

The number of dependents is the number of people (household members) who still occupy or inhabit one house with the head of the household, and are still the household's dependents in meeting their daily needs. According to Singarimbun, (Solikhin, 2015) the household is a socio-economic unit whose members live in one unit of the house or part of the house.

In the opinion of Ahmadi (2002: 250), states that:

1) A family is declared large if the family consists of a husband, wife and > 3 children.
2) A family is said to be small if the family consists of a husband, wife and 3 children.

The large number of family members causes the fulfillment of family needs to be greater which will affect the size of the burden of the dependents of the head of the household. So the dependents of fishermen in this study can be interpreted as people who are dependents of fishermen including wives, children, parents, in-laws, brothers-in-law, nephews or other families who still have family relationships.

d. Fishermen's Socio-Economic Condition

According to Taufik (2017), the alarming social and economic conditions of fishermen in Indonesia cannot be separated from the pattern of poverty and economic uncertainty, especially at this time, fishermen are faced with the threat of climate change. Sociologically the characteristics of fishing communities are different from farming communities in terms of land management and use. Fishermen are very dependent on natural conditions with an unpredictable level of job risk. The characteristics of fishing communities are formed following the dynamic nature of the resources they work on, so that to get maximum catches, fishermen must move around. In addition, the high business risk causes the fishing community to live in a harsh natural atmosphere which is always filled with uncertainty in running their business. Although in the census the fishery sector is a sub-sector of agriculture, the existence of fisherman households has special characteristics when compared to farming households. The differences that emerge from these two households include:

1) Farmer households and aquaculture farmers rely on limited land as a factor of production, while fisherman households use coastal areas as a factor of production,
2) In farming households the use of land is limited, while the sea for fishing households is not limited which is limited by administrative territorial boundaries,
3) Farmers in the production process are tied to the seasons, while fishing households are full of lunar cycles (Kamil, et al, ,201 9).

According to Kusnadi (Fitri, et al, 2016) Most of the social categories of Indonesian fishermen are traditional fishermen and labor fishermen. They are the main contributor to the quantity of national capture fisheries production. However, their social position remains marginal in the process of exploitative

economic transactions so that as producers, fishermen do not get a share
great income.

According to Fatimah (2012), deteriorating social welfare conditions among fishermen are very much felt in coastal villages whose waters experience overfishing (overfishing) so that the catch or income earned by fishermen is fluctuating, uncertain, and decreasing from time to time. .

2.2 Basic Concept of Income n

Income is a person's net receipts either in cash or in kind. Income or also called the *income* of a citizen is the result of the sale of the production factors he has in this production sector "buying" these production factors to be used as inputs to the production process at prices prevailing in the production factors market. The price of factors of production in the market of factors of production (as well as for goods in the market of goods) is determined by the attraction between supply and demand.

The basic concept of income consists of the following:

a. Cost

According to Adam Zordan (2020), that cost is the sacrifice of an economic unit measured in units of money, to obtain goods or services that are expected to provide current or future benefits/benefits. Fixed costs (FC) are costs that are relatively fixed in number and continue to be issued even though the production obtained is large or small. In this study, fixed costs (FC) were obtained from fixed costs depreciation using the straight-line method of depreciation formula, namely the calculation using residual value = (acquisition cost-residual value or residual): economic life. While variable costs (VC) are costs whose size is influenced by the production obtained. Variable costs are obtained from the cost of fuel oil, consumption, and ice blocks.

b. Fisherman's Income

Fishermen's income is the difference between revenue (TR) and all costs (TC). So Pd = TR – TC. Fishermen's income (TR) is the product of the product obtained (Y) and the selling price (Py). Fishermen costs are usually classified into two, namely *fixed costs* and *variable costs* . Fixed costs (FC) are costs that are relatively fixed in number and continue to be issued even though the production obtained is large or small. Variable costs (VC) are costs whose size is influenced by the production obtained, for example costs for labor. Total cost (TC) is the sum of fixed costs (FC) and variable costs (VC), so TC = FC + VC.

c. Non-Fishermen's Income

Non-fisherman income is income earned from working family members such as wives and children. In line with what Azizah (2015) in Fitria Amir *et al* (2019) said that another source of income is the income of fishermen's families which is additional income from their wives and children.

3. RESEARCH METHODS

3.1 Types of research

This study uses a descriptive research method with a qualitative approach that aims to analyze a data. According to Arikunto (2010) this method is research that is required to use numbers, starting from data collection, interpretation of the data, and the appearance of the results. The data used (scoring) for example is contained in the measurement scale.

Fishermen's family income is a measure of income received by fishermen from capture fisheries business which is calculated from the difference between revenue and production costs.

3.2 Analysis Techniques

The data analysis technique in this study used descriptive qualitative analysis, namely income analysis. The data is presented based on what is in the field according to the object of research then this data is described in the form of a percentage table in order to obtain clear conclusions about the income of fishermen's families in Pulau Kerasian Village, Pulau Laut Islands District, Kotabaru Regency, South Kalimantan Province.

a. Income Analysis

1) Cost Analysis

Total cost is the total amount of production costs incurred. This cost is obtained by adding up the fixed costs and variable costs. According to Soekartawi (1995) to see the total cost of production (Total Cost) can be calculated using the formula:

TC = FC + VC

Where:

TC = Total Cost (total production cost)

FC = Fixed Cost (fixed cost)

VC = Variable Cost (cost is not fixed)

2) Fisherman Revenue Analysis

According to Soekartawi (1995) revenue is the result of multiplying the number of results/production with the selling price of the product. To determine the acceptance of traditional fishermen from fishing gear, the following formula is used:

TR = PxQ

Where:

TR = Total Revenue

P = Price Level

Q = Number of Production Units

3) Income/Profit Analysis

According to Soekarwati (1995), the profit in a business is obtained from the calculation of the reduction between the total revenue and the total cost. With the following formula:

= TR-TC

Where:

Income (Rp)

TR = *Total Revenue* (Rp)

TC = Total Production Cost (Rp) *Total Revenue* (Total production value) is calculated using the formula:

4) Non-Fishermen Income Analysis

To find out the amount of non-fishermen's income, it is used to collect information related to other types of work besides fishermen to the amount of income generated from the work.

5) Analysis of Total Family Income

To find out the total income of fishermen's families, the formula is used:

PK = PN + PNN.

PK = Family Income

PN = Fisherman's Income

PNN = Non-Fishermen Income

Overview of Research Objects

4. RESEARCH RESULT

4.1 Fisherman Family Income

Table 4.14 shows that the average monthly income of a fisherman's family is Rp. 5,904,207. The fishermen's family income is categorized as very high. As according to Maresa, I., et al (2019), in BPS (2008), the income group of the population is divided into 4, namely the very high group if the average income is more than Rp. 3,500,000 per month, the high income group is if the the average income is between Rp. 2,500,000 - Rp. 3,500,000 per month, the medium income group is if the average income is between Rp. 1,500,000 - Rp. 2,500,000 per month, and the low income group is if the income is average. - on average between IDR 500,000 – IDR 1,500,000 per month. The high income by the community is due to the head of the family having another job besides working

as a fisherman and some family members have jobs so that they help increase family income. The high income is also due to the small expenditure of fishermen's families compared to their income.

The results of this study are in line with research conducted by Farisa, et al (2017) which states that family income is the sum of all income received by fishermen and their family members, both from fishing and other activities. This research is also supported by research conducted by Nurbaya (2019) which states that the income of fishermen, which has a significant effect on increasing community economic activities, cannot be separated from the contribution of income obtained from both fish catching businesses and fishing community side businesses.

Based on the results of research in the field, as far as what the researchers observed at the research location, it showed unique differences and patterns, which were different from the findings of other researchers in different locations. The respondents are local fishermen who are classified as traditional but from the results of their activities as capture fishermen they can fulfill their needs and live with the same lifestyle as other professions, the respondents also said that they live well and in the research location it is difficult to distinguish fishermen from other professions. not seeing him doing his daily activities as a fisherman.

4.2 Sources of Income for Fisherman's Families

Based on table 4.15 it shows that there are other sources of income or non-fishermen that are carried out by family members in order to assist the head of the family in increasing the income of the fishermen's family. From the table, it is known that there are family members who work as traders, construction workers, farm laborers, temporary employees, entrepreneurs and some family members do not participate in providing additional family income. This source of income really helps the head of the family to increase the amount of family income when extreme weather makes fishermen unable to go fishing/fishing.

As Zen (2009) in Fitria Amir *et al* (2019), states that efforts to increase income can be done by involving family members, especially wives for fishermen to earn a living in fishing activities and outside fishing activities. The fishermen's family members who work as traders are the fishermen's wives, while the children of fishermen who have graduated from high school and who have not graduated from school on average work as farm laborers, construction workers and some honorary employees in government agencies.

5. CLOSING

5.1 Conclusion

Based on the results of research and analysis that has been done, the following conclusions can be drawn:

1. The income of fishermen's families in Pulau Kerasian Village, Pulau Laut Islands District, Kotabaru Regency, South Kalimantan Province, is seen from the average income of fishermen's families of Rp. 5,904,207 categorized as very high income.
2. The sources of income for fishermen's families in Pulau Kerasian Village, Pulau Laut Islands District, Kotabaru Regency, South Kalimantan Province are known as traders, construction workers, farm laborers, temporary employees and entrepreneurs. The other sources of income are carried out by the head of the family and family members such as the fishermen's wives and children and also the fishermen themselves when they are not active at sea due to bad weather.

5.2 Suggestion

1. It is recommended that fishermen in Pulau Kerasian Village, Pulau Laut Islands District, Kotabaru Regency, South Kalimantan Province form a fishing group that can be used as a forum to provide each other with the latest information and can strengthen their role in terms of fish prices so that income increases.
2. In terms of other sources of income, there are still many family members who are not working or unemployed, so it is advisable to be able to work and generate good income so that it will help increase family income.
3. The government there should pay more attention to fishermen, such as providing counseling in the form of training on how to provide added value and good fish processing processes, so that fishermen can get more income.

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