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Analysis of Fishermen's Multiple Livelihood Patterns In Muara Sampara Village, Kapoiala District Konawe Regency

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Abstract

This study aims to determine the double income pattern of fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency. The research location was determined purposively (purposive) with the consideration that Muara Sampara Village is an area that practices a double livelihood pattern of fishermen. The population in this study were all fishermen in Muara Sampara Village and the determination of the sample in this study was carried out using the census method, namely taking the entire population as a research sample, namely 20 families.Data analysis used descriptive analysis, namely to find out the fishermen's double income pattern based on the results of identifying the amount of fishermen's income in Muara Sampara Village and to find out the fishermen's main and side income by using income analysis. The results showed that there were two types of income earned by fishermen in Muara Sampara Village, namely fishermen's income obtained from catching fish and income outside fishermen obtained from construction workers, traders, ketring business, fish smoking business, cashew farmers, carpenters, pincara drivers , village officials, and workshop businesses to increase fishermen's income. The average income outside fishermen is IDR 1,010,000.

Keywords: Fishermen, Multiple Livelihood Patterns, Income.

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INTRODUCTION

Indonesia is a maritime country with a very wide sea area. This vast ocean area can generate many economic activities for the population by utilizing marine resources, especially for people who live in coastal areas. Indonesia has sea and coastal areas that are productive and play an important role in economic development(Dahen, 2016).

Indonesia's coastal and marine areas have abundant fishery resources because two-thirds of Indonesia's territory is water territory. Geospatial Information Agency Letter Number: B-3.4 in Maritime Affairs and Fisheries in Figures (2014) states that Indonesia has 17,504 islands with a coastline of 99,093 km and an ocean area of 6.32 million km². Indonesia as an archipelagic country has enormous and diverse fishery potential(Siskawati et al., 2016).

As an archipelagic country, Indonesia has a sea area of 70%. This ocean area contains enormous and diverse marine economic potential, including fish resources. The abundance of fish resources means that fishermen's income should be sufficient to meet their daily needs. But in reality this is not the case, poverty still plagues fishermen's lives. From an economic standpoint, the catch of fishermen is still far from fulfilling their daily needs(Retnowati, 2011).

Fishermen are a community living in coastal areas whose main livelihood is utilizing natural resources in the sea, be it fish, seaweed, shrimp, coral reefs, shellfish and other marine wealth. Fishing communities have special characteristics that distinguish them from other communities, namely characteristics that are formed from life in the ocean which is very harsh and full of risks, especially risks originating from natural factors. Coastal areas are known to have unique characteristics and have a very high diversity of natural resource potential, both biological and non-biological. Therefore, the rate of increase in the number of fishermen in Indonesia is very rapid. This is because marine fisheries are a large resource. But there are also many obstacles experienced by fishermen, so that the catch is only a few. This condition causes fishermen to become poor(Rosni, 2017).

A double income pattern (income diversification) is something that can be done by applying a variety of livelihood patterns, namely by finding other jobs besides being a fisherman to increase income, or by mobilizing family workers (fathers, mothers and children) to work other than fishermen and earn income. A double income pattern can be carried out by mobilizing other joints of life to give way to increase the coffers of income. The dual income pattern can also be carried out in various ways which in essence do not only utilize one source of income(Fridayanti and Dharmawan, 2013).

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According to Iqbal (2004) inSaputra et al. (2019), the dual livelihood role carried out by farming households, husband and wife each work in the same sector, husband and wife work but in different sectors, one member of the household has more than one type of work, each family member chooses a job on the other hand, it is common to increase household income in order to survive.

RESEARCH METHODS

This research was carried out in Muara Sampara Village, Kapoiala District, Konawe Regency from September 2021 to November 2021. The research location was determined purposively (intentionally) with the consideration that Muara Sampara Village is an area that practices a double livelihood pattern for fishermen. The population in this study were all fishermen in Muara Sampara Village, Kapoiala District, namely 20 heads of families. Determination of the sample in this study was carried out by the census method.

Data analysis used to answer the problems in this studydescriptive analysisused to answer the research objective, namely to find out the fishermen's double income pattern based on the results of identifying the amount of fishermen's income in Muara Sampara Village, Kapoiala District, Konawe Regency and to find out the main income and side income of fishermen using income analysis.According toSoekartawi (2016), the revenue formula is as follows:

$$\pi = TR - TC$$

Information:

Π: Profit
TR: totalrevenues
TC: total cost

RESULTS

Characteristics of Respondents

Respondents in this study were fishermen in Muara Sampara Village, the total number of respondents in this study were 20 people.

Age

The age of the respondent is the vulnerable age of the respondent as a fisherman. Age information is needed in this study because each respondent has a different age

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range which will affect the perspective, determination of attitudes, and actions that will be taken by respondents in going to sea. Age is the length of life of the respondent from birth until the research is carried out. Age grouping based on groups from the Ministry of Health of the Republic of Indonesia (2016), namely the range of under 20 years of young age, 20-55 years of age or productive age, and over 55 years of age or old age. Respondent data based on consumer age in Muara Sampara Village can be seen in Table 1

Table 1 Respondent Identity Based on Age of Fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency, 2022

No.	Age (Years)	Number of people)	Percentage (%)
1	0 – 19	0	0.00
2	20 – 55	20	100.00
3	>56	0	0.00
Total		**20**	**100.00**

Source: Primary data processed in 2022

As can be seen in Table 1., it can be seen that 100% of the respondents in this study were predominantly at a productive age, namely 20-55 years. The productive age group who is a fisherman in Muara Sampara Village, Kapoiala District, Konawe Regency, is the head of the household. The head of the household has the responsibility to meet the needs of the family, besides that the head of the family has better physical abilities than a housewife.

Level of education

Fishermen's educational level can influence fishermen's mindset. Educated fishermen can manage catches and manage income well. In addition, fishermen who have higher education also have a permanent job that can increase income to meet the needs of the fishing household. An overview of the identity of respondents based on the level of education of fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency can be seen in Table 2.

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Table 2.Respondent Identity Based on Education LevelFishermen in Muara Sampara Village, Kapoiala District, Konawe RegencyYear 2022

No.	Level of education	Number of people)	Percentage (%)
1	basic education	13	65.00
2	Intermediate Education	6	30.00
3	higher education	1	5.00
Amount		**20**	**100.00**

Source: Primary data processed in 2022

As can be seen in Table 1.2, it can be seen that the education level of the respondents shows varying data values. The majority of respondents were at the elementary education level (SD) with 13 respondents (65%), and secondary education level (SMP-SMA) with 6 respondents (30%), then higher education level with 1 respondent (5%).

The number of fishermen with a basic educational background shows that a person's high education does not affect the catch of fishermen. In this case, fishing communities still use traditional fishing methods. This is in line with research by Ridha et. al (2017) that the educational factor for fishermen working at sea does not require a high educational background, they think that being a traditional fisherman is more or less a menial job that relies more on muscles and experience.

Number of family dependents

Family dependents are all people who live in a house with expenses and other necessities of life borne by the head of the family. The head of the family is the person who is responsible for all activities and events in the household and tries to always meet the needs of all family members who are his dependents. The greater the dependents of the fishermen's family, the fishermen will tend to try to be more active in earning a living for the necessities of life for their families, while the necessities of life are always increasing. According toPuspitasari et al., (2013)The number of family members is categorized into three categories, namely small families (1-3 people), medium-sized families (4-6 people), and large families (> 7 people). An overview of the identity of respondents based on the number of family dependents on fishermen in Muara Sampara Village, Konawe Regency can be seen in Table 3.

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Table 3. Respondent's Identity Based on Number of Family DependentsFishermen in Muara Sampara Village, Kapoiala District, Konawe Regency in 2022

No.	Family Dependents (Person)	Number of people)	Percentage (%)
1	Small Household (< 4)	18	90.00
2	Medium Household (5 – 6)	2	10.00
3	Large Household (> 7)	0	0.00
Total		**20**	**100.00**

Source: Primary data processed in 2022

As can be seen in Table 3, it can be seen that fishermen's activities in Muara Sampara Village, Konawe Regency are dominated by fishermen with a number of family dependents who are included in the small household category of 18 people or 90% of the total respondents, and the rest are included in the household category. small as many as 3 people or 10% of the total respondents with an average number of dependents of 3 people.

The number of family dependents is closely related to the large amount of household expenses, the more the number of family members, the higher the costs that will be incurred or borne. According to Mapandin (2006), the number of dependents in a household will affect the amount of consumption that must be spent by the household because it is related to their increasing or decreasing needs. Furthermore, according to Lestari (2016), the number of dependents of family members in a household can affect the level of consumption that must be spent by the household concerned because it relates to their increasing needs.

Reception

According to Soekartawi (2016), that revenue (Total Revenue) is the amount of production multiplied by the selling price of the product on the market. The greater the number of products produced that are purchased and the higher the price per unit of production that is sold, the greater the total income received by farmers. Fishermen's income is the result of sales where the catch obtained is multiplied by the selling price of the fish. Income is measured in rupiah (Rp/Kg). Fishermen's receipts are divided into two, namely good season receipts, namely in January, February, March, April, May, June, October, November, December and bad season receipts, namely in July, August, September which can be seen in Table 1.4.

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Table 4. Acceptance of Fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency, 2022

No.	Income Description	Revenue (Rp/MT)
Good Season Admissions:		
1.	Highest	11,460,000
2.	Lowest	7,200,000
3.	Average	9,717,000
	Total receipts	**194,340,000**
Bad Season Admissions:		
1.	Highest	1,750,000
2.	Lowest	700,000
3.	Average	1,261,750
	Total receipts	**25,235,000**

Source: Primary Data Processed 2022

It can be seen in Table 4. that it is known that during the good season, the highest income is the result of multiplying the production of fishermen and fish catches of IDR 11,460,000 with a catch selling price of IDR 30,000/kg during the good season. The lowest income from the multiplication of fishermen's production and fish catch is IDR 7,200,000 with a selling price of IDR 30,000/kg during the good season. Thus, the total good season revenue for fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency is Rp.194,340,000/ month obtained from the total income of fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency. Meanwhile, during the bad season, the highest income is the result of multiplying the production of fishermen by the amount of fish caught, amounting to Rp1,750,000with a catch selling price of IDR 35,000/kg during the bad season. The lowest income from the multiplication of fishermen's production and fish catch is IDR 700,000 with a selling price of IDR 35,000/kg during the bad season. Thus, the total bad season revenue for fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency is Rp.25,235,000/ month obtained from the total income of fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency.

Cost

The costs referred to in this study are fishermen's expenses for fishing activities in Muara Sampara Village, Kapoiala District, Konawe Regency, which are measured in rupiah units. Costs for fishermen in Muara Sampara consist of fixed costs and variable

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costs. According to Mardani et al., (2017) that fixed costs are costs incurred during the production process and the amount is not affected by the number of products produced. Fixed costs are costs whose numbers are not affected by the amount of production, but experience depreciation. Variable costs are costs whose amount is affected by the amount of production. An overview of the costs used by fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency can be seen in Table 5.

Table 5. Fixed Costs of Fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency in 2022

No.	Description	Cost
Fixed cost:		
1.	Boat	265,248
2.	Net	9,938
3.	Kating Machine	82,188
4.	Machete	868
5.	Basket	5,844
6.	Cork	10052
7.	Paddle	6,781
	Total	**380,918**

Source: Primary Data Processed 2022

As can be seen in Table 1.5 it can be seen that the total fixed costs consisting of boats, nets, katinting machines, machetes, baskets, corks, and paddles used by respondents in fishing activities amounted to IDR 380,918. Based on the results of the study, it is known that the highest average use of fixed costs for fishermen is a boat, which is Rp. 265,248, while the lowest is a machete, which is Rp. 868. This is because apart from the unit price of the boat, which is Rp. 3,182,976/unit, it is relatively high compared to other fixed cost components, the length of time the boats are used is also relatively longer, namely 5 years on average. Likewise, the machete, which is the lowest fixed cost component for fishermen in Muara Sampara Village, has a unit price of IDR 25,000/unit–IDR 50.

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Table 6. Variable costs of fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency in 2022

No.	Description	Cost
Good Season Variable Cost:		
1.	Gas	359,000
2.	Provisions	538,500
	Total	**897,500**
Bad Season Variable Cost:		
1.	Gas	79,000
2.	Provisions	118,500
	Total	**197,500**

Source: Primary Data Processed 2022

According to Mardani et al., (2017) that variable costs are costs used by patchouli farmer respondents in Aladadio Village whose amount varies according to the amount of production produced. As can be seen in table 1.6, variable costs are divided into good seasons and bad seasons due to the influence of climate or uncertain seasons, resulting in different costs for fishermen each month. Good season variable costs for the gasoline component average Rp. 359,000 while the provision component averages Rp. 538,500. In a different case, during the bad season the average cost of fishermen has decreased, namely the gasoline component averages Rp. 79,000 while the stock component averages Rp. 118,500. From this statement it can be concluded that the costs incurred by fishermen when going to sea are higher during the good season which is influenced by favorable weather conditions. The total cost of fishermen can be seen in Table 7.

Table 7. Total Costs of Fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency in 2022

No.	Description	Income
Total fine season fee:		
1	Highest	1,639,167
2	Lowest	1,177,292
	Average	**1,278,418**
Total bad season costs:		
1	Highest	889,167
2	Lowest	424,931

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	Average	**578,418**

Source: Primary Data Processed, 2022.

As can be seen in Table 7, it can be seen that the highest total good season costs are based on fishermen's income of Rp1,639,167 obtained from the total fixed cost depreciation and variable cost depreciation. Furthermore, the lowest total cost is Rp. 1,177,292 which is obtained from the total fixed cost depreciation and variable cost depreciation and the average is Rp. 1,278,418. While the highest total bad season costs based on fishermen's income amounted to IDR 889,167 obtained from the total fixed cost depreciation and variable cost depreciation. Furthermore, the lowest total cost is Rp. 424,931 which is obtained from the total fixed cost depreciation and variable cost depreciation and the average is Rp. 578,418.

Fishermen's Income

PFishermen's income is an effort made that comes from the fishermen themselves, what is meant is someone who catches fish or processes marine products that are used to earn income. Fishermen's income can be seen in Table.8.

Table 8. Income of Good Season Fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency, 2022

No.	Description	Income
Income of good season fisherman:		
1	Highest	9,964,375
2	Lowest	6,022,708
	Average	**8,438,582**
Bad season fisherman income:		
1	Highest	1,231,875
2	Lowest	189,375
	Average	**683,332**

Source: Primary Data Processed, 2022.

As can be seen in Table 8, it can be seen that the highest good season fishermen's income in Muara Sampara Village, Kapoiala District, Konawe Regency is IDR 9,964,375/month and the lowest is IDR 6,022,708/month. The average income of good season fishermen in Muara Sampara Village is IDR 8,438,582. Meanwhile, the highest bad season fishermen's income was in Muara Sampara Village, Kapoiala District,

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Konawe Regency, amounting to Rp. 1,231,875/month and the lowest was Rp. 189,375/month. Meanwhile, the average income of fishermen in the bad season in Muara Sampara Village is IDR 683,332.

Income outside fishermen

Income outside fishermen or pA diversified livelihood pattern is a mixed income pattern. Where the livelihood pattern uses a livelihood pattern that does not only come from fishermen but comes from outside fishermen. Diversification is that which comes from outside fishermen, where fishermen do their work in other sectors. Livelihoods other than fishermen can be seen in table 9.

Table 9. Livelihoods Other Than Fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency, 2022

No.	Livelihoods Other Than Fishermen	Number of people)	Percentage (%)
1	Construction laborers	4	20.00
2	Trader	6	30.00
3	Ketring Business	2	10.00
4	Fish Smoking Business	2	10.00
5	Cashew Farmers	1	5.00
6	Craftsman	2	10.00
7	Pincara driver	1	5.00
8	Village officials	1	5.00
9	Workshop Business	1	5.00
	Amount	**20**	**100.00**

Source: Primary Data Processed, 2023.

As can be seen in table 1.9, it can be seen that fishermen in Muara Sampara Village have livelihoods other than fishermen, namely as construction workers by 4 respondents (20%), traders by 6 respondents (30%), ketring business by 2 respondents (10 %), fish smoking business 2 respondents (10%), cashew farmers 1 respondent (5%), carpenters 2 respondents (10%), pincara drivers 1 respondent (5%), village officials 1 respondent (5%), and workshop business as much as 1 respondent (5%). Fishermanwho is in Muara Sampara Village, Kapoiala District, Konawe Regency, has an

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additional income pattern with the reason of increasing income. Income of fishermen in other sectors can be seen in Table.

Fishermanwho is in Muara Sampara Village, Kapoiala District, Konawe Regency, has an additional income pattern with the reason of increasing income. Income of fishermen in other sectors can be seen in Table 10.

Table 10. Income outside fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency, 2022

No.	Description	Income
1	Highest	1,500,000
2	Lowest	500,000
	Average	**1,010,000**

Source: Primary Data Processed, 2022.

As can be seen in Table 10, it can be seen that the highest income in the sector outside fishermen in Muara Sampara Village, Kapoiala District, Konawe Regency is fishermen who have a side income as a ketring business and village officials, which is IDR 1,500,000/month and the lowest is fishermen who have side income as a trader, cashew farmer, and workshop business is IDR 500,000/month. Meanwhile, the average income outside fishermen in Muara Sampara Village is IDR 1,010,000.

CONCLUSION

Based on the research that has been done, it can be concluded that in Muara Sampara Village they practice a double livelihood pattern, namely the community has the main livelihood as fishermen and their side livelihood as traders, pincara drivers, village officials, construction workers, carpenters, workshop business, ketring business, smoking fish, and cashew farmers to increase the income of the people in Muara Sampara Village. The average income of good season fishermen in Muara Sampara Village is IDR 8,438,582. Meanwhile, the average income of fishermen in the bad season in Muara Sampara Village is IDR 683,332. The highest income in the non-fisherman sector in Muara Sampara Village, Kapoiala District, Konawe Regency is a fisherman who has a side income as a ketring business and village officials, which is IDR 1,500. 000/month and the lowest are fishermen who have a side income as traders, cashew farmers, and workshop businesses, namely IDR 500,000/month. Meanwhile, the average income outside fishermen in Muara Sampara Village is IDR 1,010,000.

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