
Analysis of Income and Impact on the Welfare of Fisherman's Household Boalemo District

Erlansyah¹, Lis M. Yapanto², Krest D. Tolosang³, BAHAR⁴

¹Universitas Nahdhatul Ulama Gorontalo

²Universitas Negeri Gorontalo

³Universitas Sam Ratulangi Manado

⁴Universitas Fajar Makassar

Correspondence email: erlansyah@unugorontalo.ac.id

Abstract: The research was carried out from April to July 2022 in Olibu Village, to be precise, in the Paguyaman Pantai District, Boalemo Regency. The population of fishermen in Olibu Village, Paguyaman Pantai District, Boalemo Regency is 116 fishermen. The sample taken was only 54 fishermen using the snow ball sampling method. This study aims to determine income and the impact on the welfare of fishermen's households in Olibu Village, Paguyaman Pantai District, Boalemo Regency, Gorontalo Province. The research method used is in the form of interviews and direct observation. The data obtained were then analyzed descriptively and quantitatively. Prosperous family indicator from the Central Bureau of Statistics (BPS).

Key words: Income, Welfare, and Fishermen

A. Background

One of the fishing settlements is located in Olibu Village, Paguyaman Pantai District, Boalemo Regency, where the majority of the population work as fishermen. The habits of fishing communities in general in their households still uphold the local wisdom values of the existing community, such as helping each other or working together in the household. Basically, the custom of the people in Olibu Village requires that women or wives help with their husband's activities. With this understanding, the position of the wife and husband is not seen as lame or not different. The wife also has the same responsibility for improving the family economy.

The view of some people in Olibu Village, regarding the problem of improving the family economy is seen as something that must be shared. Happiness is enjoyed together and sorrow is shared, so it is not surprising to see wives running small businesses such as selling. Some fishermen's wives also go to earn money by taking salaries from other people's gardens. When the men cannot go to sea because of bad weather and they have no skills to work other than being fishermen. This is where the role of a woman is very influential, where they have to work to earn a living for the economic needs of the family. However, not all fishing communities do not have expertise in other fields, some of the fishermen have side jobs such as being farm laborers and construction laborers when not going to sea.

The phenomenon that occurs in coastal communities (fishermen) in Olibu Village, Paguyaman Pantai District, Boalemo Regency is that the economic life conditions of the people are always uncertain, sometimes they are able to make ends meet, sometimes not, because the income they receive is not balanced with their daily needs and does not permanent, because fishermen's income is very dependent on natural situations and conditions. Uncertain natural conditions, the existence of fish is not settled because they always move from one place to another, unstable sea currents, there are winds (both east, west, northwest and southwest winds) which can cause big waves, equipment facilities catches are inadequate, prices for goods are high, as well as engine damage and boat damage, causing the fishermen's income to decrease.

The level of fishermen's welfare is largely determined by their catch or what is commonly referred to as catch production. The number of catches directly affects the amount of income received so that fishermen are able to meet their daily needs. This can be interpreted that the necessities of life are available and easy to reach for every resident so that in turn the number of poor people is getting smaller (Asmita, 2016)

Meanwhile what is meant by fishermen's income is the results received by all fishermen's households after carrying out fishing activities at a certain time. However, the fish catch obtained cannot be regarded as income, if there has not been a sale and purchase transaction. The transactions in question are buying and selling transactions between fishermen (producers) and buyers (consumers) and transactions between fishermen (producers) and fish dealers (distributors). Income received by fishing communities is used to meet all the needs of consumers in each of their households, for example buying household equipment, paying monthly electricity, paying interest on loans or other debts, buying fishing facilities and infrastructure, expenses for fishing, and even being used for children's education expenses. they.

However, the income earned by the fishermen does not come entirely from fishing, but can be obtained from the results of other economic activities as a side job to fill their spare time. In addition, the role of wives and children is also needed to support work to increase the amount of income and government intervention is also very important in overcoming the problem of increasing fishermen's income, for example creating fishermen's work programs and simultaneously providing assistance to fishermen in the form of boats, engines and rafts.

During the dry season when the temperature of the hot sea water is quite high, fish are difficult to get because fishermen don't catch fish, resulting in a decrease in fishermen's income levels. If the coastal waters are not in season for fishing or there is no good income, fishermen will carry out andun (seasonal migration) to land which can provide income. The length of the period of andun for coastal fishermen is very dependent on the existing level of income, that is, if the level of income earned in the two-three days of going to sea from the end of their andun period is considered a little, it means that they have to end their period of andun (Kusnadi, 2013).

Basically income can support the success, prosperity and economic progress of a society in every region/country. Therefore, the economic condition of the community is also influenced by the amount of income. The greater the income earned by a household or community, the economy will increase, conversely if people's income is low, the result is that the household economy in society does not increase (Bastian, 2012).

Based on the background above, the authors are interested in conducting research entitled "Income Analysis and Impact on Fisherman Household Welfare in Olibu Village, Paguyaman Pantai District, Boalemo Regency".

B. Formulation of the problem

The formulation of the problem in this study is:

1. What is the income of fishermen in Olibu Village, Paguyaman Pantai District, Boalemo Regency?
2. What is the impact on the welfare of fisherman households in Olibu Village, Paguyaman Pantai District, Boalemo Regency?

C. Research purposes

Based on the formulation of the problem, the objectives of this study are:

1. To find out the income of fishermen in Olibu Village, Paguyaman Pantai District, Boalemo Regency.
2. To determine the impact on the welfare of fisherman households in Olibu Village, Paguyaman Pantai District, Boalemo Regency.

D. Research methods

1. Types and Research Approaches

The type of data used in this research is survey and observation methods which are descriptive qualitative and quantitative.

2. Place and time of research

This research was conducted in the village of Olibu, precisely in the District of Paguyaman Pantai, Boalemo Regency. This research was carried out in April - July 2022.

3. Sampling technique

a. Population

The population in this study were fishermen in Olibu Village, Paguyaman Pantai District, Boalemo Regency. Based on the results of the data that has been obtained, the number of fishermen in Olibu Village is 116 fishermen.

b. Sample

The sampling method used in this study was snow ball sampling. The number of samples to be studied is 54 fishermen obtained using the following Slovin formula:

$$n = \frac{N}{Nd^2 + 1}$$

$$n = \frac{116}{116 \cdot 0.10^2 + 1}$$

$$n = \frac{116}{2,16} = 54$$

Information :

n =Sample Size

N =Population

d = deviation from the desired population or precision, i.e. 0.10.

4. Data source

This study used survey methods and direct interviews with the community, using a questionnaire and using two ways of collecting data, namely:

a. Primary data is data collected or obtained from interviews with fishermen using a questionnaire.

b. Secondary data is data obtained from government agencies in the village of Olibu, the Boalemo Maritime Affairs and Fisheries Service, and from other literature related to this research topic.

5. Data analysis technique

Knowing the level of welfare of fishing communities, there are 2 criteria that are commonly used in measuring the level of welfare of fishermen, (Audina, 2020).

a. Bappenas

Welfare status can be measured based on the proportion of household expenditure. Households can be categorized as prosperous if the proportion of spending on basic needs is comparable to or lower than family income. The analysis of household income and household expenditure used to measure the level of welfare of fishing communities is as follows:

- Household Income Analysis

Household income is the sum of all the income earned by family members in the form of money as a result of their work. Household income comes from three sources, namely husband, wife and other sources. Household income can be calculated by:

$$TRPN = PN + PAN + PIN$$

Information :

TRPN = Household income

PN = Husband's income

PAN = Wife's income

PIN = Other sources of income

- Household Expenditure Analysis

Family expenses are costs incurred for the necessities of life within one year. The measurement is done by calculating daily, weekly and monthly needs. Total household expenditure can be formulated as follows:

$$Ct = C1 + C2$$

Information :

Ct = Total household expenses

C1 = Spending on food

C2 = Expenditures for non-food items

b. BPS (Central Bureau of Statistics)

According to the Central Bureau of Statistics (2015), the indicators used to determine the level of welfare are indicators of prosperous families which can be seen in Table 1.

Table 1 Prosperous family indicators based on BPS (2015)

No	Welfare Indicator	Criteria	Score
1	Income	High (>Rp 10,000,000)	3
		Moderate (Rp 5,000,000-Rp 10,000,000)	2
		Low (<Rp 5,000,000)	1
2	Expenditure	High (> IDR 5,000,000)	3
		Medium (Rp 1,000,000-Rp 5,000,000)	2
		Low (<Rp 1,000,000)	1
3	Condition of residence	Permanent (11-15)	3
		Semi permanent (6-10)	2
		Non-permanent (1-5)	1
4	Residential facilities	Complete (34-44)	3
		Enough (23-33)	2
		Less (12-22)	1

5	Health of family members	Good (<25%)	3
		Enough (25%-50%)	2
		Less (>50%)	1
6	Ease of getting health services	Easy (16-20)	3
		Enough (11-15)	2
		Difficult (6-10)	1
7	Ease of entering your educational level	Easy (7-9)	3
		Enough (5-6)	2
		Difficult (3-4)	1
8	Ease of getting transportation facilities	Easy (7-9)	3
		Enough (5-6)	2
		Difficult (3-4)	1

Based on the results of the scoring of the welfare indicators above, tabulation is then carried out to determine the total score obtained, then determine the level of welfare. The criteria for determining the level of welfare can be seen in Table 2.

Table 2 Criteria for determining welfare according to BPS (2015)

Score	Description
Score between 2.61 - 3.4	High level of welfare
Score between 1.81 - 2.60	Moderate welfare level
Score between 1.0 - 1.80	Low level of welfare

To obtain the total score then weighting is carried out on each indicator.

Table 3 Determination of Weighting

No	Indicator	Weight
1	Income	24 %
2	Expenditure	18 %
3	Condition of residence	9 %
4	Residential facilities	9 %
5	Health of family members	8 %
6	Ease of getting health services	12 %
7	Ease of getting you into education	12 %
8	Ease of getting transportation facilities	8 %

Furthermore, the score of each indicator is multiplied by the weight according to (Table 3). The results of the multiplication of each indicator and the weight are added up and then the results are adjusted to (Table 2), to determine the level of welfare. It is also necessary to note that the family welfare indicators above are representative of several indicators that have been determined by BPS.

E. Data Description

1. Overview of Research Locations

Olibu Village is one of the villages located in Paguyaman Pantai District, Boalemo Regency. Olibu Village is the village at the far end, about 35 km from the sub-district center. Judging from the village's economic life, the agriculture and fishermen sector is the locomotive of the economy. The road infrastructure is still very bad, causing the journey to take up to 1 hour to reach Olibu Village from the sub-district center.

Based on the administration of Olibu Village with an area of approximately 2,400 hectares which is divided into 3 hamlets, namely Hamlet I (Olibu), Hamlet II (Karang Indah), Hamlet III

(Mombinge). The height of Olibu Village ranges from 600 meters above sea level. With the state of the land has wavy hilly valleys and flat. The population in Olibu Village is currently 686 people, of which 369 men and 317 women (Salimi, 2018).

Respondent Characteristics Data

Respondents in this study amounted to 54 people who work as fishermen in the village of Olibu. The research results were obtained through data collection using questionnaires and field observations. The intended data includes the characteristics of the respondents and indicators of the welfare level of fishing households.

Respondent Age

Age is an important factor in work productivity, because at a productive age a person can do maximum work. Furthermore, Otoluwa (2015), states that age can also be related to family welfare, when age gets older, physical abilities begin to decrease.

Age can also affect a person's ability to work, because the ability to work productively will continue to decline as a person gets older, however there is a tendency for older prosperous families to have more experience at work. Based on data from the National Family Planning Coordinating Board (BKKBN) that productive age ranges from 15-60 years (Mareto, 2015). Based on the research results obtained from respondents, the characteristics of respondents based on age are obtained which will be presented in table 4.

Table 4. Age of fishermen in Olibu Village

Age Group(Year)	Total population	Percentage(%)
25-29	6	10.60
30-34	6	10.60
35-39	7	12.40
40-44	11	18.75
45-49	6	10.60
50-54	11	18.75
55-59	4	8.50
60-64	2	6.50
65-	1	3.30
Total	54	100

Source: Primary Data 2022

Table 4.1 shows that the number of respondents who are mostly employed are from the age range of 40-44 years and 50-54 years. This is because when they are at that age, the ability that a person has is in his productive period to carry out all activities including work. In accordance with Rosni's statement (2017), that productive age is the age stage that humans have to be able to work and produce something optimally. But in general, at that age is a time when someone passes on experience or shares knowledge with those who are younger.

a. Education

The level of education is an indicator that determines the quality of human resources and the development of an area so that it makes it easier for someone to take advantage of the potential that exists in their area. Even the level of education will affect a person's mindset and perspective in accepting a change (Syahputra et al, 2017). Furthermore, the education level of fishermen in Olibu Village can be seen in Table 5.

Table 5 Level of Education of Respondents in Olibu Village

Level of education	Frequency	Percentage (%)
SD	42	80,60
JUNIOR HIGH SCHOOL	7	10,40
SENIOR HIGH SCHOOL	2	3,75
Bachelor	3	5,25
Total	54	100

Source: Primary Data 2022

Based on Table 5, it can be seen that the education level of the fishermen in Olibu Village varies, this is evidenced by the final education attained by the fisherman respondents which differ from one another, of which 2 respondents only reached the high school level (SMA), 3 respondents up to the undergraduate level (S1), then as many as 7 respondents only went to junior high school (SMP) and most of the fishermen with a total of 42 respondents, their education was limited to elementary school (SD), some did not even finish school. This is because the people of Olibu Village who work as fishermen are less concerned with education, on the grounds that they are constrained by the cost of education and some of them want to help their parents in earning a living so that the family's needs are met.

2. Fishermen Welfare Indicators

a. Fishermen's Income

The level of welfare is directly affected by income. The difference in income is influenced by the number of family dependents. According to Zulianny (2013), the main income is the income that is obtained from work that is carried out with the use of more time and the highest income compared to other jobs, expressed in rupiah. While additional income is income from work done with less time usage, expressed in rupiah. The income of fishing households in Olibu Village obtained from fisheries and non-fishery businesses can be seen in Table 6.

Table 6 Average income of fishermen in Olibu Village

Source of Income	Revenue(IDR)
Fishery Income	IDR 1,711,111
Non-Fishery Income	IDR 1,227,778
Monthly Income	IDR 3,025,926
Revenue Per year	IDR 36,311,111
Income per capita	IDR 16,618,518

Source: Primary Data 2022.

In accordance with Table 4.3, the average income of fishing families in Olibu Village is IDR 36,311,111 per year, while the average per capita income per year is IDR 16,618,518. The income of the fishing community in Olibu Village is obtained from fishery and non-fishery income, which can be seen in (Table 6). The fishing business originates from the sale of catches from the sea. In addition, several fishing communities in Olibu Village prefer to catch fish outside Gorontalo waters due to their increasing standard of living. Meanwhile, the income of non-fishery fishing communities is obtained from other jobs such as farmers and carpenters, then assistance from fishermen's wives besides being busy taking care of the household, in between hours they work to supplement family income. The wife's income can contribute to additional family income. Income indicator criteria can be seen in Table 7.

Table 7 Criteria for fishermen's income indicators in Olibu Village

Welfare Indicator	Score	Fisherman	
		Fishermen (Person)	Percentage(%)
Tall	3	41	89.30
Currently	2	13	10.70
Low	1	-	-
Amount		54	100

Source: Primary Data 2022.

Based on Table 7, the results of a comparison of the per capita income per year of fishermen in Olibu Village can be seen that 89.30% fall into the category of high welfare indicators adjusted for BPS indicator criteria (2015), where their income is more than IDR 10,000,000/year, then 10.70% is included in the category of moderate income criteria with a per capita of IDR 5,000,000-10,000,000/year.

The income level of fishermen in Olibu Village is measured using indicator criteria from BPS (2015), with reference to income results, namely comparing income with living standards and local prices. When adjusted for the BPS (2015) welfare indicator criteria, it can be stated that the majority of fisherman respondents are categorized as high welfare indicators. This shows that the level of fishermen's welfare has begun to experience changes for the better in improving family welfare.

b. Fisherman Family Expenditures

The expenditure of the fishing community in Olibu Village is grouped into two parts consisting of food and non-food expenditure. Food expenditure is part of the estimated expenditure that is used to meet the needs of food (staple goods) for fishermen's families, while non-food expenditure is an estimated expenditure that is used to meet needs other than buying food. The average per capita expenditure of fishermen in Olibu Village per year can be seen in Table 8.

Table 8 Average expenditure of fishing households in Olibu Village

Food Expenditure	Expenditures(Rp)
Total Monthly Expenses	IDR 684,055
Total Expenditure per year	IDR 9,081,852
Total Expenditures Per Capita	IDR 4,158,130

Source: Primary data 2022.

Based on Table 8, the average monthly expenditure of fishermen in Olibu Village is Rp. 684,055, the total annual expenditure is Rp. 9,081,852, and the total expenditure per capita is Rp. 4,158,130. This is due to the higher prices of basic necessities and fishermen respondents in Olibu Village prioritizing basic food needs compared to other needs.

Based on indications, food expenditure is greater than non-food expenditure. According to Hendrik (2011), spending is the amount of money spent to meet basic needs (food, clothing and shelter) within a certain period of time. Respondents' household expenditure is influenced by the number of household members, consumption patterns, and other needs.

The expenditure level of fishing households in Olibu Village can be measured using the BPS indicator criteria (2015), namely by looking at the level of food and non-food consumption or equated with the expenditure of fishing families. The fishing households of Olibu Village are all categorized as not poor. The average number of family members is three people. Annual expenditure is obtained by dividing the total household expenditure by the number of household members (Onte, 2017). Criteria for family expenditure indicators can be seen in Table 9.

Table 9 Criteria for indicators of expenditure for fishing families in Olibu Village

Welfare Indicator	Score	Fisherman	
		Fishermen (Person)	Percentage (%)
Tall	3	11	9.65
Currently	2	43	90.35
Low	1	-	-
Amount		54	100

Source: Primary data 2022.

Based on Table 9, it can be seen that the fishing families of Olibu Village are included in the moderate criteria in the expenditure category which has been adjusted to the indicators of prosperous families based on BPS (2015), where the total per capita expenditure of all fishing families is less than IDR 5,000,000/year.

c. State of Residence

Based on the results of interviews with fishermen in the village of Olibu, the living conditions are still quite good. According to observations, almost all fishermen respondents have a place of residence that is in a permanent condition, with their own ownership status of 43 respondents and 11 respondents only living. The condition of fishermen's houses in Olibu Village varies greatly, with 10 houses using porcelain floors and 44 plaster-floor houses with a floor area of 50-100 m, 30 houses and 24 houses having an area of <50 m. The criteria for the condition of the fishermen's family in Olibu Village can be seen in Table 10.

Table 10 Criteria for conditions where fishermen live in the village of Olibu

Welfare Indicator	Score	Fisherman	
		Fishermen (Person)	Percentage (%)
Permanent	3	46	92,23
Semi permanent	2	8	7,77
Non permanent	1	-	-
Amount		54	100

Source: Primary data 2022.

Table 10 shows that 46 fishermen respondents with a percentage value of 92.23% have a permanent residence, and 8 fishermen respondents with a percentage of 7.77 have a semi-permanent residence. This can be seen from the items assessed such as the type of roof, walls, ownership status, floor area and yard area.

The attention of fishermen from the village of Olibu to where they live is quite large. Basically the existence of a house does not only have a function as a place of refuge, but the house has become part of a lifestyle symbol that influences the socio-economic status of the household and even shows the identity of the owner in society. The better the living conditions, the better the socio-economic conditions of the family (Audina, 2020).

If the total number of respondents is combined and then adjusted according to the criteria for prosperous indicators according to BPS (2015), it can be categorized as a level of welfare. They are already in the category of a high level of welfare.

d. Residential Facilities

Residential facilities are basically part of the completeness of the house in a family that can

increase the comfort and welfare of the family's life (Suriadi, 2016). Based on the research and the results of the interviews conducted, most of the fishermen in Olibu Village have incomplete housing facilities, which can be seen in Table 11.

Table 11 Criteria for residential facilities for fishermen in Olibu Village

Welfare Indicator	Score	Fisherman	
		Fishermen (Person)	Percentage (%)
Complete	3	-	-
Enough	2	-	-
Not enough	1	54	100
Amount		54	100

Source: Primary data 2022.

One measure of the comfort of a place to live is inadequate living facilities. All of the lighting sources used by fishermen in Olibu Village use electricity from their homes. For electronic equipment which is a means of entertainment such as television, only some fishing families are available.

The cooling facilities used by fishermen's families, as many as 35 fishermen respondents use fans. While the rest still prefer to use coolers from nature, because according to them the wind from nature is sufficient. Meanwhile, the water sources for fishermen in Olibu Village all use drilled wells and for bathroom facilities, some houses already have their own bathrooms. The fuel used by fishermen has entirely used gas.

The results of the calculations show that the average total score of residential facilities indicators matches the prosperous indicator criteria according to BPS (2015), the score obtained is 1, this indicates that their level of welfare is lacking.

e. Health of Family Members

Health is one of the most important needs for a person's life. Health itself can be interpreted as an optimal condition for a person both in terms of spiritual, physical and social culture (Sriyono, 2015). The scores obtained from the health indicators of the fishermen's family members in Olibu Village can be seen in Table 12.

Table 12 Health criteria for members of the fishermen's family in Olibu Village

Welfare Indicator	Score	Fisherman	
		Fishermen (Person)	Percentage (%)
Good (<25%)	3	28	51,46
Enough (25%-50%)	2	26	48,54
Less (>50%)	1	-	-
Amount		54	100

Source: Primary data 2022.

Based on Table 12, the health of fishermen's family members is a good criterion where all families who are sick in a month <25% are around 28 respondents with a percentage of 51.46%. While 26 respondents with a percentage of 48.54% are categorized as sufficient. The predominant types of illness are headaches, fatigue and colds. The calculation results show that most fishing families are in a position with a score of 3. This score is adjusted to the criteria for prosperous indicators according to BPS (2015). other:

- Good, if all household members experience less than 25% illness in one month.
 - Enough, if 25% -55% of all household members experience illness in one month.
 - Not good, if all household members experience sick conditions > 50% in one month.
- f. Ease of Obtaining Health Services

Health services are a reciprocal relationship. For the community, some receive access to low service facilities, medicines are not available or even unaffordable. However, in all these problems, there is much that can be done to overcome these problems if there is political ability (McKee, 2018).

The BPS indicator (2015), which is used to obtain easy health services, consists of 6 items, namely the distance to drug stores, drug prices, distance to the nearest hospital, drug handling, and contraceptives. Based on the research conducted, it is known that all fishermen's families say that the distance to the hospital is quite far from Olibu Village because the location of the hospital is in the center of the district. Meanwhile, the distance to the puskesmas is quite easy to reach because it is only about 7 km away. Olibu village because the location of the hospital is in the center of the district.

The cost of medical treatment was based on the opinion of 54 fishermen respondents, 53 respondents felt it was quite affordable while the rest said it was difficult to reach. The statement above is in accordance with the results of interviews with fisherman respondents (per person) for more details can be seen in Appendix 8. Then to see the criteria for the ease of getting health services for fishermen in Olibu Village according to BPS welfare indicators (2015), can be seen in Table 13.

Table 13 Criteria for ease of obtaining fisherman health services in Olibu Village

Welfare Indicator	Score	Fisherman	
		Fishermen (Person)	Percentage (%)
Easy	3	-	-
Enough	2	52	98.45
Difficult	1	2	1.55
Amount		54	100

Source: Primary data 2022.

Based on the table above, it can be seen that 52 fishermen respondents with a percentage of 98.45% stated that it was sufficient to get health services and the remaining 2 respondents with a percentage of 1.55% stated that it was difficult. Ease of getting health services that are quite easy to reach both in terms of distance and ease of treatment.

g. Ease of Entering Children in the Education Level

Education is a human right and an essential tool for achieving an objective of achieving equality, development and peace. Non-discriminatory education benefits both boys and girls, and thereby ultimately helps in achieving a harmonious relationship. have greater similarities between men and women (Sa'ud and Sumatri, 2012). From the results of the study, most respondents thought that education had an important and very important role for the lives of their children in the future. The number of respondents regarding convenience Entering children's educational level is presented in Table 14.

Table 14 Criteria for ease of entering children into the education level of fishermen in Olibu Village

Welfare Indicator	Score	Fisherman	
		Fishermen (Person)	Percentage (%)
Easy	3	45	89.33
Enough	2	-	-
Difficult	1	-	-
Not Schooled (underage)	0	9	10.67
Amount		54	100

Source: Primary data 2022.

Based on Table 14, it can be seen that the development of fisherman education is going relatively well in Olibu Village. This is shown from the enthusiasm of the fishermen, as many as 45 respondents (89.33%), in getting their children to a better level of education, because most of their children are still in elementary and junior high school which allows for school fees, distance to school and procedures. the acceptance was relatively easy, apart from that there was support from the government by proposing a free education program to make it easier for fishermen to send their children to school. And there were also 9 respondents (10.67%) who had underage children (not yet required to attend school).

Most of the respondents consider education to be very important because education is a provision for their children in the future so that their children get a decent life and are respected or valued by society. In addition, in today's modern era education is needed in the competition to advance the economy of a nation.

h. Ease of Getting Transportation Facilities

Based on interviews with fishing communities, the ease of obtaining transportation facilities is one of the important things in the daily lives of fishermen. The means of transportation used by fishermen in Olibu Village are that most of them choose to walk (if they are only around the village), motorbikes and public transportation are used when traveling long distances. Seen in Table 15.

Table 15 Criteria for ease of obtaining fisherman transportation facilities

Welfare Indicator	Score	Fisherman	
		Fishermen (Person)	Percentage (%)
Easy	3	42	88,18
Enough	2	12	11.82
Difficult	1	-	
Amount		54	100

Source: Primary data 2022.

Based on Table 15, 48 fishermen family respondents (88.18%) said it was easy, while 12 fishermen family respondents (11.82%) said it was quite easy to get transportation facilities. The indicators used to obtain the convenience of transportation facilities consist of 3 items, namely transportation costs or costs, vehicle facilities, and vehicle ownership.

Fishermen families who said it was easy to get transportation facilities on average had private vehicles, while respondents who said it was quite easy were those who did not have private vehicles and only rented or used public transportation facilities if there was a need. Meanwhile, respondents who are difficult to reach because the obstacle they always face is the lack of funds to rent a vehicle

or use public transportation facilities.

F. Data analysis

1. Analysis of the Welfare Level of Fishermen's Households in Olibu Village, Paguyaman Pantai District

Based on the results of the analysis of 8 welfare indicators, the welfare classification of all fishermen family respondents was obtained which can be seen in Table 16.

Table 16 Analysis of the level of welfare of fishermen households in Olibu Village

Indicator	Score	Weight	Total Score
Income	3	24 %	0.72
Expenditure	2	18 %	0.36
Condition of residence	3	9 %	0.27
Residential facilities	1	9 %	0.09
Health of family members	3	8 %	0.24
Ease of getting health services	2	12 %	0.24
Ease of getting you into education	3	12 %	0.36
Ease of getting transportation facilities	3	8 %	0.24
Amount	20	100 %	2.52

Source: Primary data 2022.

According to Rosni (2017), measuring the level of welfare of fishing communities in Indonesia, indicators are needed that can provide a clear and precise picture. Indicators can provide a clear picture of both social and economic aspects, because welfare can be seen from these two aspects. In accordance with the BPS indicator (2015) which is used to determine the level of welfare includes 8 items, namely: income, expenses, living conditions, housing facilities, health of family members, ease of getting health services, ease of entering children into education, and ease of getting transportation facilities. Based on Table 16, the criteria for the level of welfare of BPS fishermen in Olibu Village are included in the criteria for moderate welfare.

The results showed that the average fishermen in Olibu Village were already at the medium level of family welfare indicator stage, which means they were able to meet their daily needs such as eating at least 3 times a day or more, having different clothes for both at home, at work, uniforms. school or while traveling. Then have a decent place to live in with relatively complete facilities. In terms of health problems and medical expenses, fishermen's families feel that they are still easily accessible, then the distance to the health center is around the sub-district center so it can still be reached.

While the current problem of children's education for fishermen is quite easy to reach because they think that getting their children into the education level has been made easier by the financial assistance from the government in the form of free schools and scholarships. Furthermore, several fishing communities already have private vehicles. So it can be said that their living conditions or level of welfare are not in the low category but also not in the high category, meaning they are still in the moderate stage.

G. Conclusions and recommendations

1. Conclusion

The conclusions in this study are as follows:

- a. The per capita income of most fishermen is included in the high welfare category with an income of more than IDR 10,000,000/year.

b. The welfare level of fishing fishermen households in Olibu Village, Paguyaman Pantai District, Boalemo Regency is included in the moderate welfare category with a score of 2.52.

2. Suggestion

Suggestions in this study are:

a. There needs to be socialization from the government regarding the economy which leads to a more prosperous society and new and more profitable fishing in large-scale businesses.

b. There is a need for further research on the factors that affect income and the impact on the welfare of fishermen's households.

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