

Welfare Level of well-being Community the Fish Landing Base (PPI) Tanjung Limau City of Bontang

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Abstract. Bontang City has a strategic area with considerable fisheries potential. The existence of the Tanjung Limau Fish Landing Base in Bontang City is expected to contribute to improving the welfare of the surrounding community. The purpose of this study was to analyze the level of community welfare around the Tanjung Limau PPI in Bontang City. The sampling technique used was purposive sampling method with a total of 60 respondents, consisting of fishermen and the general public. The data were analyzed using the welfare level method based on the 2016 Central Statistics Agency. The results showed that 95% or 58 respondents had a welfare level with high criteria while the remaining 5% or 2 people had a welfare level in the medium category.

Keywords: Welfare level, Coastal community, Fish Landing Base, Bontang City.

1. INTRODUCTION

Poverty is a social phenomenon that is always relevant to study until today. The problem of poverty is also one of the indicators that influence the development index in a region. Poverty is not only seen from an economic perspective but also the socio-cultural and even political dimensions. Madan (2012) states that poverty is always identified with a low quality of human life, deprivation, poor nutrition, illiteracy and low levels of human development.

The success of development in a country can be illustrated through the existence of poor people in that country (Mahaeni et al., 2014). The less the presence of poor people, it can be interpreted that development in a region or country has been successful. The condition of a prosperous society is depicted in the condition of humans who are in a state of health, prosperity and peace. a prosperous society is a society that can fulfill its needs both physically and spiritually (Prastyadewi et al., 2013).

Bontang City is one of the cities in East Kalimantan Province. The characteristics of the region are coastal areas that directly face the Makassar Strait. Of course, with this geographical location, this area has considerable fishery potential. With the potential of these natural resources, Bontang City continues to strive to increase the productivity of fishery products through the introduction of fishing technology, providing assistance in fishing tools and equipment, as well as training in processing fish catches in order to encourage the growth of the fisheries sector. In order to develop the fishing industry, as well as to reduce dependence on the oil and gas industry, in 2007 the Bontang City Government carried out activities to build the Tanjung Limau fishing port and provide facilities needed by fishermen.

The Fish Landing Base or commonly referred to as the fish port is a stopping place (terminal) of the ship after making a voyage (Ilma YB, et al. 2015) The existence of the Tanjung Limau Fish Landing Base (PPI) is expected to have a strategic

position in terms of its influence on the contribution to improving the welfare of coastal communities in Bontang City. The activity begins with the landing of fish by distributors and fishermen anchored at the port (Ikhwan F, et al. 2024) This can be seen from the frequency of ship operations which is quite decent. The fishing boats are not only from the Bontang City area but also fishermen from other areas including South Sulawesi Province, West Sulawesi Province, and Central Sulawesi Province. The Tanjung Limau PPI is under the authority of the Provincial Government. The authority includes determining the location of development and management, as stipulated in Law No. 23/2014 on Regional Government.

2. RESEARCH METHODS

Research Time and Location

The research period started from September 2023 to February 2024. Research activities were carried out in the community around the Tanjung Limau Fish Landing Base, Bontang City, East Kalimantan Province.

Data Collection Method

The types of data used in this study are primary data and secondary data. Primary data is data obtained directly from the source, in this case the respondent. Sugiyono (2009) states that primary data is a collection of data that provides statistics directly to data collectors, while secondary sources are types of data that do not provide valid records to data providers. The primary data required in this study are the characteristics of respondents and the standard level of household welfare according to BPS (2016).

Meanwhile, secondary data is data obtained from other people or documents (data that has been processed). Secondary data is information obtained from conducting document studies in the form of reading, reviewing and analyzing other media such as literature, books, and company records (Sugiyono, 2009). Secondary data needed in this study include books, research journals and BPS reports for Bontang City.

The type of research used is qualitative descriptive research. Qualitative descriptive analysis is a data analysis technique that describes or describes the data that has been collected as it is without intending to make conclusions that apply to the public (Sugiyono, 2015).

The observation method approach was used in this study to collect data. Structured observation is an observation that is specifically planned regarding what, when, and where observations are made (Sugiyono, 2016).

Sampling Technique

The sampling technique in this study used purposive sampling technique. Sugiyono (2016) states that purposive sampling technique is a technique that determines the type of sample with previously adjusted considerations. In determining the sample, Sugiono (2019) stated that the appropriate sample size in research is between 30 and 500, if the sample is divided into categories, the number of sample members for each category is at least 30:

Fishermen who moor their vessels at PPI Tanjung Limau

The community around the Tanjung Limau PPI Determination of the number of samples in this study as stated by Sugiyono above consists of 30 fishermen who moor their ships at PPI Tanjung Limau and 30 people from the general public who live around PPI Tanjung Limau. So that the total number of respondents was 60 people.

Data Analysis

Measuring the welfare level of the community around PPI Tanjung Limau through a method developed by BPS in 2016, the following are welfare indicators with criteria and scores.

If the total score obtained is between 20-24, the level of community welfare is classified as high. If the total score obtained is between 14-19, the level of community welfare is moderate, while if the total score obtained is between 8-13, the level of community welfare is low.

Table 1. Welfare level standards based on BPS 2016

No.	Welfare Indicators	Criteria	Scale
1	Revenue	High (>Rp.4,000,000)	3
		Medium (Rp.3.000.000-Rp.4.000.000)	2
		Low (<Rp.3,000,000)	1
2	Spending	High (>Rp.4,000,000)	3
		Sedang (Rp.3.000.000-Rp.4.000.000)	2
		Low (<Rp.3,000,000)	1
3	State of residence	Permanent (score 13-16)	3
		Semi Permanent (score 9-12)	2
		Non Permanent (score 5-8)	1

4	Residential facilities	Complete (score 27-34)	3
		Fair (score 19-26)	2
		Less (score 11-18)	1
5	Health of family members	Good (<25% sick)	3
		Fair (25%-50% sick)	2
		Deficient (>50% sick)	1
6	Ease of obtaining health services	Easy (score 17-21)	3
		Fair (12-16)	2
		Difficult (score 7-11)	1
7	Ease of enrolling children in education	Easy (score 9-11)	3
		Fair (score 6-8)	2
		Difficult (score 3-5)	1
8	Easy access to transportation facilities	Easy (score 9-11)	3
		Fair (score 6-8)	2
		Difficult (score 3-5)	1

Source: Statistics Center (2016)

Based on these eight (8) indicators, the scores were accumulated to obtain a classification of levels from low, medium to high categories.

Table 2. Classification of welfare levels based on BPS 2016

No.	Scale	Criteria
1	20-24	High
2	14-19	Medium
3	8-13	Low

Source: Statistics Center (2016)

3. RESULTS AND DISCUSSION

Household Welfare Level of Communities Surrounding Tanjung Limau PPI

There are several ways to measure poverty, one of which is the BPS Indicator. According to Fitriyana (2020), increasing fisheries production by improving infrastructure and technology on a household scale, in this study the level of family welfare of both fishermen and the general public who live around PPI Tanjung Limau Bontang is measured using the 2016 Central Statistics Agency indicators. This welfare indicator explains the measurement of the level of community welfare in Indonesia through eight aspects or criteria.

Revenue

In the book Accounting Theory, Theodorus (2011) states that revenue is the amount of money earned from the sale of goods or services within a certain period of time. As stated by Suroto (2000) in Christopher (2017), income includes all cash received, goods from third parties, and goods

produced, which are valued based on the current economic value of assets owned. Whether earned directly or indirectly, income is a source of money that a person can use to fulfill their daily needs. It is essential for survival and lifestyle. Income, which includes earnings, salaries, rents, and profits, is a stream measured over a period of time.

The size of a person's income is usually seen from the type of work or livelihood, because each type of work has a different level of income. The income earned is of course used for the purposes of meeting the needs of family life. Humans as living beings have basic needs that must be met, at least physiological needs such as clothing, food and shelter. Furthermore, after basic needs have been met, humans will try to meet other needs such as security, social, appreciation and self-actualization needs.

The assessment of household income indicators uses three categories, namely high, medium and low categories, to see in detail can be seen in Table 3 as follows:

Table 3. Distribution of respondents by income

Welfare Indicators	Criteria	Scale	Number of Respondents(people)	Percentage (%)
Revenue	High more than Rp4,000,000	3	49	81,7
	Medium between Rp3,000,000 to Rp4,000,000	2	7	11,7
	Low Less than Rp3,000,000	1	4	6,7
Total			60	100

Source: Processed primary data, 2023.

Table 4. Distribution of respondents based on expenditure

Welfare Indicators	Criteria	Scale	Number of Respondents (people)	Percentage (%)
Spending	High more than Rp4,000,000	3	48	80,0
	Medium between Rp3,000,000 to Rp4,000,000	2	5	8,3
	Low Less than Rp3,000,000	1	7	11,7
Total			60	100

Source: Processed primary data, 2023.

In this study, income has been assumed to be the income that comes from the family, either the husband alone or the accumulation of the husband's income and other family members. The results showed that 49 respondents were in the high category, namely having an income of more than Rp4,000,000 rupiah per month. While 7 respondents were in the medium category with income between Rp3,000,000 and Rp4,000,000 per month. Meanwhile, only 4 respondents whose income levels were in the low category.

Spending

Household expenditure is all costs incurred in order to meet household needs, both food and non-food needs. Generally, household expenditure is allocated more to food and non-food needs. Rice, side dishes, vegetables, seasonings, sugar, coffee, tea, fruit, milk, cigarettes, and tobacco are some examples of household expenditure categories that are earmarked for food needs. Meanwhile, non-food expenditures include fuel, clean water, lighting, clothing, health,

transportation, home improvements, social activities, and taxes (Suhartini et al., 2004).

The purpose of expenditure at the welfare level is to find out how much money is spent by respondents to fulfill their daily needs. The assessment of the household expenditure indicator uses three categories, namely the high, medium and low categories, to see the details can be seen in Table 4 as follows:

The results showed that 48 respondents were in the high category, namely having expenses of more than Rp4,000,000 rupiah per month. While 5 respondents were in the medium category with expenses between IDR 3,000,000 and IDR 4,000,000 per month. Meanwhile, 7 respondents with expenditure levels were in the low category.

Living Conditions

Four dwellings are a basic human need. The need for housing is currently increasing rapidly, especially in urban areas. In addition to the population growth factor, the increasing number of

people moving to the area is one of the causes of the increased need for housing (Edward, 2015). Living conditions are an indicator of a household's socioeconomic situation, which can indicate or influence the level of community welfare. The assessment criteria are determined based on 5 physical conditions of the dwelling. These 5

conditions are ownership status, floor area, floor type, roof type, and wall type. The assessment of living conditions is divided into three categories, namely permanent (3), semi- permanent (2), and non-permanent (1).

Table 5. Distribution of respondents based on living conditions

Indicator Welfare	Criteria	Scale	Total Respondents (people)	Percentage(%)
Circumstances Place of Residence	Permanent (score 13-16)	3	49	81,6
	Semi Permanent (score 9-12)	2	11	18,4
	Non-permanent (score 5-8)	1	-	-
Total			60	100

Source: Processed primary data, 2023.

The results showed that the majority of respondents had permanent living conditions, with a total response of 49 people (81.6%) while the remaining 11 people (18.4%) had semi- permanent living criteria. The description of the condition of the house is as follows, in general, the ownership status of the residence is self-owned with a percentage of 45 people (75%), the floor area is more than 15 m² as many as 53 people (83.3%), the type of floor is tile or ceramic as many as 53 people (83.3%), the type of roof is tile or shingle as many as 55 people (91.7%) and the type of wall is 55 people (91.7%).

Residential Facilities

Living facilities can be used to determine the socioeconomic status of a household (Rizal, 2013). Similarly, in the community around PPI Tanjung Limau Bontang, socioeconomic status can be measured by looking at the facilities owned by households. Several criteria including; fuel, means of transportation, toilet conditions, yard area, use of air conditioning, lighting, and clean water sources are all factors that influence the assessment.

Table 6. Distribution of the number of respondents based on residential facilities

Indicator Welfare	Criteria	Scale	Total Respondents (people)	Percentage(%)
Facilities Place of Residence	Complete (score 27-34)	3	58	96,7
	Simply (score 19-26)	2	2	3,3
	Less (score 18-11)	1	-	-
Total			60	100

Source: Processed primary data, 2023.

The results showed that the majority of respondents had a complete condition of residential facilities, with a total response of 58 people (96.7%) while the remaining 2 people (3.3%) had sufficient criteria for residential facilities. The description of the completeness of residential facilities in general is as follows; the type of fuel for cooking using LPG gas as many as 54 people (90%),

a yard area of more than 15 m² as many as 48 people (80%), the type of air conditioner that uses air conditioner as many as 49 people (81.7%), the type of vehicle that has a four-wheeled vehicle as many as 49 people (81.7%).

Furthermore, the source of clean water used is PDAM water as many as 48 people (80%), the type of drinking water consumed is refill water

as many as 44 people (73.3%), how to get drinking water by buying as many as 52 people (86.7%), the water consumed comes from PDAMwater as many as 52 people (86.7%), the ownership status of the MCK used is privately owned as many as 54 people (90%) and easy to access MCK facilities as many as 54 people (90%).

Health of Family Members

Health is a basic need that greatly affects human survival. Maintaining health is an obligation for every individual, because the main key in the ability to be able to carry out all activities is health. The health of family members is one of the indicators that can determine whether a family is classified as prosperous or not. This indicator has three assessment criteria, namely having 1 or no disease (score 3), having 2 to 3 diseases (score 2), and having more than 4 diseases (score 1).

Table 7. Distribution of Respondents Based on Health of Family Members

Indicator Welfare	Criteria	Scale	Total Respondents (people)	Percentage(%)
Health of Family Members	Good (<25% sick)	3	56	93,3
	Simply (25% to 50% sick)	2	-	-
	Less (>50% sick)	1	4	6,7
Total			60	100

Source: Primary data processed, 2023.

The results showed that the majority of respondents had good health conditions with a total of 56 people (93.3%), then the remaining 4 people (6.7%) had poor health. In general, the health of the community around PPI Tanjung Limau Bontang is in good condition.

Ease of Getting Health Services

Excellent health services can be achieved by providing services that focus on the needs, expectations, and values of consumers. The public

certainly really wants access to health services that are responsible, safe, quality, fair, and without discrimination, so that patients' rights to health services can be maintained (Nasution et al., 2021).

Easy access to health services includes hospital distance, polyclinic distance, medical costs, handling/availability of medicines, availability of contraceptives, ease of family planning consultation, and drug costs, which are summarized into three assessment criteria, namely easy, moderate and difficult.

Table 8. Distribution of the number of respondents based on ease of obtaining health services

Indicator Welfare	Criteria	Scale	Total Respondents (people)	Percentage(%)
Easy access to health services	Easy (score 17-21)	3	54	90,0
	Simply (score 12-16)	2	6	10,0
	Difficult (score 7-11)	1	-	-
Total			60	100

Source: Primary data processed, 2023.

The results showed that the majority of respondents had found it easy to get health services with a total response of 54 people (90.0%) while the remaining 6 people (10.0%) had sufficient criteria. The description of the ease of obtaining health services in general is as follows; close hospital

distance as many as 54 people (90%), close polyclinic distance as many as 48 people (80%), affordable medical fees as many as 49 people (81.7%), handling of medicines or availability of pharmacies with good categories as many as 49 people (81.7%).

Furthermore, it is easy to get contraceptives as many as 48 people (80%), easy to get family planning consultation facilities as many as 44 people (73.3%) and affordable medicine costs as many as 52 people (86.7%).

Ease of Enrolling Children in Education Levels

Education has become the main need after the fulfillment of health. Simanjuntak (2001) explains that the level of performance and productivity of a person can be determined by the level of education obtained. The higher the level of

education, the greater the opportunity for high productivity and performance. Nowadays, every family must have realized the important role of education in the family.

The indicator of ease of enrolling children in education or ease of access to formal education for children in the family is divided into three criteria, namely the cost of education, the distance from home to school, and the school admission process which is summarized into three assessment criteria, namely easy, moderate and difficult.

Table 9: Distribution of the number of respondents based on the ease of enrolling children in education

Indicator Welfare	Criteria	Scale	Total Respondents (people)	Percentage(%)
Ease of enrolling children in education	Easy (score 9-12)	3	42	70,0
	Simply (score 6-8)	2	17	28,3
	Difficult (scores 3-5)	1	1	1,7
Total			60	100

Source: Primary data processed, 2023.

The results showed that the majority of respondents had found it easy to access or enroll their children in education with a total response of 42 people (70.0%), while the criteria were sufficient as many as 17 people (28.3%) and 1 person (1.7%) stated that it was difficult. The description of the ease of accessing education for children in general is as follows; 56 people (93.3%) stated that school fees were cheap, 54 people (90%) stated that the distance from home to school was relatively close, and 54 people (90.0%) stated that the process of sending children to school was easy.

Ease of Transportation Facilities

The location of this study is a coastal area, where the dominant community earns a living as fishermen and traders. In addition to using water transportation, access to land transportation services in daily life is also important.

The indicator of ease of obtaining access or transportation facilities is divided into three indicators, namely the cost or cost of transportation to the house, proper vehicle facilities and vehicle ownership status. The three indicators are summarized into three assessment criteria, namely easy, sufficient and difficult.

Table 10. Distribution of the number of respondents based on the ease of obtaining transportation facilities

Indicator Welfare	Criteria	Scale	Total Respondents(people)	Percentage(%)
Ease of getting transportation facilities	Easy (score 9-12)	3	40	66,7
	Simply (score 6-8)	2	20	33,3
	Difficult (scores 3-5)	1	-	-
Total			60	100

Source: Primary data processed, 2023.

The results showed that the majority of respondents had found it easy to get transportation facilities with a total response of 40 people (66.7%), while the criteria were sufficient as many as 20 people (33.3%). The description of the ease of accessing transportation facilities in general is as follows; stating the cost or cost of transportation to the house is affordable as many as 56 people (93.3%), the vehicle facilities used are feasible as many as 54 people (90.0%) and the vehicle ownership status states that it is privately owned as many as 48 people (80.0%).

Classification of Household Welfare Levels of Communities Surrounding PPI Tanjung Limau with BPS Indicators Measurement of welfare levels refers to 8 BPS criteria in 2016 adjusted based on household income, household expenditure, living conditions, living facilities, health of household members, ease of obtaining health services, ease of

entering children into education, and ease of obtaining transportation facilities. This is in line with Halomoan et al (2024) that development must be felt by all levels of society for welfare.

The classification of welfare levels is divided into three levels: high, medium and low. These three classifications are calculated based on the range score, which is obtained from the difference between the highest value of the eight indicators (24) and the lowest value of the eight indicators (8), then the difference is divided by the desired number of classes (3) to obtain a value of 5.3 as the range score. Based on this range score, the determination of the welfare level is grouped into three sections, namely: 1. scores between 18.7-24.0 (high welfare level); 2. scores between 13.4-18.6 (medium welfare level); 3. scores between 8.0-13.3 (low welfare level).

Table 11. Classification of the welfare level of the community around Tanjung Limau PPI

No.	Criteria	Scale	Number of Respondents (people)	Percentage(%)
1	High	18,7 - 24,0	58	95,0
2	Medium	13,4 - 18,6	2	5,0
3	Low	8,0 - 13,3	-	-
Total			10	100

Source: Primary data processed, 2023.

The table above shows that the majority of respondents are in the classification of welfare levels in the high category with 58 respondents or 95.0%, with an average scale obtained of 22. Furthermore, there are 2 people or 5.0% who are at a moderate level of welfare. In contrast to research conducted by Hernawan, et al (2023), which states that the welfare level of the fish farming community in Embalut Village is mostly in the medium category with a total of 55.5% with an average score obtained of 19. The difference in welfare levels is influenced by the size of the community's income and expenses.

4. CONCLUSION

Based on the standards of the Statistics Center in 2016, an average total score of 22 was obtained with 58 respondents or 95.5%. This means that the welfare level of the majority of people around the Tanjung Limau Fish Landing Base is in the high criteria or the household life of the community is prosperous.

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