# Fishermen Welfare Level in Torosiaje Laut Village

1.2Wisna D. Onte, <sup>2</sup> Azis Salam <sup>2</sup> Z.C Fachrussyah

<sup>1</sup>wis\_msdp2009@mahasiswa.ung.ac.id <sup>2</sup>Department of Aquatic Resources Management, Faculty of Fishery and Marine Science, Universitas Negeri Gorontalo

#### Abstract

The purpose of this study aims to determine the level of welfare of the fishermen of Torosiaje Laut Village, Popayato District, Pohuwato Regency, including calculating the household income of fishermen and fishermen household expenses. The study was conducted in May to June 2016. The research method used was descriptive method. The average per capita income of fishermen per year is IDR. 6.180,000 and per capita expenditure per year is IDR. 1,870,200 and the conditions of residence and facilities are complete, health services, education and transportation are easily accessible by fishing communities, thus it can be said that this fisherman household in Desa Torosiaje Laut can be said to be prosperous.

# Keywords: welfare; fishermen; family.

#### Introduction

Based on the law of the Republic of Indonesia No 11 of 2009 concerning Social Welfare Chapter 1 Paragraph 1: Welfare is a condition of fulfilling the material, social and social needs of citizens so that they can live properly and be able to develop themselves, so that they can carry out their social functions. According to Kusnadi (2002) the poverty trap that afflicts the lives of fishermen is caused by complex factors. These factors are not only related to fish season fluctuations, limited human resources, capital and access, exploitative fish trade networks for fishermen as producers, but are also caused by the negative impacts of fisheries modernization that encourage excessive depletion of marine resources.

The results of studies on the level of living welfare among fishing communities, have shown that poverty and socio-economic inequality or income inequality are serious problems faced by fishermen and are not easy to overcome (Satria, 2002). As is the case with the fishing communities in the village of Torosiaje, the nature of the sea is that the imbalance of household income is not in accordance with the number of family members. Desa Torosiaje laut is one of the villages that has quite diverse and potential natural resources such as the fisheries and agriculture sub-sectors. In addition, the availability of potential land for the development of fisheries business such as fishing, aquaculture, post-harvest

and marketing is expected to support increased production from the fisheries sub-sector so that it will indirectly increase welfare as reflected in annual fishery household income. The development of fisheries business potentials provides opportunities for the utilization of fish resources for fishermen, which can play a role in increasing the income and welfare of the surrounding fishing communities. Based on the description above, then this matter is so interesting for the writer to study.

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# Research Methodology

The location of the research was the Village of Torosiaje Laut, Popayato District, Pohuwato Regency, located in Gorontalo Province. Map of the research location can be seen in Figure 1.

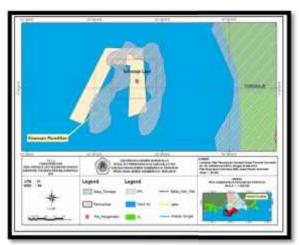


Figure 1 Research site

This study uses a survey method that is a study that measures the symptoms that exist without investigating why these symptoms exist (Mudlofar, 2012). Samples were taken from one population and used a questionnaire as a primary data collection tool. The population in this study was 370 villagers (Source, Torosiaje Laut Village Profile, 2016). Samples taken by 20 fishermen as respondents. Sampling technique according to Soepono (1997), was carried out using a purposive sampling method, namely research based on the consideration of fishermen respondents who were willing to be interviewed and were able to answer the researcher's questions openly.

The measurement of the level of welfare in this study is based on Sajogyo's (1977) poverty criteria. The concept of poverty line is divided into several categories as follows:

- 1. Not poor, i.e. if per capita income per year is higher than the exchange rate of 320 kg of rice for rural areas.
- Poor (the threshold value of food sufficiency),
  i.e. if the per capita income per year is lower
  than the exchange rate of 240-320 kg of rice for
  rural areas.
- 3. Very poor (not enough food), i.e. if the per capita income per year is lower than the exchange rate of 180-240 kg of rice for rural areas
- 4. The poorest, if the per capita income per year is lower than the exchange rate of 180 kg of rice for the countryside.

Household income is the sum of all results obtained 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.

Family expenses are costs incurred for the necessities of life in a period of one year, which consists of expenses for food and non-food needs. Spending is done by calculating daily, weekly and monthly needs.

# Results and Discussion

The total area of the village of Torosiaje is 200 Ha (2 KM²) not counting the vast expanse of sea which is currently still in the mapping of the area by the Provincial BPJS. Location of settlements on water is 20 Ha, aquaculture location is 25 Ha, plantation / agriculture location is 25 Ha and Mangrove forest location is 130 Ha. with a population of up to 2015 is 1405 people, men = 676, women 729, and 392 families with a total of 2 hamlets. The majority of Torosiaje villagers are Muslim (100%), and Torosiaje Village consists of 12 tribes namely the Bajo, Bugis, Gorontalo, Tomini, Banjar, Kaili tribes. Chinese, Sangihe, Minahasa, Toraja, Makassar, and Bone.

The main livelihoods of the people of Desa Torosiaje Laut are very diverse. Livelihoods are dominated by fishermen as much as 61.35% or 370 people out of 603 adult men. The next most livelihoods were breeders, farmers including farm laborers and traders respectively 75 people (12.43%), 49 people (8.17%) and 46 people (7.7%). Other livelihoods include civil servants / military / police, private employees, teachers, honorariums, traveling traders, cake makers, repair shops, boat craftsmen and artisans.

Income depends on the volume of catch, type and condition of fish caught and the price of fish in the market (Asriyanto, 2014). The income of the fishing community of the village of sea Torosiaje, seen from the background, the majority of the population has a fishing job.

The household income of the sea Torosiaje village fishermen from fishery and non-fisheries businesses can be seen in Table 1.

Table 1 Average annual household income of Torosiaje Laut fishermen.

Rata-rata pendapatan (IDR/Perbulan)				
	Fishery (IDR)	Non Fishery (IDR)	Monthly income (IDR)	Annual income (IDR)
Total	1.077.500	412.500	1.490.000	17.880.000

Source: Primary data 2016.

The income of the fishing community in of Torosiaje Laut Village is obtained from fisheries and non-fisheries businesses. Fishery business that is derived from the sale of catches. According to Asriyanto (2014) the small income of fishermen is influenced by the experience of fishermen and the length of time one spent at sea. While the income of non-fishermen are from cake makers and street vendors.

In the concept of poverty, Mahardika (2008) illustrates the relationship between income levels and poverty levels, the higher the level of income of fishermen, the lower the level of poverty, and vice versa the lower the income of fishermen, the higher the level of poverty.

Table 2 Percapita income of fisherman household.

	Income per capi	ta	
	Annual income (IDR)	Average Family members (people)	Percapita (IDR)
Total	17.880.000	3	6.180.000

It can be seen in Table 2 that the household respondents of Torosiaje Laut Village fishermen are included in the non-poor criteria, the average per capita income is IDR 6,180,000 with an average number of family members of three people.

Marine Torosiaje village fishermen households do not face the problem of poverty with resignation, but rather do a variety of strategies to overcome poverty. The strategies that can be carried out by fishermen households are trying to rely on the role of family members (wife and children), diversification of fishing gear, utilization of productive organizations, and social networks. With the implementation of these strategies, fishermen can survive in the midst of difficult conditions or at least fishermen do not fall deeper into the abyss of poverty.

The expenditure of the fishing community of Torosiaje Laut Village is grouped into two, consisting of expenditures for food and non-food. Food expenditure is an estimate of expenditure used to meet family food needs for one year. While non-food expenditure is the estimated expenditure used to meet needs other than to buy food for one year.

Tabel 3 Average expenditure of household.

Average expenditur (IDR/Per month)				
	Food (IDR)	Non Food (IDR)	Average expenditure (IDR)	Annual Expenditure Percapita (IDR)
Total	87.200	59.250	446.450	5.357.400

Source: Primary data 2016

The average fisherman respondent's household food expenditure was IDR 5,357,400 (Table 3). Expenditures for food needs are greater than nonfood needs. This is due to the high price of basic needs, the number of family members and the attitude of respondents in general who prioritizes food needs compared to other needs. Based on the indication of food expenditure is greater than nonfood expenditure. In line with Hendrik (2011) which states that, expenditure is the amount of money spent to meet basic needs (food, clothing and shelter) in a certain period of time. Household expenditure is influenced by the number of household members, consumption patterns, and other needs.

According to interviews with fishermen respondents it is known that actually family expenses are usually adjusted for income. If income is declining, fishermen will reduce expenses to meet their daily needs. It can be said that daily expenses are flexible in accordance with the income earned by fishermen.

Table 4 The average expenditure per capita of fishing households.

Average percapita expenditure				
	Expenditure (IDR/year)	Average family members (people)	Expenditure percapita (IDR /year)	3.1
Total	5.357.400	3	1.785.800	

Source: Primary data 2016.

It can be seen in Table 4 that the household respondents of the Torosiaje Laut Village fishermen are included in the non-poor criteria, with an average per capita expenditure of IDR 1,785,800 with an average number of family members of three people. Spending per capita per year is obtained by dividing total household expenditure by the number of household members.

Consumption expenditure is a number of costs incurred by households to buy food needs. Household expenditure consists of all household expenses based on needs in a year. Per capita expenditure per year is obtained by dividing total household expenditure by the number of household members (Prayuda, 2014).

According to Mugni (2006), there are many causes of poverty in fishing communities, such as lack of access to capital sources, access to technology, access to markets and low community participation in natural resource management. In addition, it can also be caused by social factors such as high population growth, low levels of education, and low levels of health as well as other reasons such as lack of public infrastructure in coastal areas, weak spatial planning which results in overlapping several sectors in one region pollution and environmental damage. the factors that cause the deterioration of the welfare of fishermen are very complex, namely natural factors and non-natural factors.

Natural factors related to fish season fluctuations. If there is a fish season or fish potential is relatively good, income can be guaranteed, while during the off-season fishers will face economic difficulties to meet their daily needs.

Non-natural factors, namely factors related to inequality in profit sharing institutions, lack of social

security for boat crews, and fish marketing networks that are prone to price fluctuations, limited housing and clothing are used as secondary needs. The need for food is a major prerequisite so that fishing households can survive.

Difference in per capita income and expenditure per year

Difference value is the residual income or lack of income from required expenses (Mahardikha, 2008). If total income is greater than total expenditure, then it produces a positive difference value, so that the household still has residual income which is a deposit. The opposite is true if total expenditure is greater than total income, resulting in a negative value, meaning that there is a lack of funds to cover expenses.

Table 5 Difference in value from the average total income and expenditure per capita per year.

Average total income (IDR/year)	Average total expenditure (IDR/year)	Difference (IDR/year)
6.180.000	1.870.000	4.310.000

Source: Primary data 2016

It can be seen in Table 5 that all respondents of Torosiaje Laut Village fishermen households have a positive difference of IDR 4,310,000 per capita per year. This means that income is greater than expenditure.

### Welfare level indicator

The fishing communities of the village of Torosiaje Laut in general have houses made of wood and roofed with zinc. There are electricity sources from PLN, only a few households use generators for lighting, there are water sources. Likewise in the case of education, the majority of household heads did not graduate and complete primary school as much as 55.55% or 20 people. For household assets owned can be in the form of boats, canoes, bicycles, radios, cellphones, and others.

On the concept of poverty Sajogyo (1977) provides an overview of the relationship between income levels and poverty levels. Indicators of

fishermen poverty based on per capita income of fishermen households in Torosiaje Laut Village can be seen in Table 6.

Table 6 Poverty indicator based on percapita income of household.

	Fishermen		
Criteria	Number of		
Cilicila	fishermen	Persentage	
	(people)		
Not Poor	20	100 (%)	
Poor	-	-	
Very Poor	-	-	
Poorest	-	-	
Total	20	100 (%)	

Source: Primary data 2016

### Conclusion and Suggestion

The average per capita income of fishermen in Torosiaje Laut Village is IDR 6,180,000, which according to the criteria of Sajogyo (1977) is prosperous. This is reinforced by the difference in average per capita income and per capita expenditure of IDR 4,310,000 with complete housing and social facilities.

Further research is needed related to the welfare level of the Fishermen of the Torosiaje Laut Village. It is necessary to improve poverty indicators and determine regional poverty indicators that are in accordance with the social, economic and cultural conditions of the people in the region.

The need for new types of fishing gear that are more profitable (large scale business) and used in larger groups.

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