



## The Perception of Fisherman Communities on the Effectivity of Boat Assistance

Surya Agung Malik<sup>1</sup> Lis M. Yapanto<sup>2</sup>, Alfi Sahri R Baruadi<sup>3</sup>

<sup>1,2,3</sup> Department of Marine Science, Postgraduate, UNG

**Abstract:** This study aims to determine the perceptions of fishing communities about how effective the boat assistance provided by the government is in increasing the welfare of fishermen in North Gorontalo Regency. The approach used in this study is a qualitative approach with research respondents being fishing communities in North Gorontalo District, Gorontalo Province. Data collection techniques using observation, interviews, documentation and related agency data. Data were analyzed by descriptive qualitative supported by primary and secondary data. The results of the study stated that the perceptions of the fishing community regarding the distribution of boat assistance from the regional or even provincial governments were sufficient to help fishermen improve their welfare. This can be seen from the income.

**Keywords:** Perception, Fisherman Community, Boat Assistance, Welfare.

### 1. INTRODUCTION

Indonesia is a country with abundant marine biological resources and has an important social economy for development, namely in the form of food sources, employment and foreign exchange earners. Indonesia's development in the fisheries sector has a very important meaning and plays a strategic role in realizing a more advanced, efficient and resilient fisheries sector. This is done in order to increase the income and standard of living of coastal communities, expand employment and business opportunities and expand markets, both the domestic market and foreign markets (Dahuri, R, 2001).

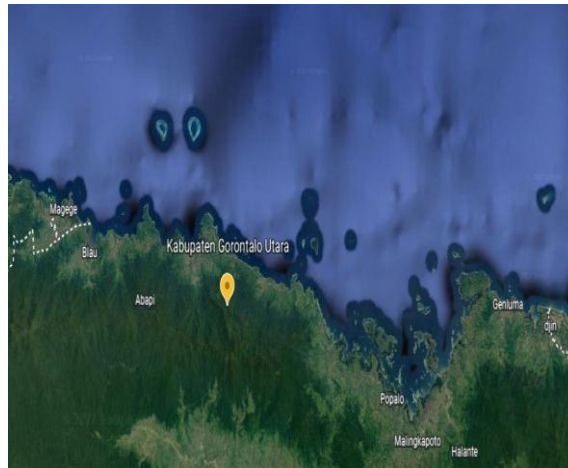
Some of the existing coastal areas and marine resources face serious environmental problems and some have not been managed optimally for the welfare of coastal communities. Therefore, to deal with development issues in coastal areas, a conceptual, comprehensive, and visionary rationale is needed so that efforts to develop the welfare of coastal communities in a sustainable manner can be achieved properly. The problem of poverty that afflicts coastal communities and fishermen is caused by complex factors and cannot be resolved by a partial development approach (Kusnadi, 2013)

Poverty is a major problem whose handling cannot be postponed and is a top priority in the implementation of social welfare development. Poverty alleviation in coastal areas and fisheries centers is one of the focuses in the implementation of marine and fisheries development. The problem of coastal communities is the lack of access to capital and market institutions. The function of capital in running a business is to increase the production capacity of the business. People who carry out business activities need capital to buy increasingly modern tools or equipment. For fishing business actors, purchasing modern equipment can cause problems because some are unable to fund their capital-intensive businesses with their own funds. (Suwardjono, 2005) stated that the income of a business depends on the capital owned, if the capital is large, the production results are high so that the expected income is also high. And vice versa, if the capital is small, the production results are low so that the income earned is low.

According to Windasai (2021), regional governments are given the flexibility to regulate and manage their own government affairs according to the principle of autonomy and assistance tasks are directed at accelerating the realization of community welfare through improving services, empowering and increasing regional competitiveness by taking into account the principles of democracy, equity distribution, privileges and specificity of a region in the system of the Unitary State of the Republic of Indonesia. The direction of national development in essence has the goal of developing the whole human being, this implies that physical development through the provision of facilities and infrastructure must be in line with the mental development of human psychology.

## 2. RESEARCH METHODS

The research was carried out in the coastal area of North Gorontalo Regency with an allocation of time from September - October 2022 in North Gorontalo Regency, Gorontalo Province



The population is the entire research object, both consisting of real objects, abstracts, events or symptoms which are data sources that have certain and the same characteristics (Sugiyono, 2015). The population in this study is all fishing communities receiving assistance in North Gorontalo Regency.

The sample is part of the number and characteristics possessed by the population (Sugiyono, 2015). In carrying out the sampling technique, the researcher used a purposive sampling technique, namely a sampling technique that was not carried out randomly based on certain considerations/criteria. The criteria in question are fishing communities that receive boat assistance in North Gorontalo Regency. The number of samples in this study was 87 fishermen receiving boat assistance.

to prove the research hypothesis that there were differences in socio-economic conditions before and after receiving boat assistance from the Gorontalo Provincial government, descriptive statistical analysis was used using the Wilcoxon Signed Rank Test (Wilcoxon Signed Rank Test) using the SPSS 18 program. The Wilcoxon Signed – Rank test is a test nonparametric based on paired samples where in this test the data must be sorted first and then processed further (Djarwanto, 2003).

The statistical formula for the Wilcoxon Signed Rank Test (Djarwanto, 2003) used is as follows:

$$Z = \frac{T - \frac{n(n+1)}{4}}{\sqrt{\frac{n(n+1)(2n+1)}{24}}}$$

Decision making on the Wilcoxon test can be obtained using the Z test. The basis for decision making is the same as the z test, namely: (1) If  $Z_{count} < Z_{table}$  then  $H_0$  is accepted, this means that there is no difference in socio-economic conditions between before and after the development of the Tamperan Fishing Port. (2) If  $Z_{count} > Z_{table}$  then  $H_1$  is accepted.

### 3. RESULTS AND DISCUSSION

#### Impact of Aid Disbursement

By using the Wilcoxon signed ranks test statistic, because the sample in this study came from the same population and the same sample of observations and the data was normally distributed. The hypothesis formulated in testing income, catch per trip and number of trips per week to fishermen before and after the distribution of boat aid in North Gorontalo is as follows:]

#### 1. Fishermen's Income

**Table 1. Wilcoxon Signed Ranks Test Income**

**Wilcoxon Signed Ranks Test**

		Ranks		
		N	Mean Rank	Sum of Ranks
Sesudah - Sebelum	Negative Ranks	0 <sup>a</sup>	,00	,00
	Positive Ranks	56 <sup>b</sup>	28,50	1596,00
	Ties	31 <sup>c</sup>		
	Total	87		

a. Sesudah < Sebelum  
 b. Sesudah > Sebelum  
 c. Sesudah = Sebelum

Based on the statistical test results above, we can see that the negative ranks or the difference (negative) turns out that the income before and after receiving the boat assistance is 0, both in terms of N, Mean Rank, and Sum Rank. A value of 0 indicates that there is no decrease (income) of fishermen who receive assistance before and after receiving boat assistance

As for positive Ranks or the difference (positive) between income before and after receiving boat assistance, there is a positive number 56 data (N), which means that 56 fishermen respondents experienced an increase in income after receiving boat assistance. The mean rank or average increase is 28.50, while the number of positive ratings is 1596.00.

ties is the equal value of income before and after the respondent receives boat assistance. We can see in the table above that the ties value is 31, so it can be said there are 31 fisherman respondents who have the same amount of income before and after receiving the boat assistance.

Pendapatan					
	Kategori	Frequency	Percent	Valid Percent	Cumulative Percent
Sebelum	< 1 Juta	10	11,5	11,5	11,5
	1 Juta - 2 Juta	34	39,1	39,1	50,6
	2 Juta - 3 Juta	30	34,5	34,5	85,1
	3 juta - 5 juta	12	13,8	13,8	98,9
	> 5 juta	1	1,1	1,1	100
	<b>Total</b>	<b>87</b>	<b>100</b>	<b>100</b>	
Sesudah	< 1 Juta	2	2,3	2,3	2,3
	1 Juta - 2 Juta	28	32,2	32,2	34,5
	2 Juta - 3 Juta	23	26,4	26,4	60,9
	3 Juta - 5 Juta	32	36,8	36,8	97,7
	> 5 Juta	2	2,3	2,3	100
	<b>Total</b>	<b>87</b>	<b>100</b>	<b>100</b>	

Based on the output of "Test Statistics", it is known that Asymp. Sig. (2-tailed) is worth 0.000. because the value of 0.000 is less than <0.05, it can be concluded that the "Hypothesis is accepted". This means that there is a difference between the income of fishermen before and after receiving boat assistance distributed by the government and it can be concluded that there is a positive

influence from the distribution of boat assistance distributed by the government to fishermen in North Gorontalo.

Meanwhile, to strengthen the comparison in the income category of fishermen receiving assistance in North Gorontalo, the data is displayed in the following table:

**Table 3. Comparison of income before and after.**

Based on the table above, it can be seen that the fishermen's income before being given assistance was

**Test Statistics<sup>a</sup>**

	Sesudah - Sebelum
Z	-6,543 <sup>b</sup>
Asymp. Sig. (2-tailed)	,000

a. Wilcoxon Signed Ranks Test  
 b. Based on negative ranks.

dominated by income ranging from Rp. 1,000,00 - Rp. 2. 000,000 as many as 34 people with a percentage value of 39.1%. Then after being given assistance by the Gorontalo Provincial government, the income has increased where the dominant one is Rp. 3. 000.000 - Rp. 5,000,000 as many as 32 people or 36.8%. So that the distribution of boat assistance in North Gorontalo Regency has a significant positive impact on increasing fishermen's income.

**2. Fisherman's catch**

**Results.** The catch of fishermen receiving assistance before and after receiving boat assistance can be seen in the following table.

**Table 4. Ranks of catches**

**Ranks**

		N	Mean Rank	Sum of Ranks
Hasil Tngkapan Sesudah - Hasil Tangkapan Sebelum	Negative Ranks	0 <sup>a</sup>	,00	,00
	Positive Ranks	51 <sup>b</sup>	26,00	1326,00
	Ties	36 <sup>c</sup>		
	Total	87		

a. Hasil Tngkapan Sesudah < Hasil Tangkapan Sebelum  
 b. Hasil Tngkapan Sesudah > Hasil Tangkapan Sebelum  
 c. Hasil Tngkapan Sesudah = Hasil Tangkapan Sebelum

Based on the statistical test results above, we can see that the negative ranks or difference (negative) means that the catch of fishermen in North Gorontalo before and after receiving boat assistance is 0, both in the value of N, Mean Rank, and Sum Rank. A value of 0 indicates that there is no decrease (income) of fishermen who receive assistance before and after receiving boat assistance

As for positive Ranks or the difference (positive) between income before and after receiving boat assistance, there is a positive data number 51 (N), which means that 51 fishermen respondents experienced an increase in income after receiving boat assistance. The mean rank or average increase is 26.00 while the number of positive ratings is 1326.00.

tiesis the value of the similarity of the catch after and before the respondent received assistance. We can see in the table above the teas value is 36, so that it can be said that there were 36 fishermen respondents who had the same amount of income before and after receiving boat assistance.

**Table 5. Test Statistics of Catch Results**

**Test Statistics<sup>a</sup>**

Hasil  
Tangkapan  
Sesudah -  
Hasil  
Tangkapan  
Sebelum

Z	-6,288 <sup>b</sup>
Asymp. Sig. (2-tailed)	,000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Based on the output of "Test Statistics", it is known that Asymp. Sig. (2-tailed) is worth 0.000. because the value of 0.000 is less than  $<0.05$ , it can be concluded that the "Hypothesis is accepted". This means that there are differences between the catches of fishermen

Catch					
	Category	frequency	percent	Valid Percent	Cumulative Percent
	< 20 Kg	43	49,4	49,4	49,4
	20 Kgs - 40 Kgs	34	39,1	39,1	88.5
<b>Before</b>	40 Kg - 60 Kg	9	10,3	10,3	98.9
	60 Kg - 80 Kg	1	1,1	1,1	100
	Total	87	100	100	
	< 20 Kg	36	41,4	41,4	41,4
	20 Kgs - 40 Kgs	33	37,9	37,9	79.3
<b>After</b>	40 Kg - 60 Kg	17	19.5	19.5	98.9
	60 Kg - 80 Kg	1	1,1	1,1	100
	Total	87	100	100	

before and after receiving boat assistance distributed by the government and it can be concluded that there is a positive influence from the distribution of boat assistance distributed by the government to fishermen in North Gorontalo in terms of fishermen's catches.

Meanwhile, to strengthen the comparison in the catch categories of fishermen receiving assistance in North Gorontalo, the data is displayed in the following table:

Table 6. Comparison of Catches

Based on the table above it can be seen that the catch per trip for the category < 20 Kg was 43 fishermen with a percentage value of 49.4% then after the distribution of boat assistance by the Gorontalo Provincial Government the number of catches of fishermen < 20 Kg decreased to 36 fishermen with a percentage value of 41,4%. While the amount

catches that increased significantly were in the 40 Kg - 60 Kg category with the number of fishermen before receiving boat assistance as many as 9 people with a percentage value of 10.3% increasing to 17 people with a total percentage of 19.5% after receiving assistance. So that the distribution of aid for fishing boats in North Gorontalo has a positive impact on increasing the catch of fishermen.

### 3. Trip Arrest

The arrest of fishermen receiving assistance before and after receiving boat assistance can be seen in the following table.



**Table 7. Wilcoxon Signed Ranks Test trip fishing**

**Wilcoxon Signed Ranks Test**

		Ranks		
		N	Mean Rank	Sum of Ranks
Trip Sesudah - Trip Sebelum	Negative Ranks	0 <sup>a</sup>	,00	,00
	Positive Ranks	53 <sup>b</sup>	27,00	1431,00
	Ties	34 <sup>c</sup>		
	Total	87		

- a. Trip Sesudah < Trip Sebelum
- b. Trip Sesudah > Trip Sebelum
- c. Trip Sesudah = Trip Sebelum

Based on the statistical test results above, we can see that the negative ranks or difference (negative) means that the catch of fishermen in North Gorontalo before and after receiving boat assistance is 0, both in the value of N, Mean Rank, and Sum Rank. The value of .00 indicates that there is no decrease (income) of fishermen who receive assistance before and after receiving boat assistance

As for positive Ranks or the difference (positive) between income before and after receiving boat assistance, there is a positive data number 53 (N), which means that 53 fishermen respondents experienced an increase in income after receiving boat assistance. The mean rank or average increase is 27.00 while the number of positive ratings is 1431.00.

ties is the value of the similarity of the catch after and before the respondent received assistance. We can see in the table above the ties value is 34, so that it can be said that there were 34 fishermen respondents who had the same amount of income before and after receiving the boat assistance.

**Table 8. Statistical test of fishing trips**

**Test Statistics<sup>a</sup>**

	Trip Sesudah - Trip Sebelum
Z	-6,356 <sup>b</sup>
Asymp. Sig. (2-tailed)	,000

- a. Wilcoxon Signed Ranks Test
- b. Based on negative ranks.

Based on the output of "Test Statistics", it is known that Asymp. Sig. (2-tailed) is worth 0.000. because the value of 0.000 is less than <0.05, it can be concluded that the "Hypothesis is accepted". This means that there is a difference between the number of fishermen's fishing trips before and after receiving boat assistance distributed by the government and it can be concluded that there is a positive influence from the distribution of boat assistance distributed by the government to fishermen in North Gorontalo in terms of fishermen's catches.

Meanwhile, to strengthen the comparison in the catch categories of fishermen receiving assistance in North Gorontalo, the data is displayed in the following table:

**Table 9. Results of the comparison of the number of trips per week**

Number of Trips					
	Category	frequency	percent	Valid Percent	Cumulative Percent
	3 Trips	6	6,9	6,9	6,9
<b>Before</b>	4 Trips	8	9,2	9,2	16,1
	> 5 Trips	73	83.9	83.9	100
	Total	87	100	100	
	3 Trips	4	4,6	4,6	4,6
<b>After</b>	4 Trips	1	1,1	1,1	5,7
	> 5 Trips	82	94.3	94.3	100
	Total	87	100	100	

Based on the table above it can be seen that in the category > 5 fishing trips there were 73 fisherman respondents who carried out fishing activities for one week with a total percentage of 83.9%, the percentage increased to 94.3% after fisherman respondents received boat assistance distributed by the Provincial Government of Gorontalo. So it can be concluded that the distribution of boat assistance in North Gorontalo had a positive but not significant impact on increasing the number of trips per week by fishermen.

#### 4. Conclusion

Based on the results of a comparison of income, catches and the number of fishing trips, there was a significant increase before and after the distribution of boat assistance. So it can be said that the distribution of assistance provided by the government is quite effective and beneficial for improving the welfare of fishing communities in North Gorontalo Regency.

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