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North Gorontalo Fisheries and Fisherman Welfare Post Implementation of The IUU Fishing Policy

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Abstract: The location of this research was conducted in North Gorontalo Regency, Gorontalo Province. The target of this research is the people who work as fishermen in Dudepo District. This research will be conducted in May 2023 with the criteria for choosing a research location, namely the potential for IUU fishing and its policies. The data analysis technique used is descriptive analysis. Descriptive analysis is used to see the amount of fish caught by fishermen in 3 (three) sub-districts and also cases of IUU fishing in North Gorontalo Regency. Analisys method used Measurement of family welfare conducted by the Central Bureau of Statistics (BPS, 2013). As for the indicators used to determine the level of welfare, namely by using the indicators of a prosperous family. North Gorontalo Regency has indications that violations have occurred, namely the practice of fish bombing and terut has increased every year. It was recorded that 16 times the practice of fishing bombing occurred from 2020 – 2022. And 2 times the practice of catching fish using trawlers, as well as 1 practice of catching using anesthetic and 1 practice of catching protected animals (turtles). Based on the results of the analysis of the level of welfare using BPS indicators, it was concluded that fishing communities in the Districts of Anggrek, Ponelo Kepulauan and Monano, North Gorontalo Regency, were included in the category of moderate welfare levels with a score of 2.40.

Key words: illegal Fishing, fisheries, fishermen welfare, police implementation

INTRODUCTION

The Indonesian fishery sector has enormous potential. The potential of fishery resources, including capture fisheries, marine aquaculture, public waters and others. Fisheries also provide significant employment opportunities. The fisheries sector is able to absorb a direct workforce of 5.35 million people consisting of 2.23 million sea fishermen, 0.47 million public water fishermen and 2.65 million fish cultivators. Meanwhile, there are quite a lot of people who depend on the fisheries sector from upstream (catching and aquaculture) to downstream (industry, trade, services, etc.), namely 10.7 million (Pursetyo et al, 2015).

North Gorontalo Regency-Gorontalo Province is one area that has very abundant fishery potential. Gorontalo Regency has a large and very potential coastal area. So that it becomes a leading sector in improving the community's economy. This potential continues to be developed by the government in order to increase the rate of regional economic growth, especially for coastal fishermen (North Gorontalo in Figures, 2012).

Coastal communities are people who live, grow and develop in coastal areas by managing the natural resources available in their environment to meet their daily needs. Fishermen as part of the coastal community are a group of people whose lives depend directly on marine products. They



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generally live on the beach, a residential area close to the location of activities for their livelihoods (Alpharesy, 2012). Fishermen are people who actively carry out fishing activities, both directly (such as net spreaders and users) and indirectly (such as sailboat helmsmen, motorized fishing vessel captains, ship engine experts, fishing vessel cooks). Yapanto, 2016).

The development of the fisheries and marine sector in North Gorontalo Regency needs to be managed properly so that it can be sustainable so that it can support an increase in the traditional economy to become a professional business so that it can not only increase the income and welfare of the fishermen themselves but be able to contribute to economic growth in Gorontalo Regency North. But the marine fisheries sector also has complex problems including symptoms of overfishing, illegal, unregulated and unreported fishing practices (Ismail, 2018).

Illegal fishing can be interpreted as a fishing activity carried out by fishermen who are irresponsible and contrary to the ethical code of fishing or activities that violate laws regarding fisheries and marine affairs, and can damage marine ecosystems (Sartono et al., 2019). Illegal fishing is one of the obstacles in implementing sustainable fisheries development goals in North Gorontalo Regency. Based on the results of reports from the Gorontalo POLDA there have been 13 cases of illegal fishing since 2012-2015 in the Gorontalo Sea Waters Area (Ramadhan, 2016). Based on mass media coverage (online) for 2022 and field surveys and interviews with fishing communities, results were obtained where the public often saw illegal fishing practices in the North Gorontalo Sea waters.

Global-Illegal, Unreported, and Unregulated (IUU) Fishing is a global crime, not only fishing crimes but involving humans, trade in slavery, other animals and narcotics, other smuggling also involves border issues with neighboring countries, especially regarding traditional fishermen who violate across borders to other countries (KKP, 2015).

The threat of IUU fishing is triggered by the condition of the global fisheries sector, where several countries experience a shortage of fish stocks, a lack of fishing fleets due to restrictions on granting fishing licenses, while demand for fishery products increases. IUU fishing activities not only endanger marine resources, but also the socio-economic life of traditional fishermen, who still dominate the Indonesian fishing industry. Comprehensive policies are needed together with a multidimensional approach in efforts to eradicate IUU fishing in Indonesian marine waters (Ismail, 2018).

Efforts to prevent illegal fishing activities have been carried out by POLDA Gorontalo by building monitoring posts against illegal fishing, collaborating with agencies related to illegal fishing, and repressive efforts, namely by submitting all illegal fishing cases to trial (Ramadhan, 2016). The handling of illegal fishing cases has also been carried out by the government in Law Number 45 of 2009 concerning Amendments to Law Number 31 of 2004 concerning Fisheries. Apart from that, specifically for the North Gorontalo area, the government has voiced to the community to join together in efforts to prevent illegal fishing.

Research purposes

The objectives of the research to be carried out include the following.

Identifying IUU Fishing practices in North Gorontalo District.

Measuring the income of fishermen after the implementation of the IUU Fishing policy in North Gorontalo Regency.

Illegal Fishing according to the International Plan of Action (IPOA) which is defined as IUU-Fishing (Illegal, Unreported, Unregulated) Fishing is a fishing activity that is carried out illegally, activities that are not regulated by existing regulations, or activities that are not reported by the head of an institution or available fisheries management institutions. Illegal fishing is a term popularized by legal experts in Indonesia which later became a popular term in the mass media and is used as an interesting legal study for researchers and even activists. When viewed in terms of Illegal Fishing



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from its literal meaning "Illegal" which means illegal, prohibited or contrary to law. "Fishing" is fishing as a source of income or a place to catch fish (Muhamad, 2017).

Fish and fisheries are important for developing countries. Fish are raised, caught, sold, processed and consumed and at every step in this process there is added economic and social value to be seized by developing countries. Therefore, from a development perspective, how developing and developing countries interact in this sector. The development policy approach to fisheries carries significant potential in fighting poverty (Ismail, 2018).

Well-being is a general concept for anthropology, economics, psychology, sociology, and other social sciences. It is often associated with financial status, but well-being is broader than just economic or material well-being. It includes subjective elements that indicate how a condition is perceived by the participant, which differs from objective and independent assessments of the condition observed. In order to build indicators of well-being, we need to know first what is important to individuals and society (Smith & Clay, 2010). This can be measured objectively over time, but people also have the impression or perception that life is good or bad, getting better or worse, worsened. How people, households, occupational groups, and society perceive their well-being is important in determining how satisfied or happy they are.

RESEARCH METHODOLOGY

The location of this research was conducted in North Gorontalo Regency, Gorontalo Province. The target of this research is the people who work as fishermen in Dudepo District. This research will be conducted in May 2023 with the criteria for choosing a research location, namely the potential for IUU fishing and its policies.

The data analysis technique used is descriptive analysis. Descriptive analysis is used to see the amount of fish caught by fishermen in 3 (three) sub-districts and also cases of IUU fishing in North Gorontalo Regency.

Fishermen's perception data is processed using percentage calculations. The percentage calculation is intended to see a comparison of the size of the frequency of each alternative answer to the questionnaire. The percentage is obtained by comparing the number of frequency of answers and the number of samples associated with the number 100%, Arikunto (2001) as follows:

$$P = \frac{F}{N} \times 100\%$$

Information:

P= Answer Presentation

F= Answer Frequency

N = Number of Respondents 100% = Fixed Number

Measurement of family welfare conducted by the Central Bureau of Statistics (BPS, 2013). As for the indicators used to determine the level of welfare, namely by using the indicators of a prosperous family 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 5,000,00	0-2
		Rp 10,000,000) Low(<	Rр
		5,000,000)	1

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2	Expenditure	High(>Rp 5,000,000) Medium (Rp 1,000,000- Rp		
		5,000,000)		
		Low(<rp 1,000,000)<="" td=""><td>1</td></rp>	1	
3	Condition of residence	Permanent (11-15)	3	
		Semi permanent (6 -10)	2	
		Non-permanent (1-5)	1	
4	Residential facilities	Complete (28-38)	3	
		Enough (17-27)	2	
		Less (6-16)	1	
5	Health of family members	Good (<25%)	3	
		Enough (25%-50%)	2	
		Easy (>50%)	1	
6	convenience get servicehealth	Easy (16-20)	3	
		Enough (11-15)	2	
		Difficult (6-10)	1	
7	Ease of getting you into education	Easy (7-9)	3	
		Enough (5-6)	2	
		Difficult (3-4)	1	
8	convenience get facilitytransportation	Easy (7-9)	3	
		Enough (5-6)	2	
		Difficult (3-4)	1	

Source: Prosperous family indicators based on the Central Bureau of Statistics (2015).

Based on the results of the scoring of the welfare indicators above, tabulation is then carried out to find out the total score obtained, then determining the level of welfare. The criteria for determining the level of welfare in Table 1.

RESULTS AND DISCUSSION

North Gorontalo Regency is an administrative area of Gorontalo Province which was legalized through Law number 11 of 2007 concerning the Formation of North Gorontalo Regency. Geographically, more than 75% of the North Gorontalo Regency area is coastal with a coastline reaching 320 km2, as well as the longest coastline in Gorontalo Province facing the Pacific Ocean. Administratively, North Gorontalo Regency is bordered by the Sulawesi Sea to the north, Boalemo Regency to the south, Central Sulawesi Province to the west, and North Sulawesi Province to the east. Kwandang sub-district is one of the sub-districts in North Gorontalo district, Gorontalo province.

Identification of IUU Fishing Practices in North Gorontalo District

IUU Fishing is all activities practices of fishing activities that have a detrimental impact on the sustainability of fisheries as a whole. North Gorontalo Regency, Gorontalo Province is one of the areas with very high potential for fisheries. However, based on survey results and interviews from related parties, North Gorontalo Regency is said to be an area where violations often occur.

It is said that in the last three years in North Gorontalo Regency there have been frequent violations related to IUU Fishing committed by fishermen. Based on data on reports of IUU Fishing violations recorded at the Maritime Affairs and Fisheries Service of North Gorontalo Regency, around 20 violations have been recorded since 2020-2022. The number of IUU Fishing violations in Figure 21

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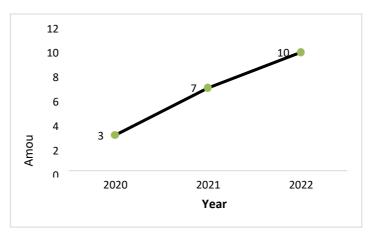


Figure 1. Graph of Number of IUU Fishing Violations

Based on data from the last three yearsit was revealed that IUU Fishing activities continued to increase from year to year. IUU Fishing violations that occurred in North Gorontalo Regency were violations related to fishing methods that were destructive and not environmentally friendly as well as catching protected animals. Based on the data obtained, it was identified that the violations that occurred were fishing practices using bombing methods, anesthesia, using trawlers and catching protected animals (turtles). The types of violations that occur can be seen in Figure 2.

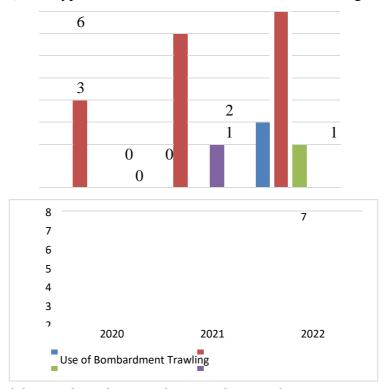


Figure 3. Graph of the Number of Types of IUU Fishing Violations

Based on data from the last three years in Figure 3, the most frequent violation is the practice of bombing fish, and it continues to increase every year. Based on government data from the Maritime Affairs and Fisheries Service, North Gorontalo Regency, it was recorded that 16 times the practice of fishing bombing occurred from 2020 - 2022. Followed by 2 times the practice of fishing using trawlers, 1 practice of catching using anesthetic and 1 practice of catching protected animals (turtle).

IUU fishing activities have a very large impact. Jaelani & Basuki (2014) stated that IUU fishing activities have a detrimental impact, namely, damaging the preservation of the sea, harming the economy, and causing environmental damage. The impact of these violations greatly affects the

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sustainability of resources which in turn will have an impact on the future economy, especially in the fisheries economy, oversight of state apparatus, and weak law enforcement (Jaelani & Basuki, 2014). In addition, the desire of fishermen to get large catches in a very instant way has become one of the triggers for violations.

The level of fishermen's welfare in the Ponelo Kepulauan, Anggrek and Monano sub-districts is measured by indicators 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. Welfare issues are always related to the concept of needs, so that fishing communities must try to meet their household needs until they are fulfilled, then they are said to be prosperous. In accordance with the BPS indicator (2015) which is used to determine the level of welfare in table 2.

Table 2. Analysis of Community Welfare Levels

		Weight	t
Indicator	Score	%	Total Score
Income	2	24	0.48
Expenditure	1	18	0.18
Condition of residence	3	9	0.27
Residential facilities	3	9	0.27
Family Health	3	8	0.24
Ease of Obtaining Health Services	3	12	0.36
Ease of Entering Children into Education			
	3	12	0.36
Ease of getting transportation facilities	3	8	0.24
Amount	21	100	2.40

Based on table 2, BPS welfare level criteria, of the 8 welfare indicators that are used as a reference, there are 2 categories that score that is not optimal, namely in the income and expenditure categories. The total score obtained is 2.40, so in the Districts of Angrek, Ponelo Islands and Monano, it is included in the criteria for moderate welfare. The welfare criteria are adjusted to the weight of the BPS (2015) welfare indicators, namely fishermen in the Districts of Angrek, Ponelo Kepulauan and Monano with scores between 1.71 - 2.40 including the category of moderate welfare levels.

CONCLUSIONS AND RECOMMENDATIONS

North Gorontalo Regency has indications that violations have occurred, namely the practice of fish bombing and terut has increased every year. It was recorded that 16 times the practice of fishing bombing occurred from 2020-2022. And 2 times the practice of catching fish using trawlers, as well as 1 practice of catching using anesthetic and 1 practice of catching protected animals (turtles).

Based on the results of the analysis of the level of welfare using BPS indicators, it was concluded that fishing communities in the Districts of Anggrek, Ponelo Kepulauan and Monano, North Gorontalo Regency, were included in the category of moderate welfare levels with a score of 2.40.

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