



## Formulative policy for managing marine and fishery resources in the management of destructive fishing (Case study of the fisheries and marine services of north maluku province)

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### Abstract

This study aims to analyze and examine the design of formulative policies for handling marine and fishery resources in overcoming the criminal act of destructive fishing in North Maluku and to find out the functionalization of the fisheries and marine service of North Maluku Province in overcoming the crime of destructive fishing. This research is an empirical legal research. The technique of collecting data in this research is through library research and field studies, namely conducting interviews. The results show that the design of formulative policies for handling marine and fishery resources in overcoming the criminal act of destructive fishing in North Maluku implies the need to restore the function of criminal law as the ultimum remedium. These alternative sanctions can be in the form of action sanctions that lead to social, economic improvements, and repairs to damage to fish resources and their ecosystems due to destructive fishing practices. Thus, as one of the fisheries crime that is rife in North Maluku, it must be minimized through partnerships forged by stakeholders in the marine and fisheries sector as well as coastal communities.

**Keywords:** formulative policy, destructive fishing, north Maluku province

### Introduction

The Unitary State of the Republic of Indonesia is an archipelagic State, most of which consists of a very wide area of water (sea) with a very large and diverse fishery potential. The fishery potential owned is a state wealth and as an economic potential that can be utilized for the future of the nation, as the backbone of national development. Among the many illegal economic problems, the practice of illegal fishing or IUU (Illegal, Unregulated and Unreported fishing practices) by fishermen using foreign fishing vessels is the most detrimental to the state. The vast territorial waters of Indonesia, and the weak supervision of the authorities on fishery activities, are often used by foreign fishermen to carry out illegal fishing in the Indonesian territorial sea. (Eko Budi, 2018) <sup>[5]</sup>

Irresponsible fishing is not only limited to illegal fishing activities (illegal fishing), but there are also fishing activities in destructive ways (destructive fishing). This activity can also cause great losses, especially to the preservation of existing aquatic ecosystems. For this reason, the Ministry of Maritime Affairs and Fisheries, through the Directorate General of Supervision of Marine and Fishery Resources (PSDKP) continues to strive to protect the sea from the threat of destructive fishing.

Destructive fishing activities carried out by community elements generally use explosives (fish bombs), and use toxic materials to catch fish. The use of these materials causes damage to coral reefs and the surrounding ecosystem, and causes the death of various types and sizes that exist in these waters. At least, the results of World Bank research in 1996 showed that the use of a bomb weighing 250 grams would cause the area of coral reefs to be destroyed to reach 5.30 m<sup>2</sup>. (Kementrian Komunikasi dan Informatika, 2021) <sup>[18]</sup>.

Efforts to overcome crime through the making of formal laws are essentially an integral part of social welfare efforts. Criminal policy in crime prevention and control is one of the policies, in addition to other development policies (social politics). Therefore, crime prevention efforts need to be pursued with a policy approach so that there is an integration (integral) between penal and non-penal crime prevention efforts. Social policy can be interpreted as all rational efforts to achieve public welfare and at the same time include community protection. Thus, in the sense of "social policy" it also includes "social welfare policy" and "social defense policy".

The Indonesian government has made various efforts to protect the potential of fisheries, one of which is criminalizing destructive fishing. Criminal sanctions against perpetrators of destructive fishing are regulated in Article 84 and Article 85 of Law Number 45 of 2009 concerning Amendments to Law Number 31 of 2004 concerning Fisheries (hereinafter referred to as the Fisheries Law). Criminal sanctions in the Fisheries Law are the only sanctions that can be imposed on perpetrators of destructive fishing. The Fisheries Law has not regulated other alternative sanctions for destructive fishing actors. Thus, criminal sanctions are formulated as the main sanctions (primum remedium) for perpetrators of destructive fishing.

The formulation of criminal sanctions as primum remedium in its development experienced several obstacles in its application and execution. On the one hand, criminal sanctions will provide a deterrent effect for destructive fishing actors. However, on the other hand, the formulation of criminal sanctions as primum remedium cannot be applied optimally because it is limited by the provisions of international legal instruments. Based on the provisions of the United Nations Convention on the Law of the Sea (hereinafter referred to as UNCLOS), imprisonment for

perpetrators of destructive fishing in the Indonesian Exclusive Economic Zone (ZEEI) only applies to perpetrators who are Indonesian citizens, while for foreign nationals who commit crimes in the ZEEI. cannot be sentenced to imprisonment. Furthermore, for fines even though the nominal is relatively large. However, there is no policy that regulates how to execute the fine decision.

According to Article 30 of the Criminal Code, if the fine is not paid, it will be replaced with a maximum imprisonment of six months. Meanwhile, the imposition of fines on perpetrators of fisheries crimes cannot be accompanied by a substitute punishment in the form of confinement, this can open up opportunities for prisoners not to pay fines and leave their responsibilities. Whereas the concept of sustainable development requires the implementation of development oriented to environmental sustainability. (Koesnadi Hardjasoemantri, 1999)

The Fisheries Law has made sustainable development one of the principles in fisheries management. (Mukti Fajar, 2013) <sup>[10]</sup> Considering that sustainable development is the basis for fisheries management, criminal law policies must be relevant and integrated with the concept of sustainable development. Thus, this study will discuss the main issues regarding the ideal policy of criminal law in overcoming destructive fishing in a sustainable development regime. This must be used as an effort to overcome the crime of destructive fishing, as a logical consequence of the many cases of destructive fishing as the data collected there are 33 cases, 11 of which are handled by the Directorate General of PSDKP, Ministry of Maritime Affairs and Fisheries, while 21 cases are handled by the Indonesian National Police. (Ayu Izza Elfany, 2019)

As one of the youngest provinces of 33 provinces in Indonesia, North Maluku (Malut) was officially formed on October 4, 1999, through Law of the Republic of Indonesia Number 46 of 1999 and Law of the Republic of Indonesia Number 6 of 2003. Geographically, North Maluku Province is located at coordinates 3° 40' South Latitude. - 3° 0' LU 123° 50' - 129° 50' east longitude, is actually an archipelago with a land to water ratio of 24: 76. It has a group of 395 islands, 83% or about 331 islands are uninhabited. With such a large sea area compared to land, it becomes homework for all relevant agencies including the Directorate of Water and Air Police (Ditpolairud) in guarding the waters from various threats, both Illegal Fishing and cases of Destructive Fishing or catching fish using explosives, such as those described above. occurred in the waters of the village of Cap, Obi District, South Halmahera Regency (Halsel)

The Director of the Water and Air Police (Dirpolairud) of the North Maluku Regional Police, Kombes Pol. Arif Budi Winofa told RRI, that currently his party has mapped water areas that are often bombed by irresponsible people or fishermen. The mapped locations are in several regencies in North Halmahera (Halut), Morotai Island Regency and Halsel Regency. The area that is prone to bombs against fish in the northern region is near Daruba, Kupa-Kupa and parts of Halut waters, then in the South Halal area, to be precise, west of the Kayoa sub-district and in the waters between Bacan and Gane Dalam. (Wanto, 2018) <sup>[27]</sup>

In principle, a group of islands that have good coral reefs, that is where they will become the target for the perpetrators of bombing fish. The reason the marine ecosystem is being targeted is due to the large number of fish hiding behind the

coral reefs. Thus, if we allow this action, what is clear is that coral reefs will not only die, but the corals around the affected areas will be destroyed and it will take decades to return to their original state." Given the data collected by the Department of Marine Affairs and Fisheries of North Maluku Province, it shows that North Maluku as an archipelagic province has an area of about 145,819.1 km<sup>2</sup>, with a water area of around 69.08% and 30.92% is land that has potential. natural resources of high ecological, economic, and social value. So, efforts need to be made to monitor and control it.

The explanation above shows that destructive fishing cases are still rampant in Indonesia, especially in North Maluku. Destructive fishing, which is a crime in the field of fisheries, not only has an impact on the damage to marine ecosystems but also creates a large potential value for the loss of the state economy. Therefore, it is necessary to further research how the regulation of destructive fishing in the legislation in Indonesia, especially in North Maluku Province is seen from the perspective of criminal law policies in order to realize the effectiveness of overcoming the crime of destructive fishing, considering that this formulaic policy is the legal basis for operationalization. criminal law.

Based on the description of the background above, the problems that can be formulated in the study are how is the design of formulative policies for handling marine and fishery resources in dealing with destructive fishing crimes in North Maluku?

## Methods

This research methods is empirical juridical research or sociological juridical research uses a statutory approach and a case approach. As for this research, the researcher uses a live case study approach as an approach to a legal event whose process is still ongoing. Thus, the author makes observations or research directly in the field in order to get accurate truth in the process of perfecting this writing. (Bambang Sunggono, 2009) <sup>[4]</sup>

## Data collection technique

The data collection technique that researchers used in this study was through library research and field studies, namely conducting interviews. The data collection studies are classified into two parts, namely primary data and secondary data, primary data obtained through field studies and secondary data sourced from library studies.

## Result and Conclusion

### Formulative policy design for handling marine and fishery resources in combating the crime of destructive fishing in north Maluku

North Maluku Province occupies an important position in the preservation of marine and fishery resources at the world level and in Indonesia, because it has several main factors, including high fishery potential, wide waters and a favorable and vulnerable geographical location. North Maluku Province has a total area of 145,819 km<sup>2</sup> and 75% of the total area of North Maluku Province is in the form of water areas, while the total land area is only 25%. (Zulham and Subaryono, 2017) <sup>[28]</sup>. This data shows that the territorial waters of North Maluku are larger than the mainland, making marine and fishery resources in North Maluku province an important source of livelihood that must be maintained, especially for most local communities and

Indonesian people in general.

Large and small islands in North Maluku Province reach 395 and have the potential for the development of marine aquaculture and capture fisheries with a fairly rich variety of fish species. (Radiarta *et al*, 2017). Furthermore, in the same source, The results of spatial analysis in North Maluku show that the total area of potential marine cultivation areas in North Maluku reaches 14,678 km<sup>2</sup>, with details of the potential area of marine fish cultivation 5243 km<sup>2</sup>, the potential area of shellfish cultivation 3,512 km<sup>2</sup>, and the potential area of seaweed cultivation 5923 km<sup>2</sup>. The data shows that North Maluku has the potential of rich marine and fishery resources and can play an important role in supporting the sustainability of Indonesia's fisheries and marine resources, so that the sustainability of fisheries and marine resources in North Maluku Province should be a shared concern.

North Maluku as one of the archipelagic provinces that are members of the within the Unitary State of the Republic of Indonesia. It has 805 islands consisting of 11 major islands, namely Halmahera Island, Cibi Island, Taliabu Island, Bacan Island, Morotai Island, Ternate Island, Obi Island, Tidore Island, Makian Island, Kayoa Island, and Gebe Island. The total area of this province reaches 145,801.1 km<sup>2</sup> which is dominated by marine waters of 69.1 percent. (interview Abdullah Togubu, 2021). This geographical condition is used by the people of North Maluku in capture fisheries sector. Most of them have a livelihood as capture fisheries fishermen in marine waters.

On the other hand, the geographical location of North Maluku Province which is quite open in Indonesian and world waters also creates its own vulnerability related to destructive fishing practices or commonly known as Destructive Fishing, where many local and foreign fishermen and boats traverse and catch fish in Maluku waters. North. North Maluku Province is directly adjacent to the Pacific Ocean which is the entry point for foreign fishing vessels, especially from the Philippines, Thailand and Taiwan (Naim A, 2010) <sup>[22]</sup>. Apart from being passed by many foreign fishing vessels that have the potential to carry out IUU fishing and fisheries crime violations, the waters of North Maluku Province.

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destructive fishing that reached the case termination stage from 2017-2018 reached 35 cases, 20 cases of fish poisoning and 15 cases of fish bombing. The vulnerable points for destructive fishing in North Maluku will be described as follows: (fishery Government office, 2020).

**Table 1**

No	Village	Country	District	Vulnerability level
Halsel				
1	Rep Ambatin	Pulau Mandioli	Halsel	Tinggi
2	Tanjung Mangoa	Pulau Mandioli	Halsel	Tinggi
3	Mare Kapal	Pulau Kasiruta	Halsel	Sedang
4	Lata-Lata	Pulau Kasiruta	Halsel	Tinggi
5	Gura Ici	Kayoa	Halsel	Tinggi
6	Gilalang	Bacan Utara	Halsel	Tinggi
7	Pigaraja	Bacan Timur	Halsel	Tinggi
8	Wayakuba	Bacan Timur Selatan	Halsel	Sedang
9	Loleo Jaya	Kasiruta Timur	Halsel	Tinggi
10	Tanjung Pramasan	Kep. Joronga	Halsel	Tinggi
11	Pulau Gala	Kep. Joronga	Halsel	Tinggi
12	Tawabi	Kep. Joronga	Halsel	Tinggi
13	Yomen	Kep. Jorongan	Halsel	Sedang
14	Pulau Lampu	Pulau Mandioli	Halsel	Tinggi
15	Wayaua	Bacan Timur	Halsel	Rendah
16	Sabatang	Bacan Timur	Halsel	Rendah
17	Pulau Sali	Bacan Timur	Halsel	Rendah
18	Pulau Pisang	Obi Timur	Halsel	Tinggi
Taliabu				
1	Limbo	Taliabu Barat	Taliabu	Tinggi
2	Enggele	Taliabu Barat	Taliabu	Tinggi
3	Lede	Lede	Taliabu	Tinggi
4	Jorjoga	Taliabu Utara	Taliabu	Sedang
5	Penu	Taliabu Timur	Taliabu	Sedang
6	Parigi	Taliabu Timur	Taliabu	Sedang
7	Pancorang	Taliabu Selatan	Taliabu	Tinggi
8	Todoli	Lede	Taliabu	Sedang
Halut				
1	Bobale	Kao Utara	Halut	Sedang
2	Gulo	Kao Utara	Halut	Sedang
3	Marwea	Tobelo Timur	Halut	Rendah
4	Mamuya	Galela	Halut	Sedang
5	Tobo Tobo	Loloda Kepulauan	Halut	Sedang

This data only records events that can be known and handled by the relevant institutions, of course, there are many cases of destructive fishing that are not revealed, not handled and not recorded by the authorized institutions. The data from POLAIRUD and DKP North Maluku shows that destructive fishing cases in North Maluku occur almost every year and require effective handling. Therefore, destructive fishing practices cause problems and losses for many parties. The definition of destructive fishing itself already includes the impacts caused by this activity, as stated by Ahmad (2016) <sup>[14]</sup>: "Destructive fishing is the practice of using fishing tools and techniques that have a destructive impact on fish habitat and cause damage to the marine environment. Not only for the marine environment, but this practice also has significant environmental, economic and social impacts.



Fig 1

**Environmental Impact**

▪ **Coral reef damage.**

Destructive fishing activities have a major impact on the destruction of coral reef ecosystems, thus threatening the sustainability of marine life and fish stocks. According to Mc.Manus *et al* (1997) in Soede & Erdmann (1998)<sup>[26]</sup>, for a bottle bomb of about 1 kg can cause holes and coral fragments with a diameter of 1-2 meters. In addition, according to the same source, the average individual fisherman can use 1-5 kg bombs in one day, not to mention if the activity involves large boats and many fishermen. So, in one day, it is estimated that bombing activities can cause holes and coral fragments of about 1-10 meters which cause huge losses for the Indonesian government. In addition, the process of forming coral reefs takes tens, hundreds or even thousands of years, so that it also has an impact on the lack of fish stocks.

▪ **Death of chicks, non-target and marine invertebrates.**

Bomb explosions and the use of cyanide in destructive fishing activities also have harmful effects on populations of small fish (saplings), non-target fish and marine animal species with no backbone. The effects of bomb explosions and cyanide sedation not only kill the targeted fish, but also kill small fish (saplings), non-target fish and invertebrate marine animal species, where non-target fish will die in vain and be thrown back into the sea. In the long term, this will affect the balance of the marine ecosystem and harm the North Maluku government in terms of fish availability.

▪ **Loss of value for coral reef benefits.**

According to Nunes *et al*. (2003), To be able to conduct an assessment of coastal and marine natural resources, an ecosystem approach can be used which is viewed from four categories including the ecosystem life support function (benefits of biodiversity that support human welfare), the value of biodiversity in the context of the protection of natural habitats, the value of biodiversity in the context of the system. production of goods or services, as well as the value of biodiversity that comes from non-use, namely bio-

ethics that reflects human moral views on biodiversity. In addition, according to Barbier *et. al* (1997). There are three types of valuation approaches, namely:

1. Impact analysis, is a framework for estimating the impact value of a specific environmental problem
2. Partial valuation, is a valuation approach to alternative utilization of coastal and marine resources
3. Total valuation, is a total valuation approach to the contribution of coastal and marine resources to the economy of an area

Based on the explanation above, in this policy paper, the loss value of the benefits of coral reefs is calculated through impact analysis, considering that destructive fishing is a fairly specific environmental problem. In addition, given the limited data available, the calculation of economic valuation will also be carried out based on an ecosystem approach by looking at two categories, namely the ecosystem life support function (benefits of biodiversity that support human welfare) and the value of biodiversity in the context of the production system of goods or services. In addition, due to the limited data available, this policy paper uses data on the number of North Maluku reef fish production which is calculated manually from the total fish production in North Maluku based on fisheries statistics from DKP North Maluku Province. Thus, the following table 2 describes the value of the benefits of coral reefs due to destructive fishing activities in North Maluku.

**Table 1:** Benefit value of coral reefs affected by destructive fishing

Benefit	Appraisal Approach and Calculation Method	Value (Rp/year)
Reef fish production	Total production of reef fish in North Maluku X price of fish Details: ▪ Total production of reef fish in North Maluku = 13,953.8 tons or 13,953,800 kg/year ▪ Average price of reef fish in Indonesia = IDR 26,500/kg	Rp 369.775.700.000
Protector of North Maluku marine ecosystem	The average cost to rehabilitate corals in one year by the Provincial DKP in Eastern Indonesia is IDR 1,140,000,000	Rp 1.140.000.000
Benefits of Coral Reefs Due to Destructive Fishing		Rp 370.915.700.000

Based on the table above, it can be concluded that the Provincial Government of North Maluku will suffer a loss of 370,915.7 million rupiah, if destructive fishing activities that have an impact on coral damage are left unchecked. Therefore, an effort is needed to integrate the prevention of destructive fishing that has been carried out by various parties so far, one of which is through the ratification of the governor's regulation regarding destructive fishing.

**Loss of provincial and state income due to reduced fish stocks for the international market**

Destructive fishing activities can have an impact on decreasing fish stocks, especially for sale to the international

market. For example, in the period 2010-2013, the volume of fish exports from North Maluku province decreased from 94 tons in 2010 to 34 tons and 4 tons in 2011 and 2012, even in 2013 the volume of fish from North Maluku province was not sufficient export (Statistic Beurau, 2016). One of the causes of the decline in reef fish stocks is the proliferation of destructive fishing activities.

- Reduced community sources of livelihood. For the people of North Maluku who are highly dependent on marine and fishery resources, destructive fishing activities have a very significant impact, especially for fishermen. According to Munyi (2019), Fishing areas rich in fish resources are the main attraction for fish bombers, where it will increase the number of fishermen fishing in the area, thus having an impact on reducing the catch of local fishermen as a result of competing with migrant fishermen. This is reinforced by the FAO, which since 1980 has called for the marine capture fisheries sector to stagnate or decline, one of which is due to destructive fishing. This shows that destructive fishing activities are one of the factors that threaten the livelihoods of local communities in the form of marine and fishery resources. As a result of the threat of community livelihoods, the North Maluku Marine and Fisheries Service must allocate additional funds for programs to create jobs, in addition to alternative livelihood programs.

### Social Impact

- **Potential conflict:** Destructive fishing is an issue that is quite a dilemma for local fishermen, where a number of local fishermen are the perpetrators of this activity, while some other fishermen oppose the continuation of destructive fishing activities. The potential for conflict will occur if the perpetrators of destructive fishing have kinship or kinship relations with the local community. On the one hand, local communities will feel reluctant to report their family or relatives who carry out bombing and drugging activities, so that the case is not revealed and has an impact on eradicating destructive fishing. While on the other hand, when local communities report destructive fishing actors who still have family and kinship relations, then family and kinship relationships become tenuous and have the potential for conflict.
- **Shifting community values:** Destructive fishing activities also have the impact of changing social values in society. Based on a destructive fishing study conducted by WCS and WCU for the USAID SEA Project in North Maluku (USAID and WCS, 2010), Information was obtained that destructive fishing was an activity that was introduced since the Second World War by Japan, in addition, according to case data recorded by the North Maluku POLAIRUD, fishermen who carried out destructive fishing activities also came from Sulawesi. A number of local fishermen who previously caught fish traditionally adopted destructive fishing behavior as a technique and a way to get fish faster and easier. This reflects that the collective social values of the community are shifting and adopting destructive fishing behavior as a profitable livelihood activity. Furthermore, this will weaken the law enforcement process to eradicate destructive fishing.

- The level of public health is declining. Potassium cyanide, ammonium nitrate and sulfur oxides in explosives used in destructive fishing can be hazardous to health. Cyanide is a trigger for heart disease, brain and nerve damage, while ammonium nitrate can cause headaches, vomiting, bloody diarrhea, heart disease, seizures, sudden collapse, shortness of breath, besides that it can also irritate the eyes, nose and skin of humans. (Fish and Sea Ministry, 2017) If the bombed fish are consumed continuously, it will certainly have an impact on the decline in the level of public health, especially coastal communities.

Criminal law policies in the field of fisheries are required to be able to enforce criminal law in a concrete way, so that every actor who catches fish in a prohibited way, especially destructive fishing, can be punished. (Widyadmojo, 2017). The formulation of criminal provisions in the field of fisheries has the function of controlling the utilization of fishery potential and protection of fishery resources and their ecosystems. In general, legal policies aim to frighten and provide a deterrent effect for perpetrators of criminal acts in the field of fisheries, especially destructive fishing. So that with the existence of a criminal law policy against the perpetrators of destructive fishing, it is expected to reduce the number of criminal acts in the fisheries sector. (Mashuril Anwar, 2020) <sup>[19]</sup>

Control of the use of fish resources needs to be done so that there is no competition of interests that negatively affects the damage to fish resources, even more broadly, it can have implications for causing social vulnerability, and in the end it could even lead to socio-cultural vulnerability in the area. Thus, the use of criminal law in statutory regulations is solely intended to provide authority in the law enforcement process. (Rovi Octoza, 2015) As public law, criminal law will play a role when there is a conflict of norms with the interests of citizens. (Syaiful Bakhri, 2013). However, the policy of criminalizing an act must be in accordance with and supported by the policy of determining sanctions and the policy of the law enforcement mechanism.

Destructive fishing practices are common in waters that have coral reefs and tropical countries with large populations high with economic pressures that trigger the emergence of despair in the among fishermen. The poverty factor in coastal areas has a significant contribution to the prevalence of destructive fishing practices. This is what makes destructive fishing activities still popular as a way of catching fish in Indonesia even though this practice is prohibited and dangerous for the perpetrators.

From the supervision activities carried out by the Directorate General of Marine and Fishery Resources Supervision (Directorate General of PSDKP), it is known that destructive fishing practices have been rampant since three decades ago, but until now the right formulation has not been found to solve the problem. There are several factors that cause the proliferation of destructive fishing activities in several Indonesian waters, including:

- Raw materials for the manufacture of explosives in the form of ammonium nitrate and potassium cyanide can be obtained easily due to smuggling practices or because they are sold freely in the market. Handling destructive fishing becomes complex and complicated because of the many links that must be unraveled, particularly related to the trade in raw materials for

making explosives;

- The high demand for live fish for consumption triggers the proliferation of fishing activities using toxic materials;
- In some areas, fishermen are in debt to the retainer/lord so that they are triggered to get their catch in a fast way, including by using explosives or toxic materials;
- The lack of skills of some fishermen in using fishing gear, thus encouraging them to catch fish in an easy way, namely using explosives and toxic materials;
- The perpetrators do not understand the negative impact of destructive fishing on human health, as well as the preservation of fish resources and the environment; and
- The court's verdict against the perpetrators of destructive fishing and the perpetrators of possession of explosives is considered very low so that it does not cause a deterrent effect.
- The lack of skills of some fishermen in using tools
- catch so as to encourage them to catch fish in an easy way using bombs and fish poison;
- The perpetrators' misunderstanding of the negative impact of destructive fishing on
- human health, as well as the sustainability of fish resources and the environment

The practice of destructive fishing can only be subject to criminal sanctions, both imprisonment and fines. This is because the Fisheries Law does not regulate other alternative sanctions for destructive fishing actors. Thus, the current criminal law policy in dealing with destructive fishing is *primum remedium* (the main means). However, the current criminal law policy in tackling the criminal act of destructive fishing, it seems that there are still some basic problems that will be formulated in Article 84 and Article 85 of the Fisheries Law.

The formulation of Article 85 above shows that the article is included in the category of material offenses, (Leden Marpaung, 2009) namely offenses whose formulation focuses on the consequences that are prohibited and are threatened with punishment by law (formulation of the consequences of actions). Article 85 is also included in the category of criminal acts in the field of fisheries in the form of crimes according to the provisions of Article 103 of the Fisheries Law.

Based on the description of the substance problem above, the prevention of destructive fishing which aims to reduce the rate of damage to fish resources and the environment is getting worse due to destructive fishing activities such as the use of explosives or bombs and anesthetics/poisons more comprehensively by involving the government, fishery business players, and the community. Therefore, criminal law policies in dealing with destructive fishing need to be a concern, especially in creating criminal law policies that can support sustainable development.

In connection with various problems in the application of criminal law policies in tackling destructive fishing today, it indicates the need to restore the function of criminal law as the *ultimum remedium*. (Ministry of sea and fishery, 2019). These alternative sanctions can be in the form of action sanctions that lead to social, economic improvements, and repairs to damage to fish resources and their ecosystems due to destructive fishing practices.

The sanctions for destructive fishing in North Maluku which are oriented to the three pillars of sustainable development, namely social, economic, and environmental aspects can be in the form of:

- The obligation to provide compensation to local fishermen who have been harmed by destructive fishing practices;
- For foreign fishermen who have competence in the field of fishing, they are required to conduct training to local fishermen, especially small fishermen within a certain period of time;
- The obligation to repair the damage to fishery resources and their ecosystems; and
- The obligation to do work voluntarily in order to restore damage to fishery resources and their ecosystems;

Indonesia as an archipelagic country with most of its territory in the form of waters, has a very large and diverse fishery potential. The potential for fisheries is an economic potential that can be utilized for the future of the nation, as the backbone of national development. Optimal utilization is directed at the utilization of fish resources by taking into account the existing carrying capacity and sustainability to improve the welfare of the people, increase the level of livelihoods of small fishermen and small fish cultivators, increase the country's foreign exchange earnings, provide expansion and employment opportunities, increase productivity, added value and competitiveness of fishery products as well as ensuring the sustainability of fish resources, fish farming land and spatial planning.

The complexity of the causes of rampant destructive fishing in Indonesian waters, requires the commitment and cooperation of various parties in overcoming it. This is because fishing activities in a destructive way or known as destructive fishing is one of the main threats on the management of Indonesia's fishery potential other than illegal fishing. Successful monitoring is highly dependent on human resources.

No matter how sophisticated the means of supervision, it will be meaningless if human resources do not have the capacity and commitment to carry out supervision properly and in accordance with the rules.

According to the researcher, destructive fishing as one of the fisheries crimes that is rife in North Maluku must be minimized through partnerships forged by stakeholders in the marine and fisheries sector as well as coastal communities. However, the participation carried out by a number of these parties still often encounters a number of obstacles in the implementation phase, both internally and externally. This raises questions regarding things that have been implemented in order to prevent destructive fishing practices.

The case of destructive fishing in North Maluku is a crucial issue because it threatens the sustainability of marine and fishery resources on which people's livelihoods depend. In the shallow waters of North Maluku, many large stretches of coral fractures are found as a result of destructive fishing activities, bombing and poisoning, where this will affect the sustainability of marine ecosystems and the high and low interest of tourists to dive and snorkel which will have an impact on decreasing sources of income. people in North Maluku (USAID and WCS, 2017). For example, the level of hard coral cover on North Moti Island, North Maluku is in the bad category at  $21.61 \pm 9.45$  with the dominance of

coral fracture substrate due to the use of fishing gear that is not environmentally friendly and fish bombs. With the dominance of the dynamic and fragile coral fracture substrate when interacting with the waves, it is difficult for coral larvae to attach, thus disrupting the sustainability of the marine ecosystem in the area, which in turn will also have an impact on decreasing the catch of fishermen in North Maluku.

Various efforts to deal with the issue of destructive fishing have been carried out as a form of commitment from various parties, including the DKP of North Maluku Province. Efforts to handle the issue of destructive fishing carried out by the DKP of North Maluku Province are realized in 4 programs related to the supervision of fishery resources (Naim, 2010)<sup>[22]</sup>, That is:

1. Improvement of supervision facilities and infrastructure, including procurement of speed boats, construction of control posts, communication tools, supervision facilities/equipment.
2. Increased supervision and control of fishery resources, including the operation of supervising fishery resources at sea, supervision of the obedience of fishing vessels in ports.
3. Development of Siswasmas, including the establishment of Pokmaswas and support for Pokmaswas activities.
4. Law enforcement and compliance, including coordination meetings for law enforcement officials and fisheries crime handling programs.

However, the various efforts that have been made by the DKP of North Maluku Province have limitations and require support from all parties to be optimal and effective. For example, the establishment of POKMASWAS will not be optimal if the monitoring and supervision activities of POKMASWAS have not been integrated with the efforts of other institutions in the law enforcement chain. Therefore, the presence of an umbrella The law that accommodates joint activities and actions in tackling destructive fishing is very important.

### Conclusion

1. The design of formulative policies for handling marine and fishery resources in the prevention of destructive fishing in North Maluku implies the need to restore the function of criminal law as the ultimum remedium. These alternative sanctions can be in the form of action sanctions that lead to social, economic improvements, and repairs to damage to fish resources and their ecosystems due to destructive fishing practices. Thus, as one of the fisheries crimes that is rife in North Maluku, it must be minimized through partnerships forged by stakeholders in the marine and fisheries sector as well as coastal communities. However, the participation carried out by a number of these parties still often encounters a number of obstacles in the implementation phase, both internally and externally. This raises questions regarding things that have been implemented in order to prevent destructive fishing practices.

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