

ENFORCEMENT ON ILLEGAL FISHING AND ITS SOCIAL IMPACTS ON THE WATERS OF JAYAPURA CITY

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ABSTRACT

A large area of water is a big responsibility to manage and secure for a country. To secure such a vast sea requires strength and capability in maritime sector in the form of modern marine technology and tools as well as reliable human resources to manage the resources contained therein. Without adequate integrated observation and surveillance capacity, Indonesia's strategic geographic location opens up opportunities for illegal fishing bombing and exploitation of marine resources by other parties that can harm the state. The study aims to determine whether the fishing carried out by the people of Jayapura waters is in accordance with Law Number 31 of 2004 concerning Fisheries and to determine the social impact due to law enforcement on illegal fishing activities in Jayapura waters. The research employs the empirical juridical approach in analysing the problems by combining legal materials from secondary data with primary data obtained in the field. The results of this study reveal that fishing carried out by the people of Jayapura waters on average is in accordance with the provisions in Law Number 31 of 2004 concerning Fisheries and all fishermen understand the consequences that will occur if they commit violations. On the other hand, they still take advantages of the condition in which there is a low level of supervision from marine police personnel. They still secretly use bomb as tools to get more fish. The author highly expects that law enforcement patrol the area every night so that the illegal ways of catching fish reduces.

Keywords: *fishermen, illegal fishing, law enforcement, social impact*

1. INTRODUCTION

1.1 Background

Geographically, Jayapura City is located in the northern part of Papua Province at coordinates 128° 17.26" – 3°58' 0.82" South Latitude (LS) and 137°34' 10.6" – 141°0' 8.22" East Longitude (BT), which is directly adjacent to the

West by the Sentani District and Depapre Jayapura Regency, to the East by the State of Papua New Guinea, to the North by the Ocean Pacific, the South is bordered by Arso District, Keerom Regency. The fisheries sector is the sector with the largest role. In 2018, fishery production in Jayapura City

increased by 76.27 percent, from 32,116.32 tons in 2017 to 56,612.43 tons in 2018 for both marine and inland fisheries. There was an increase in fishery production in 2018, followed by an increase in the number of fishery households. Fishery households in 2017 were 2,151 households, with marine fisheries households amounting to 1,001 households and inland fisheries households amounting to 1,150 households. Meanwhile, in 2018, there were 2,182 fishery households, with 1,012 marine fishery households and 1,170 inland fishery households [https \(/link.papua.go.id\)](https://link.papua.go.id). In Jayapura City, fishing households are mostly found in Muara Tami District and North Jayapura District.

The vast water area becomes a big responsibility in managing and securing it. To secure such a vast sea, it takes strength and capability in the maritime field in the form of modern marine tools and technology as well as reliable human resources to manage the resources contained therein. Without an adequate integrated observation and surveillance capabilities, Indonesia's strategic geographical location opens up opportunities for theft and illegal use of marine resources by other parties that are detrimental to the state if its monitoring capabilities are limited.

The ability of Indonesian to carry out supervision and control is still limited because the supervision facilities and infrastructure that it

has are not sufficiently supportive for supervisory tasks. Catching fish using bomb is rampant. The roles of the Ministry of Maritime Affairs and Fisheries (hereinafter referred to as 'KKP'), Water Police (hereinafter referred to as "Polair") is indispensable in preventing, monitoring and enforcing the laws against the use of fish bombs in the waters of the Bay of Jayapura City.

The waters of the Bay of Jayapura City have been established as a maritime development program by the KKP which sociologically uses fish bombs by fishermen. Limited supervision over the extent of the coastal bay waters of the city of Jayapura causes cases of violations to still occur. Polair has succeeded in uncovering dozens of cases of fishing with explosives (Nakmofo, Law enforcement for perpetrators of fish bombing in East Flores Regency, Jurnal, 2017). In fact, catching fish using bombs in Jayapura waters which is suspected to be in groups and organized still occur. In addition, the equipment used, such as the type of fish bomb, based on the information obtained from the perpetrators, was gotten in the middle of the sea and some perpetrators made their own types.

The increasing exploitation of fishery products causes fishermen and fishery companies to carry out their own exploitation process. Such competition is not only done legally but sometimes also done illegally. One form of illegal exploitation of fishery products is the use of explosives

materials, also known as "fish bombs" in catching the fish. The use of explosives materials or fish bombs to catch is in principle a criminal act which is contrary to Article 84 and Article 85 of Law No. 31 of 2004 concerning Fisheries. The consequences of bombardment of fish can also damage the life of marine ecosystems, thereby hampering conservation and protection of the marine environment, including the protection of regional fisheries. Coastal pollution, thick sediments due to logging upstream, poison and bomb fishing, rock excavation, and overfishing in some places also threaten Indonesia's coastal and marine biodiversity, which is unmatched in the world (Muhammad, 2009). Enforcement on the perpetrators of fish bombing is a matter of great urgency. In fact, the use of bombs in fishing still occurs in the waters of Jayapura city.

1.2 Problem Formulation

Based on the background above the author is interested in doing a research in order to answer these research questions:

- a. Is fishing carried out by the people of Jayapura waters in accordance with the provisions of Law Number 31 of 2004 concerning Fisheries?
- b. What is the social impact due to law enforcement of illegal fishing by the Jayapura waters community carried out by law

enforcement officers in Jayapura?

2. LITERATURE REVIEW

2.1 Illegal Fishing

The word 'illegal fishing' has two words: illegal and fishing. According to meriam-webster.com/dictionary.com, the word 'illegal' means 'not according to or authorized by law.' Another source,

lexico.com/definition/illegal, mentions that the word means 'contrary to or forbidden by law,' especially criminal law. Based on the same source, the word comes from French word 'illegal' or medieval Latin 'illegalis. The synonyms of the words are unlawful, banned, forbidden, prohibited, foul, dirty, unfair, unjust, crooked, shady, fraudulent, dishonest, unscrupulous, etc. (collinsdictionary.com).

Meanwhile, the word 'fishing' means the activity of catching fish, either for food or sport (google.com). According to britannica.com, fishing, also called angling, originated as a means of providing food for survival. According to Food and Agriculture Organization, illegal fishing is an activity which is (1) conducted by national or foreign vessels in waters under the jurisdiction of a State, without the permission of that State, or in contravention of its laws and regulations; (2) conducted by vessels flying the flag of States that are parties to a relevant regional fisheries management organisation

but operate in contravention of the conservation and management measures adopted by that organisation and by which the States are bound, or relevant provisions of the applicable international law; or (3) in violation of national laws or international obligations, including those undertaken by cooperating States to a relevant regional fisheries management organization (<http://www.fao.org/iuu-fishing/background/what-is-iuu-fishing/en>).

Illegal fishing is also known as illegal, unreported and unregulated (IUU) fishing. IUU fishing is a broad term that captures a wide variety of fishing activity. It is found in all types and dimensions of fisheries; it occurs both on the high seas and in areas within national jurisdiction. It concerns all aspects and stages of the capture and utilisation of fish, and it may sometimes be associated with organized crime. The paper will limit the discussion on illegal fishing using explosive materials occurring in Indonesia, especially in Jayapura waters.

Fishing using explosive materials, also known as blast fishing, fish Bombing, or dynamite fishing is a destructive fishing practice using explosives to stun or kill schools of fish for easy collection. This often illegal practice is extremely destructive to the surrounding ecosystem, as the explosion often destroys the underlying habitat (such as coral

reefs) that supports the fish (McClellan and Bruno, 2008). The frequently improvised nature of the explosives used means danger for the fishermen as well, with accidents and injuries.

Blast fishing in Indonesia, has been around for over fifty years and continues to transform its one-of-a-kind coral reefs into desolate gray moonscapes, as fishermen continue to use explosives or cyanide to kill or stun their prey. Dive operators and conservationists say Indonesia is not doing enough to protect the waters off the Komodo Islands. They say enforcement declined following the exit of a United States-based conservation group that helped fight destructive fishing practices. Coral Gardens that were among Asia's most spectacular dive sites, were the latest victim of bomb blasting despite being located inside the Komodo National Park, a 500,000-acre reserve and U.N. World Heritage Site (Herin, 2012). The use of bombs made with kerosene and fertilizer is very popular in the region. While previously Komodo was relatively protected by a cooperative undertaking with TNC (The Nature Conservancy) since the Indonesian government has assumed responsibility for park protection, there has been an upsurge in bombing. During a recent visit to Crystal Bommie, it was found to be 60% destroyed, with freshly overturned coral tables proving recent bombing (2012). In the market in the city of Makassar,

an estimated 10 to 40 percent of the fish are caught in this manner. The local fishermen find the technique to be easier and more productive than traditional methods. The goal for the country has been to implement stricter policies and fisheries management programs to limit the killing of the fish as well as the destruction of the marine ecosystem. Forty years ago, blast fishing was practiced with dynamite which was in plentiful supply after World War II. Today, fishermen mostly use homemade bombs that are made from bottles filled with an explosive mixture; weights are also added to make the bottle sink faster underwater. After the bomb explodes, the fish killed or stunned by the shock wave from the explosion are collected (Pet-Soede and Erdmann, 1998).

Commercial dynamite or, more commonly, homemade bombs constructed using a glass bottle with layers of powdered potassium nitrate and pebbles or an ammonium nitrate and kerosene mixture are often employed. Such devices, though, may explode prematurely without warning and have been known to injure or kill the person using them, or innocent bystanders (McClellan and Bruno, 2008).

Underwater shock waves produced by the explosion stun the fish and cause their swim bladders to rupture. This rupturing causes an abrupt loss of buoyancy; a small amount of fish floats to the surface, but most sink to the seafloor. The explosions indiscriminately kill

large numbers of fish and other marine organisms in the vicinity and can damage or destroy the physical environment, including extensive damage to coral reefs (Lewis, 1996).

Researchers believe that destructive fishing practices like blast fishing are one of the biggest threats to the coral reef ecosystems. Blown up coral reefs are no more than rubble fields. The long-term impact associated with blast tanks is that there is no natural recovery of the reefs. Coral reefs are less likely to recover from constant disturbance such as blast fishing than from small disturbance that does not change the physical environment. Blast fishing destroys the calcium carbonate coral skeletons and is one of the continual disruptions of coral reefs (Fox, Dahuri and Caldwell, 2003). In the Indo-Pacific, the practice of blast fishing is the main cause of coral reef degradation. As a result, weakened rubble fields are formed and fish habitat is reduced.

The damaged coral reefs from blast fishing lead to instant declines in fish species wealth and quantity (Raymundo, et al., 2007). Explosives used in blast fishing not only kill fish but also destroy coral skeletons, creating unbalanced coral rubble. The elimination of the fish also eliminates the resilience of the coral reefs to climate change, further hindering their recovery. Single blasts cause reefs to recover over 5–10 years, while widespread blasting, as often practiced,

transforms these biodiverse ecosystems into continuous unstable rubble (Fox and Caldwell, 2006).

Fish bombs destroy coral reef areas, leaving them in pieces. This not only leaves a negative impact in the long run, but it also reduces any chance of recovery or regrowth, as the damage done is too severe. Aside from ecosystem degradation, fish bombs affect the tourism industry as reefs are no longer attractive, reducing tourist arrivals to the islands. Fishermen suffer loss as they are then unable to catch fish in areas that have been bombed; the fish have all died and the area that used to be a home and nursery to fishes has now been destroyed beyond repair (<https://www.iucn.org/news/commission-environmental-economic-and-social-policy/202101/communities-combating-fisheries-crime-and-reef-destruction>).

2.2 Law Enforcement

[Hhttps://www.merriam-webster.com/dictionary/law](https://www.merriam-webster.com/dictionary/law) enforcement states that law enforcement is a department of people who enforce laws, investigate crimes, and make arrests. Another definition of the words is the activity of making certain that laws of an area are obeyed (<https://dictionary.cambridge.org/dictionary/english/law-enforcement>). Meanwhile, law enforcement is an agency or official who is

responsible for catching people who break laws.

Law enforcement is the activity of some members of government who act in an organized manner to enforce the law by discovering, deterring, rehabilitating, or punishing people who violate the rules and norms governing that society (New Law Journal, 1975: 358). The term encompasses police, courts, and corrections.

Modern state legal codes use the term peace officer, or law enforcement officer, to include every person vested by the legislating state with police power or authority, traditionally, anyone "sworn or badged, who can arrest any person for a violation of criminal law, is included under the umbrella term of law enforcement.

Although law enforcement may be most concerned with the prevention and punishment of crimes, organizations exist to discourage a wide variety of non-criminal violations of rules and norms, affected through the imposition of less severe consequences such as probation.

Most law enforcement is conducted by some type of law enforcement agency, with the most typical agency fulfilling this role being the police. Social investment in enforcement through such organizations can be massive, both in terms of the resources invested in the activity, and in the number of people professionally engaged to

perform those functions (Hess and Orthman, 2008).

Law enforcement agencies tend to be limited to operating within a specified jurisdiction. In some cases, jurisdiction may overlap in between organizations; for example, in the United States, each state has its own state-wide law enforcement arms, but the Federal Bureau of Investigation is able to act against certain types of crimes occurring in any state. Various specialized segments of society may have their own internal law enforcement arrangements. For example, military organizations may have military police.

Operational policing activities in enforcing laws are managed in three strategies that are conducted simultaneously in different intensities in accordance with the levels of escalation of the societal problems (Team of Police Science, 2015):

- a) Early detection and pre-emptive strategy—it is effective to answer when the societal problems are still kept in human life aspects in the forms of potential disturbances and correlative criminogenic factors and when the societal problems have not emerged to the surface.
- b) Preventive function strategy—it is effective to be applied when the levels of the escalation of the societal problems are still at the disturbance threshold, or police

hazards. It is applied through a set of preventive activities so that there will be no disturbances, disorder, violations and crimes.

- c) Investigative and repressive function strategy—it is required to answer the societal problems that have emerge to the surface as real disturbances and factual threats. A number of law enforcement efforts (repressive efforts), including inquiry efforts to collect data and information (investigative efforts) are conducted.

2.3 Social Impacts

Social impacts can be difficult to define. It is often understood as the effects on people and communities that happen as a result of an action, activity, project, program or policy (www.communityscot.org.uk). A common way to think about social impacts is to consider them as the change that happens for/to people as a result of an action or activity. In this paper, the author would like to discuss the social impacts of fish bombings committed by fishermen in Jayapura waters on people living there and its nearby environment.

3. METHOD

The research employs the qualitative approach and an empirical juridical method. The research aims at analysing the problems by combining legal materials from secondary data with primary data obtained in the field. Data

are gathered using literature studies and field observations.

4. DISCUSSION

2.1 Fishing by the people of Jayapura waters

Poison fishing and fish bombing are common practices and can have a negative impact on the ecosystem. Fishermen have always been regarded by various parties as destroyers of the environment. Some types of technology that fishermen use to catch fish are not environmentally friendly or damage the environment (unfriendly technology). The results of several interviews conducted with fishermen who use bomb fishing reveal that they do that because (1) the material is easy to find; (2) it is simple in the context of assembling and using the process; and (3) it gets more fishes. The use of these bombs is only a secondary tool for fishing gear owned by fishermen, because the other main fishing gear is hand lines. According to the fishermen, the operation of fishing gear that can damage the environment is only carried out at any time, when there are schools of fish or in deep waters. These bombs are obtained by assembling them yourself, or buying them from other fishermen in the local village or neighbouring villages who have expertise in making/assembling fish bombs. The raw material for making bombs consisted of used bottles/pipes, filled with gunpowder which was obtained very easily. One bomb when operated can provide fish of

10 times the yield with a hand line. Operation of fish bombs in fishing, done in secret, or done when finding schools of fish. Although there are other fishermen in the vicinity, the operation can still be carried out, because other fishermen will also be involved in collecting the catch. The results of this study indicate that most fishermen who carry out bombings are aware and know that the operation of this fishing gear is a criminal act that can drag the perpetrators to prison. Fishing carried out by the Jayapura waters community on average is in accordance with the provisions of Law Number 31 of 2004 concerning Fisheries and all fishermen understand the law that will occur if they commit a violation, but on the other hand they still take advantage of the conditions with reduced supervision from water police personnel, so that fishermen secretly still use bomb catching tools to get high yields of fish more.

2.2 Social impacts due to law enforcement actions of illegal fishing by the people of Jayapura waters carried out by law enforcement officers in Jayapura

The impacts caused by explosives on human life and marine life include traditional fishermen finding it difficult to get fish in coastal waters due to damage to fish breeding grounds, fighting between traditional fishermen due to fighting over coastal waters whose coral reefs are still intact; Economic gap between traditional fishermen

(sampan boats) and modern fishermen, ring net boats, etc.). The Jayapura Prosecutor's Office in carrying out law enforcement against the perpetrators of the fish bombing crime is more focused on repressive actions. According to researchers, repressive actions are the right enforcement of laws with high demands and threats of punishment, the impact that arises with repressive law enforcement can provide a deterrent effect for perpetrators and become a lesson for fishermen not to take actions that violate the law so that law enforcement can achieve effective results. The lack of data on fish bombing crimes held by the Jayapura District Attorney is in stark contrast to information from the public regarding the high level of fish bombing activity in the Jayapura city fishing area. This shows that the Jayapura District Prosecutor's Office is still not effective in carrying out legal protection efforts against Jaya's fisheries.

Law enforcement carried out by the Jayapura Police against perpetrators of the fish bombing crime includes several forms of action, namely:

a. Preventive Action

The preventive action taken by the Jayapura Police is aimed at preventing the occurrence of a criminal act of bombing fish in Jayapura waters. The preventive action was not intended for the perpetrators of the crime of

bombing fish, but the action was carried out against the entire community, especially the fishermen in Jayapura city. The use of explosives, which is popularly known as fish bombing, which has been widely practiced by fishing communities in catching fish, has forced law enforcement officers, especially the police, to act decisively in carrying out their duties, thus the authorities firmly hunt down and arrest the perpetrators of illegal fish bombing catching fish. In dealing with blasting cases in the waters, the police do not mind spending large sums of money in eradicating various forms of crime or those using prohibited materials or bombs in fishing. With the alertness of the police at sea in anticipating an explosion in the waters of Jayapura, the officers finally managed to catch the fishermen who had been caught, bombing fish in Jayapura waters. In addition to the bombing of fish with explosives, there are still many fish anesthetics in the waters of Jayapura. So that the waters in Jayapura are currently a serious concern by the marine security apparatus, so that the problem of catching fish that occurs in the sea is currently difficult to handle by the police, considering that the apparatus is very limited and far from the place, especially the waters in Jayapura are very wide. . so the police can't handle it. All kinds of forms have been carried

out by the police in maintaining order and security in Jayapura waters. The forms and efforts made by the police to prevent illegal fishing by using explosives such as bombs or other materials that sacrifice a lot of ecosystems in the sea and cause considerable state losses can be seen in one of the activities done, such as night patrol. It is a form carried out in order to avoid increasing misuse of fishing by using explosive devices, namely bombs that often occur in Jayapura waters.

b. Repressive measures

The repressive action is the second form of law enforcement action carried out by the Jayapura Police in an effort to overcome the problem of the fish bombing crime in Jayapura waters. The repressive action taken is law enforcement as a form of control action against social life in society. Repressive action means that if there is a violation of legal norms, law enforcement officials will control it through repressive actions and sanctions.

c. Curative action

Curative action is one form of law enforcement action taken by the Jayapura Police in overcoming criminal acts fish bombing. The curative action taken by the Jayapura Police was not a planned action but a direct action from the Jayapura police

that came out of the idea of the police. Curative action is a part of efforts to build legal awareness for criminals not to repeat their actions. Curative action is taken when there is an opportunity and repressive actions, namely when the perpetrator is undergoing an examination, at the same time the investigator also gives advice and fosters the perpetrator not to repeat his actions.

Based on this description, it can be concluded that Jayapura Police in enforcing the law against the crime of fish bombing has carried out 2 forms of preventive action as an effort to prevent the occurrence of the crime of fish bombing. These preventive measures include night patrols and surveillance of fishing activities. Based on the results of interviews with the police carrying out law enforcement to prevent the bombing of fish in Jayapura, there are several obstacles that greatly affect the effectiveness of these preventive measures. These obstacles have caused the impacts on preventive actions taken are still not able to build public awareness and have not been able to effectively prevent the bombing of fish in the waters of Jayapura. The minimum number of police personnel, operational costs and lack of infrastructure greatly affect the level of public awareness and public obedience to the law. The factor of economic need among fishermen, which is supported by a

lack of supervision, gives the community the opportunity to commit the crime of bombing fish. The role of preventive action is very much needed, because it is a causative solution to the behaviour of fish bombing, which has almost become a culture among fishermen in Jayapura waters.

Based on the existing laws, Jayapura Police has applied several law enforcement efforts to overcome the problems of the criminal act of bombing fish in the waters of Jayapura. Jayapura Police as law enforcement agency has taken several repressive actions in order to control the social life in the community. If there is a violation of legal norms, law enforcement officers will control it through repressive actions and sanctions.

Based on accurate law enforcement, curative action is carried out by Jayapura Police, namely when the perpetrator is undergoing an examination, at the same time the investigator gives advice and fosters the perpetrator not to repeat his actions.

Law enforcement against the perpetrators of the fish bombing crime through the Court Institution in Jayapura City, is also inseparable from efforts to provide justice to the community and perpetrators as well as protect the marine environment. As an effort to enforce the law, the District Court in Jayapura remains guided by the main task of the court, namely examining, adjudicating and deciding all cases submitted by prosecutors based on justice.

The preventive and curative efforts carried out by the Jayapura District Court are still limited to incidental or informal guidance and counselling to people who coincidentally attend the trial at the Jayapura District Court. When the district court presided over the trial related to the criminal act of bombing fish, the panel of judges often gave advice to the convict and the public who attended the trial not to catch fish using bombs because it could damage the marine environment and harm the life of the community. still limited to coaching and counselling incidentally or informally to the community who coincidentally attended the trial at the Jayapura District Court. As for the way in which when leading a trial related to the criminal act of bombing fish, the panel of judges often gives advice to the convict and the public who follow the trial not to carry out fishing using bombs because it can damage the marine environment and harm the life of the community in the future.

Law enforcement carried out in prisons is a repressive form and curative actions are carried out in correctional facilities so that guidance is expected to foster legal awareness and good behaviour for perpetrators and do not repeat it.

5. CONCLUSIONS AND IMPLICATIONS

5.1 Conclusions

Based on the results of the study, this study concludes the following things:

- a. Fishing by the people of Jayapura waters—Fishing carried out by the Jayapura waters community on average is in accordance with the provisions of Law Number 31 of 2004 concerning Fisheries and all fishermen understand the law that will occur if they commit a violation, but on the other hand they still take advantage of the conditions with reduced supervision from water police personnel, so that fishermen secretly still use bomb catching tools to get more fish.
- b. Social impacts due to law enforcement of illegal fishing actions by the people of Jayapura waters carried out by law enforcement officers in Jayapura—During the nightly patrols by the police in Jayapura waters, the crime rate significantly decreases, as most crimes are committed at night. With the night patrol, the rate of fishing using explosives has decreased, because the perpetrators already know that there is always a police force ready to guard security in Jayapura waters.

5.2 Implications

- a. Local government and law enforcement agencies should improve the awareness of people working as fishermen living nearby Jayapura waters on the importance of maintaining the environment by obeying the laws.
- b. Local government should help fishermen living nearby Jayapura waters to live better.

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