

Analysis of Supervision Forms for Communities Carrying Out *Destructive Fishing* in West Sulawesi Waters

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Abstract

The behavior of fishermen engaging in harmful practices, such as bombing and use forbidden fishing gear, adversely affect the sustainability of the marine ecosystem. The legal question addressed in this article is to the kind of monitoring exercised by the community engaged in destructive fishing in the waters of West Sulawesi. The oversight of the community engaged in destructive fishing is characterized by inherent supervision from the Provincial and Regency Marine and Fisheries Service, internal oversight by the Regional Office of the Ministry of Marine Affairs and Fisheries, and external supervision by the Water and Air Police (Polairud). However, the supervision of destructive fishing in the waters of West Sulawesi is notably ineffective, with patrols occurring only in response to reports from fellow traditional fishermen to the government.

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1. INTRODUCTION

integral collection of various *abiochemical* (physics-chemistry) and *biotic* (living organisms) components that are related to each other and interact with each other to form a functional unit. These components are functionally inseparable from each other. If there is a change in one of these components, it will affect the other components. This change affects the entire existing system, both in terms of structural, functional and balance unity. In the case of coral reefs, for example, one of the adaptation efforts that needs to be done is to improve the quality of the coral reef ecosystem. Coral reef ecosystems in good condition will be able to increase their resilience to climate change, or even if affected by climate change, the ecosystem will recover quickly. (Aulia et al., 2021) . Coral reef ecosystems are part of the marine ecosystem that is a place of life for various marine biota. In the coral reef ecosystem, more than 300 types of coral, 2000 types of fish and dozens of types of *molluscs*, *crustaceans*, *sponges*, *algae*, *seagrass* and other biota can live (Naim, 2010) . Environmental damage can be prevented by the existence of national regulations in this case Law Number 32 of 2009 concerning Environmental Protection and Management as a reinforcement of the principles of environmental protection and management based on good governance. Because, every process of formulating and implementing instruments for preventing environmental pollution and/or damage as well as overcoming and enforcing the law requires the integration of aspects of transparency, accountability, participation and justice. The pressure that occurs on the marine environment is caused by activities to exploit marine water resources, which results in changes in seawater quality standards, as well as ecosystems in the sea.

The legal aspects of preventing marine pollution are regulated in Law Number 32 of 2009 concerning Environmental Protection and Management and Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management. Fishing is an activity to obtain fish in waters that are not in a cultured state by any means or means, including activities that use ships to load, transport, store, cool, handle, manage and/or preserve, and fishing at sea is all fishing activities carried out at sea. Fishing gear is a means, equipment, or other object used to assist in the efficiency and effectiveness of fishing. *Destructive fishing practices* that cause damage to coral reef ecosystems in various regions in Indonesia have been widely studied previously. It is estimated that 75% of coral reef damage in Indonesia is caused by the use of explosives and 5% by cyan, the explosion of fish bombs packed in beer bottles can destroy 5 m² of coral reefs. Damage to marine ecosystems and coral reefs due to the use of fish bombs is characterized by the remains of coral fragments scattered on the seabed. The use of fish anesthetics causes damage to coral reefs, as well as the death of larvae and small fish (Kamaruddin et al., 2022)

Destructive fishing also occurs frequently in the waters of West Sulawesi. *Destructive fishing* is a method of fishing that uses explosives such as fish bombs or toxic materials that damage marine and fishery resources. This *destructive fishing activity* is often carried out by the people of West Sulawesi, most of whom are coastal villages, where the majority of the community's work is fishing. Fishermen in the West Sulawesi area mostly use boats with engines as a means of transportation to catch fish, and use bombs to catch fish. Fish bombs are prepared using special fertilizers as the core material for explosives in the sea. After carrying out fish bombing, the area around the bombing is immediately affected by the presence of coral reef fragments and dead fish. Small fish are not used by fishermen to be accommodated. The behavior pattern of this fishing community in fishing is actually clearly prohibited in Law Number 45 of 2009 concerning Fisheries in Article 9 and Article 85. So the behavior of fishermen who carry out *destructive fishing* such as bombing and using prohibited fishing gear has an impact on the sustainability of the marine ecosystem. Thus, the legal issue in writing this article is what form of supervision is needed for communities carrying out *destructive fishing in the waters of West Sulawesi* ?

2. RESEARCH METHODS

This article using the type of Normative research, using the Legislation research approach and conceptual approach. Efforts to answer the problems raised in the background of the problem in this study, qualitative analysis is used with the deductive-inductive thinking method (Hendrik Mezak, 2006) . Quality analysis is an analysis that uses conclusions, based on theoretical and doctrinal data and legislation that regulates *destructive fishing*.

3. RESEARCH RESULTS AND DISCUSSION

3.1 Forms of Supervision

Supervision can be interpreted as a process to ensure that organizational and management goals are achieved in accordance with the ways to make activities according to plan with the instructions that have been given and with the principles that have been outlined. Supervision according to Robert J. M Ockler explains the *essential elements* of the supervision process, namely a systematic effort to set implementation standards and planning objectives, design information systems, feedback, compare real activities with previously set standards (Ariansyah & Yusran, 2020) . Supervision is a form of mindset and action pattern to provide understanding and awareness to a person

or several people who are given tasks to be carried out using various available resources properly and correctly, so that there are no errors and deviations that can actually create losses by the institution or organization concerned. Judging from its type, this supervision has three types of supervision, namely: (a) Preliminary supervision (*steering controls*). This supervision is planned to address problems or deviations from standards or objectives and allows corrections to be made before a particular activity is completed. (b) Supervision carried out together with the implementation of activities (*Concurrent Control*). This supervision is carried out while an activity is taking place. This type of supervision is a process where certain aspects must be met first before activities can be continued or become a kind of " *double check* " tool that better guarantees the certainty of the implementation of an activity. (c) Feedback supervision, namely supervision that measures the results of certain activities that have been completed (Rianto, 2023). Thus, it can be described that supervision is a process where the leader wants to know whether the results of the implementation of work carried out by his subordinates are in accordance with the plans, orders, goals or policies that have been determined.

Looking at the types of supervision, a good government needs to supervise its subordinates by looking at the process of program implementation or the results of activities that have been completed. The government's supervision process is as follows: (a) preventive and repressive supervision, Supervision of the implementation of regional government is carried out preventively and repressively. Preventive supervision is carried out before a government decision comes into effect and on regulations before the regulations are enacted. Preventive supervision is not carried out on all decisions or regulations regarding certain matters, which according to the provisions of Government Regulations or Laws, can only come into effect after obtaining approval from authorized officials. The form of preventive supervision is to give approval or not to give approval. Repressive supervision can be carried out at any time and on all decisions and Regulations. The form of repressive supervision is to cancel or suspend the validity of a Regional Regulation. Suspending is a preparatory action for a cancellation, but this does not mean that every cancellation must always be preceded by a suspension, or in other words, cancellation can be carried out without prior suspension. The agency authorized to carry out supervision is the authorized official. (b) Active and passive supervision, Close supervision (active) is carried out as a form of "Supervision carried out at the place of the activity concerned" This is different from distant supervision (passive) which is carried out through, "Research and testing of accountability letters accompanied by evidence of receipts and expenditures". On the other hand, Supervision based on formal truth examination according to rights (*rechmatigheid*) is "an examination of expenditures whether they are in accordance with regulations, have not expired, and the rights are proven to be true". Meanwhile, rights based on material truth regarding the intended purpose of expenditure (*doelmatigheid*) are "an examination of expenditures whether they have met economic principles, namely that the expenditure is necessary and the cost burden is simple and minimal (Elvany, 2019)

3.2 Supervision of Destructive Fishing Activities in West Sulawesi Waters

Historically, fishing activities in the past, the term "destructive" or "destructive fishing" was basically unknown to fishermen. All fishing activities, whatever and by whatever means, were considered legal by them. In carrying out fishing, the goal was only one, namely how to get a large catch, no matter how (Sigit, 2020). Along with developments, a fishing gear is considered prohibited when there is a government

regulation on it, but as long as there is no information, any fishing gear is considered legal by fishermen. This fact can be seen through the history of the use of fishing gear, which initially did not prohibit any fishing gear, causing people to openly fish using explosives and anesthetics (Amiruddin et al., 2022) . However, after the issuance of the regulation prohibiting these fishing techniques, people began to camouflage their fishing gear, although some of them still do it openly. Thus, the term destructive fishing gear or fishing techniques is unknown to fishermen, there are only prohibited fishing gear or fishing techniques. This view of society is actually built on the understanding that arises from the results of their interaction with resources. The issuance of the Fisheries Law No. 45 of 2009 as amended by Law No. 6 of 2023 concerning Job Creation which reads "Any person who intentionally owns, controls, carries, and or uses fishing gear that disrupts and damages the sustainability of fish resources that disrupt and damage the sustainability of fish resources on fishing vessels in the fisheries management area of the Republic of Indonesia as referred to in Article 9 shall be punished with imprisonment for a maximum of 5 (five) years and a maximum fine of Rp. 2,000,000,000.00 (two billion rupiah).

In general, the rampant *destructive fishing* is caused by several factors, namely: (1) The span of control and the breadth of the supervision area are not balanced with the capabilities of the current supervisory personnel, (2) Limited facilities and surveillance fleets at sea, (3) Weak human resource capabilities of Indonesian fishermen and the large number of business people and economic chain hunters, (4) still weak law enforcement. (5) Weak coordination and commitment between law enforcement officers. Furthermore, there are 4 (four) things that motivate fishermen to carry out fishing using explosives and anesthetics, including: (1) the pressure of the subsistence economic needs of fishing communities, (2) still low understanding of the importance of sustainable utilization of fishery resources; (3) increasing demand for foreign markets, especially live fish; and (4) inconsistency and weak law enforcement in preventing the use of explosives and anesthetics.

The authority to supervise destructive fishing activities carried out by fishing communities is carried out in stages or in the form of their respective authorities . Supervision of fishermen with prohibited fishing gear, namely through the Fisheries Supervisor of the Directorate General of Marine and Fisheries Resources Supervision, supervision by the Director General of Marine Affairs and Fisheries is carried out in each regional office in each region with the basis of supervision through the Regulation of the Minister of Marine Affairs and Fisheries (Permen KP) Number 18 of 2021 concerning the Placement of Fishing Gear and Fishing Aids in the Fisheries Management Area of the Republic of Indonesia and the High Seas and the Arrangement of Fishing Andons as implementing regulations of Government Regulation (PP) Number 27 of 2021 concerning the Implementation of the Marine and Fisheries Sector. Next is the Water and Air Police (Polairud) the form of supervision carried out by Polairud is a repressive action by conducting patrols and making arrests if there are fishermen who carry out *destructive fishing* . Next is the district/provincial fisheries service. The function of the district/provincial fisheries service is to supervise the community who carry out destructive fishing, namely by using internal supervision, internal supervision is closely related to the realization of legal protection, legal protection as an output of supervision by the fisheries service in the local government, namely by carrying out preventive legal protection, by conducting counseling on the prohibition of using fishing gear that is prohibited by law.

The essence of supervision is absolutely aimed at avoiding the possibility of misappropriation or deviation from the intended purpose. Through supervision, it is

expected to help implement the policies that have been determined in order to achieve the goals that have been designed effectively and efficiently, and also through supervision, an activity that is closely related to the determination or evaluation of the extent to which the work has been carried out is realized (Nurbaningsih, 2011) . Supervision can also find out to what extent the leadership policy has been implemented and to what extent there has been misappropriation of the work. In relation to public accountability, supervision is one of several ways to build and maintain the legitimacy of citizens for the capacity of government together to realize an efficient supervision system, both internal supervision (internal control) and external supervision (external control). In addition to encouraging community supervision (*social control*) (Nasir, 2017) . Supervision includes efforts to check whether everything is happening according to the established plan, based on an instructional order issued, and the principles adopted by implementing it with the aim of reciprocally making improvements if there is negligence or misappropriation before it gets worse and difficult to fix. George R Terry, supervision is the stage of determining what must be realized, namely the limits of the provisions, what is being done, namely assessing the implementation and if necessary implementing improvements so that the implementation is based on the concept, namely in accordance with the limits of the provisions (Kautsari et al., 2024) .

The forms of supervision according to the concept with the implementation carried out according to authority are as follows: (a) Inherent Supervision Inherent supervision is supervision carried out by officials who have the authority to directly supervise the main tasks, functions and objectives of the existence of an institution that has been running in accordance with its functions and roles. This form of supervision of destructive fishing is carried out by the regional government in carrying out work programs in providing education and counseling to the community about the importance of using fishing gear that is permitted by law from the rampant use of fishing gear used by the community is prohibited. (b) Internal Supervision carried out by supervisory officers from special supervisory institutions formed internally by the Government or Executive institutions. In destructive fishing actions carried out by fishermen in the implementation of this form of supervision is carried out by the Fisheries Supervisor of the Directorate General of Marine and Fisheries Resources Supervision, which is located in each region with their respective regional offices. (c) External Supervision External supervision is supervision carried out by officers appointed from outside the Fisheries Service Organization or the Ministry of Maritime Affairs and Fisheries. This form of supervision is carried out by the water and air police (Polairud) who, when carrying out raids in sea areas, immediately take repressive action against fishermen who carry out destructive fishing.

The implementation of supervision of *destructive fishing in the waters of West Sulawesi* is through the fisheries office, the ministry of maritime affairs and fisheries, and also with the water and air police or Polairud. These three elements of the agency carry out forms of supervision work by synergizing with each other in taking action. The action which is the result of supervision of *destructive fishing* is not only applied to traditional fishermen, but also to professional fishermen who have ships. Traditional fishermen groups use destructive fishing by using water bombs or poison, while professional fishermen use tiger trawls. In addition to action, other forms of supervision are by approaching the community, by conducting interactive dialogues on the dangers of using destructive fishing or conducting raids on all fishing gear owned by the community. Thus, it can be described that the form of supervision carried out by the central government and local governments is less effective in taking action. The lack of

internal and external supervision gives traditional fishermen the freedom to use destructive fishing.

4. CONCLUSION

The form of supervision of the community that carries out *destructive fishing* is inherent supervision by the Provincial and Regency Marine and Fisheries Service, Internal supervision in the regions by the Regional Office of the Ministry of Marine Affairs and Fisheries, Directorate General of Marine and Fisheries Resources Supervision, and external supervision by the Water and Air Police (Polairud), however, supervision of destructive fishing in the waters of West Sulawesi is less effective, there are patrols in the waters of West Sulawesi if there are reports from fellow traditional fishermen to the government.

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