

ROLE OF LAW ENFORCEMENT ACTIVITIES IN THE FISHERIES RESOURCE MANAGEMENT

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ABSTRACT

Enforcement activities is important to determine the success of fisheries management. However, enforcement is costly for Indonesia which made up from many islands and has very long coastline. Therefore, it is needed to find the alternative with least in cost. One of the feasible alternative is by empowering fishers and their communities to monitor and surveillance the fisheries resources in their adjacent. This system is rather using traditional concept of community-based or co-management.

Key-words: enforcement, regulations, fisheries, management, resources, effective, community-based, co-management.

I. INTRODUCTION

Fisheries law enforcement by and large determine the extent of compliance with its law and regulations. Law enforcement activities really need to be enhanced in order to achieve the goals of fisheries management. However to enforce the regulation is costly. This is not only realised by the developing countries but also by the developed countries. The expenditure on enforcement comprise a large portion of the state's expenditures on fisheries matters (Susilowati, 1998). Moreover, this expenditure in future is expected to increase significantly.

The economics of fisheries law enforcement assessed by Sutinen and Andersen (1985) concluded that from both historical evidence and logical reasoning enforcement costs are a major determinant of regulatory policy for nonexclusive resources. When enforcement on the fisheries law is imperfectly and costly applied to a certain fishery sector, it will affect the behaviour of fishing firms and optimal fisheries management policy. Sutinen and Hennessey (1985) provide the first evaluation of a fisheries enforcement programme. They examined the impact of enforcement under the Magnuson Fisheries Conservation and Manage-

ment Act of 1976 (MFCMA). They also exposed enforcement as the neglected element in fishery management. They raised a question on the assumption of most literature on fisheries management and regulation, i.e. laws can be perfectly enforced without cost. In fact, law enforcement is usually accounted as one of the legal or institutional problems (Kusuma-Atmadja *et. al.*, 1996) and usually imperfect in the fishery as affirmed by Sutinen and Andersen (1985). The empirical result showed that the expenditure on enforcement of MFCMA were high relative to the potential benefits from the U.S. fisheries, but stated that it was difficult to say whether more or less enforcement was dictated (Sutinen and Andersen, 1985). They suggested that authorities have come to realise that management and enforcement policies were interdependent and should be set simultaneously.

II. PROBLEMS

Surveillance and enforcement operations are critical to the success of any system of fisheries management. Goodreau (1987) believed that without enforcement fisheries regulations will be ineffective. Only effective enforcement can prevent fisheries from deterioration (Sutinen and Kuperan, 1994). Incomplete enforcement could result in the non achievement of the expected objectives of fisheries management for the targeted fishery. Lepiz and Sutinen (1985) suggest that any enforcement operations will be conditioned by the characteristics of the fishery and each country's claims to it.

The nature of fisheries Indonesia is quite dispersed with long coastline and are made up of many islands. The government faces the challenge of securing compliance with limited enforcement resource. In fact, holding high compliance is the precondition of the success of fisheries management. The question raised now is can we secure compliance of the fishers without rely on the expensive enforcement? Thereafter, one of the good effort is through empowering fishers and the related stakeholders to cooperate in managing fisheries resource. Establishing sharing responsibility among the stakeholders could form the co-management or community-based systems in the fisheries management. Empowering fishers to manage their local resources is not the only remedy for the complex resource problems but it seem become the most reasonable for Indonesia as of now. However, in Indonesia empowering fishing community has not been done in well comprehensive planning yet.

III. ENFORCEMENT: MODE AND NATURE

There are two types of enforcement modes, namely: onshore (dock-side) and offshore enforcement. Generally, the offshore enforcement is comprised of three principal modes: observers, sea patrols, and air patrols (Sutinen and Hennessey, 1984). The observer programme places an individual on board a foreign vessel to monitor its fishing activities. The observers have no authority to take enforcement actions, however they fulfil

an important role in the enforcement process by indicating enforcement presence. Sea patrols by coast guard ships and boats is the most comprehensive enforcement mode. Ship and boat patrols can both detect and apprehend violators and can be conducted in all weather where fishing takes place. Boarding at sea from such patrol ships and boats provides detailed information on catch, gear, processing and data reporting requirements.

Air patrols are typically used to search large areas to determine the number, type and identity of fishing vessels. Air patrols can detect limited types of regulatory violations. For example, violations of a closed area regulation can be readily detected by air patrol surveillance but violation of catch limitations and gear restrictions are usually impossible to detect from the air. Moreover, the disadvantage of air patrols is that they can not directly apprehend suspected violators and are often limited by weather conditions.

Dockside or onshore enforcement is also as important as offshore enforcement. The enforcement modes include monitoring landing, inspecting primary buyers and general investigation. However, dockside monitoring cannot reliably determine where fish were caught nor the gear actually used during operation. Of course, there are advantages and disadvantages among the kinds of enforcement modes. However, it is suggested that enforcement strategies should be jointly applied along with the best mode-combination subject to the characteristics of the elements of fisheries enforcement and management.

According to Sutinen and Hennessey (1984), there are four principal types of enforcement sanctions: (1) A citation; (2) Violations; (3) Seizures; and (4) Permit Sanctions. They describe a citation as a written (or verbal) warning involving no penalty, that is usually issued for a technical infraction or an infraction of minor consequences. While a violation is a civil penalty (or administrative penalty), that is issued for serious infractions. A seizure of a fishing vessel is reserved for gross, flagrant infraction of conservation or criminal laws. A permit sanction is used for those who refuse to pay penalties and when other remedies fail. Commonly, the sanctions most often imposed on the violators can be ranked as follows: (1) A citation; (2) Civil penalty (violation); (3) Seizures; and (4) Permit Sanction. Monitoring and surveillance, detection, boarding, and arrests are considered the responsibility of enforcement agencies. Prosecution lies ultimately with the Magistrate Court after the subject is detected through surveillance/ monitoring activities of the respected agencies and a sanction is issued. If the violation is a minor one, the enforcement personnel may give a citation sanction or verbal warning subject to the violator immediately ceasing the violation activity. The citation sanction is not recorded, but if the warning is neglected then a sea chase and boarding activities aimed at the target vessel are conducted. After the second warning and/or if there are heavier violations, then the violator will be subject to civil sanction or administrative fines. In this case, the boarding certificate is usually handed to the vessel master after being informed of

the nature of their offences. Furthermore, the violator will be given two choices, either to pay a compound or to contest the case in court. A compound is an immediate fine that must be paid by the violator to the enforcement Division in the Fisheries Department. Otherwise, fishers could settle the case of non compliance at the court level.

In the United States, enforcement of law and regulations under the Magnuson Fishery Conservation and Management Act (MFCMA) is the joint responsibility of the US Coast Guard (Department of Transportation) and the National Marine Fisheries Service (Department of Commerce). In Malaysia, the institutions responsible for enforcement of fisheries regulation are: (1) the enforcement section of the Fisheries Department Management and Protection Branch; (2) the Marine Police; (3) the Royal Malaysian Navy; and (4) the Royal Malaysian Air Force.

With limited financial resource, Indonesia should try to impose the onshore enforcement as the beginning exercise. The offshore enforcement should taking into consideration to the decision maker in Fisheries Department in the future.

IV. ENFORCEMENT IN MALAYSIAN FISHERIES: A BRIEF REFERENCE

In general, there are two modes of offshore enforcement applied by the Malaysian Government, namely sea patrols and air patrols. The sea patrols are conducted by using fast speed boats of the PL-class and PX-class. The large PX-class vessels are mainly employed for patrolling the EEZ waters which can be operated under all

weather conditions. The enforcement bodies use vessels to detect, board and arrest the fishing vessel violators. In Malaysia, sea patrols are considered an effective technique for monitoring compliance especially with the zoning regulation (Kuperan, 1993). As mentioned earlier, air patrols are used in searching large sea areas to determine the location, number, type and identity of the fishing vessel used for the surveillance, particularly in the EEZ area. Air patrols in Malaysia are jointly undertaken by the Royal Malaysian Air Force and Airwing Section of the Police Force and Fisheries Department. The Fisheries Department will rent air craft for aerial surveillance from the Department of Civil Aviation.

Onshore or dockside enforcement mode in Malaysia is carried out by personnel of the Department of Fisheries to undertake boarding and inspection of vessels at landing jetties and harbours. The aim of this type of enforcement is to detect vessels operating without licenses and using prohibited fishing gear and equipment. This mode of enforcement is less costly but is not capable of detecting violations of zoning regulations and gear restriction.

The major resources for fisheries enforcement activities owned by the Enforcement Division of the Fisheries Department consist of the patrol boats fleet and personnel involved, while air patrol is considered as a partial resource. It is widely understood that most fisheries enforcement is handled by the coast guard which is mobilised by sea patrols since air patrols are high in terms of operational costs. In 1986 there were 27 patrols boats operating in Malaysian waters, but four years later this number

rose to 44 units. Similarly, the number of speed boats also increased by 16 units from 35 in 1986 to 51 in 1991. Among the seven regional enforcement centres (REC), Port Klang was given two additional speed boats in 1991 while the other six REC were given only one boat each. This could be due to the fact that Port Klang is considered as a strategic point for both fisheries and trade ports in the country. For sea patrol, the price per unit of vessels used for enforcement for the PA-class vessels together with engine and navigation equipment cost about RM2.5 million. One unit of the PL-class boat costs around RM200,000. The larger PX and PA-patrol vessels require 8 crew members per vessel but the smaller fast speed boats need only 2 persons per boat. The total manpower resources needed were 384 crew members in 1991 to operate the 95 patrol vessels and speed boats used by the Fisheries Department. Actually, when all the staff in the Enforcement Division, Department of Fisheries are taken into account (onshore and offshore personnel's) the total deployment of manpower is 515 persons. The social cost of the resources used to enforce the fisheries regulation is therefore high. One of the ways to obtain the expenditure is to look at the expenditure on surveillance/monitoring and/or enforcement.

In Malaysia, there are five types of sanctions imposed by the Department of Fisheries for violations of regulation: (1) Stern verbal warning; (2) compound (similar to administrative fines); (3) Court prosecutions; (4) Seizures (boat, gear, catch); and (5) Permit Sanctions. Monitoring and surveillance, detection, boarding, and arrests are considered the responsibility of enforcement agencies. Prosecution

lies ultimately with the Magistrate Court after the subject is detected through surveillance/monitoring activities of the respected agencies and a sanction is issued. The specific entities for fisheries enforcement in Malaysia is shown in Table 1. If the violation is a minor one, the enforcement personnel may give a citation sanction or verbal warning subject to the violator immediately ceasing the violation activity. The citation sanction is not recorded, but if the warning is neglected then a sea chase and boarding activities aimed at the target vessel are conducted. After the second warning and/ or if there are heavier violations, then the violator will be subject to civil sanction or administrative fines. In this case, the boarding certificate is usually handed to the vessel master after being informed of the nature of their offences. Furthermore, the violator will be given two choices, either to pay a compound or to contest the case in court. A compound is an immediate fine that must be paid by the violator to the enforcement Division in the Fisheries Department. Otherwise, fishers could settle the case of non compliance at the court level. The most common offences recorded for domestic vessels is the trespassing into the five miles limit which is reserved for traditional fishers. For the first and second offences, the violators will be asked to pay a compound of a minimum of RM500 or a maximum of RM50,000. For the third offence, a court case is mandatory and it is also mandatory that the catch and gear, and vessel are seized. To bring the case to court, the Department of Fisheries must submit a letter of consent to prosecute with all necessary supporting documents (e.g. charge sheet, investigation paper, photographs evidence, certificate of boarding, etc.).

Table 1
The Specific Entities for Fisheries Enforcement in Malaysia

No	Element Type	Specific Entities
1.	Rule-making Bodies	Parliament, Fisheries Department, Ministry of Agriculture
2.	Laws and Regulations	Fisheries Act 1963, Fisheries Act 1985, EEZ Act 1984, and various Fisheries Regulations
3.	Firms and Individuals	Fishers, foreign and domestic
4.	Detection and Apprehension Authorities	Fisheries Department, Marine Police, Royal Malaysian Navy, Royal Malaysian Air Force and Police Airwing Unit
5.	Prosecution Authorities	Enforcement Division of Fisheries Department and Marine Police
6.	Conviction and Sanction Authorities	Magistrate Courts

Source: Jahara (1988).

V. DO INDONESIAN FISHERIES NEEDS ENFORCEMENT ?

The effective law enforcement in Indonesian fishery is hardly achieved in the short term. This is mostly due to the physical difficulties such as long coastline and dispersed in islands' location. Lack of law enforcement in zoning regulation to protect the inshore fisheries in Indonesia was reported by Susilowati (1998).

There are three principal agencies involved in the enforcement of fisheries regulations in Indonesia. They are the Fisheries Office (under the division of 'usaha tani'), the Marine Police and the Navy. Currently, the marine police or navy help in monitoring the fisheries resource. The arrested fishers are handed over to the court officers for further action, if necessary.

However, up to now, it is very seldom that Indonesian fishers are brought to court for violating the fisheries regulations. Given limited budget, personnel and facilities, it is very costly for the government of Indonesia to carry out proper enforcement and surveillance of fisheries and maritime resources. In practice, enforcement operations which are conducted by the navy is undertaken in two ways: (1) operations conducted individually by the navy due to the secrecy of the mission; (2) operations conducted jointly with other agencies. The budget for operation of fisheries enforcement is covered by the arm forces and the fisheries office. The type of operation at the sea is directed by the navy for security defence (keamanan laut=kamla) which include intelligence, territorial, patrol, and jurisdiction operations. The operation is

subject to the LOCUS DELECTI principle, namely the violator can be prosecuted in any region of Indonesian territory.

Frankly, the fisheries office should be given more resources to carry out fisheries enforcement rather than just waiting from the Navy to undertake fisheries enforcement. No statistics are available on violation records in the Indonesian fisheries. In fact, many disputes and conflicts have been found in the field. It is expected that decision makers in central government will more open and realised the importance of enforcement activities. Thus, enforcement policy could be decentralised to the lower level authority. The co-ordinator for enforcement activities in the fisheries should be nominated to the most concern entity, in this case is Fisheries Department.

VI. CONCLUSIONS

Enforcement on fisheries regulations is very costly given thousands kilometers of coastline for Indonesia. Without enforcement activities, compliance of the fishers could not be ensured. In otherhand, the effectiveness of fisheries management is determined by the compliance condition. Thus, we need to find out a strategy for securing compliance without rely on modern enforcement for Indonesia. One of the approaches which is able to secure compliance with least in cost is by empowering the fishers and their communities. This approach employs rather the traditional concept of community-based or co-management systems. Towards the restoration of traditional practices also used to over-

come the failure of introduced 'scientific-based' (modern) management systems to regulate the exploitation in inshore fisheries effectively in the South Pacific (Doulman, 1993). Moreover, local communities are the best position to monitor compliance with regulation when the government faces limited capacity to enforce fisheries regulation since centralised fisheries management brought about open-access conditions throughout much of Indonesian fisheries (Bailey et al., 1992).

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