



FROM FISHERIES CONSERVATION TO COMMUNITY SUSTAINABILITY (STUDY ON BENGKULU GOVERNMENT'S POLICY ON FISHERIES)

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Abstract

Bengkulu, which is located in the western coast of Sumatra and is adjoining Indian Ocean with an area of 12335.20 km² sea, has high levels of biodiversity thus it included in one of Mega Biodiversity. However, some species are endangered and fishing economic level in general is still low. This is due to the rampant of illegal fishing, lack of disciplines from fishery community in conducting their activities (such as docking and selling not on the designated places, unregistered fleets). This writing began from field surveys in the coastal town of Bengkulu, but problem raised is how local government policies in manage these issues. This paper used normative juridical method with literature searches and statute approaches. Interview with officials from the Ministry of Marine and Fisheries is conducted as a complement. Results of the writing shows the government's policies on fisheries can be found in Act on ratification of UNCLOS in 1982; Act on Waters, Act on Biodiversity; Act on Fisheries; Regulation of the Minister of Marine Affairs and Fisheries No. PER.05/MEN/2008 on Fisheries Capture Business. These acts have lead to the sustainable use of fisheries. Unfortunately, policy on obligation to anchor in PPI and on registry for small fishing fleets, for which fisheries act mandated, are still not found in Bengkulu. Suggestion; despite the absence of policy, the Government of Bengkulu as an inherent part of Indonesia should be fully aware that Indonesia is bound to UNCLOS 1982 and UNIA 1995, also Code of Conduct for Responsible Fisheries, so the measures taken can lead to responsible management, thus sustainable fisheries management can be achieved.

Keywords: *community, fisheries, government policy, sustainability.*

Introduction

Bengkulu, which is located in the western coast of Sumatra and is adjoining Indian Ocean with an area of 12335.20 km² sea, has high levels of biodiversity thus it included in one of Mega Biodiversity. It is not surprised if people tend to choose fishing as a living.¹ They are varied from traditional to modern.

Even though Bengkulu is very rich of fishery recourses the fishermen economy are still in low level. In 2012 Bengkulu Marine and Fishery Department (DKP Bengkulu) noted a decrease in the number of fishermen,² and Ulayat³ recorded that no less than 500 fishermen and farmers turned to coal waste collection along Bengkulu River even to the edge of sea. Even today there are nearly 50 coal gatherer communities along the Watershed Bengkulu organized by fences. They sell it not only in Bengkulu but also to.⁴ While doing the survey it is found many fishing fleets under 10 gross tonnage (GT) landed outside the fish landing port (PPI); many people sell fish along the seashore in buildings (some of the buildings are permanent and others are not where the roof made of only tarpaulin or iron sheeting). From interviewed with a fisherman it is known that Indo-pacific sailfish, Yellowfin Tuna, Senangin Fish, Terong fish, Gebur fish, Karang fish are now difficult to find. These are issues

regarding not only fish but also fisherman, marine environment, and society around it which should be addressed by Bengkulu Government immediately.

Indonesia has ratified United Nation Convention on The Law of The Sea 1982 by enacted it through Act No. 17 year 1985 on the ratification of UNCLOS 1982 which then implemented in Act No. 6 Year 1996 on Indonesia Water and ratified Agreement for the Implementation of the provision of the UNCLOS 1982 relating to the conservation and management of straddling fish Stock and Highly Migratory Fish Stock (UNIA 1995) through Act No. 21 year 2009 and also adopted Code of Conduct for Responsible Fisheries (CCRF). It means Indonesia has to commit what have been agreed by those regulations, especially CCRF in relation to sustainable fishery management.⁵ This paper tries to analyze Bengkulu Government policy in realizing community sustainability in fisheries. What efforts have been done in enhancing fisheries community in Bengkulu.

Materials and Methods

This research is a juridical normative research (Soerjono Soekanto and Sri Mamudji: 1983), in particular the inventory of policy of Bengkulu Government in forming community sustainability in fisheries. Primary legal materials include regulations, both international and national which become references to Bengkulu Government in making such policy. Secondary legal materials that complement the primary legal materials include literatures relating to the topic of the paper. The legal materials collected by the laws of search methods both written and unwritten law of primary and secondary legal materials. Search the written law and unwritten literature studies done both on line and off line.

Result and Discussion

Sustainable Development and the Chancing Paradigm on Fisheries

The general principle that States should ensure the development and use of their natural resources in a manner which is sustainable has emerged only recently. It appeared firstly in treaties in 1980. The term is generally consider to have been coined by 1987 Brundant Report, which is defined it as 'development that meets the needs of the present without compromising the ability of the future generations to meet their own needs'.⁶

Fisheries are a common property natural resource; anyone can, in principle, fish in the sea. Anyone can enter a particular fishery. If the quantity of fish being caught together with fish lost through natural mortality exceeds the amount of fish being added to the stock through reproduction, then the size of the stock will start to decrease. This phenomenon is known as over-fishing. To prevent it is usually necessary to regulate the amount of fish to be caught.⁷

Fisheries sustainability began with conservation paradigm by biology scientists. In this paradigm fisheries sustainability is defined as long term conservation. It means that fisheries activity will be "sustain" if it is able to protect fishery resource from extinction. This concept gave a little attention to human purpose in conducting fishery activity.

Then in 1950s, there appeared a new paradigm, rationalism paradigm which focused on fishery sustainability that rational from economic point of view and based the argumentation on a concept the achievement of maximum profitability for resource owner.

This concept was challenged by Charles who proposed community paradigm in 2001. He argued that fishery sustainability will be achieved through community approach, which means main concern should be addressed to fishery community sustainability as a community system. Traditional fisheries concepts which proved to be of self control against the catch, appropriate use of technology, high levels of collectivity among fishing communities and traditional knowledge which reflects the resilience of fisheries. Thus, fishery sustainability not solely for the sake of the preservation of the fish itself or for economic benefit (as rents) but more than that to the sustainability of fisheries communities (sustainable community) which is supported by institutional sustainability including the quality of sustainability of regulation devices, policies and organization promoting the achievement of ecology, economic and fishery community sustain.

International Regulations on Fisheries

UNCLOS 1982

The core of the fisheries provisions of UNLOC 1982 is to be found in the articles dealing with the EEZ.⁸ As regards conservation, article 56 (1), article 61(1) and (3), article 62(1), of UNCLOS 1982 provide the coastal state's rights and duties on the fisheries regime of the EEZ. These articles show that the coastal state's management are very important in preserving fish. Under article 192 States have the obligation to protect and preserve the marine environment. Article 193 provides States have the sovereign rights to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment. Article 194 provides measurement that States should take to prevent, reduce and control pollution of the marine environment. It is seen that UNCLOS 1982 tries to prevent the failure of conservation by marine pollution of a State. That is why these regulation are related one each other.

Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating of the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (United Nations Implementing Agreement/UNIA) 1995.

In essence, the UNIA 1995 contains provisions, standards, management and conservation of fish species and migratory species straddling fish, which has been ratified by 75 countries. UNIA 1995 effective from December 11, 2001.

Ratifying this strengthening Indonesia commitment to prevent infringement and uncontrolled illegal fishing by foreign vessels in our EEZ zone which cause increasing high commercial value of fish stock that has been rife in Indonesian. It will then more easier for Indonesia to get data and information related to fisheries, by changing the information and data among contracting States. Indonesia has rights and duties to implement conservation and manage fish stock.

Code of Conduct For Responsible Fisheries (CCRF)⁹

FAO is a UN Body which one of its mandates is responsible for global fisheries management. To achieve this FAO published CCRF. The Code is global in scope, and is directed toward members and non-members of FAO, fishing entities, sub regional, regional and global organizations, whether governmental or non-governmental, and all persons concerned with the conservation of fishery resources and management and development of fisheries, such as fishers, those engaged in processing and marketing of fish and fishery products and other users of the aquatic environment in relation to fisheries. The Code provides principles and standards applicable to the conservation, management and development of all fisheries. It also covers the capture, processing and trade of fish and fishery products, fishing operations, aquaculture, fisheries research and the integration of fisheries into coastal area management.

Some of general principles of CCRF are:¹⁰

- (1) States and users of living aquatic resources should conserve aquatic ecosystems. The right to fish carries with it the obligation to do so in a responsible manner so as to ensure effective conservation and management of the living aquatic resources.
- (2) Fisheries management should promote the maintenance of the quality, diversity and availability of fishery resources in sufficient quantities for present and future generations in the context of food security, poverty alleviation and sustainable development. Management measures should not only ensure the conservation of target species but also of species belonging to the same ecosystem or associated with or dependent upon the target species.
- (3) States should prevent overfishing and excess fishing capacity and should implement management measures to ensure that fishing effort is commensurate with the productive capacity of the fishery resources and their sustainable utilization. States should take measures to rehabilitate populations as far as possible and when appropriate.

Indonesia Policy on Fisheries

In Indonesia, contribution of marine resources to the national economic is in the second level after services. Moreover, there is a tendency that industry competency has moved to marine industry based. Marine development in future needs support from politics and all stakeholders. In achieving this goal Indonesia government develops an integrated maritime economy by optimizing the utilization of marine resources sustainably.¹¹

Act No. 31 Year 2004 and Act No. 45 Year 2009 on Fisheries

Two important points from those which are governed in the acts are about compulsories to register the fleet and to land the fleet on fish landing port (PPI)

Fishing fleet is defined as a vessel, boat, or other floating device used to catch fish, to support fishing operations, fish farming, fish processing, fisheries training and research/exploratory fishery. The act obliges all fleets to be registered. To follow up this act, ministry of marine and fishery published Ministry Regulation No. 5 Year 2008 on Fish Captured Business. In chapter 7, article 19 to 21 provide authority in licensing for fleets with certain weights. Article 21 requires Regents / Mayors to manage registration of fishing boats weighing less than 5 GT domiciled in its jurisdiction.

Article 41 provides all fleets to land and unload the fish captured on fish landing port (PPI). It is understood that in a PPI there is Governmental functions that setting, coaching, controlling, monitoring, and security and operational safety of fishing boats in the fishing port. On the other hand, the operation function is a function to carry out the operation in the form of the provision and / or related services in the fishing port. The importance of government function in the port is as a control in avoiding over fishing and illegal fishing.

The compulsory to land the fish catch on pointed port has a coercion meaning as there is an administrative sanction if it isn't obeyed. The sanctions include warning, liquidation or revocation of licenses. Coercion is one of legal element in order to achieve its goal, order and justice.¹²

Bengkulu Government Policy

Policy of Bengkulu Government which constitute¹³ follow up action of national long term development plan¹⁴ should in accordance with regulation both national and international which referred by Indonesia government .

Bengkulu government realizes that natural resource management are still not sustainable and ignore aspects of environmental preservation. It makes environmental carrying capacity decreases and the availability of natural resources depleted. Mining business contributes to land and water pollution which causes an imbalance in the overall system environment supporting human life. Coral reef are now in poor condition as impacts of fishing by fishermen that use explosive material and coral reef mining for building materials and street paving.

In achieving the sustainable utilization of natural resources and environment Bengkulu Government makes programs as follows:

- a. Utilization of farm and marine natural resources sustainably
- b. Forestry development and conservation of water resources
- c. Utilization of mineral and mining
- d. Control of natural resource and environment appropriately
- e. Law enforcement law enforcement for natural resources and environmental safety.
- f. Fishermen with modern fishing gear shall not enter traditional fishermen capture zone.
- g. Coaching and counseling should be done continuously so that fishermen will notice the aspect of environmental sustainability in particular the preservation of coral reefs.
- h. Coastal area and fisheries development can be directed to the beach and sea tourism related sectors. *But should be based on environmentally sound development concept and also should involve surrounding communities so there will be symbiosis between government and the community. It is hoped to increase community welfare and district revenue.*

Marine Affairs and Fishery Department of Bengkulu Policy as a Partner of Bengkulu Government

To attain the goals Bengkulu Government incorporates with Bengkulu Marine Affairs and Fishery Department (DKP). The function of DKP Bengkulu in promoting Bengkulu government program in fisheries is to formulate technical activities, capture technology coaching, other means and methods of

good catching. One of drifts of policy and strategy of DKP is increasing utilization and management of fish resources through coaching and supervision and increase community empowerment activities in order to achieve responsible and sustainable fisheries.

There are several important issues which become focus of DKP Bengkulu,¹⁵ some of them are over fishing, illegal fishing, environment damage and fishermen poverty. These issues affect sustainable of community. To overcome these issues DKP Bengkulu has arranged programs which set out in strategic plan 2010-2015. Programs and activities of DKP Bengkulu are below:

1. On Capture Fishery Field:
 - a. Fish resources breeding program
 - a. Procurement of supervisory board
 - b. Fish captured business allocation based on fish stock and worth ship of fleets
 - c. Licenses control, by not adding new licenses, except substitute the expired licenses.
 - d. Rerecord of active fleets
 - e. Arrangement of fishing gear
 - b. Restructurization program for fleets
 - c. Diversion and Diversification Fishermen Business
 - d. Production improvement program
 - a. Repair /maximize record of fish captured on fish auction place (TPI)
 - b. Reduce the number of boats without motors into motor boats
 - c. Enrichment of local fish biomass which is still low.
 - d. Coaching and handling fish captured post-harvest on board
 - e. Limitation of new licenses to make economic value of company competitive
 - e. Improvement of fish captured export
 - a. Implementation of CCRF
 - b. Improve capture fish handling to keep quality
 - c. Coaching and handling fish captured post-harvest on board
 - d. Increase of fleets that meet seaworthy and save worthy.
 - f. Non fishermen employment program. One of them is to make fish landing port (PPI) become the center of Minneapolis zone of fish capture activity.
 - g. Fishery port development program, its activities:
 - a. Improve facilities and services of PPI
 - b. Improve Fishery Port Information Center
 - c. Improve fishing port as a center of economic zone based on marine and fishery activities.
2. On Coastal And Small Islands Fields:
 - a. Marine Partner Program in developing District Marine Conservation Zone (KKLD). Bengkulu has three water conservation zone; Turtle conservation in Muko Muko, Linau, Merpas, and reservation zone in Enggano (in process)
 - b. Workshop on status of fish species protection. Result of the workshop is that the species below are under protection

No.	Species	District									
		City	Kaur	M-M	B-U	B-S	Seluma	B-T	Kpyng	Curup	Lebong
1	Terubuk		√					√			
2	Banggai Cardinal Fish										
3	sea cucumbers	√									
4	Shark						√	√			
5	Turtle		√	√	√	√	√	√			
6	Dugong	√			√						
7	Super Red Arowana										
8	arowana jardini										
9	Whale	√			√			√			
10	Kima	√	√		√						

11	Lola	√	√		√					
12	Napoleon		√		√					
13	Sea horse	√	√		√					
14	Ornamental corals	√	√		√	√	√	√		
15	Labi-Labi		√	√	√		√	√		

3. On Supervision Field

- a. DKP Bengkulu has improved operation and maintenance of surveillance vessels. This has been available for speed boat used for controlling activity.
- b. Programs on Settlement of marine and fisheries offenses are coordinating forum in handling fishery crime, technical meetings of provincial fisheries surveillance, data building control based, potential and utilization of marine resources monitoring, coordination/supervision/verification of fish resource case.
- c. Surveillance operation of fisheries resource improvement field the programs are to build and monitor, identification and verification district fisheries licenses.

The policy of Bengkulu Government together with DKP Bengkulu and its programs are obviously seen that there is a strong will to create a sustainable fishery community, but it is law enforcement which is difficult to implement.

Regulations on registration of fleet imply regularity, order and discipline. The fleets under 5 GT are also need to be registered, even though small in scale but they also capture fish. The fish captured, the way they capture and the fishing gear they use need to be monitored. How will data regarding amount and species fish captured will be gotten if they even not registered? Then it is impossible to get accurate data on whether over fishing has been occurred or not in Bengkulu.

Furthermore, fish landing ports (PPI) in Bengkulu city (Pulau Baai, Pondok Besi and Malabero) are still from fish landing activity. The fleets back to their own dock while the rule says they are to land the fish captured on fish landing port (PPI). Some fishermen told different reason of why they do not land on the port; one said the facilities on the port is not adequate and make fish easily damage; other said that they have to pay expensive if they want to land there. But both of them do not know they have to land there by rules. Another reason from DKP officer was that PPI were build too far from the sea. It is noted that PPI building haven't been coordinated well. It should have been planned well as it is hoped to become a center of economic zone based on marine and fishery activities. By not landing on the port, it is difficult to get data over amount of fish and kind of species captured accurately.

From the policy, the programs tend to be directed more on coaching the harvest on the board. There should also be a program that make a group of fishermen that environmentally sound. These group will grow into a bigger group and later will become a community that environmentally sound.

Other problem that needs to be addressed is the pollution of Bengkulu river caused by coal waste from coal mining. Coal mining caused damaged over Bengkulu river basin and the waste up to coastal area. Revenues derived from mineral and mining resources directed to accelerate economic growth by *investing in other sectors with high productivity. In addition, a part of the revenue has to be saved for reclamation and conservation activities, especially for environmental damage as a result of the utilization of both resources.*

After inventorying the rules, there are no rules regarding registration of fleets under 5 GT or rules over coal waste collecting along the coastal area and Bengkulu river basin, there is no rules over that matter in Bengkulu. Some fishermen on Pantai Zakat said that they haven't registered or have been registered by DKP or district government because *the compulsory is only for big fleets.*

For Bengkulu river pollution case, district revenue from coal mining which waste pollutes the river has to be allocated to recover river basin and coastal area.

Conclusion

Most of policy of Bengkulu Government in creating a sustainable fishery community has already been in accordance with national policy drift. However, not everything goes right easily. The facts that fish landing port that are not going as they were hoped, no regulation on registration of fishing fleets

under 5GT, coastal environment damaged as a result of coal waste collecting by people. This, of course needs a further research, but anyhow as Churchill stated in his book that various explanations can be given for the lack of success of management, such as non-compliance by fisherman with such measures as are adopted, such non compliance being facilitated by a lack of rigors in enforcement. The root cause, however, which lies behind these explanations, is over capacity of many fishing fleets, i.e., there are far more vessels than are economically justified or necessary to catch the fish available. This leads fisherman to disregard conservation measures because of the competition to catch any available fish. Unless the problem of registration of fleets under 5 GT, compulsory land to fish landing port, coal waste collecting are seriously addressed, it seems unlikely that fisheries management in Bengkulu will improve, thus community sustainability won't be achieved.

References

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