

THE CONSERVATION OF MARINE ECOSYSTEM FROM TRAWL USAGE BY THE LOCAL GOVERNMENT BASED ON SUSTAINABLE MARINE PRESERVATION PRINCIPLE

Waluyo, Djoko W. Winarno, Ayub T. S. Kusumo, Rosita Candrakirana

Faculty of Law, Universitas Sebelas Maret, Indonesia
Correspondence: waluyo.fh@gmail.com

Abstract

Fisheries practice using trawl and seine nets in Indonesia are still numerous since fishermen round that it will yield much more. However, the practice also threatens the life of small and young fishes as well as destroys the coral reef. The government then issued the regulation namely the Regulation of Minister on Marine Affairs and Fishery Number 2/Permen-KP/2015 about the Prohibition of Trawl and Seine Nets Usage, which apply to the whole area of fisheries in Indonesia. It was one of the efforts by the Government of the Republic of Indonesia in conserving its marine ecosystem. The aim of this study was to evaluate the application of regulation to prohibit the trawl and seine nets usage based on sustainable marine preservation principle. This study was a doctrinal research applying case approach and statute approach. The study was held on several regions in Indonesia where the regulation has been enforced. The findings then elaborated with legal sources, such as Act number 32 year 2009 about Environment Conservation and Management, Act number 31 year 2004 about Fisheries, and Regulation of Minister of Marine and Fishery Number 2/Permen-KP/2015 as primary legal sources. The secondary legal sources used were journals, articles, and other relevant sources. The result showed that there is a need to establish a model for ideal implementation of the regulation based on sustainable marine preservation principle in order to conserve the marine environment as well as to increase the welfare of traditional fishermen.

Keywords : *conservation, local government, trawl*

Submitted: 10 September 2016 | Revised: 28 November 2016 | Accepted: 15 April 2017

I. INTRODUCTION

Fisheries practice using trawl and seine nets in Indonesia are still numerous since fishermen found that it will yield much more. However, the practice also threatens the life of small and young fishes as well as destroys the coral reef. Therefore, the government of Indonesia, through the Minister of Marine Affairs and Fisheries, release a regula-

tion to prohibit the use of trawl and seine nets. The released of Ministerial Decree of Marine and Fisheries Number 2/Permen-KP/2015 on Trawl Usage Prohibition has set a pro and contra in the community on many aspects, such as legal, economic, social, and cultural. From legal point of view, the release of the Ministerial Decree was a means of marine resources protection and conservation. However, from the economic point of view, the establishment of the regulation is causing a decrease in traditional fishermen's welfare. The yield of traditional fishermen becomes reduced because they only use a simple and safe fishing gear, which do not endanger the marine ecosystem sustainability. On the other hand, the big fisheries industries gained much more harvest due to the trawl usage, as well as threatened the conservation of the ecosystem. It would later cause poverty to the fishermen community as well as the destruction of marine ecosystem. The low yield would also induce horizontal social conflicts among fishermen.

In fact, not all of trawl usage will endanger the marine ecosystem. The use of trawl in deep ocean will not pose a problem to the ecosystem. So, the proper methods or model for fishing is actually required. There are three proposed approach for managing the fisheries. *First*, environmental conservation necessities; *Second*, management for economic benefit; and *Three*, management for both economic benefit and conservation necessities.

The Model number Three is a management model govern by local regulation on Provincial level, which regulates the particular permitted area for fishing, the authorized fishermen, the legal fishing gear, the under-controlled fish auction methods, and the registered boat for fishing activities. Besides, the policy model for marine management should emphasize on Sustainable Marine Principle so that the ecosystem can be conserved as well as the welfare of the fishermen can be maintained or augmented.

The aim of this study was to evaluate the application of regulation to prohibit the trawl and seine nets usage based on sustainable marine preservation principle. Evaluating the implementation of regulation, it is also proposed the potential role of local government in provincial level in ensuring the fisheries practice which environmental-friendly as well as advantageous economically for the traditional fishermen.

II. METHODS

This study was a doctrinal research applying case approach and statute approach. The study was held on several regions in Indonesia where the regulation has been enforced. The primary legal sources used in this study were Act number 32 year 2009 about Environment Conservation and Management, Act number 31 year 2004 about Fisheries, and Regulation of Minister of Marine and Fishery Number 2/Permen-KP/2015. The secondary legal sources used were journals, articles, books, and other relevant sources. The tertiary legal sources used were newspapers, expert opinion, and scientific discussion on study subjects. The data were also retrieved from structured interviews to the local authorities. The findings then elaborated with legal sources, such as primary, secondary, and tertiary legal sources. Being elaborated, the findings then analyzed systematically, logically, and by juridical analysis

III. THE REGULATION OF TRAWL USAGE

In international law, it is known that there are four sources of¹. International Customary Law and International Conventions are the two of them². The part of the international customary law regulates the management of fisheries internationally. It is also ruled by bilateral, multilateral, and regional treaties³. In 1982, *The United Nations Convention*

¹ Sources of International Law according to article 38 paragraph (1) International Court of Justice Statute are: *international conventions, international customs, general principles of law, judicial decisions and teachings of the most highly qualified publicists.*

² Based on article 38 International Court of Justice Statute, *International custom, as evidence of general practice accepted as law.* There are two elements theory which become the legal basis of International Custom, i.e.: 1) The custom should be facts of practices or behavior commonly done or practiced by states (the evidence of material act), 2) the Custom has acknowledged or accepted by the global community as a behavior that possess a legal value (technically known as *opinio juris sive necessitatis* or *opinio juris*).

³ Fish-producer States usually join the fisheries organization, regionally or multilaterally, and therefore obey the agreement within the organization. International law recognizes two type of legal source, they are hard law and soft law. The 1995 FAO Code of Conduct for Responsible Fisheries (CCRF) is an example of soft law.

on the Law of the Sea 1982 (UNCLOS)⁴ indicated its concern on marine exploitation into regulation on determination of territory which may influence the States' rights on exploration, exploitation, natural as well as non-natural resources management, and States' jurisdiction. Food and Agriculture Organization (FAO), as one of the international organization, also established a Code of Conduct for Responsible Fisheries (CCRF)⁵. It was done to promote a sustainable and long-term fisheries management by the principles and international standards for responsible fisheries activities stated within the Code.

The article 1 paragraph (2) of CCRF states:

“The Code is global in scope, and is directed toward members and non-members of FAO, fishing entities, sub regional, regional, and global organization whether governmental and non-governmental and all persons concerned with the conservation of fishery resources and management and development of fisheries, such as fisher those engage in processing and marketing of fish and fishery products and other users of the aquatic environment in relation to fisheries.”

The CCRF is globally⁶ applied for fisheries activities, whether it is inside the national jurisdiction or offshore. The Article 6 of CCRF showed the general principles of fisheries activities, they are:

1. Article 6 paragraph 1: The obligation of State and living aquatic resources users to conserve the aquatic ecosystem. The fisheries should be carried out in a responsible manner to ensure effective conservation and wise management of the living aquatic resources.
2. Article 6 paragraph 2: The management of fisheries obliged to promote the quality, diversity, and availability of marine resources in order to provide adequate amount for present and future generations. It applies on the context of food security, poverty alleviation,

⁴ UNCLOS 1982 resulted from Conference on the Law of the Sea III held on December 1973-September 1982

⁵ The aim of CCRF is to assure the conservation stages and the effectiveness of fishing by closely consider the environmental, biological, technical, economic, social, and trading aspects.

⁶ Hasjim Djalal, “The Emergency of The Concept of Fishing Entities, Ocean Development and International Law”, Vol. 37 No. 2 April-June 2006, 2006. Also read Dikdik Mohammad Sodik, “International Law of The Sea and Its Regulation in Indonesia”, p. 158.

and sustainable development.

3. Article 6 paragraph 3: States are obliged to avoid over fishing as well as excess fishing capacity and should implement a proper management measures to assure that the fishing effort is proportionate with the production capacity of the fishery resources and their sustainable utilization.

The application and improvement of environmental-friendly fishing tools also being regulated by the CCRF in the article 6 paragraph (6) by means of obligation for States to formulate regulation in order to manage the development and usage of selective and environmental-friendly fishing tools and techniques. The States also agreed on several general principles of CCRF to be performed internationally such as: (1) the obligation to conduct the act of conservation, especially in fishing activities, as well as to carry out a responsible conservation; (2) the assurance of quality, diversity, and availability of marine resources for present and future generation which should become part of management activities; (3) the prevention of excessive fishing by the States and the assurance of proportionate and sustainable utilization of marine resources; (4) the prioritizing of research in developing the marine and fisheries science, techniques, and its interactions towards the ecosystem as well as the reassurance of cooperation, both bilaterally and multilaterally; (5) the alertness approach upon conservation, utilization, and management of marine resources by the States; (6) the obligation to develop a selective and environmental-friendly fishing gear; (7) the attention of the States upon the nutrition content of the fish by the time of catching, handling, and distribution; (8) the effort of rehabilitation carried out by the State to protect the marine resources from disruption, pollution, and quality degradation which caused by environment-threatening fisheries; (9) the assurance of the legal compliance upon the fisheries control; (10) the act of cooperation among States on conservation and responsible fisheries; and (11) the assurance of decision making transparency by the States concerning a responsible fisheries.

A States will be bound to a source of international law when one has ratified it. A conduct of ratification will oblige the State to conform the regulation ruled in certain international law it ratified. In case of Indonesia, a ratification of international law often followed by a con-

struction of national legal aid concerning the regulation it has ratified.

The implementation of international law into national law is based on Transformation Theory and Delegation Theory in international law⁷. Based on the two theories above, it is assumed that international law and national one are complementary. The consequence will be a required transformation stage will be applied when it concerns to implementation of international convention into national regulation. But this stage will not necessary when it concerns the international customs and general principles of law. However, it will depend on national legal political view on how to transform the international law into national regulations.

As a follow up of UNCLOS 1982 ratification and compliant of the CCRF, Indonesia has issued some regulations to manage the fisheries activities throughout the country. As a conformation of international law, the fisheries practice should follow the obligation to prevent the illegal, unreported, and unregulated (IUU) fishing. Illegal fishing has become a threat to the sustainability of marine environment worldwide, including Indonesia. Besides the illegal fishing, the use of non-environmental-friendly fishing gear also hazardous to the conservation of marine environment. It is known that around 1970 – 1980s, there was an increase of trawl usage in Indonesia, which highly become the threat to the sustainability of marine ecosystem. The threat posed by trawl usage was due to harvesting without selection, both mature and immature organism. This act would endanger the organism regeneration.

The Ministerial Decree of Minister of Agriculture No 503/KPTS/UM/7/1980 has define the trawl as a bag-form net pulled by a motorboat and employing a net opener called “beam”, or a pair of otter board; or a wide net pulled by a pair of motorboat⁸. Trawl was recognized by Indonesians on many names, such as *pukat harimau*, *pukat tarik*, *tangkal tarik*, *jaring tarik*, *jaring trawl ikan*, *pukat apolo*, *pukat langgasi*,

⁷ Transformation theory rooted from Dualism fathom which consider international law and national law are two different systems, so the transformation phase is needed. While the Delegation theory rooted from Monism fathom which believe that both international and national law are one unit of law, so international law can automatically adopted into national law.

⁸ Indonesia. Presidential Decree regarding Eradication of Trawl Usage. Presidential decree number 39 year 1980.

etc. The use of this fishing gear is internationally forbidden due to the danger it posed to the ecosystem, the way it interfere the sustainable harvest in the future, and how it prevent a smooth regeneration of the marine ecosystem⁹. The harvest of traditional fishermen who use small boat and simple fishing gear were also decreased.

Facing all the threat and disadvantage of trawl usage, the government of Indonesia issued the Presidential Decree No. 39 year 1980 on Eradication of Trawl Usage. The three consideration applied in this issue were¹⁰ :

1. Basic fisheries resources preservation
2. Traditional fisheries product escalation
3. Social constraints prevention

The decree also regulates the phases of trawl usage eradication in Article 2 as well as the planned action for each phase in Article 3. The target of eradication action would be the final amount of trawl to the number of a thousand (1000). The phases are paraphrased below:

1. Phase One:
 - a. Since the date of the decree was in force until September 30th 1980, the eradication of trawl was put into action gradually upon the trawl which located and operated around Java and Bali islands;
 - b. By the October 1st 1980, all fisheries activities using trawl in waters of Java and Bali islands were prohibited;
 - c. For those fishermen located and operated around Sumatera island, the trawl usage prohibition should take place by the date January 1st 1981 at the latest.

2. Phase Two :

Since October 1st 1980, the trawl usage outside waters territory mentioned on Phase One will be restricted into the amount of only a thousand by the date July 1st 1981.

⁹ On a summary by JALA (*Jaringan Advokasi Untuk Nelayan*, Advocation Network for Fishermen) which contain a writing entitled "*Dampak Lingkungan Akibat Trawl*" (Environmental Impact of Trawl), was cited on National Research Council (2002) *Effects Of Trawling and Dredging on Seafloor Habitat*, National Academy Press, Washington, DC.

¹⁰ Djoko Tribawono, "*Hukum Perikanan Indonesia*", 2006, p. 114.

The issue of the Presidential Decree No. 39 year 1980 on Eradication of Trawl Usage was followed by the Ministerial Decree by Minister of Agriculture No. 503/Kpts/Um/7/1980 on Phases of Trawl Eradication. Unfortunately, the Presidential decree was based on regulation named Coastal Fisheries Ordonantie (Ordonansi Perikanan Pantai) (*Staatsblad* No. 144 year 1927), which was declared to be obsolete according to the transitional provision of Act No. 9 year 1985 on Fisheries. Besides, the Presidential Decree above was still to be the main reference on fisheries regulation, albeit there were questions of its implementation effectiveness. Ideally speaking, a newer legal aid should be provided in facing an advance threat in the present time.

In year 1982, the President then issued a Presidential Instruction No. 11 year 1982 that regulated the developing of basic fisheries conservation, guiding the encouragement of traditional fisheries product escalation, and providing steps on possible social constraints prevention. The Presidential Instruction was aiming in continuing the phases of eradication process for the rest of the fishing gear which use the trawl. As stated on article 4 of the instruction, by the date January 1st 1983, there should be no more trawl usage operating on Indonesia waters. However, a new regulation still be needed.

Around the year of 2008, Indonesia regulated the use of trawl for fishermen on the north part of Eastern Kalimantan by the Ministerial Decree by the Minister of Marine and Fisheries No. 6 year 2008 jo Ministerial Decree No. Per. 14/Men/2008 on Pukat Hela usage on north part of Eastern Kalimantan. While a year after, the government issued the Act No. 45 year 2009 on Fisheries which in accordance to the previous Act No. 31 year 2004. Based on the Article 9 paragraph (1) Act No. 31 year 2004 jo Act No. 45 year 2009 on Fisheries it is forbidden to possess, to take control, to bring, and/or to use the fishing gear which is disturbing and harming the sustainability of marine resources in the maritime area of the Republic of Indonesia. It is clearly that the regulation was agreed to the international resolution on conserving the marine environment. However, it was in contrary to the regulation issued in 2008 which gave permission to use trawl in certain and limited marine area of Republic of Indonesia. It is shown that there is an inconsistency within the national regulation on fisheries, as well as a disagreement of the national law toward the inter-

national law.

The Ministerial Decrees above is not the only inconsistency within the national regulation. Issuing the decree, the Minister of Marine and Fisheries established a decree No. Kep.06/Men/2010 on Fishing Gear Usage across the Territory of Fishing Management of Republic of Indonesia. Unfortunately, the later decree still grants permission on trawl usage in Indonesia. The other regulations, which also permit the trawl usage in marine territory of Indonesia, are Ministerial Decree by Minister of Marine and Fisheries No. per.02/men/2011 jo Ministerial Decree No. 18/Permen.KP/2013 on Fishing path and Fishing Gear Placement across the Territory of Fishing Management of Republic of Indonesia. The recent decree still mentions the permitted trawl usage in the territory of Indonesia and even give wider permission for trawl usage across Indonesia.

IV. THE PROBLEM ON IMPLEMENTING THE REGULATION

There were at least two problems on implementation of trawl usage regulation in Indonesia. First problem was the inconsistencies within the national regulations. The government has issued the regulation to strictly prohibit the trawl usage in Indonesia maritime area. However, there were still other regulations which permit the trawl usage in certain area, which become source of jealousy among provinces. The area which prohibited to use trawl would envy the others which permitted to use trawls because the difference of quantity of the yield.

At first, the implementation of regulation to slowly decrease the amount of trawl usage was running well, but then it became ineffective due to trawl usage by industrial fishing boats. The nomenclature of fishing gear was also manipulated into *pukat ikan*, *pukat hela*, and others.¹¹ Although in fact those names were still categorized as trawl. Those acts then endangered the sustainability of marine ecosystem because of overfishing and damaging the ecosystem sooner or later, as well as triggered horizontal conflicts which possibly occur among fishermen.

As described above in the National Regulation part of this paper,

¹¹ *Ibid*, p.119

there was another inconsistency. There were several regulations which permit the use of trawl, i.e.: The Minister of Marine and Fisheries Decree No. Kep.06/Men/2010 on Fishing Gear Usage across the Territory of Fishing Management of Republic of Indonesia, The Ministerial Decree above is not the only inconsistency within the national regulation. Issuing the decree, the Minister of Marine and Fisheries established a decree No. Kep.06/Men/2010 on Fishing Gear Usage across the Territory of Fishing Management of Republic of Indonesia and Ministerial Decree by Minister of Marine and Fisheries No. per.02/men/2011 jo Ministerial Decree No. 18/Permen.KP/2013 on Fishing path and Fishing Gear Placement across the Territory of Fishing Management of Republic of Indonesia. Both Decrees showed that there was a limited permission on trawl usage, and become wider permission in the latter decree.

There are disadvantage of permitted use of trawl for fishing. Despite the posed threat to the marine ecosystem, the trawl usage also interfere the attempt of traditional fishermen to catch their yield. Trawl usually owned by a wealthy and modern fishermen or an industrial fishery, due to the high price of trawl and the high capacity of yielding. Thus, there happened such an unhealthy competition between the traditional fishermen and the wealthy fishermen or industries.

It was not only in the substance that the disagreement was found, but also among one and another regulation which are not in parallel. Development of regulation should follow the principle of "*lex superior derogat lex inferior*". So it is understood that a Ministerial Decree should follow what has been regulated on the Presidential Decree because the Ministerial Decree has lower level on legislation hierarchy compare to the Presidential Decree. The Ministerial Decree should refer to the Presidential Decree on related matters and disallow to be in contrary.

It is also mentioned in the *Stufenbau* theory that legislations possess a hierarchy. The theory required that the higher level of legislation should become the basic norm (*grundnorm*) for the lower one and the lower regulations should not be contrary to the higher legislation¹².

¹² Akhmad Solihin, "*Politik Hukum Kelautan dan Perikanan (Isu, Permasalahan dan Telaah Kritis Kebijakan)*", 2010, p. 82.

Therefore, the ministerial decree should have been referred to the Presidential decree and should have not ruled the trawl usage in an opposite way.

The issue of regulations that conflicts one another was not without any consideration. It was a dilemma on the use of *pukat hela* (a kind of trawl) in Indonesia, especially in the northern part of East Kalimantan (recently known as a province, North Kalimantan). The regulation was issued particularly for this region to permit limited usage trawl to ensure the welfare of the local fishermen by wide-range utilization of marine resources. The regulation was applied only and restricted on the north part of Eastern Kalimantan, which located near the border of eastern Malaysia. Based on the Decrees, the trawl usage was limited, evaluated, and reported annually by the Director General to the Minister of Marine and Fisheries.

It is important to recognize that trawl usage across Indonesia waters territory was so wide, so as a fishery expert, Prof. Ari Purbayanto, should describe the widespread of trawl usage in Indonesia as below¹³ : (1) Malacca strait (*pukat apolo, pukat layang, mini trawl, lampara dasar, dogol berpalang/berpapan, cantrang berpapan/berpalang, fishnet*); (2) Karimata strait and South China Sea (*pukat ikan, pukat udang, lampara dasar, dogol berpapan, lampara dasar berpapan*); (3) Java Sea (*arad, jaring WCW, dogol berpapan, cotok, garuk kerang, payat alit, krakat, mini beam trawl, arad berpalang, arad berpapan, cantrang berpapan, lampara dasar berpapan, lampara dasar berpalang, mini trawl, andu*); (4) Makassar strait, Flores Sea, and Tiworo strait (*lampara dasar, katrol/rengreng, mini trawl, padderren, dogol berpapan, dogol berpalang*); (5) Seram sea, Tomini bay, Sulawesi sea, and Pacific ocean, Bintuni bay (*pukat udang, pukat ikan, dogol, lampara*); (6) Arafura sea, Aru sea and Banda sea (*pukat udang, pukat ikan*); (7) Hindia ocean (*pukek osok, pukat ulur, pukat ikan, lampara dasar*).

A scientific discussion concerning the legislation construction with Muchsan, was held in the Faculty of Law Gadjah Mada University and cited on Djoko Wahyu Winarno's thesis that there are two legislation construction based on their basic reasoning, they are:¹⁴

¹³ *Ibid*, pp. 80-81.

¹⁴ Muchsan (scientific discussion on 13 February 2010 at Faculty of Law Gadjah

1. Absolute legislation, which built based on the lack of legislation (vacuum of legislation) or even put aside the existing legislation because the new one will be more advantageous.
2. Relative legislation, which built based on the freedom of government authority (*vrije bestur*).

For the case of the issue of Ministerial Decree by Minister of Marine and Fisheries No. 6 year 2008 jo Ministerial Decree No. Per. 14/Men/2008 on Pukat Hela usage in northern part of East Kalimantan, the government of Indonesia was based on the first reasoning, the absolute legislation, for the legislation construction. The government with belief that the legislation would provide protection to the welfare of traditional fishermen took this act. In addition, the legislation would later bring peace and solution upon the conflict and social constraints concerning the wide gap between the traditional fishermen and the modern and industrial one. Another consideration that might be taken by the government was the lack of legislation which would benefit the traditional fishermen.

As explained above, there were inconsistencies of regulations on trawl usage in the national legislations of Indonesia, which part of them were also disagreed from the international resolution. It might happen when there is a missing step in legislation development which required to produce a good regulation. Based on William N. Dunn, legislation is a series of steps which depends on each other and follows on timely sequence, in which the steps described as agenda construction, legislation formulation, legislation adoption, legislation implementation, and legislation evaluation¹⁵. As for the case of trawl usage legislation, there should have been an evaluation of former regulation and how it was implemented. Speaking of the ideal, the government should not only concerns to the welfare and social constraints among the fishermen, but also put into consideration of the sustainability of the marine environment. Ideally, a sustainable marine ecosystem will also ensure the sustainable welfare of the fishermen, as well as will support the international resolution on environmental conservation.

Mada University) cited on Djoko Wahyu Winarno's PhD thesis summary, Studi Pembuatan Pemerintah Kabupaten Banyuwangi dalam Memberikan Perlindungan Hukum Kepada Nelayan, 2011, p.59.

¹⁵ William N, Dunn, "*Pengantar Analisis Kebijakan Publik*", 1991, p.30.

The inconsistencies of regulation have put a legal confusion on law enforcement side. The other consequence is that the welfare of traditional fishermen has been put into stake. The permission of trawl usage endangers the traditional fishermen since it will cause them to be unable to catch sufficient amount of fishes and other marine resources. On the other side, the industrial fisheries and the wealthy fishermen can widely exploit the ocean by their trawl.

The confusion also felt by the authorities which had to implement the regulations into practice. Based on the data collected on previous study in 2015, there were also problems faced by the authorities in North Sumatera Province in implementing the regulations on trawl usage prohibition. It was understood that there was a doubt that the regulation would save the environment without interfering the fishermen welfare. Below is the summary of the discussions with the local government.

A. DISCUSSION WITH THE MARINE AND FISHERIES OFFICE OF NORTH SUMATERA PROVINCE

Source of data: Mr. Robert Napitupulu (Chief of Fisheries Section on the Marine and Fisheries office)

There are several problems in implementation of the trawl usage prohibition regulation. There also objection from the traditional fishermen regarding the regulations, because of their decreased yield. The prohibition in trawl usage has put the fishermen into difficulties. They had opportunity to exploit the marine resources by operating simple and environmental-friendly fishing gears. But the consequences were they could not yield the fishes optimally. It was because some big fisheries management were able to use trawl and harvest much more from the ocean. It then caused a decrease on their income as fishermen, which later would impact on the increase of poverty amongst the community. It was felt that there was a double standard in treating the fishermen, one to traditional fishermen and other to the big fisheries industries. The overlapping regulations also bring confusion to the law enforcers and authorities.

The traditional fishermen were confused about the legal permission of trawl usage which has various time limits, so that they complained.

The traditional fishermen thought that there would be lesser problems if trawl was used strictly for fishery only. So, probably there was a need to reconsider whether the generalization of trawl function is appropriate. Regarding the changing authority from the local government to the provincial government, the Marine and Fisheries Office has sent letters for coordination. They believe that the shifting authorities will be managed well by setting the z-zone.

B. DISCUSSION WITH THE LEGAL BUREAU OF NORTH SUMATERA PROVINCE

Source of data: Mr. H.M. Hatta Siregar (Chief of Law Education Section of the Legal Bureau of North Sumatera Province)

The regulation of trawl usage prohibition seemed like a regulation which took side, because the regulation only benefited certain groups. It also suspected that the regulation was “requested” by big fishery enterprises. The decrease of traditional fishermen yield was one of its impact, which can be considered as disadvantageous.

The task of the Legal Bureau was to provide an appropriate legal accompaniment to the Marine and Fisheries Office of North Sumatera Province in facing the claim regarding the prohibition of trawl usage. It was considered that local regulation is important after the issue of Minister Regulation on trawl usage prohibition. Marine and Fisheries Office should initiate the local regulation with constructive collaboration among relating offices. The Legal bureau will take the responsibility on the documentation system of the local regulation. The Legal bureau also gave information that recently the authority of fisheries management had changed from local (city or regency) to the provincial government. They found that this change brought about disadvantage, because the one who understand fully and always got in touch with the condition of fisheries in a certain area was the city/regency government.

C. DISCUSSION WITH THE ENVIRONMENT BODY OF NORTH SUMATERA PROVINCE

Source of data: Bapak Teddy Supriatna

It is the duty of Environment Body to be aware and take action in

minimizing the marine environment degradation. However, it still been thought that it has not been done properly. It was admitted by the officer that there were difficulties on law enforcement regarding marine ecosystem preservation. In order to undertake those tasks, the Environment Body of North Sumatera Province provided a special technical unit called *Unit Pelaksana Teknis (UPT) Ekologi Pesisir Pantai Timur* (Eastern Coastal Ecology). Unfortunately, the lack of strategic plan was impede the effort in enhancing the management of marine environment. Albeit the strategic authority owned by the Environment Body, there was a vulnerability faced by the Body. In one side, there were legal aspect which needs to be enforced, and in the other side there was the social and cultural aspects of the traditional fishermen which cannot be ignored regarding the trawl usage prohibition.

V. THE POTENTIAL ROLE OF LOCAL GOVERNMENT

The authority of Local Government (in this case is Provincial Government) was regulated by the 1945 Constitution of the Republic of Indonesia. It means that an amendment of Constitution might change the way of Local Government authorities. The post-amendment of 1945 Constitution granted wider authority to the Local Government, which then followed up by the Assembly with issue of Assembly Decree Number XV/MPR/1998 about the Autonomy, Regulation, Division, and Just Utilization of National Resources; and Balance of the National and Local Financing in the framework of Republic of Indonesia as well as the Assembly Decree Number IV/MPR/2000 about the Policy and Management of Local Autonomy.

The Assembly Decrees above then followed by the Law Number 23 Year 2014 about Local Government. In the article 27 of Law Number 23 Year 2014 on Local Government, it was ruled that the Provincial Government authority was to manage marine resources and fisheries which are:

- 1) Provincial government has given the authority to manage the marine resources on its territory which are exploration, exploitation, conservation, and management; management of marine wealth on crude oil and gas; administrative management; spatial management;

maintenance of maritime security; protection of national sovereignty.

- 2) The provincial government authority to manage marine resources as far as 12 miles from coastline to high seas or archipelagic waters, if the distance less than 24 mile away between two province, the marine resources management authority shared the same distance according to the median line between the two province regions.

Sea is the *state property assumption* which based on centralized government management has induced externalities on fisheries activity. The characteristic of the externalities are¹⁶: (1) The common property doctrine that have effect sea to be open access there are no limitation on fishing gear, the certain time and place for fishing, the amount of yield, and authorized fishermen, (2) The centralized policy formulation that have effect there are no community participation. (3) The legal anti pluralism although there are legally binding local regulation that recognized a Hak Ulayat Laut that can guarantee the preservation of the sea. The common property doctrine can provoke a conflict among fishermen. To prevent the conflict among fishermen, the provincial government have to make local regulation as an implementing regulation for The Marine and Fisheries Minister Regulation Number 2 Year 2015.

In summary, Local Government had given an extensive autonomy in regulating and managing its resources, not exclude the marine resources for coastal province or archipelagic province. Local Government had the rights to explore, exploit, as well as to preserve and to conserve its natural resources in order to reach the highest level of community welfare. It can be implied that the Local Government has the authority to carry out its own management for the marine resources as long as still in accordance to national and international regulations, and thoughtfully consider the sustainability of the marine resources. However, the disharmony of national regulation came first to be overcome. The disharmony would bring confusion to the government, the law enforcers, and the community especially the fishermen.

¹⁶ Saad 2000. Akhmad Solihin, *Politik Hukum Kelautan dan Perikanan (Isu, Permasalahan dan Telaah Kritis Kebijakan)*, 2010 : Hal. 16

VI. CONCLUSION

The implementation of national regulation on trawl usage prohibition has not achieved its best practice. There is disharmony of regulation, both within the national regulations and between the national and international regulations. It also brings about the confusion in implementation by the local authorities as well as the fishermen as the major player of fisheries.

The disharmony of regulations and the confusion on its implementation opens an opportunity for local government potential role, especially in the provincial level. Local government had granted an extensive authority to manage the resources for as far as its people's welfare. So it is proposed that local government can make the most of this opportunity to achieve better welfare for their traditional fishermen but still maintain the conservation of marine ecosystem based on sustainable marine principle.

REFERENCES

- Solihin, Akhmad, *"Politik Hukum Kelautan dan Perikanan; Isu, Permasalahan dan Telaah Kritis Kebijakan"*, Nuansa Aula, Bandung, 2010.
- Sodik, Dikdik Mohamad, *"Hukum Laut Internasional dan Pengaturannya di Indonesia"*, Refika Aditama, Bandung, 2010.
- Tribawono, Djoko, *"Hukum Perikanan Indonesia"*, Citra Aditya Bakti, Bandung, 2013.
- Warasih, Esmi, *"Pranata Hukum, Sebuah Telaah Sosiologis"*, PT Suryandaru Utama, Semarang, 2005.
- Ria S., Marhaeni, *"Hukum Perikanan Nasional dan Internasional"*, Gramedia Pustaka Utama, Jakarta, 2010.
- William N, Dunn, *"Pengantar Analisis Kebijakan Publik"*, Gadjah Mada University Press, 1991.
- Winarno, Djoko Wahyu, *"Studi Perbuatan Pemerintah Kabupaten Banyuwangi dalam Memberikan Perlindungan Hukum Kepada Nelayan"* Thesis on Master of Law Universitas Gadjah Mada Yogyakarta, 2011.
- Djalal, Hasyim, *"The Emergency of The Concept of Fishing Entities, Ocean Development and International Law"*, Vol. 37 No. 2 April-June 2006, 2006.
- JALA (Jaringan Advokasi Untuk Nelayan) with Environmental Justice Foundation (EJF), *"Ketika Perikanan Menjadi Sesuatu yang Mematikan (Dampak Lingkungan dan Sosial Trawl di Sumatera Utara)"*, Medan, 2007.
- Geneva Convention on Law of the Sea 1958* opened for signature 8 May 1958 (entered into force 30 September 1962)

- United Nation Convention on The Law of The Sea 1982* opened for signature 10 December 1982 (entered into force 16 November 1994)
- Code of Conduct for Responsible Fisheries 1995
- Indonesia. Presidential Decree regarding Eradication of Trawl Usage. Presidential decree number 39 year 1980.
- Ministerial Decree by Minister of Agriculture No. 503/Kpts/Um/7/1980 on *Phases of Trawl Eradication*.
- Ministerial Decree by Minister of Marine and Fisheries No. 06/Men/2008 jo Ministerial Decree No. Per. 14/Men/2008 on *Pukat Hela usage on north part of Eastern Kalimantan*.
- Minister of Marine and Fisheries established a decree No. Kep.06/Men/2010 on *Fishing Gear Usage across the Territory of Fishing Management of Republic of Indonesia*.
- Ministerial Decree by Minister of Marine and Fisheries No. per.02/men/2011 jo Ministerial Decree No. 18/Permen.KP/2013 on *Fishing path and Fishing Gear Placement across the Territory of Fishing Management of Republic of Indonesia*.
- [...] Dinas Kelautan dan Perikanan, 2010, <http://www.dkp.go.id/content.php?c=4286> on March 2014.