

As principais conseqüências da pesca ilegal, não declarada e não regulamentada (INN) continuada nas águas da Indonésia para agentes de segurança marítima e comunidades costeiras

The main consequences of continued illegal, unreported, and unregulated (IUU) fishing within Indonesian waters for maritime security actors and coastal communities

Las principales consecuencias de la continua pesca ilegal, no declarada y no reglamentada (INDNR) en aguas de Indonesia para los actores de la seguridad marítima y las comunidades costeras

Recebido: 28/08/2019 | Revisado: 02/09/2019 | Aceito: 04/08/2019 | Publicado: 04/10/2019

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Resumo

A pesca ilegal, não declarada e não regulamentada é conhecida como uma ameaça global séria e se torna um dos principais problemas internacionais. A Indonésia, como um dos maiores países do arquipélago e a Mega Biodiversidade que possui recursos marinhos ricos, variados e potenciais, conseguiu atrair a pesca doméstica e a pesca estrangeira para cometer práticas de pesca ilegal, não declarada e não regulamentada (pesca INN). Esta pesquisa tem como objetivo entender o fenômeno da pesca ilegal, não declarada e não regulamentada na Indonésia e entender as conseqüências das práticas de pesca IUU para a comunidade costeira e para os atores estatais de segurança marítima. Esta pesquisa constata que as práticas de pesca IUU têm impacto significativo e negativo sobre as comunidades costeiras nos aspectos

econômico, ambiental e social. Além disso, as práticas de pesca INN também têm um impacto significativo e negativo na integridade dos atores estatais da segurança marítima na proteção das águas da Indonésia.

Palavras-chave: Consequências; Pesca INN; Indonésio; Marítimo.

Abstract

Illegal, Unreported and Unregulated Fishing is known as a global serious threat and become International major issues. Indonesia, as one of the biggest archipelago countries and Mega Biodiversity that has rich, various, and potential marine resources has succeeded in attracting domestic fisheries and foreign fisheries to commit Illegal, Unreported and Unregulated Fishing (IUU Fishing) practices. This research aims to understand the phenomenon of Illegal, Unreported and Unregulated Fishing in Indonesia and to understand the consequences of IUU Fishing practices to the coastal community and the maritime security state actors. This research finds that IUU Fishing practices have significant and negative impact towards Coastal communities on Economic, Environmental, and Social aspect. Furthermore, IUU Fishing practices has also significant and negative impact on the integrity of Maritime Security State Actors in protecting Indonesian waters.

Keywords: Consequences; IUU Fishing; Indonesian; Maritime.

Resumen

La pesca ilegal, no declarada y no reglamentada se conoce como una amenaza mundial grave y se convierte en un importante problema internacional. Indonesia, como uno de los países más grandes del archipiélago y la Mega Biodiversidad que tiene recursos marinos ricos, variados y potenciales, ha logrado atraer a las pesquerías nacionales y extranjeras a cometer prácticas de pesca ilegal, no declarada y no reglamentada (pesca INDNR). Esta investigación tiene como objetivo comprender el fenómeno de la pesca ilegal, no declarada y no reglamentada en Indonesia y comprender las consecuencias de las prácticas de pesca INDNR para la comunidad costera y los actores estatales de la seguridad marítima. Esta investigación encuentra que las prácticas de pesca INDNR tienen un impacto significativo y negativo para las comunidades costeras en el aspecto económico, ambiental y social. Además, las prácticas de pesca INDNR también tienen un impacto significativo y negativo en la integridad de los actores estatales de seguridad marítima en la protección de las aguas de Indonesia.

Palabras clave: Consecuencias; Pesca INDNR; Indonésio; Marítimo.

1. Introduction

Indonesia is one of the biggest archipelago countries with 17.504 islands that possess wide waters territorial. 75 percent of the total of Indonesian territory is sea waters. The width of Indonesian seawater is around 5.8 million Km² that consists of 0.3 million Km² of territorial sea; 2.8 million Km² of high seas; and 2.7 million Km² of Exclusive Economic Zone (EEZ). In addition to vast marine waters, Indonesia also has rich and various marine resources that have important meaning for Indonesia especially because it contains fisheries resources (Dahuri, 2010). It causes fisheries resources to have an enormous potency as one of the sources of Indonesian economic growth. Based on the status of Indonesian Biodiversity by the Indonesian Institute of Science, Indonesia has 1.400 fisheries species in 2011. Therefore, Indonesia is called as one of Mega Biodiversity (Septaria, 2016). The vast sea area and the wealth of marine resources owned by Indonesia make Indonesia become the second major producer countries of marine captured fisheries in the world after China. Indonesia produces 7.7% of global fish production reaching 6,109,783 tons in 2016 as seen in table 1 below (FAO, 2016):

Table 1. Marine capture fisheries: major producer countries

Country	Production (tonnes)			% Variation		Variation, 2015 to 2016 (tonnes)
	Average 2005–2014	2015	2016	2005–2014 (average) to 2016	2015 to 2016	
China	13 189 273	15 314 000	15 246 234	15.6	-0.4	-67 766
Indonesia	5 074 932	6 216 777	6 109 783	20.4	-1.7	-106 994
United States of America	4 757 179	5 019 399	4 897 322	2.9	-2.4	-122 077
Russian Federation	3 601 031	4 172 073	4 466 503	24.0	7.1	294 430
Peru	6 438 839	4 786 551	3 774 887	-41.4	-21.1	-1 011 664
Excluding anchoveta	989 918	1 016 631	919 847	-7.1	-9.5	-96 784
India	3 218 050	3 497 284	3 599 693	11.9	2.9	102 409
Japan*	3 992 458	3 423 099	3 167 610	-20.7	-7.5	-255 489
Viet Nam	2 081 551	2 607 214	2 678 406	28.7	2.7	71 192
Norway	2 348 154	2 293 462	2 033 560	-13.4	-11.3	-259 902
Philippines	2 155 951	1 948 101	1 865 213	-13.5	-4.3	-82 888
Malaysia	1 387 577	1 486 050	1 574 443	13.5	5.9	88 393
Chile	3 157 946	1 786 249	1 499 531	-52.5	-16.1	-286 718
Excluding anchoveta	2 109 785	1 246 154	1 162 095	-44.9	-6.7	-84 059
Morocco	1 074 063	1 349 937	1 431 518	33.3	6.0	81 581
Republic of Korea	1 746 579	1 640 669	1 377 343	-21.1	-16.0	-263 326
Thailand	1 830 315	1 317 217	1 343 283	-26.6	2.0	26 066
Mexico	1 401 294	1 315 851	1 311 089	-6.4	-0.4	-4 762
Myanmar*	1 159 708	1 107 020	1 185 610	2.2	7.1	78 590
Iceland	1 281 597	1 318 916	1 067 015	-16.7	-19.1	-251 901
Spain	939 384	967 240	905 638	-3.6	-6.4	-61 602
Canada	914 371	823 155	831 614	-9.1	1.0	8 459
Taiwan, Province of China	960 193	989 311	750 021	-21.9	-24.2	-239 290
Argentina	879 839	795 415	736 337	-16.3	-7.4	-59 078
Ecuador	493 858	643 176	715 357	44.9	11.2	72 181
United Kingdom	631 398	65 451 506	701 749	11.1	-0.4	-2 753
Denmark	735 966	868 892	670 207	-8.9	-22.9	-198 685
Total 25 major countries	65 451 506	66 391 560	63 939 966	-2.3	-3.7	-2 451 594
Total other 170 countries	14 326 675	14 856 282	15 336 882	7.1	3.2	480 600
World total	79 778 181	81 247 842	79 276 848	-0.6	-2.4	-1 970 994
Share of 25 major countries	82.0%	81.7%	80.7%			

* Production figures for 2015 and 2016 are FAO estimates.

Source: FAO, (2016)

The potentials of Indonesian marine waters has succeeded in attracting not only traditional or domestic fisheries but also foreign fisheries with their small boat or even big vessels to do an illegal activity called Illegal, Unreported and Unregulated fishing (IUU Fishing). The FAO (Food and Agriculture Organization of the United Nations) stated that Illegal, Unreported and Unregulated Fishing refers to activities that are conducted by national or foreign fishing vessels in maritime waters under the jurisdiction of the state without any permission from the state which have not been reported or misreported to the related national authorities in a way that is contradictory with the regulation established by the its RFMOs (Regional Fisheries Management Organizations) (Schmidt, 2004).

The IUU Fishing practices certainly result in many negative impacts. These activities will harm both the fish stocks of the victim states and even the global fish stocks. In addition, IUU Fishing practices will also endanger the marine environment because in its operations the perpetrators of IUU Fishing uses dangerous ways such as bombing or using chemicals to capture the marine resources. The impacts will affect the coastal community and the maritime security actors.

This paper aims to explain the phenomenon of Illegal, Unreported and Unregulated Fishing in Indonesia and to explain about the impacts and consequences of IUU Fishing practices to the coastal community and the maritime security state actors. Indonesian Ministry of Marine Affairs and Fisheries (KKP), Navy (TNI-AL), and Indonesian National Marine Police are maritime security actors that will be highlighted in this paper. Other than that, actions that have been taken by the Indonesian government against IUU Fishing within Indonesian waters in addressing the IUU Fishing issue will also be explained in this paper.

2. Literature Review

Illegal, Unreported and Unregulated Fishing is known as a global serious threat and become International major issues since it is affecting not only Exclusive Economic Zone (EEZ) of a country but also internal waters. In fact, in some countries such as Australia, an IUU Fishing practice is also considered as a violation of sovereignty (Gallic & Cox, 2006). By capturing marine resources illegally in EEZ of a certain state, and if it is done by foreign fisheries, it is certainly interfering with the sovereignty of a state. Illegal, Unreported and Unregulated Fishing practices in Indonesia is still becoming unresolved problem yet, since the

activities of IUU Fishing still happen quite often in Indonesian waters. The foreign fisheries who frequently entering Indonesian waters are fisheries from Thailand, Vietnam, Philippines, and Malaysia since they are neighboring countries geographically, so that it is easier for them to get into Indonesian waters (Muhamad, 2012).

In Indonesian territorial waters, 95% of IUU Fishing activities committed by small scale of Indonesian fishing vessels and 5% is performed by foreign fishing vessels that flying the Indonesian flag (Septaria, 2016). Refer to the Annual Report of Indonesian Ministry of Marine Affairs and Fisheries in 2017, KKP's guard ship has succeeded arrests and examines 3.727 vessels which committed on illegal fishing activities. As shown in table 2 below;

Table 2. The Recapitulation of the Number of Vessels Examined and Arrested during 2014-2017 Periods.

Year	Examined			Arrested		
	Indonesian's Vessel	Foreign Vessel	Amounts	Indonesian's Vessel	Foreign Vessel	Amounts
2014	2.028	16	2.044	22	16	38
2015	6.720	62	6.782	48	60	108
2016	3.995	149	4.144	23	140	163
2017	3.636	91	3.727	45	85	130
Amounts	16.379	318	16.697	138	301	439

(Source: Pudjiastuti, 2018)

It consists of 3.636 of Indonesian domestic vessels and 91 of foreign vessels. From the examining process, it results 130 vessels arrested which consist of 45 Indonesian vessels and 85 foreign vessels. The number of vessels originating from Vietnam that arrested by KKP (*Kementerian Kelautan dan Perikanan*) has the highest number, there are 68 units of vessels. It followed by 11 Malaysian vessels and one Timor Leste vessel (Pudjiastuti, 2018).

In security operations carried out by KKP, they also implemented law number 45/2009 related to sinking illegal fishing perpetrator vessels. From its operations, 127 fishing vessels have sunk in 2017. It consists of 123 foreign fishing vessels and 4 Indonesian fishing vessels. 90 out of 123 fishing vessels were originating from Vietnam, 19 Philippines fishing vessels, 13 Malaysian fishing vessels, and 1 Thailand fishing vessels (Pudjiastuti, 2018). Table 3 below represents the recapitulations of the number of illegal fishing perpetrator vessels sunk by KKP:

Table 3. The Recapitulations of the Number of Illegal Fishing Perpetrator Vessels Sunk by KKP during 2014-2017 Periods.

NO.	PERIODE PENEGGELAMAN	K I A								K I I	TOTAL
											
		FILIPINA	VIETNAM	THAILAND	MALAYSIA	TIONGKOK	BELIZE	NIGERIA	PAPUA NUGINI	INDONESIA	
1	Periode Oktober s.d Desember 2014	1	3	2					2		8
2	Periode 9 Februari 2015			1							1
3	Periode 20 Mei 2015	18	11	10	4	1					44
4	Periode 18 Agustus 2015	11	13	6	2					4	36
5	Periode 19 dan 20 Oktober 2015	4	6	2							12
6	Periode 31 Oktober 2015		6								6
7	Periode 15 Desember 2015				4						4
8	Periode 31 Desember 2015	2			2					6	10
9	Periode 22 Februari 2016							1			1
10	Periode 14 Maret 2016	7	11		8		1			4	31
11	Periode 5 April 2016		13		10						23
12	Periode 17 Agustus 2016	16	35		9						60
13	Periode 1 April 2017	19	46		12					4	81
14	Periode 29 Oktober 2017		44	1	1						46
JUMLAH		78	188	22	52	1	1	1	2	18	363

(Source: Pudjiastuti, 2018)

Based on the table 3 above, it can be seen that there were 127 fishing vessels sunk by KKP in 2017. The number increased compared to 2016 which only 115 fishing vessels (Pudjiastuti, 2018). From the data above, it can be seen that the foreign fishing vessels caught by KKP were dominated by ASEAN countries. According to Nova (2017) one of the factors why the intensity of IUU Fishing practices is high within ASEAN countries is because of the border of the state is adjacent with the Exclusive Economic Zone (EEZ) of the other countries, so that it is easier for foreign fishermen from ASEAN countries to enter EEZ of the other states (Nova, 2017).

3. Discussions

- The Impacts of Illegal, Unreported and Unregulated Fishing Practices

Year over year, the problem of Illegal, Unreported, Unregulated Fishing has been increasing, especially in coastal states such as Indonesia. It became a classic issue that is still

unresolved even though some actions have been taken by the government against them (Nova, 2017). The IUU Fishing practices provide significant loss and negative impacts. It can threaten Indonesia economically and causes significant damages to the marine environment and directly affect the ecosystems and fish habitat in the oceans (Agnew et al., 2009). Moreover, IUU Fishing practices will cause social impact as well primarily for the coastal communities (Gallic & Cox, 2006). In fact, impacts of IUU Fishing do not only apply to the coastal communities, but also to the Indonesian maritime security actors such as Indonesian Ministry of Marine Affairs and Fisheries (KKP), Maritime Security Agency (BAKAMLA), Indonesian National Police, and Navy (TNI AL) who have important role in security, defense, and safeguards the Indonesian territorial waters (Putri, Windiani, & Hanura, 2016).

- Impacts on Coastal Communities

In the previous time, the system of Indonesia's defense against illegal, unreported, unregulated fishing had not been developed well. It has caused Indonesia to be very vulnerable to IUU Fishing activities and it was easier to commit such crime towards Indonesian waters (Septaria, 2016). The main impact on the accumulated event is absolutely beneficial to the Indonesian citizens, especially for those who live in coastal areas.

The continuity of IUU Fishing activities will reduce fish stocks in Indonesian waters. It will cause an economic impact on the fishermen since oceanic resources are their main source of income. Food and Agriculture Organization/FAO mentioned that the loss of Indonesian oceanic resource caused by illegal, unreported, unregulated fishing reaches 30 trillion Indonesian rupiah per year (Putri et al., 2016).

Economical Loss experienced by the state will affect the coastal community's income. In the end, the coastal community must accept the consequences of IUU Fishing practice where their business will be disrupted and they will face big loss of their income (Septaria, 2016). Fisherman's income reduced, and with the reduced amount of fish in the market, prices go up, scarcity rises, along with citizens' poverty. This event naturally causes "change" within Indonesian fishermen and coastal community. The fishermen could not get enough income by catching fish in the ocean. The decreasing of fish stocks in the ocean will cause suffering for the legal fishermen because it might lead to increase their costs but they only got small revenue (Beke & Bomeyer, 2014). Another consequence is the coastal community no longer can utilize ocean resources as their main source of food.

If Illegal, Unreported and Unregulated Fishing practices keep continue, making fishermen as a profession will be no longer as viable as it used to be. According to the data of

Central Bureau Statistics (BPS) Indonesia for the period 2003-2013, it represents that the number of traditional fishermen has decreased from 1.6 million to 864,000 households (International Organization for Migration, 2016).

Besides the economic impact, there is also another impact which the effect might not be seen immediately, but rather would gradually be seen after a few years or so, which is an environmental impact. The IUU Fishing practices will significantly affect the sustainability of marine and coastal environment (Nova, 2017). The IUU Fishing perpetrators would not only reduce the Indonesian oceanic resources but also pollute and give major damages to the marine environment. Destructive fishing practices and inappropriate fishing gears are some of the techniques used by IUU Fishing perpetrators that cause damage to the marine ecosystem (Garcia, 2003).

One of IUU Fishing gears used by the IUU Fishing perpetrators is trawl. RFMO (Regional Fisheries Management Organizations) stated that in 1980, some marine ecosystems such as sea birds habitat, turtles, and marine mammals have been damaged because of use of trawl in IUU Fishing operations (Palma, Tsamenyi, & Edeson, 2010). Besides the use of trawl, on the IUU Fishing activities, the perpetrators ironically use several danger substances such as cyanide and bombs or dynamite to capture the fishes (Nova, 2017).

Use of bombs and cyanide naturally endanger and harm the marine environment. It causes death to marine organisms and destroys the coral reefs. In Indonesia, more than 75% of the total area of coral reefs has been damaged because of IUU Fishing practices (Dahuri, 2000). Indonesia is known as a country which has beautiful and diverse coral reefs, thus the beauty can attract tourists to explore Indonesia.

By the destruction of the Indonesian marine environment caused by IUU Fishing practices, it will reduce the opportunities of ecotourism (Meere & Lack, 2008). The continuity of IUU Fishing practices would not only affect the fishing industry but also the tourism sector. The consequences that arise from the marine environmental damage are decreasing Indonesian income from the tourism sector since one of the sources of GDP in Indonesia came from the tourism sector. Meanwhile, the coastal community will directly affected by the decreasing GDP condition. Consequently, they will lose their opportunity to use the magnificence of the marine environment as one of the sources of their income and it will bring them to poverty.

Besides economic and environmental impacts, Illegal, Unreported and Unregulated Fishing practices also can cause social impact. The social impact of Illegal, Unreported and Unregulated Fishing essentially comes from the economic impact. As mentioned previously

that the continuity of IUU Fishing would cause commotion in society life, such as poverty, especially among the coastal community.

Since the amount of marine resources in the ocean has been reduced because of IUU Fishing activities, it creates a perception that fishing is no longer an advantageous career option. Some fishermen decided to look for another alternative job. The social consequence of IUU Fishing activities is the potential use of workers without any effective control. The IUU Fishing operator usually uses labor from small scale fishermen who come from various developing countries. Most of labor are having low education and less knowledge, so that their awareness about IUU Fishing practices is very low. They are willing to be paid with low wages, live in the ship with below standard and even their security is not guaranteed. Consequently, it results in their household income to be very low and the coastal community will befall over to the poverty even deeper (Palma et al., 2010).

The lack of fish market in the coastal area make it also difficult for coastal community to sell their catch, hence they eventually do barter with the IUU Fishing perpetrators since they have less education about IUU Fishing practices (Resosudarmo & Jotzo, 2018). Inadequate of fish market has made coastal community have no options except transacting with IUU Fishing perpetrators.

- Impacts to the Maritime Security Actors

The impact of Illegal, Unreported and Unregulated Fishing could be felt by almost all parts of the societies. In the previous section, it was explained that IUU Fishing impacts Indonesian citizens, especially those who live in coastal areas. It is, of course, one of the most significant impacts. The Impact, however, does not stop just there, but as well as other aspects of societies. However, on a bigger scale, the reduction of catch from fisherman will not only impact the life of the fisherman itself. The reduction of catch would also lead to a reduction of the overall income of Indonesia as a whole, since Indonesia could be counted as one of the main exporters in terms of fisheries (FAO, 2016). The continuity of this event would lead to the reduction of Indonesia's Gross Domestic Profit (GDP), and in extreme cases, this will lead to other problems on a national scale. Some state actors affected by IUU Fishing practice are maritime security state actors such as the Indonesian Ministry of Marine Affairs and Fisheries (KKP), Indonesian National Marine Police, and Indonesian Navy (TNI-AL).

As maritime security actors, each actor have their main role in safeguarding Indonesian waters from Illegal, Unreported and Unregulated Fishing. Ministry of Marine Affairs and Fisheries (KKP) has an important role in conducting supervisory activities on

Indonesian waters by providing guard ships to be used in their security operations. In their routine patrols, KKP collaborates with other state actors such as the Indonesian Navy and Indonesian National Police. Other than that, to analyze International cooperation between countries in the maritime sector related to IUU Fishing problem, KKP also assigns their focus on PUSKITA (Pusat Kerjasama Internasional dan Antar Lembaga) (Kementrian Kelautan dan Perikanan, 2014).

Another state actor who has an important role in safeguarding Indonesian waters from Illegal, Unreported and Unregulated Fishing is an Indonesian National Marine Police. They have responsibilities to fostering and performing their functions that aim to serve, protect, and maintain the security of Indonesian citizens and enforce the laws in Indonesian waters as well to against IUU Fishing practice (Putri et al., 2016).

Other than the Indonesian Ministry Marine Affairs and Fisheries and Indonesian National Marine Police, the Indonesian Navy (TNI-AL) also has a very important role in Indonesia's maritime security. They have three main roles in securing Indonesian waters, that are military role, police role, and diplomacy role. TNI-AL plays an important role in carrying out security, defense, and safeguards Indonesian water territory from foreign countries (Putri et al., 2016).

As state actors who have an important role to safeguards Indonesian waters, it is obvious that crimes such as Illegal, Unreported and Unregulated Fishing practices will give them significant impacts. Firstly, seeing the impacts that might happen caused by the IUU fishing, news will be spread, and people or even the world, as their natural behavior, would start seeking for the person to blame. In this case, the one organization that will be blamed, is, of course, the organization whose job is to protect them from IUU Fishing practices, which is maritime security state actors, such as Indonesian Ministry of Marine Affairs and Fisheries (KKP), Navy (TNI-AL), and National Marine Police.

Not only from inside, but the “blaming” will also result in diplomatic embarrassment for Indonesia where it comes from other countries that witness the event. The high rate of IUU fishing happens in Indonesia, consequently will be interpreted as Indonesian Security Actor's failure in protecting their ocean, which would lead also to questioning the country's integrity (Sodik, 2009). Furthermore, the continuity of IUU Fishing practices in Indonesia will also destruct International point of view to the image of Indonesia since it is considered as unmanageable fisheries (Raharjo, Sudrajat, Wasi Bintoro, & Saefudin, 2018). Indonesia might got International protest from other countries that may lead to the imposition of sanctions and even trade embargo (Dinas Kelautan dan Perikanan, 2008). When looking at

these consequences that might happen to the country when the ocean is not well-protected from IUU fishing actors, we need to look at this event as one of the most potentially threatening matter, that might impact Indonesia as a whole.

Secondly, in terms of reduction of GDP, it will cause a reduction in the Government's national budgeting. In this case, some maritime state actors such as Ministry of Marine Affairs and Fisheries (KKP), Navy (TNI-AL), and Indonesia National Marine Police will be impacted, such as reduction in their wage, budgeting for operation activities, assets and services enhancements, etc.

This is, of course, a case that cannot be taken lightly. In lighter case, it might only impact minor parts of the organization, might be a delay or cancellation on some development or service enhancement projects, that ceases in-country development. In extreme cases, organizations would need to reduce the number of employees to cut the budget. This will lead to many rather horrific events on their growth, such as protests and many other events that can impact the nation's stability.

-Actions of Indonesian Government against IUU Fishing Practices

Since Illegal, Unreported and Unregulated Fishing practices have many negative impacts as mentioned in previous sections, Indonesia has been considered IUU Fishing as a major threat that needs to be addressed. The combat against IUU Fishing became a high priority agenda for the Indonesian government to protect the sustainability of Indonesian waters (Sodik, 2009). Since the election of President Joko Widodo in 2014, maritime and fisheries policy has been a central priority for the Indonesian government. In 2015, the Indonesian government doubled the budget of the Ministry of Marine Affairs and Fisheries (KKP) (OECD, 2018).

President Joko Widodo has a vision in developing Indonesian marine and fisheries. The vision is "Laut sebagai Masa Depan Bangsa". Meanwhile, in marine and fisheries development mission, Indonesian President Joko Widodo is referring to three pillars, which are Sovereignty Pillar, Sustainability Pillar, and Prosperity Pillar (Pudjiastuti, 2018). The values imbued in the vision and mission stated by Joko Widodo is rather deeply meaningful when combined. As President Joko Widodo sees the ocean as a significantly paramount source of Indonesian income and wealth, it essentially holds the future of the nation itself.

The country sees the ocean as one important aspect that would create the future of the nation, hence, it must be protected and as well, developed most efficiently. To achieve this goal, the country holds strongly onto the three pillars. First, Sovereignty, denotes the

Indonesian marine as resource meant only for Indonesian citizens. This, of course, includes the local fishermen, businessmen, and Indonesian citizen as a whole. Secondly, Sustainability, denotes the Indonesian marine as one resource that will hold Indonesia for a long term, far away in the future, hence the sustainability must be kept secure. This includes the protection from any form of oceanic pollution, IUU Fishing practices, and any other act that would endanger Indonesian marine's sustainability.

Lastly, Prosperity, denotes the Indonesian ocean as one source of Indonesian prosperity and wealth of Indonesian citizen. This, of course, concludes all the previous points that Indonesian marine needs to be protected and secured in terms of its sustainability, so that it can provide prosperity to the Indonesian citizens. To achieve the vision, some laws, regulations, and policies have been established and being implemented to fight IUU Fishing problem in Indonesia.

One of the policies that are being implemented in Indonesia is the sinking policy by Minister Susi Pudjiastuti to the perpetrators of Illegal, Unreported and Unregulated Fishing. The sinking vessel policy is also mentioned in Article 69 verse (4) of Law no. 45 Year 2009 (Raharjo et al., 2018). The law stated that investigators or supervisor of fisheries, in carrying out their function, they can take special action in forms of burning and or sinking the foreign vessels that proven to commit IUU Fishing activities supported by strong evidence in Indonesian Exclusive Economic Zone (Isnurhadi, 2017).

However, the policy seemed not effectively implemented until 2015. It can be seen from the number of vessels that were sunk from 2009 to 2012 that were only 37 ships (Raharjo et al., 2018). Meanwhile, in Minister Susi Pudjiastuti era, from 2014 through 2016, the government has drowned 151 vessels (Tirto.id, 2016). With the sinking vessels policy, it is expected to give deterrent effects to the IUU Fishing perpetrators.

Other than the sinking vessels policy, president Joko Widodo also ratify a President regulation number 44/2016 related to negative list of foreign investment which stated that capture fisheries business is closed for foreigners (Marta, 2017). The regulation aims to make Indonesian sea sovereignty is only for domestic capital, domestic capture fisheries businessmen, domestic vessels, and even Indonesian vessel's crew. With this regulation, it is expected that it can give prosperity guarantee to the Indonesian capture fisheries businessmen. Besides sinking vessels policy and President regulation, the Indonesian Ministry of Marine Affairs and Fisheries also established a regulation number 57/2014 related to prohibition toward transshipment activity. It stated that fish trading activity is prohibited to be done in the middle of the sea (Isnurhadi, 2017). All policies and regulations created by Indonesian

government aim to against IUU Fishing activity in Indonesian Exclusive Economic Zone (EEZ), so that the prosperity of capture fisheries businessman especially small scale fishermen and coastal community can be kept secure.

4. Conclusion and Recommendation

Several points need to be noted carefully. As it has been known that Indonesia holds a rather huge amount of potential oceanic resources, it can be said that the “richness” of Indonesian oceanic resources can be very tempting when seen by other countries. The proof of this statement is the chain of events that put Indonesia as a victim of the Illegal, Unreported and Unregulated fishing that has been happening for the past several years. The impact of these events could be felt significantly by citizens of Indonesia in general, and coastal communities and maritime security state actors in specific. Starting from how Illegal, Unreported and Unregulated Fishing can affect the life of coastal communities such as fishermen, oceanic marketplace by reducing the number of catch, polluting the ocean, causing them to suffer from economic aspect that would also increase the number of poverty in the coast.

On the next step, the case grows by the reduction of number of oceanic catches available in the market, impacting Indonesia’s overall GDP since until now it has been one of Indonesia’s main sources of income, then causing instability in the country which will lead to national-scale problems such as increase in national poverty rate.

IUU Fishing activity has also a significant impact on the Indonesian marine environment. The perpetrators are not only stealing Indonesian ocean resources but also causing major damage to the marine ecosystem. If the IUU Fishing activities along with damage Indonesian marine ecosystems keep continue, the sustainability of Indonesian maritime development will be disrupted and the consequences will suffer Indonesian citizens, especially the coastal communities. The problem continues to global-scale problems after this step. The national-scale problem above would be heard by other countries, causing them to have various comments and perceptions towards the condition in Indonesia. Other countries will see Indonesia failing in protecting their country’s one of the most valuable assets, and will be seen negatively. This will be burdened heavily especially to maritime security state actors such as the Indonesian Ministry of Marine Affairs and Fisheries (KKP), Navy (TNI-AL), and National Marine Police. They will be seen as failing in doing their duty to protect Indonesia’s ocean from such crime, which then will be the beginning of Indonesia’s downfall.

Looking at the description of the consequences that can happen when the problem of Illegal, Unreported and Unregulated Fishing continues and not be taken care seriously, it is paramount for us to look at this problem and find the best solution to solve the problem. Indonesia now has been increasing the security against such crime, such as implementing the sinking vessels policy, President's regulation number 44/2016 about the sovereignty of Indonesian waters, and Ministry of Marine Affairs and Fisheries regulation number 57/2014 related to prohibition toward transshipment activity. These are some of the great steps to increase Indonesia's defense against illegal, unreported, unregulated fishing by the government.

However, the defensive act would not be enough if Indonesian citizens do not as well increase our awareness of the crime. One of the suggestions that can be improved from this is the act of raising awareness, especially towards the coastal communities. Educations must be transferred to them on how important it is to protect our ocean ecosystem and not pollute them, and what can we do to avoid Illegal, Unreported and Unregulated Fishing to maintain the sovereignty, sustainability, and prosperity of Indonesia.

Besides raising awareness about the danger of IUU Fishing activities toward Indonesian citizens, increasing effectiveness of security operations performed by Indonesian maritime state actors such as KKP, TNI-AL, and Marine Police in Indonesia Exclusive Economic Zone (EEZ) is also a step that can be taken to reduce IUU fishing practices. It can be done by increasing the number of the security operation vessels.

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