

Research Article

WTO Agreement on Fisheries Subsidies: Is It Enough to Combat IUU Fishing in Asia-Pacific?

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Abstract

Government subsidies on fisheries are supposed to provide welfare and development for the country. Nevertheless, some government subsidies contribute to a more fisheries crisis, including Illegal, Unreported, and Unregulated fishing (IUU Fishing). Subsidies in the fisheries sectors were estimated in 2018 to be as high as \$35.4 billion worldwide, of which an estimated \$22 billion qualified as harmful subsidies. Therefore, the World Trade Organization (WTO) in June 2022 adopted the Agreement on Fisheries Subsidies (AFS) to end prohibited fisheries subsidies. Henceforth, two-thirds of WTO members must deposit their instruments of acceptance to make the agreement viable. This normative legal research will utilize primary and secondary legal materials. The author intends to analyze these materials with a statutory and historical approach to examine (i) subsidy issues resulting in IUU Fishing, (ii) the AFS and its urgency, and (iii) whether AFS is sufficient to eliminate IUU fishing - in the Asia-Pacific region. This article argues that the AFS needs to be enforced to reduce harmful subsidies. However, the AFS is still not sufficient to thoroughly combat IUU fishing in the Asia-Pacific region, as it does not regulate certain issues such as overfishing and overcapacity, as well as banned fuel subsidies.

Keywords: Agreement on Fisheries Subsidies; IUU Fishing; Subsidies; WTO

Introduction

Fish and fisheries are economically and socially crucial (Sumaila, 2017). Fisheries play an essential role in feeding the world's population, creating jobs, and enhancing the economic development of coastal communities (Delpuech *et al.*, 2022). Fisheries are also pivotal because fish is a source of millions of people's micronutrients, protein, foreign exchange, income and livelihood (Sumaila *et al.*, 2013). In 2020, global capture fisheries production (excluding algae) was 90.3 million tonnes, estimated at USD 141 billion (FAO, 2022). This number decreased by four percent compared to the average of previous three years, primarily due to disruptions in fishing operations caused by the COVID-19 pandemic and China's catch reduction (FAO, 2022). However, the long-term trend in global fisheries is relatively stable (FAO, 2022).

Fishing represents an activity that involves interaction with the marine environment, very significant to the global economic activities, and even adheres to some people's lives (Arthur *et al.*, 2019). To ensure fisheries continue to support and benefit future generations, the United Nations (UN) adopted the Sustainable Development Goal (SDG) 14 of the 2030 Agenda for Sustainable Development (FAO, 2022). SDG 14 aims to "conserve and sustainably use the oceans, seas and marine resources for sustainable development." In this regard, the fisheries sector must be managed effectively and agilely to meet SDG's ambitious goals (Sumaila, 2017).

Nevertheless, some roadblocks exist to achieving that goal, including Illegal, Unreported, and Unregulated Fishing (IUU Fishing). This illicit activity may involve exceeding catch limits, defying fishery permit regulations, or fishing in the waters of another State without permission, including fishing in contravention of national or regional laws, such as fishing for precious prohibited species in protected waters or with banned gear and equipment (Lindley & Techera, 2017). The consequences of IUU Fishing are multi-faceted and potentially severe, affecting many aspects of people's lives. IUU Fishing increases the poverty of coastal communities, damages fish habitat in the ocean, and inhibits the nation's progress toward achieving long-term sustainability goals. In fact, IUU Fishing is responsible for approximately one-fifth of the global fisheries catch, with estimates placing the value of the illicit trade anywhere between \$10 billion to \$23.5 billion every year, with overall economic losses estimated to be \$50 billion (Sumaila *et al.*, 2020).

IUU Fishing is global but more widespread in certain regions. Therefore, the global community and individual countries must tackle IUU Fishing to secure sustainable and inclusive benefits from renewable marine resources (Sumaila *et al.*, 2020). IUU Fishing undoubtedly needs to be eradicated rapidly. Unfortunately, this crisis is supported by government subsidies identified as one of the key contributors to IUU Fishing. Without government subsidies, as much as 54 percent of the present high-seas fishing grounds would be unprofitable (Sala *et al.*, 2018). Governments spend about \$35 billion annually and about 20 percent of the total value of all marine fish caught at sea and brought to port to support the fishing sector (Martini, 2019; Sumaila *et al.*, 2016). However, many of these subsidies are harmful and drive unsustainable practices (Widjaja *et al.*, 2020), and an estimated \$22 billions of those \$35 billion subsidies qualified as harmful subsidies (Sumaila *et al.*, 2016).

The international community has recognized the urgency to eliminate support for IUU Fishing and has prioritized it for approximately two decades (Delpeuch *et.al*, 2022). In 2001, The Food and Agriculture Organization (FAO) called on countries to avoid supporting IUU Fishing through the voluntary instrument, namely the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing (IPOA-IUU) (Delpeuch *et.al*, 2022). This objective was then included in the 2002 Report of the World Summit on Sustainable Development and later became Target SDG 14.6 of the UN's 2030 Agenda for Sustainable Development to eliminate subsidies that contribute to IUU Fishing (Delpeuch *et.al*, 2022). This big commitment charges the World Trade Organization (WTO) to establish multilateral disciplines to prohibit supports that benefit IUU Fishing (Delpeuch *et.al*, 2022).

After a long voyage of negotiating and drafting the appropriate instrument, the World Trade Organization (WTO) at the 12th Ministerial Conference on 17 June 2022 marks a significant step forward in prohibiting harmful subsidies by adopting the Agreement on Fisheries Subsidies (AFS) (WTO, 2022). The AFS is the first WTO multilateral agreement that matches environmental concerns with promoting fairer world trade (Sanchez, 2023). To make the AFS viable, two-thirds of WTO members must deposit their instruments of acceptance to the WTO.

From the issues mentioned above, this article will advance a three-part analysis. The first part is to answer 'what' kind of subsidies contribute to IUU Fishing. The second part is to answer 'how' urgent the AFS is to be enforced. The last part is to answer 'how' sufficient the AFS is to combat IUU Fishing. These questions are essential in order to raise awareness of the current condition of harmful fisheries subsidies and their effect on the country's economic and social welfare. It is also crucial for the government to understand the benefits and weaknesses of the AFS so it can be used as a consideration for the government in deciding the acceptance of the AFS. Further, looking into the AFS that potentially will be enforced, it is also necessary for countries to comprehend the obligations that arise through the AFS.

Furthermore, this article will analyse the potential impact of AFS, particularly for Global South countries in the Asia-Pacific region. Fisheries sectors continue to generate significant contributions to national economies in the Asia-Pacific region, including to the gross domestic product, trade, employment, and nutrition (APFIC, 2018). Asia-Pacific region has also been recognized as the world's largest producer of fish for decades and represents 61 (sixty-one) percent of the global marine capture production (APFIC, 2018). However, it is

unfortunate that IUU Fishing still “invades” the Asia-Pacific region, where estimates of illegal fish caught by foreign vessels in the region are US\$ 3.7 – 5.2 billion per year (APFIC, 2018).

While the article aims to offer insights into the potential impacts of the AFS, several limitations should be noted. First, the availability of data poses a challenge, as the AFS was only adopted in 2022 and has not even been implemented yet, leaving a narrow three-year window for impact assessment. Moreover, not all countries have ratified the agreement; for example, Asia-Pacific nations such as Indonesia remain outside its formal scope, which increases the challenge of conducting a comprehensive regional analysis. Additionally, the political dimensions surrounding IUU Fishing dynamics introduce further complexity. Lastly, although the article frames its approach within legal research, other factors, such as politics and economics, still need to be considered for further study, as they inevitably affect both compliance and outcomes, warranting deeper interdisciplinary consideration.

The preliminary finding is that IUU fishing still often occurs. It is partly because of the harmful subsidies, such as fuel subsidies provided by the government that promote illegal fishing activities. Therefore, the AFS needs to be enforced to decrease (or hopefully eliminate) harmful subsidies. However, because of the complexity of IUU Fishing, the AFS is still insufficient to combat IUU Fishing thoroughly, mainly because it does not regulate specific regulation on fuel subsidies.

Literature Review

The first literature review was conducted for an article written by Remi Parmentier (2016), titled “Harmful Incentives: The Case of Fisheries Subsidies in the UNCTAD Trade and Environment Review.” This article explained that there are at least three reasons why subsidies in the fisheries sectors should be disciplined. Firstly, it is because the total amount of fisheries subsidies is vast and significant, as it constitutes 30 to 40 percent of the landed values generated by wild fisheries worldwide. Secondly, subsidies have socio-economic, distributional, and trade impacts due to their ability to distort the market for fish and disadvantage fishers who receive fewer subsidies. Thirdly, it has been established that capacity-enhancing subsidies stimulate overcapacity and overfishing. The author further mentioned that this kind of subsidy needs to be eliminated, even in fisheries where management is reasonably practical.

The first article emphasizes the need to discipline harmful fisheries subsidies but does not discuss the specific impacts on IUU Fishing and lack of regional focus on the Asia-Pacific. The article was also written before the AFS was adopted. Therefore, this article is written to identify the harmful subsidies, specifically the ones that cause IUU Fishing in the Asia-Pacific Region, while exploring the advantages and disadvantages of the currently adopted AFS.

Next, an article written by Mitchell Lennan and Stephanie Switzer (2023), titled “Current Legal Developments: World Trade Organization Agreement on Fisheries Subsidies,” stated that the AFS does not address all aspects of fisheries subsidies because it does not thoroughly govern the subsidies that likely contribute to overfishing and/or overcapacity. The article also concludes that the AFS is far from comprehensive yet significant, as it is the first WTO multilateral agreement established to address environmental issues.

This second article analyses the legal scope of the AFS and acknowledges the incompleteness of the AFS in addressing overcapacity/overfishing. However, this second article lacks focus on the implementation of the AFS in the Asia-Pacific Region and does not explicitly explore IUU Fishing in depth. Therefore, this article is written to further identify the factual condition of IUU Fishing in connection to harmful subsidies in the Asia-Pacific Region and offer the evaluation of the AFS in its efficiency in eliminating IUU Fishing.

Last but not least, an article written by Minna Yu and Xinyu Liu (2024), titled “A New Approach to Combating Illegal, Unreported, and Unregulated Fishing: Analysis of the WTO Agreement on Fisheries Subsidies,”

provided insights into the interpretation and future implementation of the AFS. The authors stated that the AFS has established an effective convergence between fisheries subsidy policies and the goal of ocean sustainable development. The authors explained that the possible implementation of the AFS would be a welcome additional instrument for combating IUU Fishing and even promote the transformation of the fisheries sector to align with the 2030 Agenda for Sustainable Development. The authors also highlighted that IUU Fishing is complex and even often combined with other illegal undertakings. The authors predicted that there would be some difficulties in implementing the AFS, among other reasons, due to systematic governance failures in some states, particularly in developing and least-developed countries. The authors suggest that cooperation between flag states, coastal states, port states, and relevant RFMOs in combatting IUU fishing must be enhanced.

This last article discussed AFS implementation challenges, particularly in combating IUU Fishing. The article also touches on domestic governance issues. The article also does not focus on a specific region in analysing the impact of AFS implementation, instead taking a more general scope. The authors also do not identify or analyse types of harmful fisheries subsidies. Therefore, this article is written to explore the types of harmful fisheries subsidies in the Asia-Pacific Region and provide suggestions on how countries can combat IUU fishing in conjunction with the implementation of AFS.

Methods

This research is normative legal research. The author will use a statutory and historical approach to answer the above research questions. In this context, the statutory approach is carried out by reviewing regulations related to the legal issue. With a historical approach, the author will examine the background of the regulations, particularly to highlight the importance of the AFS in the context of harmful subsidies resulting in IUU Fishing. The author will also analyse empirical facts and data about harmful fisheries subsidies and IUU Fishing. The author will utilize primary legal materials such as the AFS and other relevant international and domestic laws. The author will also utilize secondary legal materials such as WTO documents, books, and journal articles. This study concerns IUU fishing cases in the Global South Countries and will focus this research on Global South countries within the Asia-Pacific region.

Result and Analysis

IUU Fishing and Harmful Fisheries Subsidies

The definition of IUU Fishing in this article refers to Paragraph 3 of the IPOA-IUU adopted by the Food and Agriculture Organization (FAO), in essence explains that: (1) *Illegal Fishing* is fishing activities that are conducted without the permission of the jurisdiction state, contravene laws and regulations, and in violation of national laws or international obligations; (2) *Unreported Fishing* is fishing activities which have not been reported or misreported; and (3) *Unregulated Fishing* is fishing activities conducted by vessels without nationality, in areas with no applicable conservation or management measures, and in a manner inconsistent with state responsibilities for conserving living marine resources.

IUU Fishing is a never-ending challenge for every country. IUU Fishing is a complex international problem that needs immediate and forceful solutions. Continued IUU Fishing will deplete fish stocks and destroy habitats, decrease the value of many fisheries, threaten species extinction, disrupt marine food webs, increase food security risks, and disrupt coastal communities' social cohesion (Widjaja *et al.*, 2020). In addition, IUU fishing is most often connected to transnational crimes, including human rights abuses, bonded labor, tax evasion, piracy, and drugs, arms, and human trafficking (Widjaja *et al.*, 2020). The effect of IUU fishing can also be severe for coastal and small islands heavily dependent on fisheries (FAO, 2019). It negatively impacts the national economy and people's livelihoods, incredibly individual small-scale fisheries in poor coastal communities in developing countries (FAO, 2019).

There are three IUU Fishing drivers: economic incentives, weak governance, and barriers to enforcing fishing regulations (Widjaja *et al.*, 2020). Firstly, economic incentives that cause IUU Fishing. Many of fisheries subsidies are harmful and drive unsustainable practices. IUU Fishing is a high-reward and low-risk activity where there are many loopholes; fishers can expect benefits from breaching regulations – large catches with low operating costs (Widjaja *et al.*, 2020). The following reason is weak governance. IUU fishing is propelled by governance gaps internationally, regionally, and domestically. These gaps are “utilized” by the IUU Fishers and thus create obstacles to enforcement by the authorities (Widjaja *et al.*, 2020). The last driver is barriers to enforcement. It is caused by a lack of political will, enforcement capacity, and sometimes corruption. These obstacles also arise due to the lack of resources, and the logistical difficulties of effective monitoring, control, and surveillance (MCS) over ocean areas undermine attempts to stop IUU Fishing (Widjaja *et al.*, 2020).

It is challenging to quantify the scale of IUU Fishing globally or domestically. There is also no specific percentage or data per year that is used internationally on IUU Fishing. However, some various benchmark data will be presented herein. The most recent global estimate suggests that the global illegal and unreported annual catch is between 11 million and 26 million tonnes of fish, with a value of \$10 billion to \$23 billion and a total value loss between \$10 billion and \$23.5 billion (Widjaja *et al.*, 2020). Regionally, the Asia-Pacific Fishery Commission (APFIC) provided initial estimates of illegal fish caught by foreign vessels in Asia-Pacific amounted to 2.1 million tonnes to 2.5 million tonnes of illegally caught fish every year, with annual value of USD 3.7 Billion to USD 5.2 Billion (FAO, 2019). Domestically, The Bureau of Fisheries and Aquatic Resources of the Philippines stipulates that annual catches of IUU Fishing were about 113,000 tons or valued at around Php5.6 billion, with illegal fishing (fishing without a permit) being the most enormous volume of IUU catch amounting to 100,000 tons (Philippines. DA-Bureau of Fisheries and Aquatic Resources, 2022).

The IUU fishing activities directly harmed the country’s economy. The global revenue lost to IUU Fishing has been valued at up to \$23 billion annually (Young *et al.*, 2023). Globally, between 8 and 14 million metric tons of unreported catches are potentially traded illicitly yearly, suggesting gross revenues of US\$9 to US\$17 billion associated with these catches. The estimated loss in annual economic impact due to the diversion of fish from legitimate trade systems is US\$26 to US\$50 Billion, while losses to countries’ tax revenues are between US\$2 and US\$4 billion (Sumaila *et al.*, 2020). IUU Fishing even results in estimated annual losses to the Asia-Pacific region of USD 5 billion (FAO, 2019). One of the countries in the Global South that continues to suffer from these losses is Indonesia. In Indonesia, IUU Fishing caused a state loss of up to IDR 9 billion for one year at only 12 fishing ports from 800 fishing ports (Santosa, 2019). Indonesia suffered up to USD 20 billion loss per year because of IUU Fishing, which also threatens 65% of Indonesia’s coral reefs, more than 85% of global fish stocks, and the economic activities of small-scale fishermen (Santosa, 2019).

Unfortunately, tons of IUU Fishing cases are still conducted by fishers or vessels worldwide. The National Oceanic and Atmospheric Administration 2019 Report described multiple reports of illegal fishing by Chinese-flagged vessels and numerous instances of IUU Fishing by stateless vessels that had characteristics of being Chinese-flagged vessels, which China denied responsibility (Vaughn *et al.*, 2022). In 2016, the Argentinean coastguard sank a vessel owned by the China National Fisheries Corporation (CNFC) for allegedly fishing illegally in its territorial waters (Laje & Shoichet, 2016). In 2017 and 2018, at least 183 vessels in China’s distant-water fishing fleet were suspected or confirmed to be involved in IUU Fishing (Gutiérrez *et al.*, 2020). Furthermore, in 2021, the Australian Border Force reported it had found 16 (sixteen) Indonesian vessels operating illegally near the Rowley Shoals Marine Park off the northern coast of Western Australia. Australian Border Force then burnt three Indonesian fishing vessels that were allegedly caught fishing illegally in Australian waters (Darmawan, 2021).

In Indonesia, the Ministry of Maritime Affairs and Fisheries reported 83 fishing vessels conducted IUU Fishing in Indonesian waters from January to July 2022, and 72 of these vessels were Indonesian fishing vessels, eight fishing vessels carrying Malaysian flags, one fishing vessel bearing the Philippines flag, and two being Vietnamese-flagged Ships (Nasution, 2022). The Vietnamese fishing vessels used prohibited fishing tools, such as trawling nets, known for their harmful environmental effects (Nasution, 2022). Recently, on August 2023,

the Indonesian Maritime Security Agency arrested a Vietnamese-flagged fishing vessel that was fishing illegally in the North Natuna Sea, Riau Island. The ship was then towed to Batam to be processed by investigators from the Ministry of Maritime Affairs and Fisheries (Wiyoga, 2023).

Subsidies are one of the reasons that those kinds of IUU Fishing activities are above-ground. The subsidy, as defined by WTO Agreement on Subsidies and Countervailing Measures (ASCM), is a financial contribution by a government or any public body within the territory of a Member in forms of transfer of funds (grants, loans, and equity infusion), potential direct transfer of funds or liability (loan guarantees), forgone government revenue from tax exemptions, goods or services to private sector other than general infrastructure, indirect support through government payments into funding mechanisms, and any form of income or price support – where the subsidised confers a benefit.

Most research on fisheries subsidies classifies the subsidies into 3 (three) categories: beneficial, capacity-enhancing and ambiguous (Sumaila *et al.*, 2019). Firstly, beneficial subsidies mean investments in the promotion of fisheries conservation and management. Second, capacity-enhancing or harmful subsidies are programs that currently, or have the potential to, encourage fishing capacity to develop, resulting in overexploitation of natural capital assets. Finally, ambiguous subsidies can lead to either sustainable management or overexploitation of the fishery resource (Sumaila *et al.*, 2019).

The data of each category's amount in this article's context are presented herein.

Table 1. Fisheries Subsidies in Asia-Pacific Region

No	Country	Fisheries Subsidies (in USD Millions)	
1.	China	Beneficial	434
		Capacity-enhancing	5,886
		Ambiguous	941
		Total	7,261
2.	Korea Rep.	Beneficial	1,635
		Capacity-enhancing	1,500
		Ambiguous	50
		Total	3,185
3.	Japan	Beneficial	534
		Capacity-enhancing	2,111
		Ambiguous	215
		Total	2,860
4.	Thailand	Beneficial	74
		Capacity-enhancing	1,069
		Ambiguous	6
		Total	1,149
5.	Taiwan	Beneficial	69
		Capacity-enhancing	708
		Ambiguous	10
		Total	787
6.	Indonesia	Beneficial	309
		Capacity-enhancing	566
		Ambiguous	61
		Total	936
7.	Vietnam	Beneficial	214
		Capacity-enhancing	338
		Ambiguous	38

		Total	590
8.	India	Beneficial	83
		Capacity-enhancing	174
		Ambiguous	19
		Total	277
9.	Philippines	Beneficial	41
		Capacity-enhancing	140
		Ambiguous	6
		Total	187
10.	Bangladesh	Beneficial	21
		Capacity-enhancing	91
		Ambiguous	49
		Total	161

Source: Sumaila, et al., Journal Marine Policy, 2019

Harmful subsidies in the fisheries sector artificially increase profits by reducing the cost of fishing and/or increasing the revenue fishers receive (ClientEarth, 2020; Delpeuch *et.al*, 2022). Harmful subsidies enable vessels to travel farther, stay at sea longer, or have greater fishing capacity (ClientEarth, 2020). In 2018, harmful subsidies accounted for about 63% of approximately \$35.4 billion in fisheries subsidies (Sumaila *et al.*, 2019). However, there is no direct evidence or case that the government purposely provides subsidies so the fishers can do IUU Fishing. There are no or very unlikely subsidies, particularly from the government directly intended to fund or sponsor the fishers to do IUU Fishing activities (Lee, 2019). It is because they are illegal *per se* (Lee, 2019).

On the other hand, harmful fisheries subsidies in this context indirectly support IUU Fishing. Certain fisheries subsidies provided have the potential to be misused by irresponsible fishermen or vessels. Especially, because there is no transparency or comprehensive data collection system concerning fishermen or vessels that have engaged or have been engaged in IUU Fishing. The lack of transparency is one of the most critical enablers of IUU Fishing. The opacity and complexity of the operations in the fisheries industry make it challenging to identify the 'actors' involved, including the fishing vessels, the authorities responsible for overseeing their activities, and the route of their products to market and their owners (EJF, 2018).

One of the subsidies that is categorised as a harmful subsidy is fuel subsidies (in the form of fuel or fuel tax exemption). The fuel subsidies have been of increasing concern to national and international bodies and have been defined as harmful for their far-reaching economic and environmental impacts (Harper *et al.*, 2012). In 2018, harmful subsidies accounted for about 63% of approximately \$35.4 billion in fisheries subsidies, with fuel subsidies being the most significant single subsidy type (Skerrit & Sumaila, 2021). Fuel subsidies also tend to benefit the larger fishers. Fuel subsidies to larger fishers are around 7.2 billion, while only 0.6 billion is provided to small fishers. This amount has not changed since 2009 (Schuhbauer *et al.*, 2020). In this context, subsidies based on the cost of fishing by reducing operating expenses, particularly fuel subsidies, are most likely to increase IUU fishing (Delpeuch *et.al*, 2022). Between 2016-and 2018, it was found that an average of USD 3.2 billion was spent annually on fisheries support that reduces the cost of inputs. Fuel subsidies were the most extensive direct support policy, accounting for 25% of the total support (Delpeuch *et.al*, 2022). Fuel provisioning is generally less subject to regulation and more difficult to monitor; thus, it can play a central role in IUU Fishing (Delpeuch *et.al*, 2022).

These fuel subsidies also promote active, fuel-intensive fishing techniques such as dredging, beam trawling, and bottom trawling, which are detrimental to the marine environment (Hung & Weng, 2012). In India, trawler vessels are a vital source of income for people employed by the fisheries sector, and many of these vessels engage in indiscriminate fishing. It is primarily possible because the central and state governments exempt

their fuel expenses from taxes, sometimes for up to 300 liters a day. Without this subsidy, the trawlers could not fish as much as they do (Arasu, 2020). Furthermore, fuel subsidies that lower fuel prices also incentivize smuggling and illegal fuel trading (Hung & Weng, 2012). In June 2022, The Vietnam Coast Guard seized two fishing vessels with 130,000 litres of unknown origin diesel oil. The initial investigation found that the first vessel was about to transport 70,000 litres of diesel oil, and the other was transporting about 60,000 litres of diesel oil – with both having no invoices and documents to prove the legal origin of the oil cargoes. The Vietnamese government further investigated and handled this case per its law (Manifold Times, 2022).

Unfortunately, fishing subsidies, as the most harmful fisheries subsidy, constitute the most significant subsidy provided to the fishing sector (Sumaila, 2017). Some countries, particularly in the Global South, are still considering the fuel subsidies necessary and even still providing fuel subsidies in a large portion for fishers. In Indonesia, fuel subsidies are the most significant support the Indonesian government provides to the fisheries sector. In 2017-2020, the support provided by the Indonesian government to marine fisheries was primarily focused on providing fuel below market price (variable-cost input-based support 1.559 IDR Billion) (Suharsono & Irschlinger, 2022). Moreover, fuel subsidies also have served as a central pillar of the Chinese government's support for the fisheries industries. China recent research has shown that China subsidizes fishing through tax exemptions, particularly on fuel, to the value of \$16.5 billion per year, or 47% of total global fishing subsidies (Arthur *et al.*, 2019). In India, fuel subsidies are also the most significant subsidies to be provided for marine fisheries. Fuel subsidies grew considerably (by 142%) between 2016 and 2019. For 2019, Government support for India's marine fisheries is primarily fuel subsidies rather than other kinds of subsidies (Irschlinger & Sharma, 2022).

From the explanation above, it can be seen that fuel subsidies categorized as harmful fisheries subsidies are still given in a big amount to fishers or vessels. Fuel subsidies have the potential to be misused by irresponsible fishers or vessels. Furthermore, negligence provision of fuel subsidies (plus a lack of transparency) can lead to illegal activities in the fisheries sector, such as the use of dangerous fishing technology and illegal trade.

The Urgency of Agreement on Fisheries Subsidies

The consequences of trade subsidies are not limited to market competition but also impact human and environmental relationships (Singh, 2017). Some subsidies that produce economic advantages sometimes do not strictly maintain environmental standards (Singh, 2017). Harmful subsidies can cause significant damage to the environment and human health. Therefore, reforming environmentally harmful subsidies is critical to accelerate sustainable development efforts (Damania *et al.*, 2023). The current WTO subsidies agreement, namely the ASCM, prescribed regulatory measures, broadly classifying subsidies and conditionally restricting their use (Singh, 2017). However, the demand has grown for broader legal claims and support, particularly for the types of subsidies with unclear objectives that are not covered within the descriptions in the ASCM (Singh, 2017).

The issue of fisheries subsidies has been on the formal negotiating agenda of the WTO since 2001 (Lennan & Switzer, 2023). In the 2001 Doha Round of multilateral trade negotiation, WTO Members committed to negotiations to clarify and improve WTO disciplines on fisheries subsidies (Lennan & Switzer, 2023) while preserving the basic concepts, principles, and effectiveness of the ASCM. The Doha Round described the mandate of fisheries subsidies as follows:

"...In the context of this negotiations, participants shall also aim to clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries..."

This was the first official stand by WTO members to move forward on WTO disciplines on fisheries subsidies (Bahety & Mukiibi, 2017). The 2005 Hong Kong Ministerial Declaration further strengthened this mandate by encouraging the Members' commitment to:

"...enhancing the mutual supportiveness of trade and environment, note that there is broad agreement that the Group should strengthen disciplines on subsidies in the fisheries sector..."

Furthermore, the adoption by world leaders in 2015 of the UN Sustainable Development Goals (SDGs) and its SDG target 14.6 deadline of 2020 set a new impulse for the WTO to accelerate the fisheries subsidies agreement. In the 11th WTO Ministerial Conference 2017, the Members agreed on a commitment to secure a deal on fisheries subsidies which delivers on Sustainable Development Goal 14.6, that is:

"...to prohibit certain forms of fisheries subsidies that contribute to overcapacity and overfishing, and eliminate subsidies that contribute to IUU fishing, recognizing that appropriate and effective special and differential treatment for developing country Members and least developed country Members should be an integral part of negotiations."

Nevertheless, to these "promising" commitments, negotiations failed to secure an agreement until June 2022, when an Agreement on Fisheries Subsidies was reached (Lennan & Switzer, 2023). There have been some rejections of the AFS from countries such as India and Indonesia, which strongly opposed making special and differential treatment conditional on having a fisheries management system in place (European Parliamentary Research Service, 2022). Furthermore, India also argued that the agreement fails to adequately regulate states that have already developed large-scale industrial fishing capacities through subsidies, which would, in turn, jeopardize key sustainability objectives (Mongabay, 2024). On the other hand, Indonesia believes that the AFS does not support Indonesian fishermen and considers it as unfair and even biased in favour of the interests of developed countries (Mongabay, 2024).

Referring to the date of this article, there are currently 101 (one hundred and one) WTO Members who have formally accepted the AFS (WTO, 2023). This instrument will enter into force and become legally binding on the WTO Members who have accepted it once two-thirds (or 111 members) of the 166 (one hundred and sixty-six) WTO Members accept the AFS (Lennan & Switzer, 2023). Reservations are not permitted by the AFS, which means that once a member has accepted the AFS, its terms cannot be unilaterally altered (Lennan & Switzer, 2023). Considering the importance of understanding the AFS – that is likely will take effect– this article will further discuss the key substance of the AFS.

Firstly, the scope of the AFS. The subsidy and specificity definition under Article 1.1 and Article 2 of ASCM draws directly to the AFS. The AFS only applies exclusively to marine wild capture fishing and fishing-related activities at sea (Lennan & Switzer, 2023). Aquaculture inland fisheries are excluded from the scope of AFS, and government-to-government payments under fisheries access agreements are not considered subsidies under this Agreement. In essence, The AFS regulates and prohibits fisheries subsidies that contribute to IUU Fishing, subsidies regarding overfished stocks, and subsidies provided outside the jurisdiction of a coastal Member or a coastal non-member and the competence of a relevant Regional Fisheries Management Organisation or Arrangement (RFMO/A).

Next, the IUU Fishing regulation in the AFS. IUU Fishing prohibition in the AFS mainly depends on three elements: the definition of subsidy, the determination of IUU fishing, and the required nexus between the subsidy and IUU Fishing (Damme, 2020). The definition of IUU Fishing in the AFS is the same as provided in paragraph 3.1 of IPOA-IUU. The IPOA-IUU is a voluntary instrument, so incorporating its definition of IUU fishing in the AFS may significantly strengthen its normative impact (Lennan & Switzer, 2023). The AFS prohibits Members from granting or maintaining any subsidy to a vessel or operator engaged in IUU fishing or fishing-related activities supporting IUU fishing. A vessel or operator will be considered to be engaged in IUU fishing if an affirmative determination is made by a coastal member (for activities in areas under its jurisdiction) or a flag state Member (for activities by vessels flying its flag), as well as a relevant RFMO/A (in areas and for species under its competence). Nevertheless, Port State Members are not entitled to determine IUU Fishing or IUU supporting activities (Lennan & Switzer, 2023). However, suppose a port state Member notifies a subsidizing Member that it has clear grounds to believe that a vessel in one of its ports has engaged in IUU fishing; the

subsidizing Member shall give due regard to the information received and take such actions regarding its subsidies as it deems appropriate.

A subsidising Member notified of an affirmative IUU Fishing determination needs to consider the nature, gravity, and repetition of IUU fishing committed by a vessel or operator when setting the prohibition's application duration. The prohibition must last as long as any sanction applied by determining State or RFMO/A, and actions taken by Members regarding this prohibition must be communicated to the Fisheries Committee. The AFS also stipulates that Member shall have laws, regulations, and/or administrative procedures regarding the prohibited subsidies resulting in IUU fishing. Besides fisheries subsidies, the AFS also governed subsidies that caused overfished stock and prohibited members from granting or maintaining subsidies for fishing in unregulated high seas.

Further, special and differential treatment provisions for developing countries and least developed countries (LDC) Members in the AFS. The LDC was one of the WTO's primary concerns in determining the AFS, considering the importance of fisheries industries for LDCs. The AFS sets out several provisions and exemptions for the developing LDCs that hopefully will support them in achieving the implementation of the AFS. Firstly, developing and LDC members will be excluded from IUU fishing and overfished stocks disciplines within the Exclusive Economic Zones (EEZ) and dispute settlement under the AFS for two years from the date of entry into force for the AFS. Secondly, the obligation for developing and LDC Members to give notification of fisheries-related information is every four years instead of every two years.¹ Thirdly, the WTO established a voluntary WTO funding mechanism (Fish Fund), especially for developing and LDC countries Member which aims to target technical and capacity building assistance for the implementation of the AFS. Last but not least, the AFS gives LDC Members flexibilities – Members must exercise due restraint in raising matters involving an LDC Member.

Moreover, The AFS also rules several procedural obligations and incorporates several provisions to improve notification and transparency of fisheries subsidies (Lennan & Switzer, 2023). The AFS even set an active and continuous relationship between the Fisheries Committee and its Members to support the success of the transparency implementation of this Agreement. In this context, each Member shall notify some information the Committee, such as writing on an annual basis list of vessels and operators engaged in IUU Fishing, measures taken to ensure the implementation and administration of the AFS, providing a description of its fisheries regime with references to its laws and regulations relevant to the AFS, providing RFMO/A to which they are parties, and Members shall bring a notification and information request issues to the Committee.

As briefly mentioned above, another pertinent point is the AFS mandates to establish a Committee on Fisheries Subsidies that is composed of representatives from each Member. The Committee on Fisheries Subsidies has important yet challenging responsibilities under the AFS. It shall allow Members to consult on any matter relating to the operation of the AFS. The Committee also shall review annually the implementation and operation of the AFS and inform the review to the Council for Trade in Goods of development. On the other hand, the Committee also has a unique competence to review the operation of AFS, identify all necessary modifications to improve the operation and submit the proposal to amend the text of the AFS to the Council for Trade in Goods.

Last but not least, The AFS also set out numerous provisions for dispute settlement regarding fisheries subsidies. The AFS dispute settlement refers to the GATT 1994 as the prevailing WTO Dispute Settlement Understanding (DSU) that will apply to disputes between Members arising under the AFS, except matters under Articles 3,4 and 5 of the AFS where the provisions Article 4 of ASCM shall apply (Lennan & Switzer, 2023). However, it should be noted that the AFS, including any findings, recommendations, and awards, have no legal implications regarding territorial claims or delimitation of maritime boundaries.

¹ This treatment is applicable for developing country Members and LDC Members with an annual share of the global volume of marine capture production not exceeding 0.8 per cent as per the most recent published FAO data.

From the explanation above, it is clear that AFS has accommodated some provisions that potentially will be beneficial to combating harmful fisheries subsidies. In this way, the agreement needs to be applicable, and the reasons: Firstly, the current prevailing subsidies regulation, namely ASCM, is not enough to cover all global subsidy issues, especially the ones that affect the environment. These types of effects are not considered by the ASCM (Lennan & Switzer, 2023). The AFS is the first WTO agreement to focus on the environment that has legislated crucial provisions to shatter IUU Fishing. Although fisheries subsidies are subject to the ASCM, they do not directly address the issues caused by certain fisheries subsidies (Lennan & Switzer, 2023). In essence, the ASCM focuses on the trade effects of a subsidy, but fisheries subsidies may cause other effects, that is, adverse impacts on fish stocks, biodiversity, and food security (Lennan & Switzer, 2023). The ASCM discipline focuses on the trade-distortive effects of subsidies but not on subsidies' harmful effects on the sustainability of natural resources (Taal, 2022).

Secondly, The AFS has excellent potential for transparency in the fisheries sector. The lack of transparency is one of the most critical enablers of IUU Fishing. Moreover, the monitoring and controlling at-sea activities is complex. Thus, effective transparency system in global fisheries is crucial to help eliminate harmful fisheries subsidies that might be misused by irresponsible fishers or vessels and contribute IUU Fishing. With the AFS, there will be a chance and opportunity to ease the monitoring and control through the transparency and notification system.

Sufficiency of the Agreement on Fisheries Subsidies to Combat IUU Fishing

Despite all the benefits that may be produced through the AFS, some missing links need to be discussed and handled to make the AFS successful in putting down subsidies resulting in IUU Fishing. First, there is no specific regulation about fuel subsidies. Subsidies on fuel have long been considered worldwide as trade distortive and harmful to the environment by indirectly promoting IUU Fishing, overfishing and overcapacity (Sanchez, 2023). Therefore, fuel subsidies should be particularly regulated or banned (especially to vessels or fishers conducted or involved in IUU Fishing). It also can be considered to set out rules to confine or limit the fuel subsidies in a certain amount to fishers or vessels per year.

Secondly, The AFS has not disciplined the issues of overcapacity and overfishing subsidies (Sanchez, 2023; Lennan & Switzer, 2023). The FAO report stipulated a clear linkage between IUU Fishing and Fishing overcapacity (FAO, 2004). Overfishing resulted directly from overcapacity, which in turn led to IUU Fishing. Thus, the more appropriate fisheries management on subsidies that result in overcapacity and overfishing and conduct capacity controls are necessary to prevent IUU Fishing. So, the gap in the law of AFS regarding overcapacity and overfishing is not in line with goals in combating IUU Fishing.

Article 5 of the 24 November 2021 Draft Consolidated Chair Text of the AFS has explicitly prohibited subsidies contributing to overcapacity and overfishing and even prohibited a list of specific harmful, low inputs, including subsidies to the purchase/fuel costs. The November 2021 Draft of AFS already set out a general prohibition on granting subsidies liable to contribute to overcapacity (Sanchez, 2023). However, according to the AFS draft agreed in June 2022, these issues did not reach a consensus at the 12th WTO Ministerial Conference (MC12). This is because WTO members were not able to agree on a broader rule to curb subsidies contributing to excessive fishing pressure, as negotiations on the rule and its exceptions for developing countries failed to reach a conclusion (IISD, 2022). Nevertheless, negotiations were agreed to continue for the next 13th WTO Ministerial Conference (MC13).

The AFS, with all its weaknesses, opens up a great opportunity and possibility to eliminate harmful subsidies. However, looking at the complexity and multi-faceted aspects of IUU Fishing, the harmful fisheries subsidies problem is just one of the million things that must be eliminated or reformed to combat IUU Fishing thoroughly. Enforcing the AFS will surely be a significant action to combat IUU Fishing gradually, but it will not tackle IUU Fishing squarely and directly (Lee, 2019). The harmful fisheries subsidies are only indirect and

peripheral (Lee, 2019). The "perfect" international law in prohibiting harmful fisheries subsidies will not be enough if there is still no efficient legal system and enforcement of domestic laws and regulations to punish owners, operators, and fishermen engaged in IUU fishing activities. So, therefore, the steps and efforts taken by countries globally or domestically and relevant international organizations must continue beyond the AFS. As a global community, we still have to integrate in finding creative and concrete solutions to fight IUU Fishing.

Conclusion

IUU Fishing is a complex global issue that still occurs. One factor that promotes this illegal activity is subsidies, particularly from the Government. Fuel subsidies are the type of subsidies that contribute to IUU Fishing. However, some countries, particularly Global South countries, still provide enormous fuel subsidies to the fisheries sector. The presence of the AFS is a silver lining to this problem. It is a ground-breaking multilateral agreement by WTO, focusing on subsidies' harmful effects on the sustainability of natural resources and the environment. The AFS has set some favourable rules to help eliminate IUU Fishing, especially regarding the commitment to transparency as one of the key factors in tackling IUU Fishing. However, the AFS is far from perfect, mainly because it does not regulate overfishing and overcapacity and specifically banned or limit fuel subsidies. Nevertheless, enforcing the AFS is necessary because it will open up a great opportunity and possibility to eliminate harmful subsidies resulting to IUU Fishing gradually. Even so, looking into the multifaceted aspect of IUU Fishing, AFS itself is not enough to tackle IUU Fishing thoroughly. More than the AFS is needed to combat IUU Fishing in the Asia-Pacific region. The global south community, particularly within the region, must still integrate in finding creative and concrete solutions to fight IUU Fishing while strengthening the domestic law enforcement for IUU Fishing.

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