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A new approach to combating illegal, unreported, and unregulated fishing: analysis of the WTO Agreement on Fisheries Subsidies

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Abstract

Harmful subsidies awarded by states facilitate illegal, unreported, and unregulated (IUU) fishing, which causes negative impacts on ocean ecosystems, seafood value chains, society, and global food security. The World Trade Organization Agreement on Fisheries Subsidies, adopted on June 17, 2022, aims to improve global fishery governance through trade measures and is regarded as a major step toward the achievement of the United Nations 2030 Sustainable Development Goals. The objective of this study is to offer a better insight into the interpretation and future implementation of the WTO Agreement on Fisheries Subsidies. Based on the *status quo* of international and regional fishery governance legal systems and management regimes in the regulation of IUU fishing, this study reviews the legislative process of the WTO Agreement on Fisheries Subsidies, analyzes five main controversial issues, and explores the conflicts of interests of different countries during the discussion. In the future, states should promote the transformation of the fisheries sector by reducing harmful subsidies for IUU fishing and enhancing cooperation among coastal states, flag states, port states and relevant RFMOs.

Keywords WTO Agreement on Fisheries Subsidies, IUU fishing, Legislative process, Sustainable Development Goals

1 Introduction

Illegal, unreported, and unregulated (IUU) fishing has been widely acknowledged as one of the greatest threats to fish stocks, marine ecosystems, and global ocean sustainability. Globally, an estimated one in five fish caught originates from IUU fishing, which caused annual losses estimated to range from 11 to 26 million tons of fish, with an economic value of up to \$23 billion (UN, 2023). According to the United Nations Food and Agriculture Organization (FAO), approximately 90% of the world's fisheries are fully exploited or overexploited, which means that they cannot accommodate any more

legal fishing, much less illegal fishing (FAO, 2022). An estimated \$22 billion a year in subsidies creates substantial, perverse incentives that encourage destructive fishing practices (Cook, 2023). There is strong evidence that certain forms of subsidies have been contributing to IUU fishing by reducing the cost of fishing operations or enhancing revenues (GSI, 2020). Recent global estimates reveal that the top 10 providers of harmful fisheries subsidies spend more than \$5.3 billion on fishing in the waters of other nations. Especially in several least developed countries (LDCs), harmful fisheries subsidies support more than 20% of the foreign catch value, which means these distant-water fleets would not be profitable without subsidies (Oceana, 2020).

The WTO Agreement on Fisheries Subsidies (hereinafter 'the Agreement'), adopted at the 12th Ministerial Conference on June 17, 2022, marks a major step forward for ocean sustainability by prohibiting harmful fisheries subsidies, including subsidies to IUU fishing

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and subsidies regarding overfished stocks, among others (WTO, 2022). It has been recognized as a historic milestone because it is the first Sustainable Development Goal (SDG) target¹ to be fully met through a multilateral agreement and the first WTO agreement to focus on the environment (WTO, 2022). Among the rules for three types of harmful subsidies, disciplines regarding subsidies for overfished stocks and other subsidies are quite brief. Article 4 focuses on the standard of conducting stock assessments, which answers the controversy over the criteria of 'overfished' during the negotiation of the Agreement.² Article 5 addresses subsidies which cannot be covered by Articles 3 and 4.³ Comparatively speaking, subsidies that contribute to IUU fishing are the most comprehensively discussed and involve complicated problems in different areas, including the definition of IUU fishing, the procedures of determination, the transparency requirements, etc. (Floyd, 2021). This article focuses on an analysis of the role of the Agreement in the elimination of IUU fishing.

Although the Agreement has not entered into force, it reflects the trend and determination of the international community to reduce and eliminate harmful subsidies for IUU fishing and achieve the SDGs of the United Nations (UN). Therefore, it is necessary to summarize and analyze the key controversial issues during the negotiation of the Agreement in depth.

¹ The 2030 Agenda for Sustainable Development, adopted by all United Nations member states in 2015, provides a shared blueprint for peace and prosperity for people and the planet now and in the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries. Among them, SDG Target 14.4 is sustainable fishing, and SDG Target 14.6 is the eradication of subsidies that contribute to overfishing.

² Article 4, entitled 'Subsidies regarding overfished stocks', which contains four paragraphs. Paragraph 1 provides that 'No Member shall grant or maintain subsidies for fishing or fishing related activities regarding an overfished stock'. Paragraph 2 provides that 'For the purpose of this Article, a fish stock is overfished if it is recognized as overfished by the coastal Member under whose jurisdiction the fishing is taking place or by a relevant RFMO/A in areas and for species under its competence, based on best scientific evidence available to it'. Paragraph 2 provides that 'Notwithstanding Article 4.1, a Member may grant or maintain subsidies referred to in Article 4.1 if such subsidies or other measures are implemented to rebuild the stock to a biologically sustainable level'. Paragraph 4 provides that 'for a period of 2 years from the date of entry into force of this Agreement, subsidies granted or maintained by developing country Members, including LDC Members, up to and within the EEZ shall be exempt from actions based on Articles 4.1 and 10 of this Agreement'.

³ Article 5 is entitled 'Other subsidies', and the content is as follows: 5.1 No Member shall grant or maintain subsidies provided to fishing or fishing-related activities outside of the jurisdiction of a coastal Member or a coastal non-Member and outside the competence of a relevant RFMO/A. 5.2 A Member shall take special care and exercise due restraint when granting subsidies to vessels not flying that Member's flag. 5.3 A Member shall take special care and exercise due restraint when granting subsidies to fishing or fishing-related activities regarding stocks the status of which is unknown.

Given the context above, this paper first introduces the *status quo* of international and regional fishery governance legal systems and management regimes in the regulation of IUU fishing, which constitutes the basis and background of the WTO Agreement on Fisheries Subsidies. It then reviews the negotiation process of the Agreement and analyzes five important issues, namely the definition and determination of IUU fishing under the Agreement, procedures that trigger the prohibition of subsidies, limitation of application to disputed waters, and the arrangement of Special and Differential Treatment (SDT) for developing countries. Overall, the paper illuminates the process that led to the consensus on each issue and the Agreement as a whole to offer a better insight into its interpretation and future implementation.

2 Current regulatory system for IUU fishing and its implications

In recent decades, a considerable effort has been made by the international community from the perspectives of law, economics, and social management to reduce or eliminate IUU fishing.

At the global level, a comprehensive legal system comprising binding and voluntary international multilateral instruments has been established. The UN has created a basic framework for the utilization and conservation of marine living resources. The 1982 United Nations Convention on the Law of the Sea (UNCLOS, 1982), the 'constitution of the oceans', confers coastal states exclusive rights and jurisdiction with regard to fisheries matters within the 200 nautical miles Exclusive Economic Zone (EEZ) and has adopted the principle of freedom of fishing on the high seas. It was followed by the 1995 Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995 Fish Stocks Agreement), which provides a further legal framework for cooperative management of straddling fish stocks and highly migratory fish stocks. The FAO, a specialized agency of the UN, has developed a series of binding and non-binding international instruments that govern fishery activities, including the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (1993 Compliance Agreement), the 1995 FAO Code of Conduct for Responsible Fisheries, IPOA-IUU, the 2009 Agreement on Port State Measures (PSMA), the 2014 Voluntary Guidelines for Flag State Performance, and the 2017 Voluntary Guidelines for Catch Documentation Schemes. These instruments are more practical and instructive. They attempt to combat IUU fishing by increasing the responsibilities of port states, flag states and RFMOs. Notably, among these instruments, the

Table 1 Important RFMOs and RFABs

| Type | Acronym | Organization name | Year established |
|-------------------|---------|--|------------------|
| Specialized RFAB | NAMMCO | North Atlantic Marine Mammal Commission | 1992 |
| General RFABs | APFIC | Asia–Pacific Fishery Commission | 1948 |
| | CECAF | Fishery Committee for the Eastern Central Atlantic | 1967 |
| | FFA | Pacific Islands Forum Fisheries Agency | 1979 |
| | COREP | Regional Fisheries Committee for the Gulf of Guinea | 1984 |
| | CRFM | Caribbean Regional Fisheries Mechanism | 2002 |
| | SWIOFC | Southwest Indian Ocean Fisheries Commission | 2004 |
| | FCWC | Fishery Committee for the West Central Gulf of Guinea | 2007 |
| General RFMOs | GFCM | General Fisheries Commission for the Mediterranean | 1952 |
| | NAFO | Northwest Atlantic Fisheries Organization | 1979 |
| | CCAMLR | Commission for the Conservation of Antarctic Marine Living Resources | 1982 |
| | NEAFC | North-East Atlantic Fisheries Commission | 1982 |
| | SEAFO | South-East Atlantic Fisheries Organization | 2003 |
| | SIOFA | South Indian Ocean Fisheries Agreement | 2012 |
| | NPFC | North Pacific Fisheries Commission | 2015 |
| Specialized RFMOs | IPHC | International Pacific Halibut Commission | 1923 |
| | IWC | International Whaling Commission | 1946 |
| | IATTC | Inter-American Tropical Tuna Commission | 1949 |
| | ICCAT | International Commission for the Conservation of Atlantic Tunas | 1969 |
| | NASCO | North Atlantic Salmon Conservation Organization | 1983 |
| | CCSBT | Commission for the Conservation of Southern Bluefin Tuna | 1994 |
| | IOTC | Indian Ocean Tuna Commission | 1996 |
| | WCPFC | Western and Central Pacific Fisheries Commission | 2004 |

PSMA is the first and the only legally binding international agreement, so it is essential to combating IUU fishing. As of February 2024, the number of parties to the PSMA totals 76, including the European Union, which counts as one party on behalf of its 27 member states, to effectively cover 102 states and 60% of port states (FAO, n.d.a). However, more joint efforts are needed to guarantee greater cooperation among all parties, along with more transparency and adherence to the international framework, strong legislation, and greater accountability and enforcement. In a word, effectively implementing these instruments is a great challenge for the FAO.

At the regional level, there are various Regional Fishery Advisory Bodies (RFABs) and RFMOs that play a significant role in the management of cross-border fishery resources. Both UNCLOS and FAO documents explicitly address the role of RFABs and RFMOs in the implementation of international agreements and the strengthening of international cooperation (FAO, n.d.b). By performing an advisory role, RFABs can provide important support for regional fishery management. RFMOs have contributed significantly to the protection and conservation of fishery resources in specific areas or special

species (Table 1). However, the performance of RFABs and RFMOs is criticized for the problems of limited membership and noncompliance (Shuo, 2022). Therefore, the role of RFABs and RFMOs in managing fishery resources needs to be improved.

It is observed that some progress has been made at the global and regional levels in combating IUU fishing, but the current fishery governance system confronts serious problems and challenges. UNCLOS and the 1995 Fish Stocks Agreement only provide a general legal framework and principles. Some provisions are rather unclear, so their implementation depends on the interpretations of relevant states, which caused some conflicts in practice. International instruments within the FAO framework are almost voluntary documents that face noncompliance problems. In light of this situation, the FAO called upon countries to develop additional market-related measures to stop IUU fishing (FAO, 2002). Several entities, such as the European Union and the United States, positioned themselves as self-proclaimed global leaders in combating IUU fishing. They have sought to improve their national laws and regulations, using trade measures and advocating cooperative action to promote stronger

governance over IUU fishing (Honniball, 2021). However, as shown in the latest report released by the FAO, despite improvements, it remains doubtful as to whether the SDGs will be achieved by 2030. It will require an unprecedented effort by individual governments and a renewed sense of common purpose across the international community (UN, 2023).

Consequently, there is a need to develop and implement legally binding, specialized, and globally recognized legal instruments to achieve the goal of sustainable fishery utilization and governance. In June 2021, the International Agreement to Prevent Unregulated Fishing in the High Seas of the Central Arctic Ocean entered into force. The agreement has two principal objectives: the prevention of unregulated fishing in the high seas portion of the central Arctic Ocean and the facilitation of joint scientific research and monitoring (United States Department of State, 2021). On March 2, 2022, 175 nations endorsed a resolution at the UN Environment Assembly (UNEA-5) to end plastic pollution, including in marine environments, and planned to develop a legally binding agreement (UN Environment Programme, 2022). On June 19, 2023, the Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (the BBNJ Agreement) was adopted in New York (BBNJ Agreement, 2023). As a significant addition to existing international ocean governance systems, once it has entered into force, this agreement will help improve integrated management of a changing ocean and support collaboration across regions and sectors to sustain marine ecosystems (Gjerde et al., 2022). In the context of legislative trends, the Agreement was successfully adopted in June 2022, which furthered ocean sustainability by prohibiting harmful fisheries subsidies that have contributed to the depletion of the world's fish stocks.

3 Review of the negotiation process of the agreement

3.1 Negotiation process of the agreement

The negotiations on the prohibition of fisheries subsidies, as part of the Doha Round of Rules negotiations, commenced at the Doha Ministerial Conference in 2001 and concluded in June 2022 with the adoption of the Agreement on Fisheries Subsidies. The negotiation process, which spanned 21 years, can be divided into three stages.

The first stage began with the Doha 4th Ministerial Conference and marked the beginning of negotiations. Paragraph 28 of the Doha Ministerial Declaration clearly stipulated that all negotiators should clarify and enhance disciplines related to fisheries subsidies in the Agreements on Implementation of Article VI of the General

Agreement on Tariffs and Trade (GATT) 1994 and the Agreement on Subsidies and Countervailing Measures (SCM Agreement) and fully consider the requirements of developing countries and LDCs (WTO, 2001). Paragraph 31 of the Doha Ministerial Declaration underscored the importance of balancing trade freedom and environmental protection and specified that fisheries subsidies were part of trade and environmental negotiations. During this period, the negotiations focused primarily on clarifying foundational issues (WTO, 2001). Based on the description of fisheries subsidies in the Doha Ministerial Declaration, negotiators discussed whether fisheries subsidies should be separately regulated under the SCM Agreement and the provision of basic disciplines for the global trading system in subsidies.

The second stage commenced at the Hong Kong 6th Ministerial Conference in 2005. During this stage, intensive negotiations were conducted on the overall framework and specific rules for subsidy disciplines. The Hong Kong Ministerial Conference shifted its primary focus from determining the content of the negotiations to addressing the types of subsidies to be prohibited and the SDT for developing countries, which fundamentally changed the direction of the negotiations on fisheries subsidies. The Hong Kong Ministerial Declaration appealed for the prohibition of fisheries subsidies that lead to overcapacity or overfishing and granted appropriate and effective SDT for developing and least developed members (WTO, 2005a). The key outcomes of this stage included the release of the chairman's text and the distribution of the roadmap based on that text (WTO, 2008). Despite some disagreements among members on specific matters related to fisheries subsidies, there was still a collective aspiration to establish effective disciplines through these negotiations.

The third stage began in 2015 and culminated with the introduction of the Agreement on Fisheries Subsidies in 2022. This stage was prompted by the urgent need to address the critical issue of fishery resources. During this stage, members worked to achieve a consensus on abolishing harmful fisheries subsidies and ensuring SDT.

At the 10th Ministerial Conference (MC10) in 2015, negotiations on fisheries subsidies failed because of disagreements on three key issues:

- A proposal to conclude negotiations on the prohibition of subsidies to IUU fishing and efforts to address overfished stocks within a specific timeframe.
- A provision that would have required members to commit to a best endeavor standstill provision on new subsidies in prohibited areas despite the inclusion of the standstill provision in the SDGs and the Trans-Pacific Partnership.

- Specific notification commitments on fisheries subsidy programs under the SCM Agreement, including details on the format and accounting for members' resources and technical capacities.

Despite the lack of consensus on subsidies for IUU fishing during MC10, certain agreements were reached through international organizations outside the WTO framework. In 2015, the UN adopted the 2030 Agenda for Sustainable Development, which encompasses 17 Sustainable Development Goals that call upon all countries to participate in eradicating poverty and hunger, combating inequality, protecting human rights, promoting gender equality, and ensuring the sustainability of the Earth's natural resources. Goal 14 specifically focuses on the protection and sustainable use of oceans and marine resources to foster sustainable development. Notably, Goal 14.6 within this framework puts forward the vision to be achieved by 2020 and further defines the mandates of the Doha Development Agenda and the Hong Kong Ministerial Conference. The concrete content of Goal 14.6 includes the prohibition of specific fisheries subsidies that promote overcapacity and overfishing, the elimination of subsidies that contribute to IUU fishing, and the recognition of reasonable and effective SDT for developing and least developed members as integral components of WTO fisheries subsidies negotiations (UN, 2015). The introduction of SDG 14.6 prompted the subsequent WTO Ministerial Conferences to clarify the objectives that the Agreement on Fisheries Subsidies should accomplish.

Since 2016, WTO members have submitted numerous proposals to the Negotiating Group on Rules. Leading states such as China, Iceland, Norway, New Zealand, Indonesia, Argentina, and the LDC Group have presented texts that focus primarily on the scope of fisheries subsidies, types of prohibited subsidies, transparency, and SDT (WTO Documents).

At the UN Ocean Conference held in June 2017, in response to the advocacy of the SDGs and to promote their achievement, UN member states agreed to take immediate action, including prohibiting certain forms of fisheries subsidies that promote overcapacity and overfishing, eliminating subsidies that contribute to IUU fishing, refraining from adopting new subsidies, striving to conclude the WTO negotiations on this issue, and ensuring that appropriate and effective SDT for developing and LDCs is included in these negotiations (UN, 2017). In December of the same year, members resolved to enact the Agreement on Fisheries Subsidies at the 12th WTO Ministerial Conference (MC12) to accomplish SDG 14.6 at the 11th WTO Ministerial Conference (MC11).

During MC12 in June 2022, members reached the Agreement on Fisheries Subsidies, which is not only a major achievement in fisheries subsidies negotiations but also one of the most significant outcomes of MC12. Spanning 21 years, this Agreement, which is the first multilateral agreement reached by the WTO since 2013 and the first WTO agreement centered around the core concept of environmentally sustainable development, is of great historical significance. WTO Director-General Ngozi Okonjo-Iweala described the Agreement as a monumental first step in curbing subsidies that contribute to overcapacity and overfishing. It is a measure that will positively impact the lives of approximately 260 million individuals reliant on marine fisheries worldwide (WTO, 2023b), and it will contribute significantly to the realization of the UN's 2030 SDGs.

3.2 Disciplines on subsidies to IUU fishing

From the negotiation history of the Agreement, it is known that the concept of prohibiting subsidies for IUU fishing has been gradually recognized by WTO members owing to the damage done by IUU fishing, and a consensus has been reached on combating IUU fishing through trade measures. In order to effectuate the mandate for fisheries subsidies negotiations in SDG 14.6, prohibiting subsidies for IUU fishing was considered a major subsidy discipline and was stipulated in Article 3. In Article 3, Article 8 and Article 11, restrictions of subsidies that contribute to IUU fishing were stipulated in the following aspects: the definition and identification of IUU fishing, the implementation of the subsidy prohibition, notification and transparency of information, SDT in developing and LDCs, and dispute settlement.

Article 1 provides the object of the Agreement. The object of the agreement is subsidies for dedicated marine fishing and marine fishing-related activities. Unspecialized subsidies, inland fisheries, aquaculture, and government-to-government payments under fisheries access agreements are excluded from the scope of this Agreement.

Article 3 of the Agreement is the main part of the prohibition of IUU fishing subsidies. First of all, Article 3.1 specifies the basic purpose is to combat IUU fishing by prohibiting subsidies, requiring that no member shall grant or maintain any subsidies to a vessel or operator engaged in IUU fishing. Article 3.7 stipulates that each member shall have laws, regulations, and/or administrative procedures in place to ensure that the subsidies referred to in Article 3.1, including such subsidies that exist at the entry into force of this Agreement, are not granted or maintained. In addition, in Footnote 4, the Agreement stipulates that 'IUU fishing' refers to activities set out in paragraph 3 of the IPOA-IUU.

Secondly, Articles 3.2 and 3.3 stipulate the subjects and procedures for the identification of IUU fishing. Article 3.2 exhaustively enumerated three subjects who can identify IUU fishing: first, coastal members make identification under their jurisdiction; second, flag state members identify the activities of vessels flying their flags; third, Regional Fisheries Management Organizations or Arrangements (RFMO/A) make identification within their regional and species authority through the provision of timely notification and relevant information. Article 3.3 emphasizes the specific procedures that need to be followed when making the identification, including the obligation of the identifying member to inform the subsidizing member of the detention of vessels and the investigation information about IUU fishing in a timely manner, maintaining an exchange of relevant information prior to notification of the final determination. It is necessary for the identifying member to notify the Fisheries Subsidies Commission if an affirmative determination is made.

Article 3.4 specifies the demands of the duration during the process of the application of prohibition. Regarding the duration of the prohibition of the IUU fishing subsidy, the Agreement stipulates that the subsidizing member shall take into account the nature, gravity, and repetition of the IUU fishing. The prohibition shall apply at least as long as the sanction that results from the determination to trigger the prohibition remains in force or at least as long as the vessel or operator is listed by a Regional Fisheries Management Organization (RFMO)/A, whichever is longer. Article 3.5 subsequently stipulates that the subsidizing member shall fulfill its notification obligations in accordance with Article 8.3, including informing the Fisheries Subsidies Commission of the steps taken to implement the prohibition of IUU subsidies, any changes to such measures thereafter and new measures taken to implement the prohibition.

Article 3.6 stipulates the character of the port state member in the IUU identification process. When the port state member informs the 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 actions with respect to its subsidies as it deems appropriate.

Article 3.8 stipulates the SDT for developing countries. The Agreement provides developing countries with a transitional period of subsidies disciplines: when they grant or maintain subsidies in their exclusive economic zones and internal waters, developing countries and LDCs shall be exempt from the implementation of IUU fishing subsidies and overfishing-related subsidies

disciplines for a period of 2 years from the date of entry into force of this agreement.

Notably, the Agreement excludes some matters from its application. Article 11.2 stipulates that the Agreement and any investigation findings, recommendations, and awards with respect to the Agreement shall have no legal implications with regard to territorial claims or delimitation of maritime boundaries, and the expert panel established under the Agreement shall make no findings with respect to any claim that would require it to base its findings on any asserted territorial claims or delimitation of maritime boundaries. Article 11.3 stipulates that nothing in this Agreement shall be construed or applied in a manner that will prejudice the jurisdiction, rights, and obligations of members arising under international law, including the law of the sea.

4 Legal analysis of key issues in the agreement

Based on the aforementioned disciplines and their negotiating process, this section will analyze five key issues in the Agreement from legal perspectives.

4.1 The definition of IUU fishing under the agreement

The first and foremost challenge in designing the Agreement is the consensus on the definition of IUU fishing. To date, there is ongoing debate on the precise definition of IUU fishing (Soyer et al., 2018). The IPOA-IUU claims to be the first instrument to deal specifically with IUU fishing (Babu, 2015). According to the IPOA-IUU, a wide variety of fishing activities can be grouped into three types of IUU fishing: (i) illegal fishing refers to activities that contravene national laws, rules of the relevant RFMO, or other rules of international law; (ii) unreported fishing refers to activities which have not been reported or misreported to the relevant national authority or RFMO, including activities that violate the reporting procedures of the competent RFMO; (iii) unregulated fishing refers to illegal activities conducted by vessels without nationality or those in which the flag state is not a party to the relevant RFMO, and the illegal activities conducted in the area are beyond the scope of any RFMO (FAO, 2001a).

During discussions on the Agreement, most submissions received by the Rules Negotiating Group of the WTO agreed to adopt the definition of IUU fishing in the IPOA-IUU. However, some concerns have been expressed for three main reasons.

First, the description of IUU fishing in the IPOA-IUU is too broad, and the activities to which an IUU subsidy prohibition would apply require a more precise definition (ICTSD, 2018). In 2015, FAO Workshop reports revisited the definition of IUU fishing in the IPOA-IUU and pointed out its shortcomings for being too general.

Some studies aimed at reconstructing catch statistics include those under the IUU umbrella and some specific activities that, arguably, are not explicitly considered by the IPOA-IUU because they do not infringe on existing laws or regulations. A frequent example is the inclusion under IUU fishing of catches discarded at sea or any other sources of unmeasured catches such as subsistence catches, bait usage, or recreational catches, with the difference between reconstructed catches and official catches being termed as IUU (Macfadyen et al., 2016).

Second, IPOA-IUU is a voluntary instrument that aims to provide a framework for addressing IUU fishing (FAO, 2001a) and calls for national implementation. Some countries, such as the European Union, Canada, the United States, and Japan, have notified the FAO of national plans of action on IUU, while many others have not (FAO, 2001b). In addition, the identification of IUU fishing actually depends on the national or regional circumstance, which has resulted in a variety of definitions in national legislation and rules of RFMOs.

Third, there have been debates over 'unregulated fishing', which is more difficult to define than illegal or unreported fishing. The IPOA-IUU Guidelines have noted that fishers who become 'unregulated' by evading rules that apply to other fishers, such as by reflagging, are to blame for wrongdoing. However, fishers who conduct an activity that is unregulated solely because the relevant state has not adopted any regulatory measures for the fishery concerned cannot be said to be engaged in wrongful acts, which often happens in the waters of LDCs (FAO Fisheries Department, 2002).

Despite its shortcomings, the WTO Agreement on Fisheries Subsidies defines IUU fishing through a reference to the IPOA-IUU to keep the concept uniform (WTO, 2022). Because national delegations think that the main task of the Agreement is to formulate trade-related measures to combat IUU fishing, the WTO should focus on conducting trade and economic endeavors (Marrakesh Agreement, 1994). Matters such as the definition of IUU are subjects of scientific research rather than the Agreement. The advantage of this approach is more flexible and relies more upon states and RFMOs to identify IUU fishing, thus making it easier to be accepted by states and reach a consensus (Damme, 2020). Apart from that, the definition of IUU fishing under the IPOA-IUU will evolve with the development of national laws and regulations, conservation and management measures adopted by RFMOs, and relevant international laws. Therefore, the scope of application of the Agreement will evolve accordingly, which should reduce legislative costs and improve efficiency.

4.2 Bodies entitled to determine IUU fishing

The main challenge in drafting the Agreement is reaching a consensus on who may decide that a vessel or operator has engaged in IUU fishing (Damme, 2020). Discussions have focused on different options. The European Union, the United States, and Australia are in favor of using IUU lists of RFMOs directly and are against the unilateral determination of IUU fishing activities by coastal states or flag states (WTO, 2016, 2017a). India supports that coastal states are entitled to determine IUU fishing activities with appropriate procedures (WTO, 2010). The African, Caribbean and Pacific Group of states (ACP Group) also places emphasis on respect for the sovereign rights of coastal states for reasons of national interests (WTO, 2017b). Besides, some states, such as Japan, hold the view that both the IUU lists of RFMOs and coastal states can decide on IUU fishing activities (WTO, 2005b).

On the whole, most states agree to apply IUU lists of RFMOs as the basis for determining IUU fishing activities. Negotiators favor authorizing RFMOs to complement state efforts to collect information about vessel license numbers, registered ports, and operators. This proposal is ideal because coastal states, especially those that are LDCs, often lack the capacity to effectively monitor IUU fishing activities. Subsidizing states may choose to ignore illegal acts because of national interests, and port states may hesitate to rely on information provided by other entities. However, as stated above, RFMOs have the problems of limited membership and geographical range. In light of these difficulties, some RFMOs have designed special schemes to overcome the drawbacks. For example, the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) not only maintains a dedicated list of non-party IUU fishing vessels (NCP-IUU Vessel List) but has also designed measures specifically against these kinds of IUU fishing activities. Instead of imposing obligations on non-parties, CCAMLR requires contracting parties to cooperate in deterring any activities that are not consistent with the objective of the Convention on the Conservation of Antarctic Marine Living Resources. NCP-IUU vessels must be inspected by authorized contracting party officials in accordance with Conservation Measure 10-03 and will not be allowed to land or transship any fish species subject to CCAMLR conservation measures that might be held on board unless the vessel establishes that the fish were caught in compliance with all relevant CCAMLR conservation measures and requirements under this Convention (CCAMLR, n.d.).

As a result, the negotiating parties reached a consensus on the bodies entitled to determine IUU fishing activities within their jurisdiction and competence, including flag state members of the WTO, coastal state members of

the WTO, and RFMOs (WTO, 2022). Besides, the Agreement requires relevant entities to enhance cooperation in the process of determining and sanctioning IUU fishing. For example, Article 3.3 requires coastal states to keep notifying flag states and subsidizing states of relevant information prior to determination and of any sanctions applied after this determination. Although port states cannot determine IUU fishing, Article 3.6 of the Agreement emphasizes the role of the port state by granting it the right to notify the subsidizing state that it has clear grounds to believe that a vessel in its port has engaged in IUU fishing, and the subsidizing state must give due regard to the information. Therefore, the design of the mechanism can strengthen cooperation among different states to combat IUU fishing.

Given the aforementioned analysis, increasing the cooperation of multiple parties will have a greater impact on combating IUU fishing. However, implementation of the Agreement depends primarily on the enforcement of international regulations and national laws by WTO members as flag states and coastal states punish owners and operators of vessels engaged in IUU fishing. To further incentivize states to regulate and combat IUU fishing, the international community must clarify the specific responsibilities of different entities and increase the capacity of developing countries.

4.3 The procedure that triggers prohibition

During the negotiation process, delegations from each country debated the best means to ensure the impartiality, accuracy, and efficiency of the procedure that triggers prohibition measures, requiring the Agreement to set out the process that must be followed when determining IUU fishing. In other words, WTO members expect the triggers to be more precisely defined.

In the revised draft text of November 8, 2021, Article 3.3 stipulated that the prerequisite condition that triggers prohibition is the existence of 'positive evidence' that can prove IUU fishing activities, and the determination process shall meet the requirement of due process (WTO, 2021c). Later, in the revised draft text of November 24, 2021, 'due process' was deleted from the preamble of Article 3.3, and a consensus was reached for the first time on the procedures that should be followed by the identifying members in Art 3.3(b) (i)-(iii) (WTO, 2021a). The obligations of notification and information exchange for members were also stipulated. This modification avoided a qualitative expression of procedures, not by lowering or discarding the standard of due process, but by refining the specific requirement of due process in detail (WTO, 2021b). It emphasized the importance of the principles of due process and transparency in triggering prohibitions, and it was helpful to reduce or avoid disputes over

the standards and procedure for triggering prohibitions among different members.

With regard to the procedure for triggering prohibition measures, there are two focal points worth noting.

First, the expression 'relevant factual information' in Article 3.3(b) used to be 'positive evidence' (WTO, 2021a, 2021b, 2021c). During the discussion, some members proposed that the expression 'positive evidence' would induce the WTO to scrutinize the quality of the evidence on which IUU fishing determinations are made by each state without referring to any supporting evidence or information (WTO, 2021a, 2021b, 2021c). Instead, 'relevant factual evidence' reduces the possibility of the WTO to criticize or appraise the quality of the evidence and is more conducive to protecting the independence of the determination made by identifying members.

Second, during the negotiation process, delegations from different parties disputed the application of the principle of proportionality. In RD/TN/RL/126/Rev.2 (hereinafter referred to as '126/Rev.2'), Article 3.4 requires subsidizing members to take into account the nature, gravity, and repetition of IUU fishing when setting the duration of the prohibitions (WTO, 2021d).⁴ This reflects the principle of proportionality in implementing the prohibitions, that is, penalties that are commensurate with the infractions. In the course of the negotiations, while a broad consensus was achieved among members on implementing the prohibition in accordance with the principle of proportionality, there were divergent views on the manner in which the principle should be reflected in fisheries subsidies sanctions. Some members deemed that it should be reflected in the process of determining and sanctioning IUU fishing activities, and in that case, the determining entity shall take into account the gravity of the IUU fishing and impose reasonable sanctions when placing a vessel on the IUU fishing list or imposing other sanctions (WTO, 2021d; TN/RL/W/276/Add.1). Considering that the determination of IUU fishing would trigger the prohibition of subsidies, other members were of the view that the process should embody the principle of proportionality when the subsidizing member determined the prohibition of subsidies. The subsidizing member could decide whether or not to impose a prohibition and what kind of prohibition to impose (WTO, 2021d; TN/RL/W/276/Add.1). Many members opposed the latter proposal, which would amount to granting the subsidizing member the right to veto and nullifying the determinations and sanctions imposed by the identifying member (WTO, 2021d; TN/RL/W/276/Add.1).

⁴ The document is restricted to the public, and its content is inferred and indirectly disclosed by WTO document TN/RL/W/276/Add.1.

Based on the views above, members revised the text of 126/Rev.2 and finally reached a consensus on the principle of proportionality as follows: prohibition is triggered by the determination made by the identifying member, and the subsidizing member can establish the duration of the prohibition based on the nature, gravity, and repetition of the IUU fishing, but cannot decide whether to impose the prohibition on its own. Meanwhile, the duration of the prohibition shall apply at least as long as the IUU vessel is listed by an identifying member or is enduring other sanctions. In short, the subsidizing member can only determine the duration of the prohibition but cannot determine whether to impose the prohibition or what kind of prohibition to impose. The content of Article 3.4 in 126/Rev.2 mentioned above has been retained in the text of the official Agreement. It clarifies that IUU fishing determinations made by any subjects (coastal states, port states, etc.) can trigger the prohibition of subsidies equally, and a positive determination made by an identifying member cannot be automatically negated by another identifying member, which further confirms the equal relationship among the identifying members and thereby safeguards the independence and effectiveness of the determinations made by the identifying member. By granting the subsidizing member discretion to decide the duration of the prohibition, the principle of proportionality could permeate the process of determining and enforcing the prohibition.

4.4 The limitation of application to IUU fishing in disputed waters

Disputed waters refer to competing sovereignty or sovereign rights claims between different states over the same maritime space, which often causes international conflicts (Van Logchem, 2021). Different variants of overlapping claims, such as internal waters, territorial seas, contiguous zones, EEZs, (extended) continental shelves, and archipelagic waters, can occur between states. The issue of disputed waters was treated with caution during the negotiations. The core problem is whether the Agreement will apply to disputed waters. On the one hand, sovereignty is a sensitive topic for states and is difficult to compromise. On the other hand, IUU fishing often takes place in disputed waters where respective enforcement is weak, such as in Southeast Asia. Disputed or undelimited boundaries are important reasons IUU fishing is done in the region (AECFWP, 2008). Therefore, it is necessary to apply the Agreement to disputed waters to combat IUU fishing. In general, including IUU fishing in disputed waters in the Agreement's scope of application will cause difficulties in at least three areas.

First, the definition and determination of IUU fishing will be vague. According to the description in the

IPOA-IUU, in some cases, the identification of IUU fishing is subject to domestic laws and regulations, depending on the clear determination of sovereignty and jurisdiction over the maritime space. Therefore, in waters whose sovereignty or jurisdiction is unknown or disputed, it is complicated to determine the body that is entitled to identify IUU fishing by applying its domestic laws and regulations. Similarly, it may provoke the establishment of different criteria for and results in the determination of IUU fishing in disputed waters. There might be multiple coastal states that apply their domestic laws and regulations to decide IUU fishing in the same waters. How would subsidizing states respond if the results were inconsistent?

Second, the inclusion of disputed waters will cause trouble for the interpretation and application of the SDT clause of the Agreement. Article 3.8 provides that, for a period of 2 years from the date of entry into force of this Agreement, subsidies granted or maintained by developing country members, including LDC members, up to and within the EEZ shall be exempt from disciplines of the Agreement. It is obvious that SDT is important for developing countries, especially for LDCs. Notably, the SDT clause applies up to and within the EEZ of coastal states and does not extend to the high seas. When the outer limits of the EEZ are not delimited, the scope of application of the two-year interim period would be difficult to determine. In other words, the inclusion of disputed waters would limit the effects of the SDT arrangement and cause conflicts among both subsidizing and coastal states.

Third, the transparency required by the Agreement cannot be guaranteed. The WTO will be able to act on Article 3 only if there is enough information available to determine whether specific subsidies are problematic (Cook, 2023). Members of the WTO are obliged to provide particular information as part of their regular notification to the SCM Committee (SCM Agreement, 1994), such as the status of fish stocks in the fishery for which the subsidy is provided, the reference points used, and whether such stocks are shared with other members or are managed by an RFMO (see Agreement on Fisheries Subsidies, 2022, Art.8, for more details). According to Article 8.6 of the Agreement, members shall notify the committee in writing of any RFMO/A to which they are parties by submitting the relevant documents, which might stir the problem of disputed waters and cause conflicts between the competence of RFMO/As and state sovereignty.

In light of the analysis above, it is better to apply the Agreement to waters with no jurisdictional dispute. If it is applied to disputed waters, it will pose an obstacle to the determination and sanction of IUU fishing and may

put state sovereignty at risk. During the negotiations, the representatives from China proposed a more systematic formula for stating that nothing in the Agreement should be interpreted as having any legal impact on territory, sovereignty, or maritime jurisdiction. Any IUU fishing activities that occur in disputed waters shall be excluded from the application of the Agreement. The proposal especially emphasizes that the WTO Understanding on Rules and Procedures for the Settlement of Disputes (hereinafter ‘Understanding’) does not apply to any measure or situation with respect to territory, sovereignty, or maritime jurisdiction. China’s proposal was, to a large extent, adopted by the Agreement, as reflected in Articles 11.2 and 11.3:

Article 11.2 (a) This Agreement and any findings, recommendations and awards with respect of this Agreement shall have no legal implications regarding territorial claims or delimitation of maritime boundaries.

(b) A panel established pursuant to Article 10 of this Agreement shall make no findings with respect to any claim that would require it to base its findings on any asserted territorial claims or delimitation of maritime boundaries.

Article 11.3 Nothing in this Agreement shall be construed or applied in a manner which will prejudice the jurisdiction, rights, and obligations of Members, arising under international law, including the law of the sea.

4.5 Special and differential treatment for developing countries

SDT for developing countries (including LDCs) continues to be a defining feature of the multilateral trading system (SDT, 2001), which was incorporated in Article 3.8 of the Agreement. How the traditional principle is to be interpreted and applied in the new Agreement is another matter of concern.

The fundamental problem is the distinction between developed and developing countries. Article 18.4 of the General Agreement on Tariffs and Trade (GATT, 1947) describes developing countries as ‘the economy of which could only support a low standard of living and is in the early stages of development’. In many situations, each WTO member can decide whether it is a developing country by virtue of the principle of ‘self-selection’ or ‘self-election’ (Linklaters, 2020). In the history of the GATT and the WTO, most members have elected themselves as developing countries at least one time, except for the United States, the European Union, Canada, Japan, Australia, New Zealand, and Switzerland (WTO, 2019). In 2020, the United States circulated a position paper entitled ‘An Undifferentiated WTO: Self-Declared Development Status Risks Institutional Irrelevance’, which advocated removing the self-declaration of

developing countries. It later proposed that the following categories of members would not be able to avail themselves of SDT provisions: membership in or accession to the OECD, membership in the G20, classification as a ‘high-income’ country by the World Bank, or a share in global merchandise trade that exceeds 0.5%. Many developing countries, including China, India, South Africa and Venezuela, made a formal submission to the WTO, resisting the US proposal and stressing the continued relevance of SDT provisions in light of the WTO’s goal of inclusiveness and fairness. Therefore, the distinction between and criteria of developed countries and developing countries remain vague and disputable.

The second issue is whether the criteria that define developing countries in other WTO agreements can be used in the Agreement of Fisheries Subsidies. Although the status of a ‘developing country’ is determined by self-selection under the GATT and the WTO, it is generally believed that the concept of ‘developing country’ focuses on the economic perspective. The two main concerns of setting SDT under other WTO agreements are related to trade and development. However, the Agreement focuses on environmental sustainability, and protecting the environment becomes a third dimension that needs to be considered when defining the status of developing countries. Some experts and members, therefore, claim that developing countries with a leading catch volume should no longer be deemed to be developing but rather developed countries in the fisheries industry. If SDT is applicable to countries with a leading volume of catch and subsidies, such as South Korea, Russia, and Indonesia, then the goal of environmental sustainability cannot be achieved.

As a compromise scheme, Article 3.8 of the official text of the Agreement stipulates that ‘*For a period of 2 years from the date of entry into force of this Agreement, subsidies granted or maintained by developing country Members, including LDC Members, up to and within the EEZ shall be exempt from actions based on Articles 3.1 and 10 of this Agreement.*’ It appears that developing countries are not evading the prohibition of harmful fisheries subsidies, and the SDT clause cannot exempt their obligations completely. On the one hand, most developing countries reached a consensus on the need to combat IUU fishing during the negotiations, but establishing an effective law enforcement system requires enormous financial and technical support. Apart from that, because of the existence of a significant development gap in the fishery industry between developed and developing countries, there is a real need for developing countries to prioritize their economies, which requires increasing exports and the receipt of some subsidies. Considering that refining the law enforcement system and boosting the economy take time, not

applying SDT to developing countries would be severely detrimental to them. On the other hand, the arrangement of SDT in the Agreement is an interim period of two years, which means developing countries are exempt only from their obligations to prohibit subsidies to IUU fishing in their EEZs for no more than two years after the entry into force of the Agreement. Compared with the interim period stipulated in other WTO agreements, such as the ten-year period of concession commitment for developing countries in the Agreement on Agriculture and eight years for export subsidies or five years for import-substitution subsidies under the SCM Agreement, the two-year period in the Agreement is relatively short. All in all, the adoption of a two-year interim period in the final version of the Agreement reflects the will and determination of developing countries to take the path of sustainable development. It also provides a window of opportunity for developing countries to improve domestic laws, management measures, and enforcement procedures.

5 Discussion and concluding remarks

SDGs were established by the international community in 2015 to meet the urgent environmental, political, and economic challenges that our world faces. IUU fishing was singled out because the entire international community has experienced difficulties eliminating this activity for too long. As shown in the Sustainable Development Report 2023, the progress of SDG 14 is in peril. About 60% of 140 targets that can be evaluated have shown stagnation or regression (UN, 2023). The WTO Agreement on Fisheries Subsidies is the first binding and multilateral agreement that focuses on ocean sustainability. One objective of the Agreement is to combat IUU fishing through trade measures, namely, by prohibiting subsidies to vessels and operators engaged in IUU fishing. During the negotiation process, the representatives of member states debated various matters, including the definition and determination of IUU fishing, the procedure that triggers prohibition, the application of the Agreement to disputed waters, and the arrangement of SDT for developing countries. Finally, they reached a consensus on the formal text of the Agreement. For the Agreement to enter into force, two-thirds of WTO members must formally accept the Protocol to the Agreement on Fisheries Subsidies by depositing an instrument of acceptance with the WTO. As of February 25, 2023, 34 WTO members (WTO, 2023a) have acceded to the Agreement, including China, Switzerland, Singapore, Seychelles, the United States, the United Kingdom, and Canada.⁵

By prohibiting harmful subsidies for IUU fishing, the Agreement established effective convergence between fisheries subsidy policies and the goal of sustainable development of the oceans. It also creates an organic link between WTO rules and rules of international organizations in the fishery industry. The analysis above has revealed the advantages and drawbacks of the Agreement by reviewing its legislative history and examining its key issues. With the possible entry into force and implementation of the Agreement, WTO disciplines on subsidies would be a welcome additional instrument for combating IUU fishing, and they would promote the transformation of the fisheries sector to align with the 2030 Agenda for Sustainable Development.

From a practical point of view, IUU fishing is complex and often combined with other illegal undertakings, such as drug trafficking, money laundering, tax evasion, and people smuggling (ICTSD, 2018). It poses difficulties, and a further improvement in the future implementation of the Agreement is required. For example, vessels are usually chartered, managed, or operated by several persons and companies in various ways, which means it is possible for some actors to evade the application of disciplines in the Agreement. To solve this problem, some states and RFMOs have been trying to collect and include more information, like beneficial owners, in their IUU vessel lists. However, RFMOs and state law enforcement agencies often lack the power to investigate the whole chain from the ownership to the beneficial owner of the vessel, especially in some developing countries where relevant government agencies and legal bases may not exist. A similar problem occurs in the circumstance of vessels flying flags of convenience. Therefore, when implementing the Agreement, several possible difficulties in complying with the disciplines need to be considered. The systematic failures of governance in some states, particularly in developing and least developing countries, are issues that require attention. The main manifestations of these failures include a low level of participation in relevant binding international agreements, which reflects a lack of political will to address IUU fishing, the absence of effective national fisheries legislation and management measures to control the operations of fishing vessels, undelimited or disputed maritime boundaries, etc. (AECFWG, 2008). In fact, the solution to these problems has been stipulated in the Agreement, which calls upon members to provide technical assistance and enhance capacity building for developing countries, in particular for LDCs. Article 7 provides for the creation of the Fisheries Funding Mechanism for targeted technical assistance and capacity building to help developing and LDC members implement the Agreement, which became operational on November 8, 2022. The fund is operated

⁵ Notably, for the purposes of calculating acceptances, an instrument of acceptance by the European Union for itself and on behalf of its member states shall be counted as acceptance by a number of members equal to the number of member states of the European Union which are members of the WTO.

by the WTO with the FAO, the World Bank Group, and the International Fund for Agricultural Development as partner organizations. The contributions of WTO members to the mechanism shall be exclusively on a voluntary basis and shall not utilize regular budget resources (WTO, 2022).

In the remaining six years, all states should endeavor to achieve SDGs. Specifically, states should accelerate blue transformation by expanding aquaculture sustainably, managing all fisheries effectively, and upgrading value chains (FAO, 2022). Apart from these measures, reducing harmful subsidies is an urgent issue that will effectively contribute to the elimination of IUU fishing and the optimization of fishery industrial structures. Finally, cooperation between flag states, coastal states, port states, and relevant RFMOs in combating IUU fishing must be enhanced.

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