



The Shared Fish Stocks Conservation: Revisiting the Unconnected Enforcement

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Article	Abstract
<p>Keywords: High seas; CCSBT; conservation; migratory fish stocks</p> <p>Article History Received: Jan 1, 2021 Reviewed: Jan 11, 2021 Accepted: Feb 11, 2021 Published: Feb 15, 2021</p> <p>DOI: https://doi.org/10.22219/ljih.v29i1.15071</p>	<p><i>"There is plenty of other fish in the sea," goes the old cliché as many stocks have been overfished by industrial fisheries, that the over-activity made some fish species in danger. The scope of this paper covers the enforcement issue of Southern Bluefin Tuna (SBT) as endangered fish species. Taking Indonesia, New Zealand, and Australia as member States who catch SBT, this paper is a conceptual study using content analysis aiming to review how these three-member States officially treat SBT stocks. Based on the discussion, it found that since the shared characteristic of SBT, in areas beyond national jurisdiction it might create regulatory gaps. While international provisions have been entered into force in respect of endangered fish stocks in high seas areas, however, a lacuna remained in which the law cannot reach the national fishing area. This situation may lead to a discrepancy framework at the national level. Therefore, this paper argues that connectivity is crucial to link enforcement among relevant States with the real interest. In this context, the enforcement must consider the movement path of SBT from a coastal State (the spawning ground), the flag State (the fishing vessel), and the Port State (the place to land SBT).</i></p>

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INTRODUCTION

The Southern Bluefin Tuna (SBT) is highly valued fish species in which the stock management is under a Regional Fisheries Organization namely the Commission for the Conservation of Southern Bluefin Tuna (CCSBT). Recently,

SBT has classified as critically endangered on the International Union for the Conservation of Nature Red List of threatened species, which means it faces an extremely high risk of extinction in the wild. Having such a good price, SBT has been primary targeted fish regardless the stock levels are very low (Phillips, Begg & Curtotti, 2019).

Each member State who fishing in the area of a regional fisheries organization, the State have to make sure that all fishing activities comply with the conservation provision and transparency principle in particular regarding information sharing and disclosure (Davis & Hanich, 2020). Instead the most general information to provide, very often catch data is challenging to acquire due to human behavior is determinant factor (Rudd & Branch, 2017).

As a migratory species, from its spawning ground in Indonesia water, the juvenile SBT moves to the west coast of Australia, and reach New Zealand when it's in adult size. SBT is considered as a single breeding stock. The breeding period takes place from September to April in warm waters south of Java. The juveniles migrate south down the west coast of Australia. During the summer months (December-April), they tend to congregate near the surface in the coastal waters off the southern coast of Australia and spend their winters in deeper, temperate oceanic waters. While it has been in age 5 month, they are scarcely found in surface waters (CCSBT, 2018)

The figure 1.1 below shows the migratory route of SBT throughout these three States. As SBT is considered as shared fish stock, then it can be said that Indonesia, Australia, and New Zealand are not only responsible to manage the stocks within their national jurisdiction, but also they need to do compatible measures that will not harm the SBT stocks for high seas fishing.

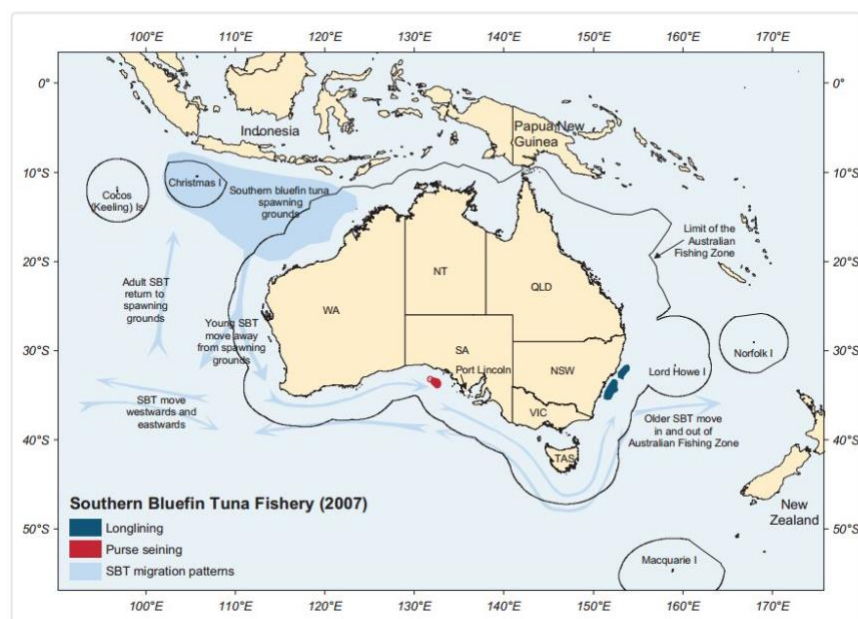


Figure 1.1 The Migration Path of SBT (Australian Bureau of Agricultural and Resource Economics and Sciences,, 2020).

The nature of SBT as highly migratory fish with long distance movement crossing inter-State's jurisdiction, SBT has potential to be exposed by threats and unsustainable fishing. There is a risk to the effective management across the range of the stock if large areas under coastal State sovereignty are excluded from conservation and management measures adopted by RFMOs. This exclusion is a matter, as Martin Tsamenyi argued, if a fishing activity occurs within the territorial sea or archipelagic waters of a coastal State, then the fisheries governance framework is almost entirely at the discretion of the coastal State, subject to minimal responsibilities to not cause harm to others and a general LOSC 1982 responsibility on all parties to protect and preserve the marine environment (Tsamenyi & Hanich, 2012).

The obligation to cooperate in the conservation and management of the living resources on the high seas is an accepted rule of customary international law, which is of the utmost importance here. As a norm of customary international law, it applies to all states, whether they ratified LOSC 1982 or not. According to Article 1 (b) of Agreement to Promote Compliance With International Conservation and Management Measures by Fishing Vessels on the High Seas, conservation and management measures means measures to conserve and manage one or more species of living marine resources that are adopted and applied consistent with the relevant rules of international law as reflected in the Convention.

From legal perspective, the enforcement policy most likely facing complex problems as the migration characteristic of SBT through jurisdictional boundaries will subject to national law and regulation of each State (Fischman & Hyman, 2010). In Australia, SBT is listed as "Conservation Dependent under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999" and incorporated with a recovery plan. The authorization for SBT to export under the Wildlife Trade Operation provisions of the EPBC Act with certain condition that SBT has to be sustainably managed in Australia under the stringent provisions. On the other hand, New Zealand has considered SBT as overfished stocks. In all cases where stocks are below the limit, the "corrective management" action has been put in place to rebuild the stocks (New Zealand Fisheries, 2020). Indonesia had issued Action Plan Indonesian Tuna Fisheries. However, SBT is not considered yet as the main targeted species in this policy.

A quotation by Australian Marine Conservation Society stated that "if ever there was a fish that best represented all that is wrong with the way we fish, the Southern Bluefin Tuna would win the dubious award" reflects how the SBT sustainability is in critical. Due to SBT is a single stock accessed by many countries, this paper

highlights a primary question regarding the law enforcement in sustaining the shared fish stocks by identifying how States officially consider the fish stocks itself under their national regulations.

RESULTS AND DISCUSSION

The Absence of an Internationally Agreed Regulations

1. Enforcement Regulations

“The Law of the Sea Convention” (LOSC 1982) and “the United Nations Fish Stocks Agreement” (UNFSA 1995) create basic principles that “States shall cooperate to establish regional fisheries management organization (RFMO) which is intended for the conservation and management of living resources within jurisdictional waters and the high seas”, as stated in Part VII, Article 118 of LOSC 1982 as well as emphasized in Article 8 of UNFSA 1995 that States are in obliged to be involved in the relevant RFMO to get access of the fish resources under its management area. By doing so, all member States must certify the implementation of conservation measures will be applied without any discrimination or against fisherman of other States.

Meanwhile, LOSC 1982 did not establish any specific guidelines for enforcement in its provision towards migratory species beyond national territory. As a result, managing particular stocks will be dealing with hassle. In 1999, the dispute between Australia and New Zealand in which both countries had taken legal actions against Japan for the SBT over-fishing charge in Indian Ocean (Sturtz, 2001). Due to “a unilateral experimental fishing program” conducted by Japan, the parties claimed that Japan exceeded the quota by 1.464 metric tons. The arbitral tribunal, however, as stated by Sturtz, it found a primary issue of lacked jurisdiction, that referred to the case fell primarily under the CCSBT since LOSC 1982 only provides general rules.

Another crucial problem which CCSBT must deal with is how to warrant that any States having high stakes interest in SBT fishing are willing to act together with the organization. Parties who can lawfully fish in the CCSBT management area are those who have been registered as members or cooperating non-members (Guggisberg, 2016). However, there will always possibility for other RFMOs fail to cooperate with CCSBT.

Article 8 section 3 of UNFSA 1995 restricting participation to “States having a real interest” pertaining highly migratory fish stocks. Nevertheless, even though the mechanism for international cooperation had been stipulated, Andrew Serdy argued “it is no clear where the member State thought the source of the strong obligation for Non-members to accede UNFSA 1995 immediately could lie”. This situation may lead to such potential Illegal Unreported and Unregulated (IUU) fishing over SBT resources conducted by non-members of CCSBT.

The UNFSA 1995 in article 34 provides authority to enforce compliance by

States. The authority for compliance measures are possible to consider in situation “when a member State has reasonable grounds to believe that a vessel belonging to a non-member state is engaged in the activity of unauthorized fishing, the member state is allowed to investigate and possibly even seize the vessel if deemed necessary”. Nevertheless, article 19(1)(b) of the UNFSA 1995 still more highlighting the responsibility of flag State in enforcing the vessel’s compliance. The article mentioned that “flag States have a duty to ensure immediate investigation of any violation and to report the findings of that investigation to the appropriate regional organization having authority over the area in which the violation occurred”.

Further, if a violation is found, UNFSA 1995 in article 19(1)(e) arranged “the flag State is required to prohibit the vessel from fishing on the high seas until sanctions can be decided by the flag State”. Moreover, since the law enforcement will depend on the flag State’s ability to apply adequate sanctions towards violation by the vessel, there will be gap remained where the investigations and sanctions will keep off and on (Smith, 1999). It can be seen when it comes to enforcement regulation at national level, there might be different measures applied by States against fishing vessel conducted violation.

2. The Fisheries Conservation Policy

The freedom to fish in high seas is not assumed as an unrestricted economic right anymore since conservation measures is required by LOSC. In pursuant to Article 118 of LOSC 1982, conservation of living resources in the high seas is a mandate for each State to cooperate each other through RFMO. The fisheries regional body primarily coordinates the efforts of member countries related to the development of the regional fishing industry and the harmonization of national fisheries policies. Such organizations commonly perform their tasks by establishing regulations coordinating joint efforts regarding harmonization of national policies and through programmatic tasks related to the development of the fishing sector. This organization is established on the basis of the member country’s common interests (Joyner, 1994).

Classified as critically endangered by the IUCN Red List in 2011, SBT has not been recognized as concerned species in the Appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The lack of control and monitoring on the regulation regarding the import and re-export of SBT catches or product shall lead to unsettled issues on regulatory agency’s duty to manage SBT in international and national stage.

Regarding authority in national jurisdiction, not any of international provisions, such as the LOSC 1982 and the UNFSA 1995, touching the fisheries jurisdictional issue when it comes to maritime zones under the coastal State’s sovereignty. For coastal States with regard to the resources utilization lies in high seas, Article 63 of

LOSC 1982 is specifically concerned with “fish stocks occurring within the Exclusive Economic Zones (EEZs) of two or more coastal States and in area beyond or adjacent to it which are called as highly migratory and straddling fish stocks.”

It seems the fisheries governance most likely depends on the coastal State’s inclination as the zonal approach in the LOSC 1982 is deficient in elaborating the practical framework for managing the sustainability of some fish stocks, in particular highly migratory species. Therefore, the effective action covers the range of stock across the State’s boundaries will be in question large areas within national jurisdiction are precluded from any policy established by RFMOs.

Regardless SBT as shared fish stocks, it is subject to each State to determine the status of SBT stocks within national fishing territory. As describe in the table 1.1 below, different status of SBT stocks and the existing law policy respectively. As the obligation created by CCSBT, every member State is obliged to adjust regional provision into their national regulation. While Australia and New Zealand have issued relevant policy that include SBT, Indonesia has classified SBT as over exploited however it seems SBT is not considered as main concern since yellowfin tuna, bigeye, albacore, and skipjack are getting more spotlight.

Table 1.1 The Status of SBT Stocks in CCSBT Member States

Country	Status	Regulation Related to SBT
Australia	has been classified as conservation dependent (www.dpi.nsw.gov.au)	the Southern Bluefin Tuna Fishery Management Plan 1995
New Zealand	Overfished (www.mpi.govt.nz)	National Fisheries Plan for Highly Migratory Species 2019
Indonesia	classified as over exploited (The Decision of the Minister of Marine Affairs and Fisheries of Indonesia)	Action Plan Indonesian Tuna Fisheries

Connecting Law Enforcement

In respect of highly migratory species, connection is important to be considered. The first connection is about habitat connectivity that can be defined as “the connectedness between patches of suitable habitat for an individual species”. Second, the concern about landscape connectivity that can be defined as “the connectedness of patterns of vegetation cover in a given landscape”. Third, it is related to ecological process connectivity that can be defined as “the connectedness of ecological processes across multiple scales” (Pulsford *et al.*, 2015). The last term for connectivity is evolutionary process connectivity that refers to “the extent to which populations

are open or closed to inflows and outflows, the degree to which climate change will result in forced movements and the impacts of other threatening processes". The movement of these species over long distances is crucial for evolutionary processes connectivity (Worboys & Mackey, 2013).

The conservation goal towards SBT stocks will be in threaten when such rules are not adopted or enforced by States (Anderson *et al.*, 2018). The management of fisheries productivity between territorial waters and areas beyond national jurisdiction will give exposure to each other. For instance, overfishing in areas beyond national jurisdiction can influence the fishing productivities in territorial waters of Coastal States (Popova *et al.*, 2019). The more disconnection appears, the less fishing opportunities at hand. The connectivity theory is essential to apply in the management of SBT fishing.

According to Robert L. Fischman and Jeffrey B. Hyman, the regulatory constraints and the subsidies/ incentives needed for a balanced approach to reducing migration barriers is one of the legal tools essential to maintaining the linkages along migration routes (Fischman & Hyman, 2010). Therefore, a mutual term is needed to apply in reciprocal way among member States in order to sustain the SBT resources. The analyses can be initiated by classifying whichever countries that naturally cluster together within connectivity (Popova *et al.*, 2019). In order of merit to guard the sustainability of SBT, enforcement regulations and conservation measures should be dully applied and connected each other in the same vision and consideration.

Regarding compliance and enforcement, Article 19 of UNFSA 1995 concerning highly migratory species, it stated that "any member States may conduct various role such as Flag State, Coastal States or Port State against any activity contrary to the conservation measures and vessel committed a serious violation". Article 21 of the UNFSA 1995 allows for member States "...to board and inspect, according to procedures set by the regional organization, foreign fishing vessels, even if they are not members of the regional organization, in order to ensure compliance with conservation and management procedures." Further, the inspecting States have right to secure evidence after they found violation by vessels, after boarding and inspection. The flag State then will receive notification of the violation.

Nevertheless, the role of the flag State, regarding enforcing the vessel's compliance, has been more spotlighted through the UNFSA 1995. That wherever the vessel committed violations, it is the obligation for flag State to take immediate investigation and extend the report of the findings to relevant RFMO which holds the authority in the area where the violation happened.

Enforcement matter is provided in Section 6 of LOSC 1982 from Article 213 to Article 222. Apparently, the enforcement term is specifically mentioned that it applies to any threatened damage to marine environment caused by pollution from land-based sources, seabed activities, any activities in the Area, pollution by dumping,

maritime casualties, and pollution from or through the atmosphere. The enforcement in Section 6 provision is likely more focused on threatened damage to the vessel navigation itself and/or marine environment rather than minding the legality of fishing catches. This is reinforced by statement in Article 235 that State's responsibility and liability have to do with damage caused by pollution of the marine environment. Notwithstanding, the law instrument is essential to prevent degradation of marine living resources in particular fish stocks (Mubarok, 2019).

Considering the enforcement towards SBT stocks is relied upon any action by CCSBT member State, Article 15 section 2 of CCSBT Convention had stated that "each party shall encourage its nationals not to associate with the SBT tuna fishery of any State not party to the Convention due to such association could affect the conservation purpose." It can be contributed to overfishing that is not only focus to fishing activity in national jurisdiction areas. Whereas, it is common for every State towards the violation sanctions merely cover fishing without license, fishing using prohibited gears, and fishing in forbidden seasons or closed areas (Indonesian Ministry of Marine Affairs and Fisheries & WWF, 2011). Thus, the issue on overfishing of SBT still in a grey area and remains the gap in national level.

In respect of managing and conserving the SBT stocks, it is essential to understand not only which State that fishing and landing SBT, but to who the SBT catches or product will be traded or the consumers. To illustrate, CCSBT has distributed the total allowable catch every year for members and cooperating non-members. However, China which is not registered as authorized member State to discover SBT resources, the country has access in position as SBT market State (Wu, 2017).

The need for integrated traceability system to track the fishing activity, the fish unloading, and the trading. Each State needs to take responsibility adjusting with its position as a flag State, port State, or market State in order to create wider impact on conserving endangered fish species like SBT which has been reduced to such a low level stocks. By adopting the CCSBT minimum performance for compliance, the authors formulated the preliminary stage to identify the traceability in SBT stocks as shown in Table. 2 below:

Table 1.2 The Connectivity in SBT Catches adopted from (CCSBT, 2018)

Objective	Enforcement & Responsibilities				Effectiveness
	Flag State	Coastal State	Port State	Market related	
Sustainable use of SBT	√	√	√		Viability of species

Monitoring and verify fishing vessel catches			√	√	The traceability of SBT (whether legal or from IUU)
Eliminating extinction risk and overfishing of SBT stocks	√	√			Compliance of Total Allowable Catch (TAC)

In response to violation on SBT fishing such as IUU fishing practices, CCSBT has established The Corrective Actions Policy to make deterrent sanctions works against law offender. However, the sanctions basically impact to the respected States, not direct to the nationals or the vessel itself. For any fishing that exceeded the limit could be recognized as non-compliance. Furthermore, non-compliance can also arise due to failure by Members to take action against non-compliance by fishers, farmers, processors, exporters or importers within their jurisdiction. The degree of non-compliance will determine the applicable sanctions. The CCSBT Compliance Committee may consider recommendation for corrective actions that include quota pay back and quota reductions in national catch allocations (Guevara et al., 2019).

Current performance of some tuna RFMOs such as the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Indian Ocean Tuna Commission (IOTC) revealed that there is no expressed provisions that require the States to make verification if their nationals under their jurisdiction have involved or benefited from IUU fishing activities (EU IUU, 2019). Therefore, as compliance is subject to every member States' conduct, prominent efforts are mandatory to increase the compliance. Regardless any role imposes to State, CCSBT should bring the transparency concerning the report of sanctions sanctions imposed by any States and any follow up improvement.

CONCLUSION

The challenge for the conservation plan of shared fish stocks is ensuring the compliance of all State parties exploiting such stocks. In spite of possibility for member parties to cooperate with the commission, there will be a gap remained that member States could pose a threat on sustainable use of the SBT stocks. The discrepancy of national policy among the States seems likely that the conservation goal for member States is in different level to each other. As the SBT status has been generally considered as endangered species due to the significant portion of its range, connecting the enforcement among States with high-stakes of SBT is essential to

initiate the traceability. The enforcement mechanism should cover the migratory pattern of the fish stock itself. Thus, in respect of fishing for SBT, the role of coastal State – flag State – port State and market related should be mutual connected regarding the SBT value chain and to maintain the sustainability of the SBT stocks.

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