



## FISHERIES MANAGEMENT

### WCPFC kicks off negotiations on a new tropical tuna measure<sup>2</sup>

The Western and Central Pacific Fisheries Commission's (WCPFC) conservation and management measure for tropical tuna (CMM 2018-01) was due to expire in February 2021. Given WCPFC's 2020 workplan was significantly disrupted due to COVID-19, a decision was made at WCPFC17 in December 2020 to roll-over CMM 2018-01 to 2021 and hold at least two week-long dedicated tropical tuna measure workshops in the lead up to WCPFC18. The first tropical tuna measure workshop (TTMW1) was held virtually from 26-30 April. This workshop focussed largely on the *scope and management objectives* of the new tropical tuna measure.

FFA members proposed a precautionary approach to any changes to the current measure, given the current CMM is effectively achieving management objectives and represents a carefully balanced approach to the sustainable management of WCPO tuna stocks, amongst other stated reasons. FFA members expect the Commission to agree to an overall high seas purse seine effort limit, with an allocation to FFA members which reflects the special requirements of Small Island Developing States (SIDS). FFA members will also be seeking longline bigeye high seas catch/effort limits which are compatible with measures implemented in FFA waters, as well as strengthened high seas longline monitoring, control and surveillance requirements. PNA's proposal supported FFA's proposal.

Conversely, the US indicated its concern with maintaining the 'status quo' of CMM 2018-01. The US proposed shifting to management objectives which consider the risk of breaching limit reference points for yellowfin and skipjack, suggesting a 20% risk is appropriately cautious. The US is seeking an increase in the allowable levels of exploitation for high seas purse seine fishing, as it believes current catch/effort levels are not underpinned by conservation concerns. The US is also proposing an increase in longline bigeye catch levels which accounts for low levels of juvenile bigeye exploitation in temperate waters fished by the US longline fleet based in Hawai'i. The US proposal was strongly opposed by FFA and PNA members.

Like the US, the EU supported a risk-based approach to establishing management objectives and stressed that the new measure needs to be consistent with principles reflected in the WCPFC Convention. While Korea did not propose any specific changes to management objectives or reference points, it did follow suit with the US, suggesting that fishing opportunities could be increased since the tropical tuna measure has been effective over the past ten years, provided there would not be a drastic change to international tuna markets or fishing industries as a result of such an increase. Korea is also seeking the removal of open-ended exemptions to the measure and agreement that only FADs with tracking buoys attached should be subject to FAD closures.

Japan proposed that target reference points be based on fishing mortality rather than fishing effort to take into account effort creep. It also proposed that management objectives and target reference points consider socio-economic factors, particularly the impact that declining catch per unit effort levels (CPUE) have on the economic viability of fishing operations. Japan also sought a longer reference period for the bigeye management objective (1976-2006) which would then help to restore biomass and CPUE to previous higher levels. Like Korea, Japan also proposed the analysis of the impact of exemptions to CMM 2018-01 and a change in the FAD definition to exclude small pieces of plastic and garbage.

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During the course of the workshop, China indicated its agreement with FFA members on maintaining current management objectives for bigeye and yellowfin. However, like the US, China wants to increase high seas purse seine fishing opportunities for its fleet, given current limits are based on historical effort and China is a relative newcomer to purse seine fishing in WCPO and as result, has only a few days allocated in the high seas. China is also seeking a restoration of bigeye longline catch limits to 2012-2015 levels, as it feels the longline sector has borne a greater bigeye conservation burden than the purse seine sector under the current measure. Taiwan also agrees with China that the heavy conservation burden on the longline sector needs to be addressed, but otherwise the new measure should not be a major departure from the current measure, with the management objective and target reference point maintained for skipjack.

Indonesia indicated that it is seeking to differentiate its purse seine fishery, which consists of many domestic small-scale purse seine vessels fishing on anchored FADs, from other WCPFC members' distant-water industrial-scale purse seine vessels which fish on drifting FADs. Indonesia has signalled an intention to propose the application of compatible management measures which are more appropriate for its purse seine fishery and in turn, can be more effectively implemented and monitored for compliance.

Throughout and prior to the conclusion of the workshop, the Chair identified key areas of commonality and divergence amongst WCPFC members. WCPFC members generally agreed that the new measure should maintain the scope of CMM 2018-01 with respect to geographical area (i.e. EEZs and high seas), stocks covered (i.e. bigeye, yellowfin and skipjack) and the duration of the measure (i.e. three years). It was suggested that there should be an annual review of the measure and a number of members agreed that exemptions should be addressed in a future discussion.

On management objectives, WCPFC members agreed that management objectives must consider the best available scientific advice and information; they should have a clear rationale, be understandable and be able to be operationalized and monitored. The management objectives must sustain the healthy status of stocks/ fisheries and must not carry an unreasonably high risk of breaching limit reference points. However, at the conclusion of the workshop there remained divergence amongst members on the specifics of management objectives for all three species, as well as baseline reference periods of 2012-2015 for bigeye/yellowfin and 2012 for skipjack.

The second tropical tuna measure workshop (TTMW2) is proposed for the 6-10 September. During TTMW2, SPC will present results from additional data analyses requested by members during TTMW1. Members will also report back on progress from intersessional discussions on management objectives, based on further questions drafted by the Chair. TTMW2 will also cover management options and monitoring, control and surveillance (MCS) measures and reporting requirements.

### **FSM takes big steps, China takes small steps to improve fishery monitoring**

According to a recent press release, the Federated States of Micronesia (FSM) is moving towards being the first country in the Pacific Islands to have the ability to utilize onboard electronic monitoring (EM) of the activities of all longline vessels fishing in its EEZ.<sup>3</sup> FSM is one of several Pacific Island countries to have undertaken trials of systems that employ cameras and sensors interfacing with GPS and record

*The US, EU and Korea are proposing an increase in fishing opportunities under the new tropical tunas measure*

*At the conclusion of the first workshop, divergence remains amongst WCPFC CCMs on management objectives*



videos of fishing activity on computer hard drives that are analyzed by shore-based Fishery Observers. Other countries that have undertaken similar work are Fiji, Marshall Islands, Vanuatu, and Solomon Islands.

In the case of FSM, a current trial of a four-camera system is being undertaken in cooperation with Japanese longliners. This follows other trials that began in 2016 and the establishment of a data review center in Pohnpei. The program has trained 15 observers to analyze video files collected from the participating vessels. The National Ocean Resources Management Authority (NORMA) has also developed a strategic plan to implement FSM's Electronic Monitoring Programme. The plan includes the development of data standards and protocols, engagement with the fishing industry, staff training, infrastructure improvements and the harmonization of FSM's national efforts with similar developments in other FFA countries.<sup>4</sup>

Major hurdles to the full implementation of electronic monitoring are development of the appropriate technology and overall costs. Recording fishing activities onboard with cameras for management purposes has taken place in several fisheries worldwide with various means of addressing the costs involved. The onshore review of the information collected can also be expensive and time-consuming. Countries such as FSM that are banking on EM to assist in reducing IUU fishing have cooperated with outside funding sources and, in some country's cases, have contributed their own funds to the trials. In the case of FSM, a major funding source has been The Nature Conservancy. The FSM Congress has also provided some funding, as has the WCPFC Special Requirements Fund.

While some Pacific Island countries are counting on advances in technology to monitor fishing activities, China is approaching the monitoring of its distant water fleet with the utilization of its human resources, albeit modestly. On 10 April 2021 China dispatched its first onboard observers to monitor high seas transshipments. Five observers are to monitor transshipments of China's distant water fleets in the Pacific and Indian Oceans. According to a statement by the Chairman of the China Ocean Fisheries Association, Zhang Xianliang, this is the first time China has dispatched its observers to monitor offshore fisheries on the high seas. According to a news report, the Agriculture Ministry has stated that fishing companies will pay the cost of observers onboard their vessels.<sup>5</sup> The records obtained by observers are to be compiled by the China Ocean Fisheries Association, which is funded by China Government. Subsequent analysis will be conducted by the Ocean Fisheries Training Center, the China Ocean Fisheries Data Center and the Ocean Fisheries International Compliance Research Center, all of which are part of the Agriculture Ministry.<sup>6</sup>

The deployment of the five observers follows a May 2020 directive of the Agriculture Ministry that "tightens at-sea transshipments in the high seas" with the objective of ensuring "well-regulated and high quality development of deep-sea fishing".<sup>7</sup> Under that notice, beginning in 2021 all high seas transshipment activities are required to follow a pre-operational application process and post-operational oversight, with all at-sea transshipment operations in the high seas supervised by onboard observers from the Ministry of Agriculture and Rural Affairs.<sup>8</sup>

It will be interesting to see how China's nascent transshipment observer program evolves. There are currently just 14 China-flagged refrigerated fish carriers on the WCPFC Register of Fishing Vessels,<sup>9</sup> not all of which may be operational at the same time in the WCPFC region. There are also many more Chinese-owned fish carriers that are believed to be flagged in other countries.

*Japanese longliners are cooperating in an electronic monitoring trial conducted by FSM*

*China has commenced dispatching observers to monitor high seas transshipments*



## ISSF identifies gaps in regional Port State Measures and updates its Status of Stocks report

The International Seafood Sustainability Foundation (ISSF) has released a new technical report that examines how tuna RFMOs have aligned their policies with the 2009 FAO Agreement on Port State Measures (PSMA) to deter illegal, unreported and unregulated (IUU) fishing.<sup>10</sup> The PSMA aims to deter IUU fishing by targeting the entry into port for fisheries and fishing products that have not yet been landed, including for transshipment or supply purposes. The PSMA establishes a framework for port states to seek specific information from foreign flagged vessels seeking entry to ports under their jurisdiction, priorities for inspections of such vessels, guidance on when port entry and/or use should be denied, and guidelines for reporting and exchange of information among states and RFMOs.

Four of the five tuna RFMOs have adopted *regional* port state measures that apply to members states of the RFMO, even if those states are not yet party to the PSMA: WCPFC, IOTC, ICCAT and CCSBT; IATTC has not adopted port state measures. The ISSF report analyses the measures that have been implemented, identifying differences between tuna RFMOs, as well as gaps between the tuna RFMOs measures and the PSMA implementing principles and operating standards provisions.

Looking across the review, ISSF identified three types of gaps – operational, information and implementation – though these do not apply in all cases.<sup>11</sup> Operational gaps include items such as an RFMO having a lack of requirements applicable to foreign-flagged vessels entering any non-designated port; lack of requirements for information to be submitted in advance for entry to port; lack of denial of port entry or use provisions; lack of harmonized priorities for inspection in ports; and lack of minimum inspection levels. Information gaps include: lack of explicit requirements for port states to report on the denial of port entry or use by a vessel; and, lack of obligation to report on all port inspections rather than only those where violations are found. Implementation gaps are evidenced in: lack of minimum standards for port inspections, training and/or minimum standards for those data to be included in inspection reports.

Based on the benchmark analysis, ISSF identified specific advocacy priorities for each RFMO and urged NGOs, industry, vessels owners and other interested stakeholders to advocate for RFMO member governments to propose changes to align with the core provisions of the PSMA and to promote more consistent implementation at regional levels. In the WCPFC, the report identifies lack of measures on four areas related to: port entry or use, two areas related to inspection, and a lack of requirements that all measures apply to any foreign flagged vessels seeking access to port as advocacy priorities.

In March 2021, ISSF also released an update of its *Status of World Fisheries for Tuna* report.<sup>12</sup> The report summarizes the stock status that results from the most recent scientific assessment of 23 tuna stocks that are recognized for stock assessments and management around the globe (6 albacore, 4 bigeye, 4 bluefin, 5 skipjack and 4 yellowfin stocks). The analysis finds that 65% of stocks are at a healthy level of abundance, 13% are overfished and 22% are at an intermediate level. 22% are experiencing overfishing. In terms of abundance, 87.6% of total catch comes from healthy stocks, a figure attributed to the fact that skipjack stocks contribute to more than half of the global catch of tunas and all skipjack stocks are considered healthy. The report also assesses 'management status' for each stock via a score for Harvest Strategies Performance Indicators from the Marine Stewardship Council (MSC) Fisheries Certification Standard. For stocks in the WCPO, the analysis suggests that bigeye and yellowfin management require improvements to its harvest strategy and harvest control rules and tools, while skipjack require specific conditions improving harvest control rules and tools to meet the MSC benchmark.

WCPFC, IOTC,  
ICCAT and  
CCSBT have  
developed  
regional port  
state measures;  
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ISSF identifies  
improvements  
are needed in  
harvest strategy  
development for  
key tuna species  
in the WCPO



Together, these studies also demonstrate the role that ISSF now plays in providing regular assessments that serve as referents for stakeholders in the tuna industry. Policy makers, advocacy organizations and industry (including ISSF members) now regularly draw on these reports to help to set priorities in tuna industry and regulatory dynamics.

## Global Fishing Watch releases transshipment database, analyses

Transshipment is of particular interest to fisheries managers because it is difficult to monitor and presents opportunities for IUU fishing, as well as other illicit activities. Developing marine learning technology to analyze GPS data points broadcast by fishing, carrier and bunker vessels from 2012-2019, Global Fishing Watch (GFW) – an independent, international non-profit organization with a mission of centering transparency in fair and effective governance of marine resources – has built a public database of information on transshipment activities.<sup>13</sup> In analysing the dataset, GFW is pointing to several potential findings that the data reveal.

First, the database offers information on spatial and temporal distribution of transshipment and bunker vessels and their activity. This enables a view of *which* fleets and vessel types engage in transshipment activity and helps to establish networks of vessels that routinely operate together with links to the ports that they primarily use. It also identifies the types of transshipment events likely support tuna fishing or other species.

Second, using machine learning, GFW highlighted more than 150,000 'loitering events' between 2012-2019. GFW defines loitering events as situations in which support vessels move in a manner that suggests that they are meeting or moving alongside a fishing vessel at sea, despite that GFW did not detect another vessel. GFW hypothesizes that such situations might be a way to identify locations in which fishing vessels are turning off their Automatic Identification System (AIS); GFW sees future opportunity to use their methods to identify the location and activity of 'dark vessels' by determining the specific location of carriers engaged in loitering events with no other visible vessel. The dataset also revealed that the number of carrier loitering events unmatched to an encountered has declined in recent years, suggesting greater AIS adoption in marine fishing fleets.

Third, GFW also experimented with examining the relationship between transshipment and 'forced labour' in pelagic longlines. GFW used a recent model that was developed to assess the risk of forced labour on vessels to suggest that 1) as much as half of the pelagic longline fleet has an elevated risk of forced labour and 2) that those vessels that had a high risk of forced labour were far more likely to engage in transshipment than those that did not. GFW emphasized in the report that these results require further investigation and validation.

Global Fishing Watch is seeking to grow its role in providing information that informs and is directly used in policy processes. The organization has entered into a growing number of relationships with coastal states including Indonesia, Ecuador and Brazil that are focused on improving fisheries transparency. The methods used in the transshipment report have been implemented in analyses provided to RFMOs by GFW and Pew Charitable Trusts. In addition, GFW has developed an online portal that visualizes the activity of carrier vessels and enables users to interact with the data.<sup>14</sup>

*GFW's public database offers insights on the transshipment network*

*GFW is experimenting with methods to explore and identify potential illicit activities related to transshipment*

## FISHERIES REGULATION

### Taiwan responds to growing pressure to combat labour abuse on fishing vessels

As reported in a recent issue of the *FFA Trade and Industry News*, Taiwan is facing growing pressure to address labour abuse on fishing vessels. In October 2020, the US Labour Department placed Taiwan on its *2020 List of Goods Produced by Child Labor or Forced Labor*. In January 2021, US Customs and Border Protection issued a 'withhold release' order against a Taiwanese trawler based on information that the vessel was involved in the use of forced labour; personnel at all US ports of entry were ordered to detain seafood caught by the vessel. NGOs including Greenpeace and Environmental Justice Foundation, have published reports identifying unacceptable labour conditions on board Taiwanese flagged vessels, and have called for regulatory and practical changes to protect workers.<sup>15</sup> Most recently, the Seafood World Group, a global coalition of 26 labour, human rights and environmental NGOs, recommended that Taiwan be downgraded in the US Department of State's 2021 Trafficking in Persons (TIP) Report from Tier 1 (countries and territories whose governments fully comply with the Act's minimum standards) to a Tier 2 (countries and territories whose countries do not fully comply with the Act's minimum standards, but are making significant efforts to bring themselves into compliance).<sup>16</sup>

Taiwan has now begun to respond.<sup>17</sup> Taiwan's Fisheries Agency (TFA) has announced new orders that all vessels greater than 24m must comply with the International Labour Organization's *Convention 188* (also known as the *2007 Work in Fishing Convention*). It has added forced labour to its reporting requirements for foreign crew aboard Taiwanese vessels. TFA reports that it has built new infrastructure facilities for foreign crew members at Taiwanese ports and is beginning 'listening sessions' where foreign crew members, government agencies and NGOs can voice concerns and talk with each other. For Taiwanese firms operating under foreign flags, the Agency has drafted an amendment to regulations governing foreign-flagged vessels entering Taiwanese ports if international agencies or other governments report that a vessel is suspected of being involved in human trafficking or forced labour. To begin enforcing changes, TFA ran one joint inspection of distant water vessels with Taiwan's Ministry of Labour as a prototype for how additional inspections will operate into the future.

The Taiwanese Fisheries Agency also responded directly to NGO criticism in a statement issued via media outlet *Seafood Source*, stating that it "endeavored to improve protection of the rights and benefits of the crew members through institutional guarantees".<sup>18</sup> The Agency reports amending its *Standard Operation Procedures for Reporting and Processing Cases of Foreign Crew Members Employed Overseas Onboard Distant-Water Fishing Vessels Suspected of Violating Human Trafficking Prevention Act*, and that it is strengthening inspection and crew interviews in both domestic and foreign ports. The Agency reports that it is also drafting an "Action Plan for Fisheries and Human Rights" that will focus on mechanisms to strengthen timely and accurate payment and the management of foreign worker hiring processes throughout the industry. It pointed to the difficulty of overseeing recruiting agencies that are based in other countries and introduced new requirements that agents be subject to an annual reviews and requirements to record and save all contracts for five years in a standardized format. Agents have now been prohibited from deducting fees from foreign crews' salaries.

EJF and Greenpeace both welcomed the changes, but called for more work to be done. Greenpeace has called for migrant fishers on Taiwanese vessels to come under the administration of the Department of Labour, rather than Fisheries,

Facing pressure over labour abuse on vessels, Taiwan's Fisheries Agency has started to respond with new policies and practices

NGOs welcome Taiwan's efforts, but call for more work to be done



which it argues does not have the expertise required to address labour issues. EJP and Greenpeace have both urged further attention regarding training officials to conduct inspections, developing mechanisms for enforcement of new regulations and involving stakeholders and international NGOs in the development of the new Fisheries and Human Rights Action Plan.<sup>19</sup>

### **New EU fisheries control system that will influence access arrangements and international trade**

A new EU system on controlling fisheries has been approved by the European Parliament. The system is designed to ensure compliance with the rules of the EU's Common Fisheries Policy and will replace the prior control system set up in 2009.<sup>20</sup>

Major aspects of the new system include the requirement for tracking of all EU fishing vessels, as well as improving digital traceability 'from net to plate' along the supply chain for all fish products, whether sourced from EU fisheries or imported.<sup>21</sup> For all vessels 12m and over in length, this will include electronic logbooks and submission of electronic landing and transshipment declarations, which will include a unique fishing trip identification number.

The European Parliament pushed back on the draft of the rules which required the reporting of *all* catches, including bycatch and sensitive or endangered species. This would have made full catch data available for the 49,000 EU vessels available for the first time ever. Instead, the EP inserted an *increased* margin of error for fishers to estimate their catches to up to 40% of caught seafood and for tuna up to 50%.

Now that the European Parliament has made adjustments, representatives from EU Member States and the European Commission are scheduled to begin negotiations to finalise the future fisheries control system in the coming months.

## **TUNA INDUSTRY**

### **Industry on standby to implement voluntary Indian Ocean yellowfin cuts**

As reported in *FFA Trade and Industry News'* Sep-Oct 2020 edition, the Indian Ocean Tuna Commission (IOTC) has failed to reduce catches by 20% to rebuild the yellowfin stock which has been classified as overfished since 2015. Given there was no discussion scheduled on a new stock rebuilding plan for yellowfin during IOTC's 24<sup>th</sup> Annual Session in November 2020, a special session was scheduled for 8-12 March 2021, following widespread lobbying from the business and NGO community. Unfortunately, the special session concluded with IOTC parties failing to reach agreement on a joint EU-Maldives proposed measure, with action once again postponed until the 25<sup>th</sup> Annual Session scheduled for 7-11 June 2021. Some major sources of contention have been the legality of driftnets used by some IOTC members, data gaps for artisanal fisheries, overfishing of yellowfin catch limits, exemptions from yellowfin catch limits for vessels <24 metres fishing exclusively within national waters and drifting FAD management.

IOTC's failure to adopt a revised yellowfin rebuilding measure was once again strongly criticized by NGOs including ISSF and WWF. According to ISSF, "the session ignored advice from IOTC's own scientific commission and failed in its one goal to agree [to] an evidence-based, enforceable plan to ensure the long-term sustainable management of the species".<sup>22</sup> WWF indicated it is "deeply disappointed by the

**New EU  
rules will  
include digital  
traceability  
systems**

**IOTC failed  
to reach  
agreement on  
yellowfin stock  
rebuilding at  
the March 2021  
special session**

reckless disregard for the consequences of the failure to put in place much-needed catch limits for yellowfin tuna stocks.....[h]iding behind the excuse of ‘a lack of data’, IOTC member-states are pushing yellowfin to the brink....”<sup>23</sup> A number of European retailers and IOTC parties also publicly expressed disappointment on the lack of progress.

Interestingly, ISSF Participating Members – a number of whom are prominent global tuna traders, processors and brand owners - have formally agreed to take a proactive industry-driven stance on yellowfin stock rebuilding. On 23 April 2021, ISSF members adopted a new ISSF Conservation Measure (1.3. IOTC Yellowfin Tuna Rebuilding). In the event IOTC does not reach agreement at the June Annual Session on implementing the most recent scientific advice to increase the effectiveness of IOTC’s current rebuilding plan (i.e. 11% reduction from 2019 yellowfin catches), ISSF members will instead commit to reducing their annual company-level sourcing of Indian Ocean yellowfin by 11% of 2017-2019 average annual levels, effective 31 July 2021. ISSF Participating Companies will be required to publish a statement on their company websites describing their commitment to this measure and their implementation plan for the 11% sourcing reduction. Compliance with this new measure (and all other ISSF Conservation Measures) will be third-party audited by MRAG Americas.<sup>24</sup> This may well mark the first-time key tuna supply chain actors have publicly agreed to implement transparent and auditable company-level measures in response to an RFMO failure to adopt critical conservation and management measures.

### **Seaspiracy makes waves in seafood industry, feeding shift to plant-based seafood**

The *Seaspiracy* documentary on the streaming service Netflix has caused a social media sensation and rocked the seafood industry. The documentary is a sensationalist account of a litany of negative outcomes and worst practices in the global seafood industry. The narrative races through fishing gear being a major contributor to the global crisis in ocean plastics waste; very high incidences of bycatch, including of dolphin and shark; the role that fishing plays in worsening climate change; accusations that eco-labels like Dolphin Safe and MSC are ineffective; illegal fishing, the deaths of observers including 18 from Papua New Guinea, and footage of an armed boarding of a fishing vessel by a Liberian coastguard-Sea Shepherd team; testimony on murder at sea from former crew who experienced forced-labour on fishing boats; and inefficient feed conversion ratios and disease in industrial aquaculture. The documentary concludes by urging viewers to stop eating fish and to switch to plant-based alternatives. The transcript for *Seaspiracy* is freely available.<sup>25</sup>

Debate on *Seaspiracy* is polarised. Its makers use a combination of selective evidence and outdated or exaggerated positions to make a powerful, but non-nuanced argument that seems to resonate with a non-specialist audience. There are a large number of newspaper articles and blogs that dissect and fact check every aspect of the documentary; these are not repeated here.<sup>26</sup> The documentary maker’s target is not to reform the seafood industry but to appeal to viewers to not eat fish. In this context, and in the broader mix of post-truth society, it does not matter to the documentary makers whether the means are fair or scientific, but that the ideological ends are reproduced. The *Seaspiracy* website makes these transparent with a call to (1) shift to a plant-based diet; (2) enforce no-catch marine reserves covering 30% of the global ocean by 2030; and (3) end subsidies to the fishing industry.<sup>27</sup>

**If IOTC fails to reach agreement in June 2021, ISSF members will voluntarily implement an 11% reduction on their average 2017-2019 volumes sourced of Indian Ocean yellowfin**

**Netflix entertainment show promotes veganism and attacks the global seafood industry**

The storytelling at the heart of *Seaspiracy* is both vain (the partners who made it are billed as the hero-protagonists) and is imbued with false nativity. Coming from the same producers as *Cowspiracy* (2014) which took on industrial meat production, it is simply not believable that the makers set out to examine ocean plastics and stumbled across the global seafood industry. So, a false story arc sees the hero-protagonists move from one unfolding revelation to the next, which appears more like a scripted journey based on a Google search using the keywords ‘marine fisheries + bad stuff’. As the *New York Times* put it, ultimately *Seaspiracy* is ‘lost in a sea of murky conspiratorial thinking’.<sup>28</sup> But, as noted, this is not the ideological point of the documentary.

Striking is the complete failure to speak to any of the hundreds of millions of people who are employed in or who sustain their livelihoods from fisheries, aside from two former crew who suffered forced labour. Instead, a top-down approach predominates where we hear from a number of activists and academics – some of whom have since publicly sided against the documentary. To ignore the centrality of seafood to the work of millions and the food security of countless millions is an obvious, glaring gap. As Daniel Pauly puts it “this is a movie that forces the problems of global fisheries through a small, privileged lens to make the Europeans and North Americans who can give up fish feel guilty enough to do so.”<sup>29</sup> To underline his point, the *Seaspiracy* website has a link to a ‘PLANeT Based Meal Planner’ for ‘only’ USD14 per month!

*Seaspiracy* has sent ripples of speculation and possible profit through the plant-based protein industry, including investments by multinational agribusiness corporations such as Cargill in Bflike, a company specialising in developing vegan fat and ‘plant-blood’ technologies to mimic meat and fish.<sup>30</sup> According to Cargill, the product innovation is ‘virtually indistinguishable from ... animal-based counterparts, with similar visual appearance (both raw and cooked), texture, mouthfeel, melting behavior and cooking performance’.<sup>31</sup> A Dutch firm, Schouten, already manufactures a ‘Fishless Stick’ and ‘Vegan Green Tuna’,<sup>32</sup> while a Swedish competitor Hooked Foods has just launched a ‘Toona’ range, but which is targeted at restaurants rather than retailers as ‘consumers... might not know how to use it in the best way.’<sup>33</sup> According to one estimate, the global market for plant-based fish products may grow up to 30 per cent annually, hitting USD 1.3 billion by 2031.

In the end, the documentary may prove to be counterproductive by undermining genuine sustainability measures in marine fisheries, which cost time and money to implement. If all fisheries are unsustainable and thus the only ‘solution’ is for us all to stop eating fish, for those consumers and companies that continue to eat seafood, will it matter that a fishery is sustainable?

### ‘2025 Pledge towards Sustainable Tuna’ launched<sup>34</sup>

In June 2017, 67 of the world’s largest retailers, tuna processors, markets, traders and harvesters, together with 21 civil society organisations and six governments voluntarily committed to traceable, social and environmentally responsible tuna supply chains through the ‘Tuna 2020 Traceability Declaration’ (TTD). With the conclusion of the TTD in December 2020, the World Economic Forum, Friends of Ocean Action and the Global Tuna Alliance formally launched the ‘2025 Pledge towards Sustainable Tuna’ (25PST) on 23 March 2021, which aims to build on the achievements and momentum gained by the TTD.

The 25PST’s ambition is “that tuna, globally, meets the highest standards of environmental performance and social responsibility; in particular through

**Seaspiracy  
contributes  
to growing  
investment in  
plant-based  
seafood  
alternatives**

demonstrable improvements in supply chain practices and the management of tuna fisheries by 2025". 25PST signatories will commit to making improvements under three main commitments - transparency and traceability, environmental sustainability, and social responsibility. Like the TTD, the 25PST is aligned with the United Nations Sustainable Development Goals, particularly, SDG14: Life Below Water.

At a minimum, Tuna Business Signatories will commit to:

- Fully traceable and transparent tuna supply chains (from vessel to plate) by the end of 2025.
- Conducting regular due diligence of Port State Measures implementation in landing ports.
- Sourcing 100% of tuna products from Global Sustainable Seafood Initiative (GSSI) recognized certified sustainable fisheries (i.e. Marine Stewardship Council) or fisheries in credible, comprehensive Fisheries Improvement Projects (FIPs).
- Advocating for the development and implementation of effective harvest strategies in tuna fisheries.
- Sharing company policies on human rights with supply chain stakeholders.
- Establishing a baseline regarding human rights due diligence for vessels and processors by end 2021.
- Implementing due diligence processes and timebound improvements targets by end of 2025 aimed at adherence to relevant ILO conventions.
- Advocating for improved social responsibility in tuna fisheries.

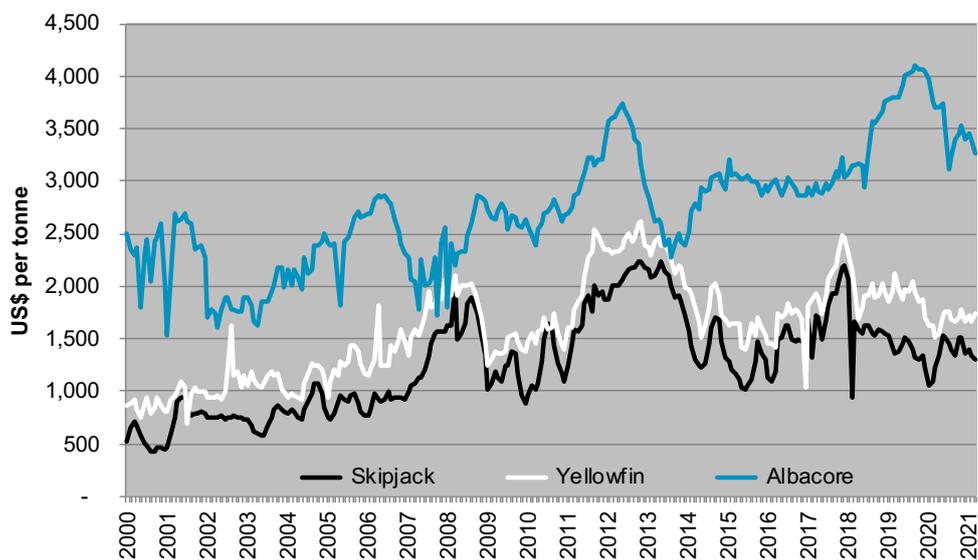
Governments and civil society organizations are also invited to endorse the 25PST and provide support to business signatories in meeting their commitments. In addition to the minimum commitments, signatories can also voluntarily take on a number of additional recommended actions (laid out in Annexes 1 and 2 of the pledge).

The full text of the '2025 Pledge towards Sustainable Tuna' is available here: <https://www.globaltunaalliance.com/wp-content/uploads/2021/02/Refreshed-Commitment-FINAL.pdf>

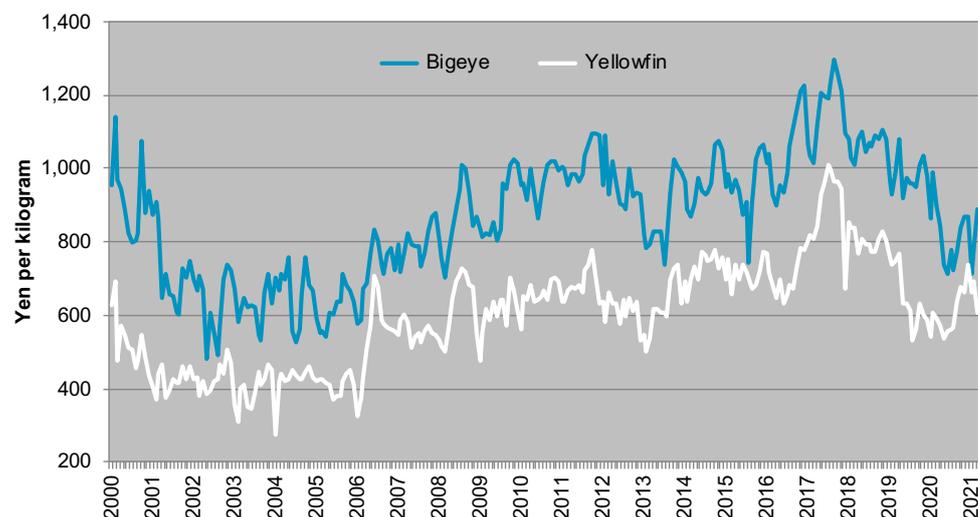
**25PST  
signatories  
will commit to  
improvements  
in transparency  
and  
traceability,  
environmental  
sustainability  
and social  
responsibility  
in their tuna  
supply chains**

## TUNA PRICE TRENDS<sup>35</sup>

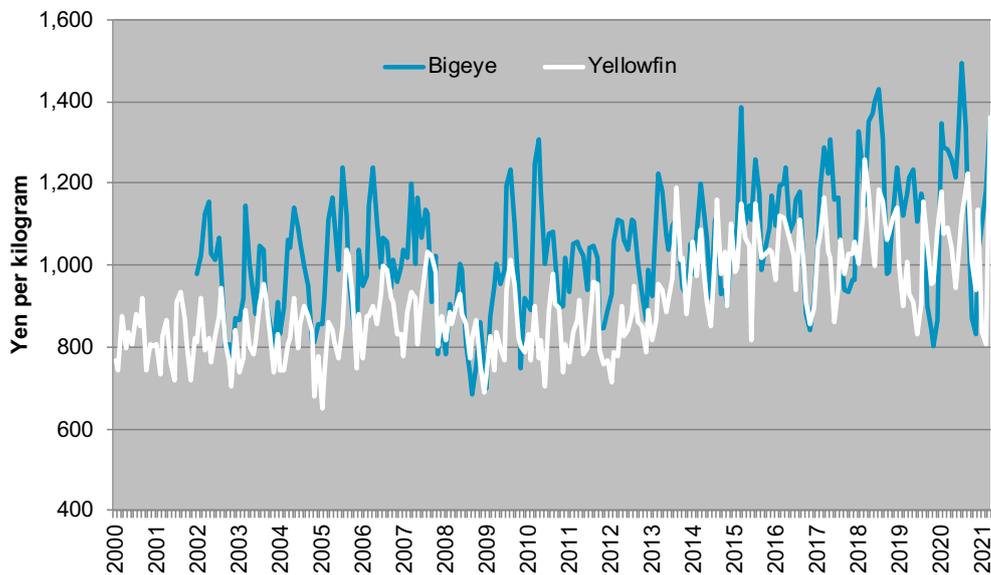
### Bangkok canning-grade prices to March 2021<sup>36</sup>



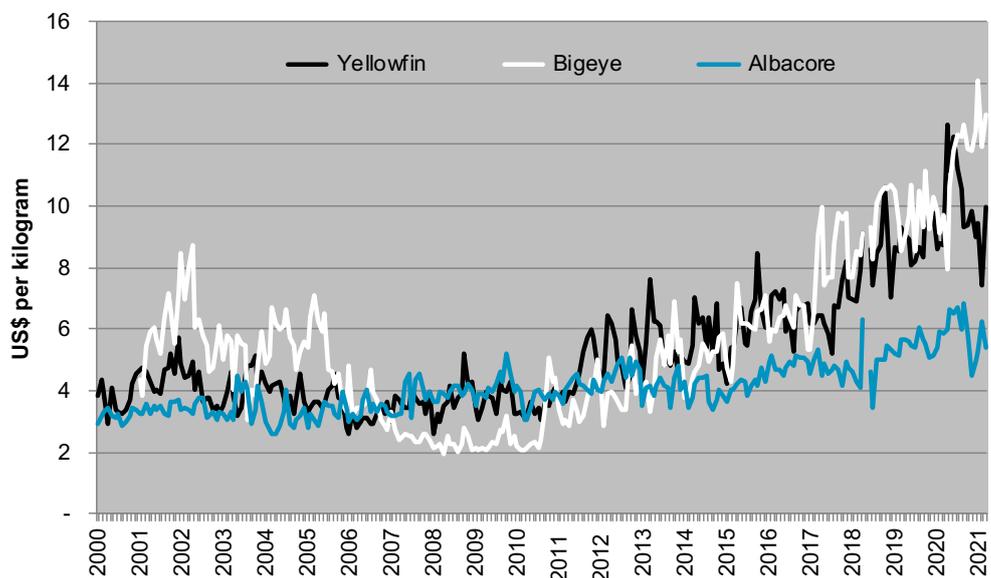
### Japan frozen sashimi prices (ex-vessel, Japanese ports) to March 2021<sup>37</sup>



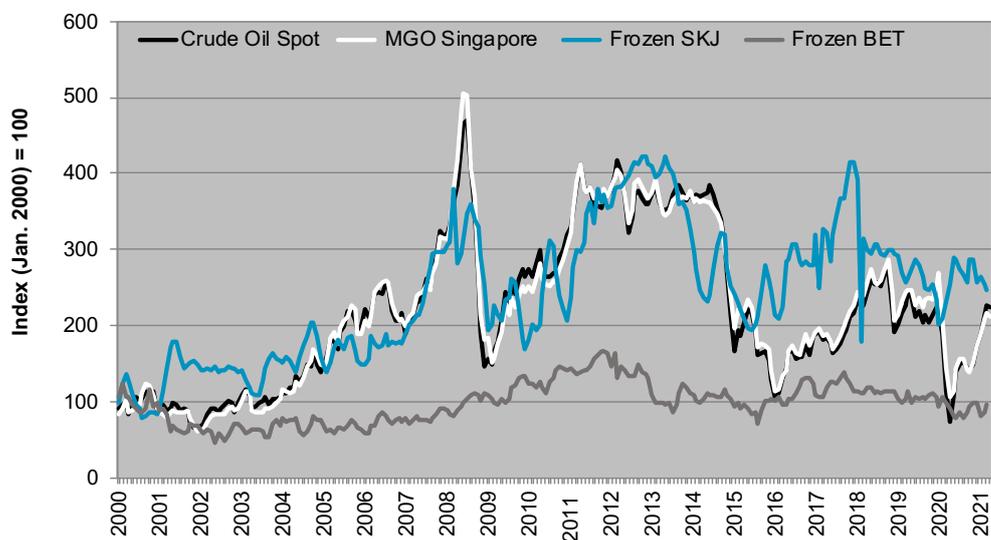
### Japan fresh sashimi prices (origin Oceania) to March 2021<sup>38</sup>



### US imported fresh sashimi prices to March 2021<sup>39</sup>



## Crude oil, canning-grade frozen skipjack (SKJ) and frozen bigeye (BET) price index to April 2021<sup>40</sup>



<sup>1</sup> Prepared for the FFA Fisheries Development Division by Professor Liam Campling, School of Business and Management, Queen Mary University of London, Dr Elizabeth Havice, University of North Carolina at Chapel Hill and Mike McCoy, independent consultant, all Consultant Fisheries Trade and Market Intelligence Analysts, Fisheries Development Division, FFA. Desktop publishing by Antony Price. The authors would like to thank FFA for their input on an earlier draft of this briefing. The contents of this briefing (including all analysis and opinions) are the responsibility of the authors and do not necessarily reflect the positions or thinking of the FFA Secretariat or its Members.

<sup>2</sup> TTMW1 – Chair’s Report; various TTMW1 meeting papers; insights from TTMW1 attendees. All documents available at: <https://www.wcpfc.int>

<sup>3</sup> ‘FSM pushes forward to be first Pacific Island country to fully establish electronic monitoring for sustainable fisheries’, Press Release, PIO Articles, 29 March 2021. Accessed at <https://gov.fm>

<sup>4</sup> *ibid.*

<sup>5</sup> Mark Godfrey, ‘Milestone reached as China assigns first on-board observers to distant-water fishing vessel’, Seafood Source, 19 April 2021. Available at: <https://www.seafoodsource.com>

<sup>6</sup> *ibid.*

<sup>7</sup> ‘China dispatches fishing observers to high seas to tackle fisheries abuses’, Press Release, Ministry of Agriculture and Rural Affairs, 12 April 2021. Available at: [http://english.moa.gov.cn/news\\_522/202104/t20210414\\_300628.html](http://english.moa.gov.cn/news_522/202104/t20210414_300628.html)

<sup>8</sup> *ibid.*

<sup>9</sup> WCPFC Record of Fishing Vessels, accessed 3 May 2021. Available at: <https://www.wcpfc.int>

<sup>10</sup> Holly Koehler, 2021. *Port State Measures in Tuna RFMOs: Benchmarking RFMO Port State Measures Against the 2009 FAO PSMA and Identifying Gaps*. ISSF Technical Report 2021-09. International Seafood Sustainability Foundation, Washington, D.C., USA. Available at: <https://iss-foundation.org/>

<sup>11</sup> ‘From minimum standards for inspector training to advance notice of port entry, report identifies IUU-mitigation gaps and opportunities’, *ISSF Press Release*. 18 March 2021. Available at: <http://www.iss-foundation.org>

<sup>12</sup> ISSF 2021. *Status of the World Fisheries for Tuna: March 2021*, ISSF Technical Report 2021-10. International Seafood Sustainability Foundation, Washington, D.C., USA. Available at: <http://www.iss-foundation.org>

<sup>13</sup> This story draws on the following Global Fishing Watch press release and report: Nathan Miller 2021. ‘New study reveals global footprint of support vessels involved in rendezvous at sea’, *Global Fishing Watch*, 8 April 2021. Full report: Global Fishing Watch 2021, *Revealing the supply chain at sea: A global analysis of transshipment and bunker vessel*, April 2021. Available at: <http://www.globalfishingwatch.org>

<sup>14</sup> For more information on the carrier portal, see: <https://globalfishingwatch.org/carrier-vessel-portal/>

<sup>15</sup> See e.g., Environmental Justice Foundation 2020. ‘Widespread abuse and illegal fishing as Taiwan’s fleet remains out of control’, *Environmental Justice Foundation*, 22 July. Available at: <http://www.ejfoundation.org>; Greenpeace 2020. *Choppy Waters: Forced Labour and Illegal Fishing in Taiwan’s Distant Water Fisheries*. Greenpeace East Asia: Taipei City. Available at: <http://www.greenpeace.org>; Aaron Orłowski, 2019. ‘Greenpeace report says forced labor persists in Southeast Asia fishing sector’, *Seafood Source*, 11 December 2020. Available at: <http://www.seafoodsource.com>

<sup>16</sup> ‘Comments Concerning the Ranking of Taiwan by the US Department of State in the 2021 Trafficking in Persons Report’, Submitted by Global Labor Justice-International Labor Rights Forum and Greenpeace on behalf of the Seafood Working Group. 31 March 2021. Available at: <http://laborrights.org>

<sup>17</sup> Mark Godfrey, ‘Taiwan Fishery Agency responds to US DoL blacklisting’, *Seafood Source*, 16 March 2021. Available at: <http://www.seafoodsource.com>

<sup>18</sup> Mark Godfrey, ‘Taiwan responds to NGO reports on forced labor within its fishing fleet’, *Seafood Source*, 2 April 2021. Available at: <http://www.seafoodsource.com>

<sup>19</sup> *ibid.*

<sup>20</sup> COUNCIL REGULATION (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy. Available at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:343:0001:0050:EN:PDF>

<sup>21</sup> Draws from Irina Popescu 2021, ‘Revising the fisheries control system’. European Parliamentary Research Service. Available at: <https://www.europarl.europa.eu/RegData/etudes/>

[BRIE/2019/642281/EPRS\\_BRI\(2019\)642281\\_EN.pdf](#); EU Fisheries Control Coalition press release, 'Two steps forward, one giant step back: European Parliament votes for modern and transparent fisheries, but opens grave loophole', 11 March 2021. Available at: <http://www.transparentfisheries.org/2021/03/11/two-steps-forward-one-giant-step-back-european-parliament-votes-for-modern-and-transparent-fisheries-but-opens-grave-loophole/> ; Shem Oirere, 'EU parliament votes to support new fisheries control system', *SeafoodSource*, 12 March 2021. Available at: <http://www.seafoodsource.com>

<sup>22</sup> 'ISSF: IOTC failing to protect yellowfin tuna', *World Fishing & Aquaculture*, 15 March 2021. Available at: <https://www.worldfishing.net>

<sup>23</sup> Cliff White, 'IOTC delays yellowfin decision, WWF declares decision "lost opportunity"', *Seafood Source*, 12 March 2021. Available at: <https://www.seafoodsource.com>

<sup>24</sup> 'ISSF adopts new conservation measure aimed at rebuilding yellowfin tuna in the Indian Ocean', *ISSF Press Release*, 6 May 2021. Available at: <http://www.issf-foundation.org>

<sup>25</sup> Seaspiracy 2021 – Transcript, 30 March 2021. Available at:

<https://scrapsfromtheloft.com/2021/03/30/seaspiracy-2021-transcript/>

<sup>26</sup> See, for example, Spencer Roberts, 'What *Seaspiracy* Gets Right About the Exploitative Fishing Industry', *Jacobin*, 14 April 2021. Available at: <https://jacobinmag.com/2021/04/seaspiracy-marine-science-fishing-industry-netflix/>; MSC press release, 'Our Seaspiracy response', 26 March 2021. Available at: <https://www.msc.org/media-centre/news-opinion/news/2021/03/26/response-to-netflix-seaspiracy-film>; 'Seaspiracy', *Environmental Marine Biology*, 24 March 2021. Available at: <https://marine-biology.net/2021/03/29/seaspiracy/>; Alex Rogers, 'OP-ED: Seaspiracy or Conspiracy? Truth and Hyperbole Behind the Controversial New Netflix Exposé on Fishing', *ECO Magazine*, 9 April 2021. Available at: <https://www.ecomagazine.com/in-depth/featured-stories/op-ed-seaspiracy-or-conspiracy-truth-and-hyperbole-behind-the-controversial-new-netflix-expose-on-fishing>; Madelyn Kearns, 'Industry pans Seaspiracy as misleading', *Seafoodsource*, 31 March 2021. Available at: <http://www.seafoodsource.com>

<sup>27</sup> Seaspiracy Website: <https://www.seaspiracy.org/>

<sup>28</sup> Natalia Winkelman, 'Seaspiracy' Review: Got Any Scandals? Go Fish', *New York Times*, 24 March 2021. Available at: <https://www.nytimes.com/2021/03/24/movies/seaspiracy-review.html>

<sup>29</sup> Daniel Pauly, 'Giving up seafood isn't the best way to save the oceans', *Vox*, 13 April 2021. Available at: <https://www.vox.com/2021/4/13/22380637/seaspiracy-netflix-fact-check-fishing-ocean-plastic-veganism-vegetarianism>

<sup>30</sup> See: <https://www.bflike.nl/>

<sup>31</sup> Cargill press release, 'Cargill invests in start-up Bflike to help food manufacturers and retailers offer a new generation of plant-based meat and fish alternative products', 22 April 2021. Available at: <https://www.cargill.com/2021/cargill-investment-bflike>

<sup>32</sup> <https://www.schoutenfood.com/vegetarian-products/>

<sup>33</sup> Christine Blank, 'Seaspiracy fueling plant-based surge in Europe, as Cargill becomes next big player to invest in seafood analog market', *Seafoodsource*, 28 April 2021. Available at: <http://www.seafoodsource.com>

<sup>34</sup> 'New global commitment to environmentally and socially responsible tuna supply chains', Global Tuna Alliance, 23 March 2021. Available at: <https://www.globaltunaalliance.com>

<sup>35</sup> All databases are provided by the Fisheries Development Division at FFA.

<sup>36</sup> Customs Department, Thailand. [http://www.customs.go.th/statistic\\_report.php?lang=en&show\\_search=1](http://www.customs.go.th/statistic_report.php?lang=en&show_search=1)

<sup>37</sup> FFA database

<sup>38</sup> Japan Customs. [https://www.customs.go.jp/toukei/info/index\\_e.htm](https://www.customs.go.jp/toukei/info/index_e.htm)

<sup>39</sup> US National Marine Fisheries Service. <https://foss.nmfs.noaa.gov/apexfoss/?p=215:2:10663896522198::NO>

<sup>40</sup> Y Charts: [https://ycharts.com/indicators/average\\_crude\\_oil\\_spot\\_price](https://ycharts.com/indicators/average_crude_oil_spot_price); Ship & Bunker: <https://shipandbunker.com/prices/apac/sea/sg-sin-singapore#MGO>