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SPECIAL FEATURE

Highlights from 17th Infofish World Tuna Trade Conference²

From 11-13 October 2022, the 17th Infofish World Tuna Trade Conference was held in Bangkok, Thailand, offering one of the first opportunities for global tuna industry stakeholders to come together again in person following COVID-19 travel restrictions. The conference's theme, '*Strengthening Resilience, Adaptability and Sustainable Growth in the Global Tuna Industry*' underpinned many presentations highlighting challenges and developments experienced by industry as a result of the pandemic. Following is a summary of some of the key highlights from over 40 presentations delivered during the conference. The conference's keynote speaker, Tri Marine Group's CEO, Mr. Juan Corrales, highlighted the importance of tuna as a nutritious, low carbon footprint source of protein and the role it will continue to play in meeting the world's growing food demand. Importantly, Mr. Corrales reiterated the need for joint efforts by all key actors in the tuna industry to collectively promote the value of tuna, rather than promoting one tuna fishery over another, which only serves to erode the image of the entire tuna market segment. This point was echoed in several other presentations delivered during the course of the conference.

Global tuna resources and supply: In 2020, global tuna production was around 5 million mt, representing 7% of total global fisheries production and 8% of capture fisheries production. The Pacific Ocean accounted for 66%, Indian Ocean 24% and the Atlantic Ocean 8% of total tuna catch. With the onset of the COVID-19 pandemic in 2020, demand for shelf-stable tuna burgeoned while the fresh and frozen segments suffered badly. In 2021, shelf-stable demand remained high and trade volumes for the fresh/frozen segments made some recovery due to innovative pivots in business and marketing strategies; in 2022 the demand for canned tuna has softened compared to peak-pandemic levels.

In the WCPO, which accounted for 56% of global tuna production in 2021, all four key tuna species (skipjack, yellowfin, bigeye and albacore) are deemed to be healthy. However, yellowfin in the Indian Ocean remains overfished and subject to overfishing, despite a rebuilding strategy being in place since 2016; the Indian Ocean accounted for 22% of global tuna catch in 2021. One of the potential challenges for global tuna fisheries is ocean warming resulting from climate change; FAO estimates that maximum catch volumes may decrease by up to 12% by 2050. Key RFMO priorities include drifting FAD management, harvest strategy and harvest control rule development, stock management and climate change impacts on coastal communities and tuna stocks. Increasingly, key tuna supply chain players, particularly retailers and brandowners, are becoming more engaged in RFMO advocacy through forums such as the Global Tuna Alliance (GTA), using their market power to drive improvement in fisheries management.

Industry updates: Thailand remains the world's largest canned tuna processor exporting over 470,000mt in 2021. While the total value of exports declined from USD 2.3 billion to USD 1.9 billion from 2020 to 2021 (-19%), 2022 has seen a recovery. The top three markets for Thai tuna products in 2021 were the USA, Africa and Middle East, collectively accounting for 58% of total exports. With the significant expansion of the FSM and Nauru purse seine fleets in the past 2-3 years, these two Pacific Island nations became the second and third highest raw materials suppliers to Thailand in 2021, displacing the USA and Korea; Taiwan remains the top raw material supplier. The Thai Government and tuna processing industry continue to proactively implement policies and initiatives relating to ethical labour practices. Their 'significant efforts' have seen Thailand upgraded to Tier 2 in the US State Department's 2022 Trafficking in Persons Report.



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Ecuador continues to be the second top tuna exporter globally and the highest supplier to the EU market. In 2021, Ecuador exported around 260,000mt of tuna (USD 1.1 billion). The Ecuadorian Government has made significant advances in updating its fisheries legislation in recent years and a US 60 million investment in the sector from 2020-2025. Ecuador's fishing and processing industries have established a GSSI-affiliated sustainable fishing certification program (*Sustentabilidad Ecuatoriana Atunera*) and a project to improve the quality of life of a targeted 100,000 fishing families.

Europe remains the single largest market for canned tuna with 2021 consumption estimated at almost 690,000mt; 370,000mt was processed within the EU, with Spain accounting for 62% of production, followed by Italy (23%). EU brandowners continue to work on developing innovative value-added products and are increasingly focussing on several key attributes of tuna – healthy, convenient, sustainable/ethical – to promote their products. The EU tuna market continues to be heavily regulated with new requirements being developed on forced labour and -18°C freezing capability onboard purse seine fishing vessels.

Tuna markets: Over the past 20 years, the volume of tuna traded has doubled and value has tripled; tuna has cemented its place as an internationally-traded commodity, with processed tuna accounting for 45% of total tuna traded. The USA, Europe and Japan remain the core markets with modest growth projected (2-3% per annum) driven by product innovation. However, trade is increasingly diversifying, with emerging markets and new processing hubs growing in importance, notably in the Middle East and North Africa which may potentially experience double-digit growth. Prices for skipjack and yellowfin have risen and fallen in response to cyclical changes in supply and demand; a strong upwards trend in prices has occurred in 2022 due largely to external pressures of rising inflation, fuel and freight costs. Overall, tuna markets and the industry have remained resilient despite the global pandemic; bottlenecks and high shipping costs have started to subside. It is unclear how emerging challenges – for example, the war in the Ukraine, rising interest rates, energy and raw material costs – will impact global tuna demand in 2023.

Sustainability and social accountability: Market demand for tuna sustainability remains strong with multiple prominent brandowners and retailers making public sustainable sourcing commitments and establishing transformative partnerships with NGOs. For example, Italy's Bolton Foods has a commitment to source 100% MSC-certified or FIP tuna by 2024; it partners with ISSF, WWF and Oxfam. With time, a growing number of sustainability-related requirements are also being introduced. For example, three new International Seafood Sustainability Foundation (ISSF) conservation measures have recently come into effect relating to longline best practice by-catch handling, vessel-based FAD management and a fins naturally attachment requirement for retained sharks. Engagement in Marine Stewardship Council (MSC) fisheries certifications and Fisheries Improvement Projects (FIPs) also continues to grow. Companies are also starting to make 'Blue Economy' commitments which move beyond direct impacts on fish stocks to broader considerations like climate change and marine pollution; supply chain companies are beginning to quantify baseline carbon emissions and make reduction commitments. Financial institutions are increasingly implementing their environment, social and governance (ESG) policies, responding to shareholder concerns, and scrutinizing their fishing-related investments to reduce their brand and reputation risk. The Sustainable Blue Economy Finance Principles have encouraged greater commitments from major financial institutions to support sustainable and ethical ocean development in the future.

Focus on human and labour rights continues to gain traction. To date, progress in this area has been driven largely by NGO and private sector initiatives, with stand-

Key supply chain actors are becoming more engaged in RFMO engagement and advocacy

Tuna markets and the industry were resilient in weathering the challenges of the COVID-19 global pandemic

alone labour standards and programs evolving such as FISH Standard for Crew and Seafood Task Force, as well as expansion of fisheries sustainability standards and programs to include social responsibility elements (e.g. MSC, fisheryprogress.org, APR). At present, there is proliferation in labour-related initiatives which is some cause for concern due to potential duplication (or contradiction) and generating consumer confusion; there are calls to not 'reinvent the wheel', with ILO's *Work in Fishing Convention C188* considered by some the best universal framework. However, much greater engagement is still required by flag states, noting only 19 countries have ratified the ILO's *Work in Fishing Convention C188*. WCPFC is first and only RFMO to date to specifically address labour standards on vessels fishing in international waters through the adoption of a non-binding resolution; a number of WCPFC members are now in the process of developing a binding conservation and management measure, but some distant water fishing members are reluctant to support its adoption.

E-commerce and technological innovation: COVID-19 lockdowns provided a catalyst for deeper digitalization in seafood sales with restaurants and retail outlets needed to pivot to online sales; the demand for online service delivery is expected to continue. Technology and digitization is rapidly making the seafood supply chain more traceable and transparent; it is also facilitating real-time vessel compliance, trip planning, logistics and performance monitoring. Today, technology is available and continues to develop to support activities such as vessel tracking (VMS, AIS); electronic logbooks; electronic monitoring for scientific data collection and compliance; smart systems for weighing fish at sea and quality control in fish wells and processing facilities; big data technologies for trip planning and monitoring; satellite buoy tracking and analytics; e-commerce platforms; and, supply chain traceability.

FISHERIES COOPERATION

US-Pacific Island Country Summit signals US reinvestment, yields joint declaration of cooperation

In September 2022, the Biden Administration hosted the first-ever US-Pacific Island Country Summit in Washington, DC. The US organised the event to demonstrate its commitment to partnership with Pacific island countries and engagement in the Pacific region, highlighting a goal of 'broadening and deepening cooperation on key issues such as climate change, pandemic response, economic recovery, maritime security, environmental protection, and advancing a free and open Indo-Pacific'.³ The Biden Administration extended the Summit invitation to all Pacific Islands Forum members, and in the end, the event brought together many Pacific Island leaders and other observers to discuss areas of shared interest.

The event came in tandem with the White House release of its (also) first-ever Pacific Partnership Strategy.⁴ This new strategy highlights the importance of the region to the US; acknowledges that the US has not been sufficiently engaged in the region; and, formally connects PICs to the larger US Indo-Pacific Strategy.⁵ It emphasises its renewed commitment to conclude negotiations on elements of the Compact agreements and on the South Pacific Tuna Treaty Annex amendments and associated Economic Assistance Agreement for 2023 and beyond. The strategy also sets a broader frame for US interests in the region as a whole; this signals an intent for the US to move beyond its traditional focus on the North Pacific region, including by building US diplomatic capacity throughout the region. Climate change and economic development are additional key pillars of the Strategy.

**Private sector
and NGO
initiatives
are driving
improvements
on human and
labour rights in
the tuna sector;
governments
are lagging**

Commentators noted that while the US' list of commitments is significant, there are challenges to consistent US focus on the Pacific: US government expertise on the region is low, and in an environment of scarce resources and competing priorities, the ability to secure funding for the initiatives – which will require Congressional approval – will be a constant challenge.⁶ Others noted that proposed activities are to be conducted by US or international agencies, rather than Pacific ones, and warn against the potential for US-led initiatives – such as the Blue Pacific consortium – to undercut Pacific regional architecture.⁷ Further, while China was not mentioned in the Summit and related documentation, China-US competition continues to loom large in the geopolitical moment and will remain a driving force in meeting commitments.

In the end, the Summit yielded an eleven-point joint declaration signed by all those attending the summit. The Declaration, while light on concrete details, lays out a framework for growing cooperation among the signatories and a new era of US-Pacific relations around the following themes:⁸

1. Strengthening partnership
2. Bolstering Pacific regionalism
3. Tackling the climate crisis together as a priority
4. Enhancing cooperation to advance economic growth and sustainable development in the Pacific
5. Supporting each other to better prepare and respond to natural disasters
6. Protect the Blue Pacific and enhance the laws that govern it
7. Maintain peace and security across the Blue Pacific Continent
8. Continuing cooperation in addressing COVID-19 concerns and other health-related issues
9. Expanding opportunities for all our peoples
10. Reaffirm commitment to comprehensively address the legacies of conflict and the promotion of nuclear non-proliferation
11. Way forward and future implementation of the Partnership

FISHERIES TRADE

UK launches new Developing Countries Trade Scheme to replace EU GSP

As part of its post-Brexit independent trade policy, the UK has reformed its national variant of the Generalised System of Preferences (GSP) and is calling it the 'UK Developing Countries Trade Scheme' (DCTS).⁹ The DCTS will come into effect in early 2023.

The DCTS replaces the UK GSP and other interim UK measures, which were largely in continuity with the EU GSP. In doing so, the UK has made some important changes to the details, but it has kept the three-tier structure of the EU GSP as follows:

1. UK Standard Preferences mirror the EU's standard GSP and this remains the least commercially significant preference scheme, offering duty-free access for 33% of products and a partial reduction in duties for another third.

The Pacific Partnership Strategy emphasizes US commitment to the South Pacific Tuna Treaty, Compact negotiations and capacity building in the region

2. The Comprehensive Preferences for Least Developed Countries (LDCs) mirrors the EU's Everything But Arms (EBA) initiative, continuing to provide duty-free and quota-free market access to LDCs for *all* products, bar armaments and ammunition.
3. The UK's Enhanced Regime (ER) mirrors the EU GSP+ in offering duty-free access for 85% of products (which is more than the GSP+) to 18 countries or territories classified by the World Bank as low income (LIC) and lower-middle income (LMIC).¹⁰

There are a number of changes to the details of the schemes. The most important of direct relevance to Pacific Islands is that the Enhanced Regime only requires that beneficiaries comply with the vulnerability criteria. This strips out the EU GSP+ conditionality requiring ratification and effective implementation of 27 international conventions on good governance, human and labour rights and the environment, which was difficult for a number of countries to do because of the implementation costs. The focus of this reform was largely Africa, where a number of non-LDCs are now set to benefit from duty-free access to the UK, including Algeria, Nigeria and the Republic of Congo, as well as Angola and Bangladesh when they graduate LDC status in 2024 and 2026, respectively.¹¹ However, because of the increased availability of preferential access, this move is likely to represent preference erosion for some countries.

The other big change is to rules of origin. LDCs are now able to use 75% non-domestic context in about half of the chapters and they can cumulate with the EU, other DCTS beneficiaries and signatories of the UK's various Economic Partnership Agreements (which were rolled over from the EU). However, it does not allow for cumulation with countries with FTAs with the UK which is a particular problem in the African context because Egypt, Morocco and Tunisia all have FTAs and are integrated to varying degrees with economies in sub-Saharan Africa.¹²

Other changes of note include:

- Tariffs are removed for a number of products sensitive to EU producers such as dairy products, olive oil and tomatoes.¹³
- 'Nuisance tariffs' of lower than 2% have been removed which makes a lot of sense given the unnecessary costs to all parties of implementation

Product-specific rules of origin for canned tuna under the Enhanced Regime are not yet clear and will be reported on in a future issue of *TIN*.

FISHERIES MANAGEMENT

FFA members proactive on harvest strategies ahead of WCPFC19

One of the priority items for FFA's 17 members at the upcoming 19th Annual Session of the Western and Central Pacific Fisheries Commission (WCPFC19) is progressing the development and adoption of harvest strategies for key fisheries and stocks in the Western and Central Pacific Ocean (WCPO). A harvest strategy (also referred to as a management procedure (MP)) is a framework that specifies pre-determined management actions for a fishery or stock necessary to achieve agreed management objectives and respond to changes in stock status. Harvest strategies represent best-practice in fisheries management as decisions relating to fisheries or stocks are more consistent, predictable and transparent.¹⁴ FFA members will present two harvest strategy-related proposals to WCPFC19 for potential adoption.

UK structures new GSP schemes to mirror the EU, but radically simplifies GSP+ and relaxes rules of origin



The first is a draft Conservation and Management Measure (CMM) for an interim management procedure for skipjack tuna in the WCPO. The MP's objective is to ensure that the spawning biomass depletion ratio of skipjack tuna is maintained on average in the long-term at around the target reference point (TRP) (50% of unfished spawning biomass) and above the limit reference point (LRP) (20% unfished spawning biomass), with no greater than 20% risk of the LRP being breached. The MP would be applied in a repeating three-year cycle with the first two cycles treated as a trial; it covers catch and effort of purse seine, pole-and line and other commercial fisheries in EEZs and high seas.¹⁵ If the proposed CMM is adopted, this will strengthen scoring for MSC certifications on target tuna stocks (Principle 1), as client fisheries will be able to demonstrate that there is an available harvest strategy for a key tuna stock. It will also help to inform the development of management procedures for the remaining key tuna stocks. In recent years, WCPFC members have demonstrated a general willingness to progress harvest strategy development and adoption for key stocks. However, progress has been slow given the complexity of harvest strategy development and capacity limitations of some members; the suspension of in-person meetings due to COVID-19 travel restrictions has also hampered progress. According to FFA members, "Not only will the adoption of this MP take better account of uncertainty, including the uncertainties of related to climate change, it will also be an important step in ensuring the effective management and sustainable use of the stock, and meeting the interests of global markets in sourcing sustainable tuna products."¹⁶

FFA members have also proposed to amend *CMM 2014-06 - Establishing a Harvest Strategy for Key Fisheries and Stocks in the Western and Central Pacific Ocean* to include a new paragraph that explicitly states that ".....the Commission shall adopt harvest control rules (HCRs) for skipjack, yellowfin, bigeye and South Pacific albacore tunas before the stocks decline below levels capable of producing maximum sustainable yield (MSY)". This amendment stems from a condition in the Marine Stewardship Council's (MSC) fisheries certification standard (MSC SA2.5.3b) that "an agreement or framework is in place that requires the management body to adopt HCRs before the stock declines below B_{MSY} ". Recently, the Independent Adjudicator (IA) assigned to an objection to PNA's scope extension to add bigeye (and FADs) to its MSC-certified skipjack and yellowfin free-school purse seine fishery ruled that this condition has not been met by WCPFC. Hence, on the basis of the IA's decision, PNA's bigeye scope extension was not successful. While MSC and the IA maintain that there is no system of 'precedent' in the MSC objection process, it is possible that the IA's decision will be treated as 'new information' by MSC conformity assessment bodies (CABs), potentially impacting future assessments and surveillance audits. Further, outcomes of MSC assessments for target stock requirements (Principle 1) are harmonised across different fisheries.¹⁷ Currently, in the WCPO, there are 33 MSC-certified fisheries from 18 different fishing nations, accounting for 75% of tuna catch in the WCPO.¹⁸ Hence, FFA members' proposed amendment to CMM 2014-06 is likely to be widely supported as it will benefit all WCPFC members with MSC-certified tuna fisheries in the WCPO.

FAO launches report on fisheries access arrangements

The FAO has published a report in October 2022 on fisheries access arrangements.¹⁹ Led by Liam Campling and Elizabeth Havice, a team of nine researchers working on fisheries in different regions together mapped the diversity of arrangements that industrial fishing fleets use to gain access to fishing opportunities in coastal EEZs. The initial findings were launched last year in a [FAO GLOBEFISH webinar](#) which summarises the report and considers a set of wide-ranging of questions from participants.

FFA members are proposing an interim management procedure for WCPO skipjack to WCPFC19 which aims to maintain stock depletion at around 50% of unfished spawning biomass

FFA members' proposed amendment to CMM 2014-06 on harvest strategies will benefit a large number of WCPFC members with MSC-certified tuna fisheries in the WCPO

The work focuses on the centrality of *firms* to access arrangements – not just the geopolitics of countries or flag states – and the distinctive resource-seeking access strategies of major distant-water fishing nations and distant-water fleets. Using eight case studies of ‘resource seekers’ – Japan, the EU, China, Taiwan, South Korea, the USA, Russia and the Philippines – the report categorises the diversity of access arrangements according to:

- ‘first-generation’ access arrangements allocating fishing opportunities in return for a financial payment, and which are negotiated agreements by (1) government-to-government, which can be bilateral (e.g. EU SFPAs) or plurilateral (e.g. the USA Treaty with the Pacific Islands); (2) industry association-to-government (used by East Asian fleets); and (3) firm-to-government (e.g. Philippines); and
- ‘second-generation’ access arrangements involving two broad mechanisms: (1) allocation of access and/or reduced licensing costs in return for the vessels registering locally, buying local goods and services, etc; and/or (2) onshore investment in processing facilities in return for fishing access (e.g. joint ventures, anticipated direct and indirect employment generation, spin-offs in terms of ancillary industries, etc).

The report then maps the approach to access arrangements used by a range of ‘resource holding’ developing countries – West Africa, Namibia, the Western Indian Ocean small island developing states, India, Myanmar, Latin America and the Pacific Islands.

The analysis reveals that each access arrangement is quite different, reflecting the ever-shifting combination of regulatory, commercial, and ecological conditions, and effects of historical and contemporary sectoral, institutional and political relations. Thus, while a number of best practices are identified – the PNA Vessel Day Scheme being one of them – the nature and outcomes of access agreements will ultimately be an empirical issue specific to each case.

For the Pacific Islands, three key lessons are very clear: (1) the power and significance of South-South cooperation cannot be underestimated and any attempts to erode that by outside interests should be resisted; (2) the success of the PNA’s purse seine VDS is not automatic and must be continually worked at to ensure that cooperation continues; and (3) attempts to seek to ‘rationalise’ the PNA VDS according to the latest fashions in academic thinking must be treated with caution.

FORCED LABOUR

US proposes a rule to add forced labour to IUU fishing definition

The US National Oceanic and Atmospheric Administration (NOAA) has proposed a new rule called *Implementation of Provisions of the Illegal, Unreported, and Unregulated Fishing Enforcement Act and Ensure Access to Pacific Fisheries Act*. The proposed rule, if issued, would implement certain provisions of two existing Acts: the *Illegal, Unreported, and Unregulated Fishing Enforcement Act of 2015* and the *Ensuring Access to Pacific Fisheries Act*, including the *Pacific Fisheries Act’s* authority to harmonize amendments to the *High Seas Driftnet Fishing Moratorium Protection Act*.

While the proposed rule has several elements, this overview focuses on the proposal to amend the definition of illegal, unreported, or unregulated (IUU) fishing in regulations that implement the *High Seas Driftnet Fishing Moratorium Protection Act*.²⁰ The

FAO study argues that access agreements should be understood as a struggle among states and firms for commercial interests



Moratorium Protection Act requires the Secretary of Commerce to identify and certify nations whose fishing vessels are engaged in illegal, unreported, or unregulated fishing, bycatch of protected living marine resources, or shark catch on the high seas without a regulatory program comparable to that of the U.S. A negative certification can result in denial of port privileges and import restrictions on fish or fish products, among other details (clarification of certification procedures and consequences of negative certification are also a part of the proposed rule). US Congress authorized the Secretary of Commerce to establish a definition of IUU fishing for the purposes of the Act and required the definition to include, among other elements, fishing activities that violate conservation and management measures required under international fishery management agreements to which the US is a party.

This proposed rule would add two new elements to the regulatory definition of IUU fishing for identifications and certifications under the Act. The first proposed element would be new paragraph in the definition of IUU fishing which would add fishing in waters under the jurisdiction of a nation, without the permission of that nation, or in contravention of its laws and regulations. The second proposed element would amend the definition of IUU fishing to include fishing activities **in waters beyond any national jurisdiction** that involve the use of forced labour. The proposed rule uses the definition of “forced labor” in Section 307 of the Tariff Act of 1930, with a few edits as follows: “all work or service which is exacted from any person under the menace of any penalty for its non-performance and for which the worker does not offer [themselves] voluntarily. For purposes of this subpart, forced labor includes forced child labor.”

NOAA’s required public comment period has recently closed, with mixed responses to the proposal.²¹ A review of comments illustrates that all stakeholders recognize the importance of revising the definition of IUU and addressing forced labour. However, stakeholders are split on their responses to the technical elements of the proposed rule changes. For instance, Bumble Bee, which Greenpeace has frequently targeted for labour concerns in its parent company FCF’s supply chain (see below), voiced opposition to the new proposal, arguing that forced labour and IUU fishing are distinct and thus require distinct solutions and approaches. Bumble Bee indicated that eliminating forced labour throughout the supply chain requires that measures taken by governments must apply to all vessels, regardless of where they fish (i.e. not only on the high seas as specified in the proposed revision).²² Bumble Bee specified that its preferred IUU definition is enshrined in the *Maritime Security and Fisheries Enforcement (SAFE) Act*, which does not require forced labour to be included in the definition of IUU fishing and pointed to NOAA’s CALM-CS initiative which focuses solely on forced labour throughout the global seafood supply chain.

For its part, industry association National Fisheries Institute supported the broadening of the IUU definition but cautioned that such an expansion could be used as a tool in international politics. It also voiced support for integrating forced labour into the IUU definition, but accompanied that support with a long list of technical and political challenges that NOAA will face in implementation.²³ In contrast, several eNGOs that issued a joint comment indicated support for expanding the IUU definition and strong support for including forced labour in the IUU definitions and regulations.²⁴ However, the eNGOs suggested that NOAA could go further to make the IUU revision applicable to a wider spatial extent and specifically that the integration of forced labour into the definition should not be limited to areas beyond national jurisdiction. Human rights organizations also voiced support for integrating forced labour into the IUU definition.

NOAA will consider comments as part of issuing a final rule. If issued, NOAA will provide a period for stakeholders to come into compliance. More broadly, the

NOAA has proposed a rule that would integrate forced labour into specific elements of its IUU regulations

Industry and NGOs alike urge attention to forced labour, but opinions differ on how IUU rules can be used to address the challenge

proposed rule raises several important issues that are relevant beyond the case at hand. It signals that definitions of IUU are multiple and also continue to evolve, even when defined or mobilized by a single entity (in this case, the US government). It points to the continued role of governments in the complex work of regulating human rights and labour conditions for workers in transboundary industries. It also highlights the attention and pressure to integrate anti-forced labour provisions into existing sustainable seafood mechanisms and requirements that continue to grow in number and complexity. While this is a case of a national government effort to do so, third party certification bodies such as MSC, as well as industry-led efforts, face the acute challenge of assessing the positioning of anti-forced labour provisions in their broader sustainability work programme.

Taiwan remains in the spotlight over labour abuses

The Taiwanese government and industry continue to face scrutiny over labour abuses in its fishing fleet. Greenpeace released a new report in September 2022 that accused FCF of sourcing from vessels that engage in or were suspected of IUU fishing, forced labour and human rights abuses. Taking aim at FCF-owned Bumble Bee brand, Greenpeace argued that its 'Trace My Catch' website displays incomplete and inaccurate information and that some of the vessels on the site have been flagged by the Taiwan Fisheries Agency for IUU fishing.²⁵ In addition, Taiwanese seafood products have been included in the US Department of Labour List of Goods produced by Child Labour or Forced Labour for the second consecutive year. This year's report maintains that there are reports of: forced work in Taiwan's distant water fleet; deception of immigrant workers; confiscation of identity documents upon boarding a vessel; up to 22-hour working days; and unsafe, degrading and unhygienic work conditions, among other ongoing problems.²⁶

Meanwhile, the US and Taiwan held a bilateral consultation on fishery labour rights and benefits in early September. The aim was for the two countries to exchange information and experience on safeguarding the labour rights of migrant fishers in particular. In association with that meeting, Taiwan reported that the government has approved the 'Action Plan for Fisheries and Human Rights', which entails seven implementation strategies. The Fisheries Agency said that it has taken several actions, including: raising the minimum wage from US\$450 to US\$550 per month; setting minimum daily rest hours in line with the ILO C188 Convention; increasing the limit of death insurance for fishing crews and providing pay-as-you-go medical insurance; and, strengthening qualifications and management of recruitment agents. In the consultation, the US emphasized that reducing the prevalence of forced labour is the key for Taiwan to be removed from the US's List of Goods produced by Child Labour or Forced Labour and encouraged the implementation of social protection programmes and establishments of migrant fisher unions, and improved monitoring of labour rights by the Taiwanese government.²⁷

This update comes as Pew Charitable Trusts, leading seafood firms, and a consortium of seafood industry partners (including SeaBOS, Global Tuna Alliance, The Global Dialogue on Seafood Traceability, Sea Pact and the Global Sustainable Seafood Initiative)²⁸ are calling for the UN Food and Agriculture Organisation to establish a mechanism to collect and store data on global fish accident and mortality rates. This call comes as a new study published by Pew estimates the number of fatalities in the fishing sector as higher than 100,000 deaths annually.²⁹ Previous estimates were around 30,000 deaths per year. Those calling for the FAO mechanism suggest that the problem of safety at sea is persistent and that creating robust data collection and analysis of accidents and loss of life on board fishing vessels globally is an important step in addressing it.³⁰

Taiwanese seafood products have been included in the US List of Goods Produced by Child Labour or Forced Labour for the second consecutive time

eNGOs are calling for the UNFAO to establish a tool for gathering data on fish accident and mortality rates

TUNA INDUSTRY

Opportunities in plant-based tuna substitutes attract large food conglomerates

Plant-based protein alternatives have increasingly gained wider acceptance in industrial countries, driven by those in the younger generations who are turning away from meat and dairy for ethical and health reasons, as well as the perceived negative ecological impacts of today's factory farms. As the market for plant-based meat expanded, the Financial Times declared in 2019 that "Plant-based fish is the new plant-based meat" and reported there were about 20 companies in the US developing plant-based seafood.³¹ Still, the market penetration of plant-based seafood analogues is still very small, estimated at only 0.1% of the retail dollar share amount of all seafood products in 2020.³²

Within the plant-based seafood segment, tuna's unique flavour and texture challenges companies to produce a viable and commercially acceptable product. Much of the research and development effort in Europe and North America was, and continues to be, focused on non-tuna substitutes for such items as crab, shrimp and minced fish products. However, some large companies appear to have the R&D budgets and expertise available to tackle plant-based tuna as a viable product.

At the other end of the chain, consumers in Europe (a major canned tuna market) appear to be focused on plant-based substitutes for fish products other than tuna. A survey cited in a presentation at the 2022 Infofish Tuna Conference described consumer desire for plant-based canned (i.e. tuna) products in supermarkets as lagging behind plant-based versions of smoked salmon, fish sticks, fish burgers, and unbreaded fish fillets. Plant-based sushi was even further down the list.³³

In spite of these and other challenges, several large food conglomerates with activities and products both within and outside the tuna industry are continuing to expand analogue tuna production and marketing efforts. Nestlé in Europe and Philippine-based Century Pacific Food all have significant efforts aimed at expanding markets for their plant-based tuna substitutes, while in the Netherlands Mitsubishi-owned Princes has recently launched a canned analogue tuna in water, oil, and picante sauce, forms that mimic the company's canned tuna line.³⁴

Nestlé has been involved with plant-based protein for some time and markets alternatives to burgers, mince, meatballs, sausages and chicken fillets. The firm reported a 40% spike in sales of plant-based and vegetarian food products in Europe in 2020 and subsequently launched a plant-based tuna analogue made from six ingredients, including pea protein.³⁵ The company's analogue tuna product has been dubbed by a Europe-based tuna industry expert as "the best contender to date" with a structure and appearance closest to tuna, and with better taste and wider consumer preference brought about by a high research and development budget.³⁶

In the Pacific, Century Pacific Food has entered the fray with its new product unveiled in 2021: unMEAT Fish-Free Tuna. The new product is the latest in a series of plant-based products under the unMEAT label that were first introduced in 2020. Century Pacific Food's foray into the plant-based food segment is an expansion of offerings from the company which, in addition to producing the leading canned tuna brands in the Philippines, manufactures various coconut, meat, and milk products for the domestic market as well as for export throughout SE Asia and elsewhere. The new analogue tuna product consists of plant-based products and non-GMO soy, natural oils and flavors. According to the company, the new product is already being

Replicating tuna's unique flavour and texture is proving challenging for companies trying to produce an acceptable plant-based product

Philippines' Century Pacific recently launched a plant-based tuna substitute

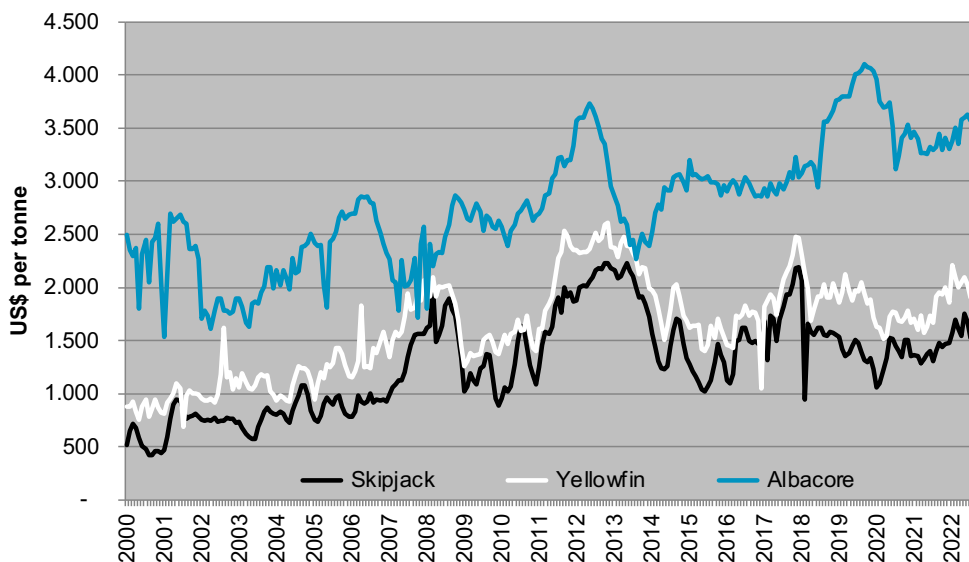


distributed to more than 500 retail outlets in the U.S., Singapore and the United Arab Emirates, where it is sold by the retailer Carrefour.³⁷ Most recently Century Pacific announced the placement of its plant-based unMEAT tuna in the Harris Teeter supermarket chain, which operates 261 stores in seven southern U.S. states.³⁸

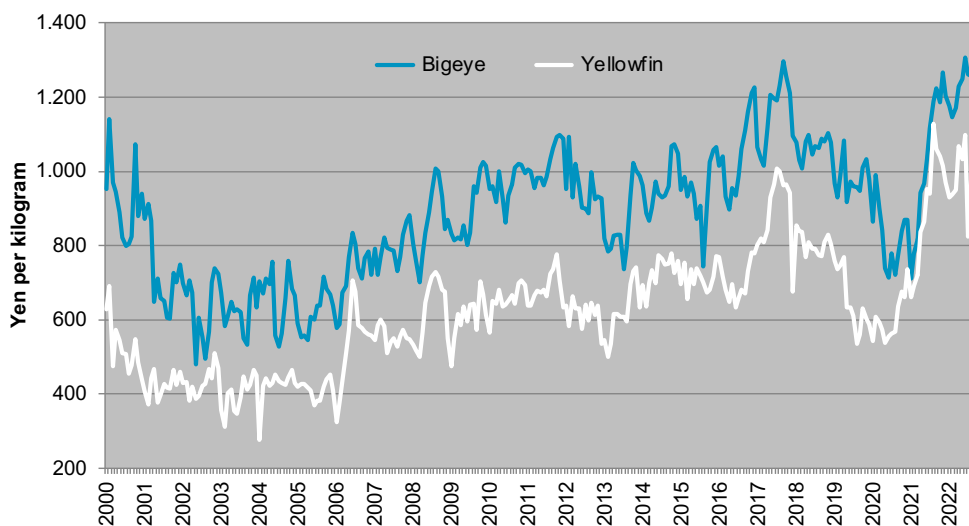
It remains to be seen if the market for plant-based tuna will expand sufficiently to retain the interest of those larger companies with diverse food manufacturing interests, or if those larger companies will dominate the sector. Several relatively small-scale companies that have been active in the production of plant protein fish substitutes have garnered significant financial backing in the last few years, and two in the U.S.: Gathered Foods and Above Food's Atlantic Natural Foods have had plant-based tuna substitute products on some store shelves for some time. Some parallels might be drawn with the US fuel ethanol industry where the largest producers such as Valero and Archer-Daniels-Midland are heavily involved in other aspects of the energy, biofeed, and chemical industries. In spite of the dominant positions of large companies, there is still a significant number of smaller independently-owned producers in operation.

TUNA PRICE TRENDS³⁹

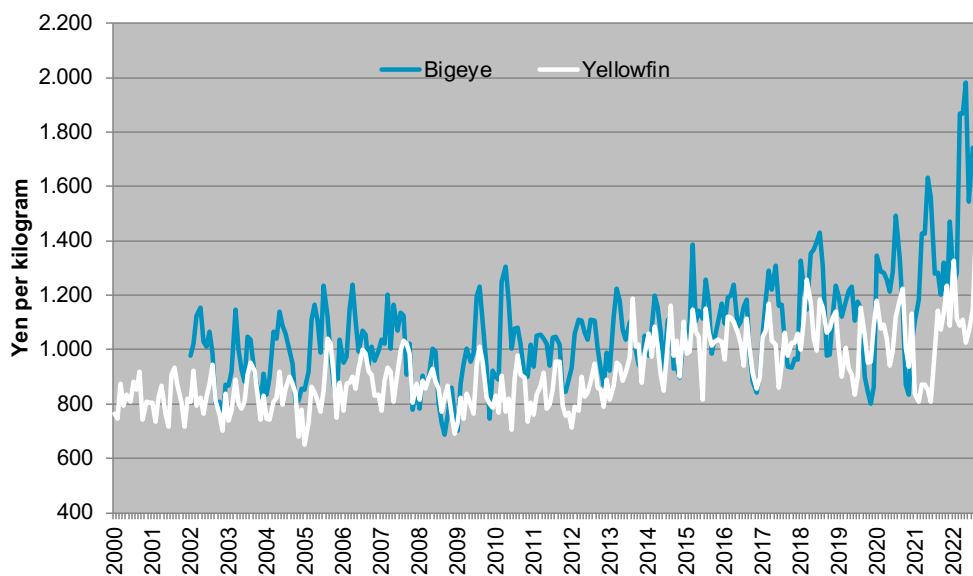
Bangkok canning-grade prices to October 2022⁴⁰



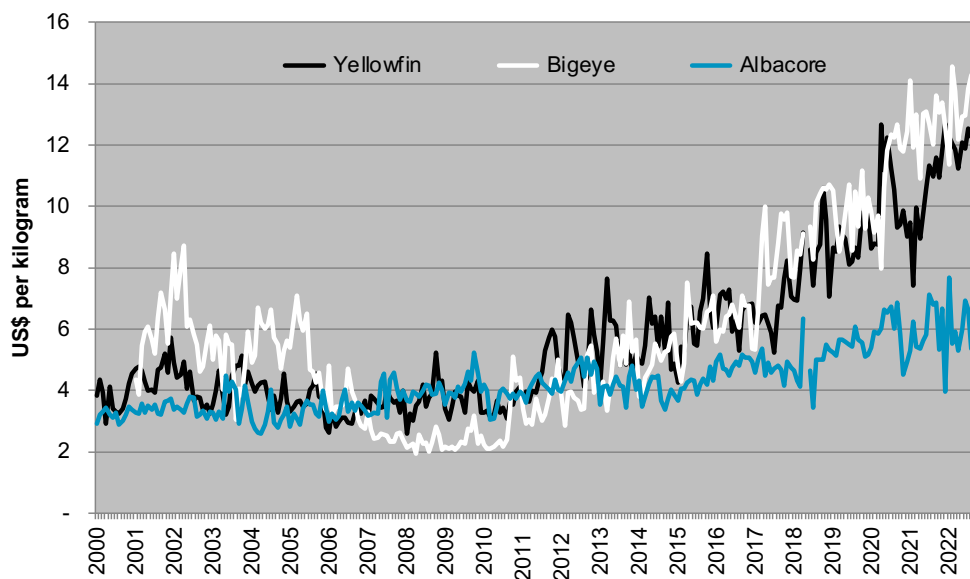
Japan frozen sashimi prices (ex-vessel, Japanese ports) to September 2022⁴¹



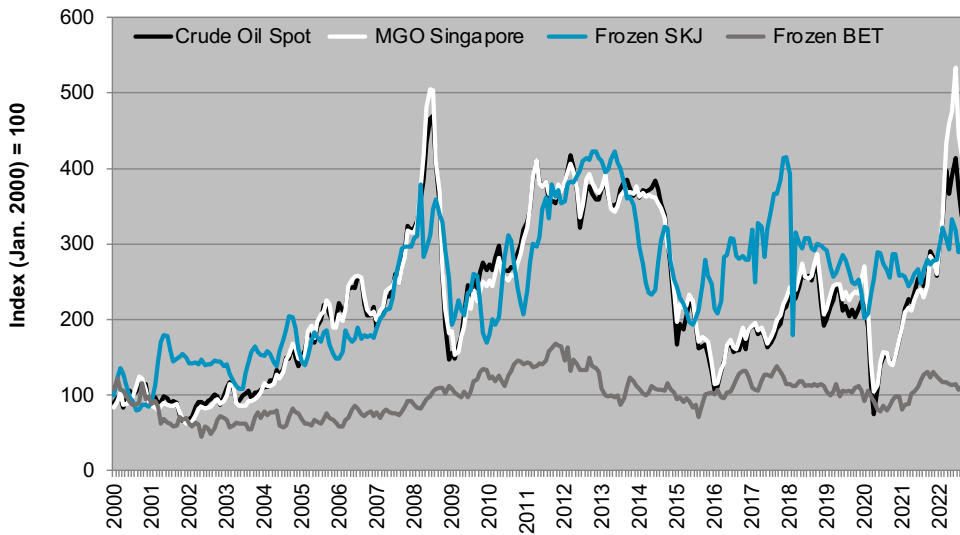
Japan fresh sashimi prices (origin Oceania) to September 2022⁴²



US imported fresh sashimi prices to September 2022⁴³



Crude oil, canning-grade frozen skipjack (SKJ) and frozen bigeye (BET) price index to October 2022⁴⁴



¹ 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.

² This article summarizes key points from numerous presentations delivered during the 17th Infofish World Tuna Trade Conference. The programme and list of presenters is available at: www.infofish.org. Individual presentations can be sourced directly from the Infofish Secretariat.

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⁴ The US State Department summary of the Summit is available here: <https://www.state.gov/u-s-pacific-islands-country-summit/>

⁵ FACT SHEET: President Biden Unveils First-Ever Pacific Partnership Strategy. *White House Briefing Room*, 29 September 2022. Available at: <http://www.whitehouse.gov>

⁶ Charles Edel 2022, 'White House Unveils Pacific Islands Strategy at Historic Summit', *Center for Strategic and International Studies*, 30 September. Available at: <http://www.csis.org>

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¹² Mendez-Parra 2022

¹³ Department for International Trade 2022, UK Developing Countries Trading Scheme (DCTS) tariff changes, UK Government, 16 August <https://www.gov.uk/government/publications/developing-countries-trading-scheme-dcts-new-policy-report>

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¹⁵ FFA Member CCMs 2022, Draft Conservation and Management Measure on a Management Procedure for WCPO Skipjack Tuna (WCPFC19-2022-DP04), 28 October. Available at: <https://www.wcpfc.int>

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¹⁷ FFA Member CCMs 2022, Proposed Amendment to CMM 2014-06 on Establishing a Harvest Strategy for Key Fisheries and Stocks in the Western and Central Pacific Ocean (WCPFC19-2022-DP06), 28 October. Available at: <https://www.wcpfc.int>

¹⁸ Dr. Rohan Currey 2022, 'MSC Certification and Tuna: Implications of the New MSC Fisheries Standard', MSC presentation, 12 October 2022, Bangkok.

¹⁹ FAO. 2022. *Mapping distant-water fisheries access arrangements*. FAO Fisheries and Aquaculture Circular No. 1252. Rome. <https://doi.org/10.4060/cc2545en>

²⁰ Proposed rule: Implementation of Provisions of the Illegal, Unreported, and Unregulated Fishing Enforcement Act and Ensure Access to Pacific Fisheries Act. Posted 8 July, 2022. Avail-

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²³ 'Comment from National Fisheries Institute', available here: <https://www.regulations.gov/docket/NOAA-NMFS-2016-0164/comments>

²⁴ 'Comment from WWF', available here: <https://www.regulations.gov/docket/NOAA-NMFS-2016-0164/comments>

²⁵ Greenpeace East Asia 2022. *Fake My Catch: The Unreliable Traceability in our Tuna Cans*, September. Available at: <http://www.greenpeace.org>

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³⁹ All databases are provided by the Fisheries Development Division at FFA.

⁴⁰ Customs Department, Thailand. http://www.customs.go.th/statistic_report.php?lang=en&show_search=1

⁴¹ FFA database

⁴² Japan Customs. https://www.customs.go.jp/toukei/info/index_e.htm

⁴³ US National Marine Fisheries Service. <https://foss.nmfs.noaa.gov/apexfos-s/f?p=215:2:10663896522198::NO>

⁴⁴ Y Charts: https://ycharts.com/indicators/average_crude_oil_spot_price; Ship & Bunker: <https://shipandbunker.com/prices/apac/sea/sq-sin-singapore#MGO>