



SPECIAL FEATURE

Highlights from 2018 Infofish World Tuna Conference¹

The 15th Infofish World Tuna Trade Conference & Exhibition, themed 'Braving Challenges: Towards a Traceable and Sustainable Tuna Industry', was held in Bangkok from 28-30 May 2018 and attended by over 600 delegates. Over 40 presentations were delivered during the three-day conference covering a range of topics related to global supply, industry updates, tuna trade and markets, market access, sustainability and technology. The keynote address was delivered by Mr. Luciano Pirovano, Bolton Foods' Sustainable Development Director and current Chairman of the International Seafood Sustainability Foundation (ISSF). Mr. Pirovano highlighted that one of the major threats to canned tuna is commoditization and consumer perception that it is an 'old-fashioned' product. Innovation and sustainability initiatives are key to combating these and other threats and creating value. Below is a summary of key points from some of the other presentations.

Global Supply Trends and Sustainability: In the last 20 years, key global trends include rising demand and growth in trade of fish and fishery products, an increase in aquaculture production and calls for effective and responsible fisheries management, trade and consumption. Of total global fisheries production in 2017 of 175 million mt, capture fisheries accounted for 92 million mt (53%). Global tuna production is around 5 million mt, representing 3% of total fisheries production and 6% of capture fisheries production. Indonesia remains the largest producer of tuna (around 900,000mt/year), followed by Japan (~350,000mt/year).

There has been progress across all four tuna RFMOs in improving the sustainability of global tuna stocks. However, efforts need to continue to be focussed on key areas including stock management; monitoring, control and surveillance (MCS); IUU fishing; FAD management; by-catch mitigation; harvest strategies and harvest control rules. In the WCPO, the latest stock assessment indicates an improvement in the health of bigeye. Hence, all four WCPO 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 number of tuna fisheries entering into Fisheries Improvement Projects (FIPs), with the intention of becoming certified as sustainable by the Marine Stewardship Council (MSC), is increasing. Currently, 20 tuna FIPs are registered with fisheryprogress.org.

Traditionally, the most powerful players in the tuna sector were RFMOs and vessel owners. However, in the past 10 years or so, power dynamics have changed with resource owners, NGOs and retailers having stronger influence. Stakeholders need to move from 'power games' in an often-segmented supply chain to the 'value game', where all stakeholders collaborate for the good of the entire sector. Momentum is already gathering for collaboration with numerous organisations from each segment of the supply chain and from every ocean region calling for, and making commitments to, change.

Of the 17 United Nations' Sustainable Development Goals (SDGs) adopted in 2015, there has only been one concrete tuna commitment involving large numbers of tuna industry players against SDG 14 (Life Below Water): Tuna 2020 Traceability Declaration: Stopping Illegal Tuna from Coming to Market. However, there are multiple other SDG's pertinent to the tuna industry where positive impacts have been made, but these initiatives have not been well-promoted and/or properly captured in the UN Ocean's website. Tailoring value chains to the SDG approach will assist companies in innovation, building strategic partnerships, securing finance and most importantly, developing sustainable supply chains.

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Canned tuna risks being perceived as a commodity and an 'old-fashioned' product

Industry Status: Thailand remains the world's largest canned tuna processor. However, the total volume of raw material (whole round/loins) imported in 2017 of 665,204mt represented an 11% decline on 2016 volumes (749,743mt). Notably, frozen cooked loin imports declined by 75% between 2015 and 2017 from 23,852mt to 5,887mt, although loin imports represent only a very small proportion of Thai raw material imports (1-3%). The top three raw material suppliers to Thailand in 2017 were Taiwan, USA and Korea. Total canned tuna and frozen loin exports (HS 1604.14) also experienced a 14% decline from 563,031mt in 2016 to 483,414mt in 2017. USA, Australia and Japan are the top three importing countries from Thailand. The Thai processing industry has been proactively implementing policies relating to food safety, IUU fishing, sustainability and ethical labour practices.

Mexico's tuna purse seine sector is comprised of 51 vessels catching on average 128,000mt per year; around 80% of which is yellowfin. After a four-year process, the fleet obtained MSC certification for yellowfin and skipjack which covers around 90% of fishing effort. The Mexican fleet's catch contributes significantly to the domestic processing industry's raw material requirement of 180,000mt/year. Mexico's current consumption is around 21 million cases/year and is projected to increase to 31 million/year by 2050. Mexican consumers' top preferences relating to canned tuna are: 1) flavour; 2) quality and 3) price. However, their preferences are starting to evolve to reflect lifestyle changes (i.e. health/nutrition, convenience, specialty packs), with brands/processors reflecting this in product innovation initiatives.

The Korean purse seine fleet remains stable at 28 vessels catching almost 280,000mt/year; around 160,000mt of which supplies domestic canners, with the rest exported to processors elsewhere. The longline fleet has declined to 136 vessels (from 148 in 2014) catching around 24,000mt for domestic consumption, as well as export to markets such as Japan and Europe. Both sectors face rising operational costs and limitations on capacity. Korean consumers are only just starting to become aware of resource sustainability issues. To date, their canned tuna purchasing decisions have been linked mostly to price, taste and food safety.

Tuna Trade and Markets: In the US market, total US retail seafood sales reached \$11.9 billion in 2017 representing over 20% growth since 2011. Of the US frozen seafood sector, shrimp accounts for around 50% of sales. By contrast, tuna accounts for less than 2% which presents a huge growth opportunity – since 2011, the frozen tuna sales value has nearly doubled to \$37.4 million, albeit from a low base. By contrast, canned tuna represents nearly 75% of the US' shelf-stable seafood category sales (29% canned light meat; 27% canned white meat; 13% pouch; 4% lunch kits). Starkist remains the US canned tuna brand leader accounting for 42% of category sales, followed by Bumble Bee (25%) and Chicken of the Sea (15%). While US household expenditure on canned tuna has decreased four percentage points over the past five years, expenditure on tuna pouches and ready-to-eat meal kits has increased.

The EU's canned tuna consumption was around 745,000mt in 2017 (whole round equivalent), a 3% increase from 2016. Around 400,000mt is imported into the EU from multiple sources – the most significant being Ecuador, Seychelles, Mauritius and the Philippines. The EU's processing sector also produces around 360,000mt, mostly in Spain (67%) and Italy (21%) and smaller volumes in Portugal and France. EU consumers are demonstrating growing preferences for tuna products which are sustainably-caught. They are also increasingly becoming focussed, like some other markets, on health and wellness, convenience, specialty/niche products and innovative packaging. To meet these preferences, increase competitiveness and lose the image of canned tuna being a commodity, the EU's canned tuna industry is

Tuna power dynamics have changed – resource owners, NGOs and retailers now have stronger influence

Consumer preferences for canned tuna are evolving to reflect lifestyle changes – health/nutrition, convenience and niche/specialty products

strategically focussing on product and processing innovation, environmental and social sustainability, traceability and food safety.

The Middle East and North Africa canned tuna market has contracted by 20% (US \$800 million) due to a range of social, political and economic challenges including increased raw material prices, exchange rate devaluation resulting in price increases in North Africa, credit tightening in Arab countries after the oil price collapse and the associated outflux of expats. The main markets remain Libya, Egypt, Saudi Arabia and United Arab Emirates. There is growing interest in international canned tuna brands – Bolton’s Rio Mare and MW Brands’ John West are creating a niche. Opportunities also exist for catering-sized products, pouch tuna, pet food and ready to serve sushi.

The Latin American tuna industry will be reshaped in the next five years by post-Trans Pacific Partnership alliances, together with free trade and anti-populism policies. Average economic growth across the Latin American countries is 3% with low inflation rates (although countries on the Pacific side of Latin America are predicted to grow more quickly than the Atlantic side). It is anticipated that the middle class will become 50% of the total population, surpassing the lower class which presents an opportunity for growth in tuna consumption. Latin America produces 25% of canned tuna globally and consumes 15%. Ecuador remains Latin America’s largest processor and the second largest in the world processing around 280,000mt/year; however, its dominance will be challenged by SE Asian tuna processors as trade barriers are removed. Key consumer trends include demand for higher quality (i.e. less flakes, more solid packs) and value-added convenience products (i.e. salads).

In Asia, Japan’s market for fresh and frozen sashimi-grade tuna is declining. In the last ten years, sales volumes at Tsukiji market have dropped 30% and sales value by 17%. However, canned tuna imports into Japan have increased. Overall, canned tuna consumption in the SE Asian region remains low, with consumers having a strong preference for fresh/frozen, not shelf-stable seafood.

Market Access: Currently, less than 1% of global fish catches are covered under multilateral catch documentation schemes (CDS). However, well-designed multilateral CDS have the potential to seriously tackle IUU fishing at a global level. To date, there are two multilateral (RFMO) level CDS for tuna – ICCAT and CCBST and two unilateral (market-based) CDS implemented by the EU (under the EU-IUU Fishing Regulation) and the US (Seafood Import Monitoring Program). RFMO-operated multilateral CDS are recommended by FAO and WTO rather than unilateral CDS, as they cover all fish caught within an RFMO’s jurisdiction moving through all ports, processing and end market states, whereas a unilateral CDS covers fish from many fisheries entering a single market state. Unlike a unilateral CDS, a multilateral CDS is also underpinned by a central registry and enables the tracking of fish from harvest forwards along the supply chain, which facilitates strong enforcement and can also be a useful fisheries management tool. At present, under its IUU Fishing Regulation, the EU is working on transitioning from paper-based to electronic catch certificates and processing statements which will be linked with TRACES, the EU’s electronic food safety platform for issuing health certificates.

Sustainability, Environment and Eco-Labeling: Tuna industry players are faced with growing transparency requirements from customers, financiers, insurers, certifiers and governments from the point of capture through the supply chain to demonstrate that catches are legal and environmentally sustainable. In addition, in recent years there has been an emerging and growing focus on social accountability. This is starting to drive pre-competitive industry collaboration. Prominent tuna players such

The US and EU markets for canned tuna are relatively stable, while the Middle East and North African market has contracted by 20%

as Thai Union, Bolton and Tri Marine are working together, in cooperation with NGOs, on initiatives such as ISSF, FIPs, the Seafood Task Force (addressing labour issues in fishing/processing) and the Global Ghost Gear initiative (aimed at reducing plastic waste in oceans). The primary markets for tuna (ie. US, EU, Australia) are increasingly focusing on sustainability, particularly ISSF compliance, engagement in FIPs, social compliance and sustainable fishing options (i.e. FAD-free, pole-and-line, MSC, Fair Trade, FFF, P&L, MSC). Secondary markets are smaller and less lucrative (i.e. Middle East) and typically only need import requirements and production specifications to be met. However, there are potentially hidden issues creating liability for buyers (e.g. purchasing IUU fish).

Recent Innovations and Trends in Technology: Service providers such as Satlink and Inmarsat have been continuing to develop technical solutions for fishing vessels to support traceability, enforcement (i.e. VMS), safety at sea, communications, geofencing and onboard monitoring (i.e. working conditions on board, security, catch reporting, FAD management etc.). Global shipping company, Maersk, has developed a solution for remote container management, whereby the location and temperature of reefer containers can be monitored in real-time. They are also partnering with IBM to develop a blockchain traceability solution for the shipping industry. The US Oceans program has been developing and trialling electronic catch documentation and traceability (CDT) systems for South East Asian fisheries to ensure catches are legal and traceable. Notably, they have developed several supply chain solutions for small-scale fisheries (covering vessels, landing sites, processors) which have been trialled in Indonesia and Philippines, two countries with very large numbers of small-scale, artisanal tuna vessels, for eventual roll-out across ASEAN.

PREFERENTIAL TRADE

Solomon Islands set to graduate from LDC status, threatening duty-free access to EU for tuna loins

Every three years the United Nations Committee for Development Policy (CDP) reviews data on countries designated as 'Least Developed' (LDCs). The 2018 review recommended the Solomon Islands for 'graduation' from LDC status (see below on how this is measured and its problems).² Typically, LDC graduation takes place three years after the UN General Assembly takes note of the CDP recommendation, which means that in 2021 the Solomon Islands will lose benefits associated with LDC status including duty free access to EU markets for canned tuna and tuna loins under the Everything But Arms Initiative (EBA). This threatens direct onshore employment at SolTuna of 2,350 people (67% women) bringing in annual employment earnings of around US\$12 million into the economy.³ A conservative multiplier effect for indirect and induced employment would push this to at least ~7,000 jobs and a more optimistic one would suggest over 13,000.⁴

Given the importance of the tuna processing industry to the Solomon Islands, the Commonwealth Secretariat undertook an analysis of the 'competitiveness challenges' of graduation for Solomon Islands' position in the global value chain in tuna.⁵

LDC status is calculated based upon three measures:⁶

1. Gross National Income (GNI) per capita, which is taken from national accounts data and converted into US dollars;
2. the Human Assets Index (HAI) which is a composite index of human health and education (i.e. under-five and maternal mortality rates, percentage of population undernourished, secondary school enrolment and adult literacy); and,

Prominent tuna players are engaging in pre-competitive collaboration on sustainability and social initiatives

Solomon Islands' graduation from Least-Developed Country status will result in loss of duty free access to EU markets for canned tuna and loins

3. the Economic Vulnerability Index (EVI), composed of eight indicators including population size, remoteness, export concentration, share of primary sector in GDP (agriculture, fisheries and forestry), and vulnerability to trade shocks and environmental change and disasters.

For GNI and HAI, the Solomon Islands was above the eligibility threshold in the UN Committee for Development Policy's 2015 review. Graduation thresholds are between 10 and 20% higher than those for initial inclusion in the LDC category so as to ensure that 'graduation is sustainable'.⁷

The 'graduation' process is not uncontentious. Small island developing states (SIDS) in particular often have overinflated measures of 'development' because of their smallness, and the measures do not sufficiently weight the economic consequences of often extreme geographical isolation.⁸ For example, in relation to GNI per capita the presence of the Regional Assistance Mission to Solomon Islands (RAMSI) has likely inflated income statistics; as has the distributional dimensions of the main industries in the economy, which are predominantly extractive and tend to concentrate wealth in the hands of a few. In regard to 'Human Assets', the quantity of secondary school enrolment has improved in the Solomon Islands but there are questions over whether education is translating into more skilled jobs in the economy.

Moreover, the UN's LDC Identification Criteria and Indicators do not take account of counter-factuals should a country graduate, especially in relation to Economic Vulnerability. In the case of the Solomon Islands, the loss of the duty-free access to the EU market may undermine the government's attempt to slow down logging (which peaked in 2016) and engage in reforestation. The lack of export-oriented economic diversification means that alternative employment-generating and foreign exchange earning industries are far from obvious. Further, can a purely economic 'value' be properly placed on the loss of huge swathes of a country with sea level rise?

Three alternatives exist to access the EU market should the Solomon Islands lose EBA status:

1. Switch to the EU's standard Generalisation System of Preferences (GSP), which reduces the tariff on canned tuna and loins from 24% to 21.5%. However, tuna buyers surveyed for the Commonwealth study all emphasised that without the duty-free access to the EU market, Soltuna would inevitably become uncompetitive.
2. Sign on to the Interim Economic Partnership Agreement (IEPA) alongside Fiji and PNG that provides duty free market access and 'global sourcing' rules of origin, which would significantly extend the range of raw material sourcing for EU-centred tuna processing in the Solomon Islands. There are, however, issues relating to sequencing between the IEPA and the PACER Plus between Australia and New Zealand and 9 PICs, which the Solomon Islands signed in June 2017. A major stumbling block is the MFN clause in both Agreements, which means that the Solomon Islands would have to offer the same tariff preferences to both sets of parties. Given that the pattern of trade between trading partners in the IEPA and PACER+ are very different and the two sets of partners offer different liberalisation periods, the liberalisation schedules are likely to widely differ. This implies additional tariff revenue loss to the Solomon Islands as a result of MFN clauses being triggered.
3. Apply to the EU's GSP+, which gives duty free access to economically vulnerable countries in return for them ratifying and implementing 27

international conventions on good governance, sustainability and human rights. If these are all in place, it is estimated to take up to 10 months for an application to the EU to be processed and agreed. The issue here for the Solomon Islands appears to be capacity challenges in the ratification and full implementation of the GSP+ commitments. Further, in its current form, the GSP+ runs until 2023, at which point further reforms may shift the goal posts.

In sum, there is no cost-neutral alternative for the Solomon Islands in terms of post-LDC access to the EU. One avenue is to explore ways to counter or slow down the graduation process (see below).

Given the evidential negative impact of graduation, the Solomon Islands could request the EU to extend its market access under the EBA, with a minimum of at least three years extension typically granted by the EU. It is also hope that the independent membership of the Committee may take on board the specificities of SIDS like the Solomon Islands. Further, the Solomon Islands is eligible to continue to receive support under the WTO's Enhanced Integrated Framework (EIF) facility for up to five years following LDC graduation; this fund could continue to be used to invest in diversified export industries, such as a new project frozen cassava and taro.

FISHERIES MANAGEMENT

[PNA announces a blockchain initiative for Pacific fishery; traceability initiatives flourish](#)

The PNA group have announced that they will launch a blockchain initiative covering all MSC-certified, Pacific branded, sustainable skipjack tuna – and that the programme will be in place by the end of July 2018. The move positions the Pacific as a pioneer of the first large-scale blockchain initiative focusing on sustainable fisheries. Pacific is launching the platform in cooperation with Thai-based blockchain service provider, Atato. It will be powered by Ethereum, a decentralised platform that runs what it calls 'smart contracts', or applications that run exactly as programmed without any possibility of downtime, censorship, fraud, or third-party interference. Each application runs on a custom-built blockchain that offers a shared global infrastructure that can move information around and represent property ownership.⁹

A blockchain differs from traditional server architecture, offering the opportunity to share complex data sets among disparate user types around the world. In the traditional architecture, every application has to set up its own servers that run their own code, which can make sharing data – for example that would link vessel registration and product end market – difficult, including because if a single application is compromised or goes offline, many users can be affected. In a blockchain, anyone can set up a 'node' that replicates the necessary data for all nodes, which allows applications to be decentralized. The PNA's block chain initiative will use IPFS (interplanetary File System) decentralised storage. IPFS describes itself as a 'peer-to-peer hypermedia protocol to make the web faster, safer, and more open'.¹⁰ It is a tool that enables the distribution of high volumes of data with high efficiency; in a blockchain, IPFS makes immutable, permanent IPFS links into blockchain transactions. This process timestamps and secures content, without having to put the data on the chain itself.

Alternative duty free options for Solomon Islands are IEPA and GSP+

The PNA is pioneering blockchain traceability in large scale fisheries with its Pacific products



The PNA's blockchain will cover the entire supply chain and chain of custody. Pacific has indicated that more than 200 million consumer units of Pacific tuna in over 23 countries annually will be traced and verified through the Ethereum public blockchain. The public nature of the blockchain is designed to give organisations and individuals the capacity to verify live how the tuna was caught, by which captain, in which vessel, area and periods as well as where and when it was processed.¹¹ The system will cover over 100 purse seine vessels and each product will have a unique tracking code.

This announcement follows from news of a blockchain trial being initiated in Fiji, with support from WWF-New Zealand.¹² The focus of the Fiji block chain project is on identifying illegal fishing and human rights abuses in the industry – with a focus on using digital technology in the fresh and frozen tuna sectors of the WCPO region to strengthen supply chain management.¹³ As traceability projects appear to be flourishing, the Spanish tuna fleet has proposed its own traceability standard for EU-wide use, following from its commitment at the World Economic Forum to full traceability by 2020. These projects, alongside traceability protocols required for access to several major markets (e.g. SIMP in the US, IUU verification in the EU) signal a flourishing of public and private traceability systems that are emerging in the market place. This trend might mirror the proliferation of sustainable seafood certifications that on the one hand have been lauded for drawing attention to, and improving, environmental conditions in fisheries, but on the other, have been criticised for leading to consumer confusion and costly compliance processes throughout seafood supply chains.¹⁴

Economic overfishing in the South Pacific Longline Fishery

Prior to the development of Pacific Island domestic longline fleets targeting albacore, vessels delivering albacore to bases in American Samoa, Vanuatu, and Fiji for cannery use were from the distant water fishing nations of Japan, South Korea, and Taiwan. As stagnant prices and increased costs limited opportunities for profitability, fleets from each of these countries exited the fishery and re-tooled to concentrate on bigeye and yellowfin. The first to switch out of the South Pacific albacore longline fishery was Japan, followed by Korea. Taiwanese vessels remained, but many operators developed vessels capable of targeting both albacore for canning and bigeye/yellowfin for sashimi. The use of Taiwanese vessels capable of freezing and holding of the catch at low temperature (-35°) or ultra-low temperature (-60°), combined with high seas transshipping, provides an edge over constant direct deliveries to onshore facilities. These Taiwanese vessels adjust their operations based on market conditions, fishing seasonality and fishery access conditions. A shrinking number of large-scale Taiwanese vessels continue to target albacore but spend most of their time in high seas areas. As a later entrant, China's vessels also target albacore, some do so seasonally with vessels also capable of low or ultra-low temperature that can also target bigeye/yellowfin. A continuing advantage of Chinese vessels are certain operating subsidies obtained from their government.¹⁵

In the past few years there has been increased recognition that the major problems currently confronting the South Pacific longline fishery that targets albacore are primarily economic rather than biological. Based on the 2015 SPC stock assessment and the level of uncertainty included within the projection analysis, there is a 20 percent chance that the South Pacific albacore stock will fall below the WCPFC limit reference point by 2033 if recent fishing effort levels continue.

Traceability initiatives are flourishing as tools to address environmental and social challenges in fisheries

The major problems of the South Pacific longline fleet are economic rather than biologically-based

The SPC's Dr. John Hampton has noted that the current stock level is estimated to be about 40 percent of what the stock would be if there had never been any fishing. Hampton described the current management aims to keep the South Pacific albacore stock stable at current levels and notes albacore is sustainable as a stock in the long term. He added that any increase in the size of the stock will require a reduction in catch.¹⁶ This will not be easy to achieve, as albacore longline catch reduction continues to be a difficult issue on which to find agreement at WCPFC.

Comments by Chris Reid, FFA's Chief Economist, in a recent interview describes in greater detail the factors leading to the current economic condition of the fishery.¹⁷ Reid notes that while there are always ups and downs in any fishery, the last five years or so have resulted in poor returns to fishers. Using historical data, Reid describes a good year today in economic terms as being what an average year looked like a decade ago, and an average year today being like a poor year then. A downward trend is evident, replacing a more normal variability between good seasons and bad. Contributing to this situation have been both higher costs and lower catch per unit of effort.

Pointing to information contained in FFA's recent report on economic and development indicators,¹⁸ Reid says that catch rates for the longline fishery south of 10°S within the WCPFC Convention Area since 2011 have been consistently lower than the average. Reid's analysis shows that although the stock is in a biologically healthy state, the problem is "economic overfishing". The fishery catches primarily older, larger fish and reduced CPUE from this segment causes economic returns to diminish.

It should be pointed out that the 2017 WCPFC Scientific Committee meeting (SC13) recommended that pending a new albacore assessment in 2018, its recommendations from the two previous meetings be maintained that "longline fishing mortality and longline catch be reduced...so that economically viable catch rates can be maintained."¹⁹

A reduction in fishing effort could enable an increase in catch rates of larger fish, but from a political standpoint this is difficult to sell when the scientific stock assessment shows over-fishing is not occurring, according to Reid.

The economics of the fishery are seen to be adversely affecting domestic fleets more than foreign fleets at the current time. Reid attributes this to the higher cost structure of the former, a lack of subsidies, and their lessened ability to move elsewhere beyond their domestic fishing zones and/or switch targets. He points out that whereas fleets in Fiji, Samoa and American Samoa have all tied up at various times with reports of some operators trying to sell out, Chinese and Taiwanese vessels have continued to fish even though world prices have not significantly increased in the last decade.

This is not to say that domestic vessels appear totally doomed, as some have pursued MSC certification and are taking advantage of markets other than that for canning. John Hampton also points out that there are two domestic fleets in the region, New Caledonia and French Polynesia, that are able to take advantage of higher prices in domestic markets. But Reid cautions that a continued drop in CPUE caused by fishing effort at current levels coupled with higher operating costs spell disaster for domestic vessels in the near future unless management steps are taken to reverse current trend. One such step in the right direction is the recognition of the importance of including economics in the decision-making process so that target reference points for albacore are made not just on a biological basis.

**Domestic fleets
are currently
adversely
affected more
than foreign
fleets**

TUNA INDUSTRY

Walmart and Chicken of the Sea settle on price fixing, opens opportunity for Pacific product in USA

Walmart and Chicken of the Sea have settled over the US price fixing scandal.²⁰ The agreement includes a cash settlement and a joint programme to launch products in Walmart's stores. A COSI press release stated: "With Walmart, we will offer our shared customers the healthy sustainably-sourced seafood products they expect from us. We are also excited about a number of consumer-driven innovations in the pipeline".²¹

In parallel, Thai Union has stepped up its processing of co-branded Pacifical canned tuna both for clients, including for Northern European supermarkets such as Irma in Denmark, and in the USA in February 2018 under its niche Genova brand.²² Huge room for growth remains.

In this context, Thai Union's US subsidiary is well placed to provide Walmart with MSC Pacifical product, potentially allowing America's largest supermarket to meet its 2017 commitment to procure 'sustainable' canned tuna by 2025, by which it means MSC (or comparable certification) or 'actively working toward certification or in a Fishery Improvement Project (FIP)'.²³ This is certainly the hope of the PNA Office, which has recently hosted Walmart representatives visiting the region.²⁴ Walmart has declined to comment to the US press on the specifics.²⁵

But Walmart's civil lawsuit was one of another 64, which may translate into other cases needing to be settled at an expected 2020 trial. Further, Thai Union was previously being treated legally separately by Walmart's lawyers and may also face ongoing civil legal action.²⁶ Thai Union has set aside between USD 20 and 50 million to settle fines.²⁷ This is despite the subsidiary of the Thai Union Group – Tri-Union Seafoods LLC which owns Chicken of the Sea – receiving conditional leniency status in September 2017 from the US Department of Justice price fixing investigation. The status means that 'neither Tri-Union nor any cooperating executives or employees within the scope of the Investigation will face criminal fines, jail time or prosecution', and was granted in return for Thai Union acting as a whistle-blower.²⁸

Greenpeace details labour abuses on Taiwanese tuna longliners, implicates FCF and wider supply chains

The world's largest tuna trading company, FCF (Fong Cherng Fishery Company), is a focus of a new report by Greenpeace East Asia.²⁹ The crux of Greenpeace's report in terms of recent evidence is that, in 2017, (1) FCF and its Japanese subsidiary, FCN International, traded tuna caught by boats involved in labour abuses; and (2) Taiwan's authorities did not act on available evidence to stop convicted human traffickers (Taiwanese nationals) from continuing to recruit migrant crew for Taiwanese boats. There are an estimated 30,000 migrant crew working on the Taiwanese distant water fishing vessels.

The rest of the report revisits and expands on older case studies of systematic human trafficking and horrific mistreatment of foreign crew on Taiwanese-owned tuna longliners. This includes a 2016 ruling by Taiwan's Control Yuan (a public agency that monitors other branches of government) which found the Fisheries Agency's investigation of an Indonesian crew's death at sea to be 'severely negligent'.³⁰ Greenpeace also travelled to Vanuatu to interview six Indonesian crew convicted for the 2016 murder of a Chinese captain on a Taiwanese-owned, Vanuatu-flagged longliner. The interviews point to

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deceptive" and
has reduced
traded volume*

systematic abuse by the captain in the lead up to his murder, suggesting diminished responsibility.³¹

This 2018 report follows a 2016 investigation by Greenpeace that identified poor working conditions and labour rights abuses in the Taiwanese tuna industry.³² For example, it found that the average salary of migrant crew on Taiwanese longliners was US\$ 300 per month, but that after deductions this ranged between US\$ 100 and 170, averaging out at US\$ 0.50 per hour. With wages as the sole variable cost of operations (e.g. fuel price tends to be the same globally), low crew salaries are crucial to the global competitiveness of the Taiwanese (and several other) tuna fleets; an issue highlighted by EU boat owners for several years, most recently in the Spanish tuna industry (OPAGAC) calling for its Standard for Responsible Tuna Fisheries, which includes social and environmental standards, to be applied as an EU regulation for fisheries imports.³³

Greenpeace's investigation is not isolated. Similar issues were picked by the US State Department's 2017 Human Rights Report, which highlights Taiwan's fishing industry.³⁴ And a US Trafficking in Persons report published last year highlighted Taiwan's progress in addressing human trafficking, including in DWF crew recruitment, but that authorities did not take the crime seriously and penalties were lenient.³⁵ Another NGO, the Environmental Justice Foundation has recently produced a short documentary film on the issue called '[Exploitation and Lawlessness: The Dark Side of Taiwan's Fishing Fleet](#)'.³⁶ Domestically, the Taiwan International Workers' Association has been calling on boat owners and the national authorities to take action to protect crew.³⁷

Taiwan's 2016 Act for Distant Water Fisheries, which introduced minimum requirements for hiring of crew (effective from January 2017), was designed to mitigate some of these abuses.³⁸ For example, it requires crew to be paid a minimum wage of USD\$450/month paid directly to crew – designed to avoid capture by labour intermediaries.³⁹ It also maintains a list of authorised crew agencies.⁴⁰ But the effectiveness of this system is questioned by Greenpeace which found that in 2017 two of Taiwanese convicted of trafficking noted above are 'officially registered with the Fisheries Agency, which means they have been vetted and authorised by the Taiwanese Government to conduct recruiting' for up to 1,099 crew.⁴¹

In response to the 2018 Greenpeace report Taiwan's Fisheries Agency pointed out that the cases studied dated before 2016, which is when the government began a major process of reform of its DWF.⁴² The Fisheries Agency has also highlighted its regulation of employment of foreign crew under the 2016 Act, claiming that there has been 'substantial progress on safeguarding the rights and benefits for foreign crews on distant water fishing vessels'.⁴³

For its part, FCF has stated that Greenpeace's 2018 report is 'unfair and deceptive' and based on 'old information'.⁴⁴ Instead, FCF President Max Chou stated that the company 'remains committed to leading our industry's social responsibility effort, and to ensuring respect for all fishing laborers.' FCF also launched a Social Accountability Project in 2016 which prohibits child and forced labour,⁴⁵ but it applies solely to crew on purse seine fleets and, moreover, there is no apparent independent assessment of its implementation and monitoring. Further investigation by Undercurrent News has suggested that FCF was not the sole potential client of fish traded in 2016 by a Taiwanese longliner named by Greenpeace as involved in labour abuses, but clients also included Thai Union and Tri Marine.⁴⁶ Further, Max Chou has stated that FCF has been reducing its traded volume from a height of around 700,000mt to 500,000mt precisely because it is applying more rigorous 'focus on IUU and social accountability'.⁴⁷

In 2016, Taiwan Government introduced minimum wage requirements for crew and established a list of authorised crew agencies

This suggests three crucial points. First, a change in labour-related law does not necessarily mean a change in working conditions in practice, especially without independent labour organisations in place to self-monitor the workplace. For example, it is not known whether labour recruitment agencies use other means to capture part of the minimum USD\$450/month salary now regulated by Taiwanese law. Second, FCF is a major supplier of raw material to Thai Union and that TU has committed to continue to work with FCF.⁴⁸ The Greenpeace investigation suggests that TU's major reform programme of labour standards in its supply chain may face an uphill struggle in implementation given the vast size and huge complexity of raw material supply networks and their often-ambivalent governance. Third, and more generally, the Greenpeace report highlights the use of flags of convenience (FOC) and front companies – both common business practices in industrial tuna fisheries. The role of PICs in better governing the social and environmental standards of tuna fisheries may require revisiting open vessel registries where no direct state monitoring and enforcement is in place. The potential alternative is that the grey legal area of FOC in fisheries may be under further external regulatory, commercial and public pressure, putting FOC states on the defensive and potentially impacting economic gains from tuna fisheries.

Rebate programme presents new challenges for PNG processing

As of 1 January 2018, PNG introduced a policy change from a system in which firms with domestic processing operations received discounted fishing licenses to one in which domestic processing companies received a rebate of US\$400 for each metric tonne of tuna processed which was caught in PNG waters. The so-called rebate system replaces the discounted license scheme, meaning that vessels associated with PNG processing plants are now required to pay the full vessel day price for fishing access. The strategy aims to act as an incentive for vessels to offload directly and to correct a chronic issue of plants operating well below their maximum capacities and the capacities that were agreed upon as a condition of discounted access.⁴⁹

The months since the rebate system has gone into effect have proven tumultuous. In February, several canneries warned that they were considering closing their doors, suggesting that the new economics of the rebate system were not viable.⁵⁰ Government officials defended the policy, saying that it had been developed in consultation with industry and stressing the importance of creating jobs onshore rather than sending them – and all of the fish – offshore.⁵¹

In May, Frabelle halted its canned tuna production line and laid off 800-850 workers in Lae, but continued its raw pack and loin operations. News outlets also reported that Majestic Seafood (a joint venture among Frabelle, Century Canning and Thai Union) had intentions to shutdown in June or July, which would involve laying off 1,500 workers. In both cases, the potential closures were initially attributed in part to the rebate programme.⁵² Later, Frabelle indicated that its stoppage and layoffs were temporary and driven by a lack of orders from the EU market, and that it did not intend to close its doors.⁵³ In the meanwhile, rumours of a potential merger between Frabelle and Majestic emerged. This merger would require government clearance to ensure that it was in compliance with regulations that prohibit mergers that could have anti-competitive effects, and it is not clear in which ways (if at all) it the proposal emerged as a response to the rebate programme.⁵⁴ By contrast, RD Tuna, based in Madang, has reportedly praised the rebate scheme and expressed optimism about the future of production in PNG. These events leave confusion on the future contours of the rebate programme and of onshore processing linked to fishing access in PNG.

Frabelle and Majestic Seafood are considering production stoppages and a merger, citing PNG rebate programme

Starkist secures raw material and cold storage

In the last two years, Starkist's processing facility in American Samoa has faced raw material shortages that have led it to several short-term processing closures. Skipjack shortages are attributed to halting of US fleet fishing as the US Treaty was being negotiated in early 2016 and a WCPFC directive that reduced the number of fishing days that the US fleet had been transferring to the high seas from their Territory EEZs. Reportedly, around 60 vessels have historically offloaded albacore to the plant; today, only 14 vessels are doing so. In addition, limited cold storage capacity has restricted the firm's ability to weather supply shortages and has also reportedly introduced inefficiencies for purse seine vessels offloading directly at the cannery, forcing some to wait for weeks docked in Pago Pago to unload.⁵⁵ As reported in prior issues of TIN, Starkist has made a series of efforts to improve its fortunes, including supporting appeals to fishing closures in the US Marine Monuments, aiming to encourage Samoan longline vessels to offload in Pago Pago, and seeking to expand its cold storage access on the island.⁵⁶

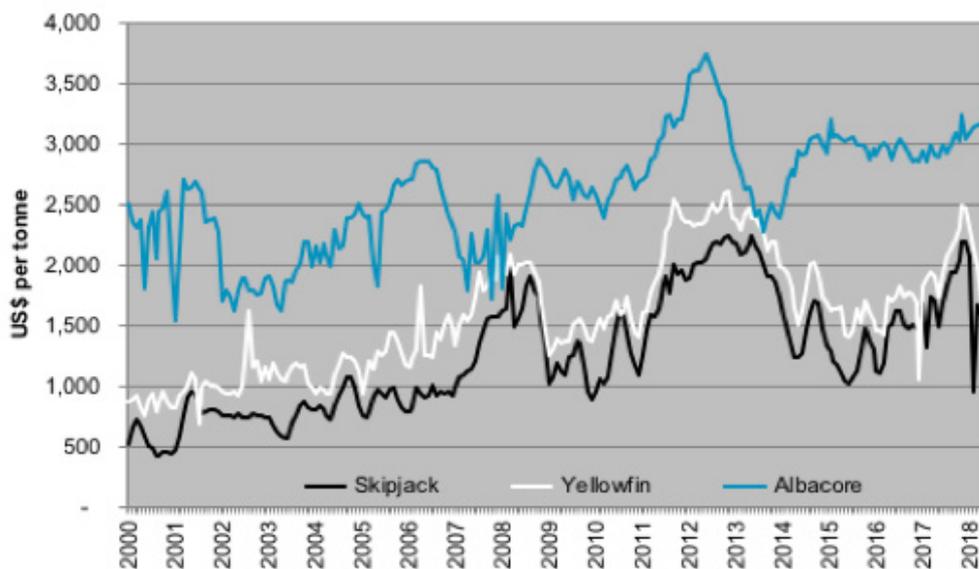
Recent months have seen two moves that offer firm progress towards stabilizing supply. First, Starkist Samoa entered into a 10-year lease with Tri Marine to expand its access to cold storage space in Tri Marine's Samoa Tuna Processors (STP) plant. Starkist had reportedly been using some cold storage space prior to the deal. The STP plant has not been operating since December of 2016. Tri Marine indicated that part of its interest in the lease was in generating jobs and maintaining the strength of the local tuna industry.⁵⁷

Second, Starkist has signed supply arrangements with two Chinese-owned longline firms. Ping Tai Rong Ocean Fishery Company has 26 longline vessels, some of which are reportedly based in Independent Samoa. Luen Thai Fishing Ventures, a large and well-established fishing presence in the region is also planning to have some of its Independent Samoa-based boats deliver to Starkist.⁵⁸ Additionally, four of the Apia Export Fishing Company vessels are also offloading their catches in Pago Pago.⁵⁹ The US Coast Guard and National Oceanic and Atmospheric Administration have reportedly begun to work with the Apia-based vessels to support compliance with US policies.⁶⁰ Albacore processed in American Samoa is an important market segment for Starkist as it is a higher price raw material and product than its skipjack counterpart, and thus makes the Territory's duty-free access to the US market significant over competitors who lack duty free access.

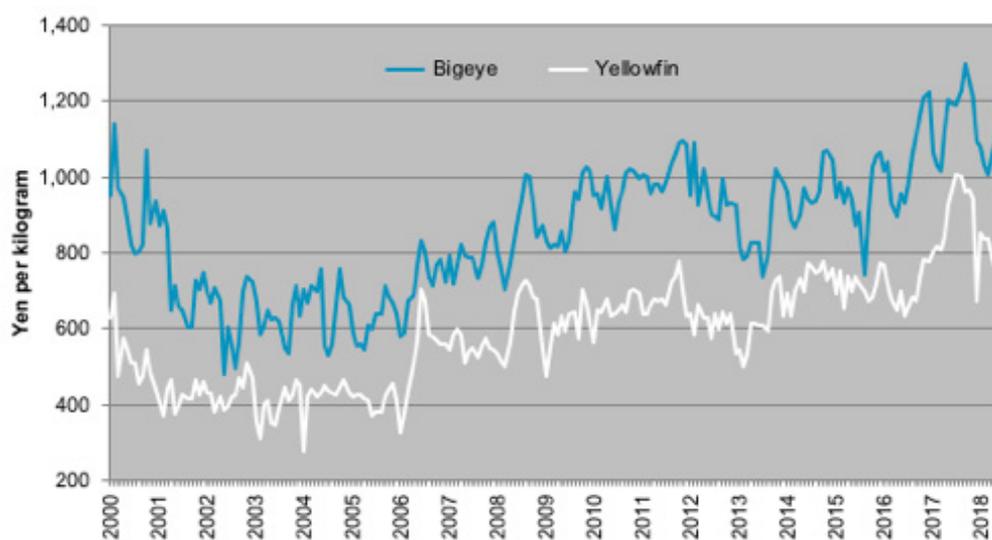
*Starkist Samoa
has made
progress on
stabilising
supply with new
cold storage
and albacore
agreements*

TUNA PRICE TRENDS⁶¹

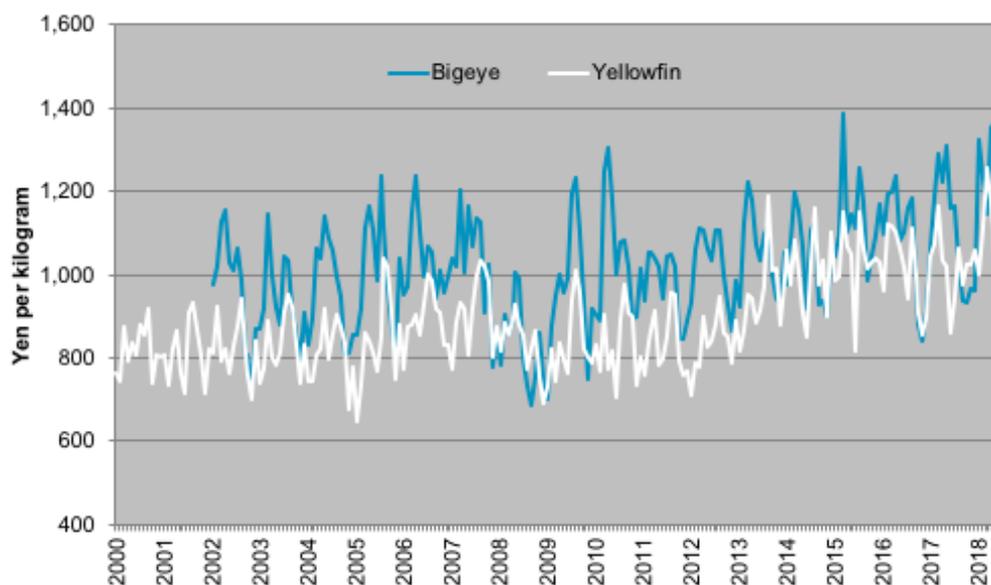
Bangkok canning-grade prices to May 2018⁶²



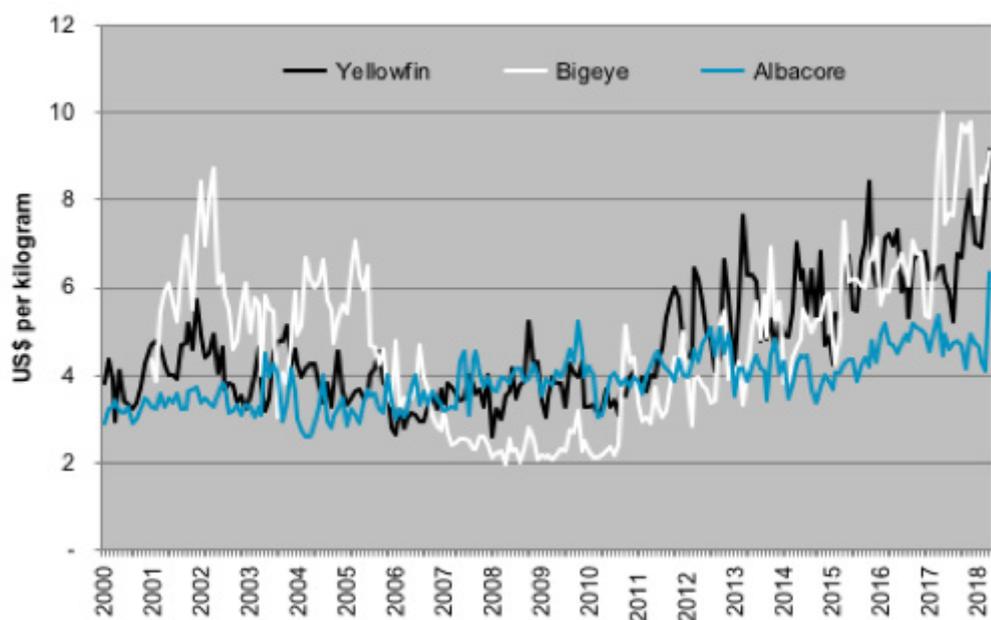
Japan frozen sashimi prices (ex-vessel, Japanese ports) to May 2018⁶³



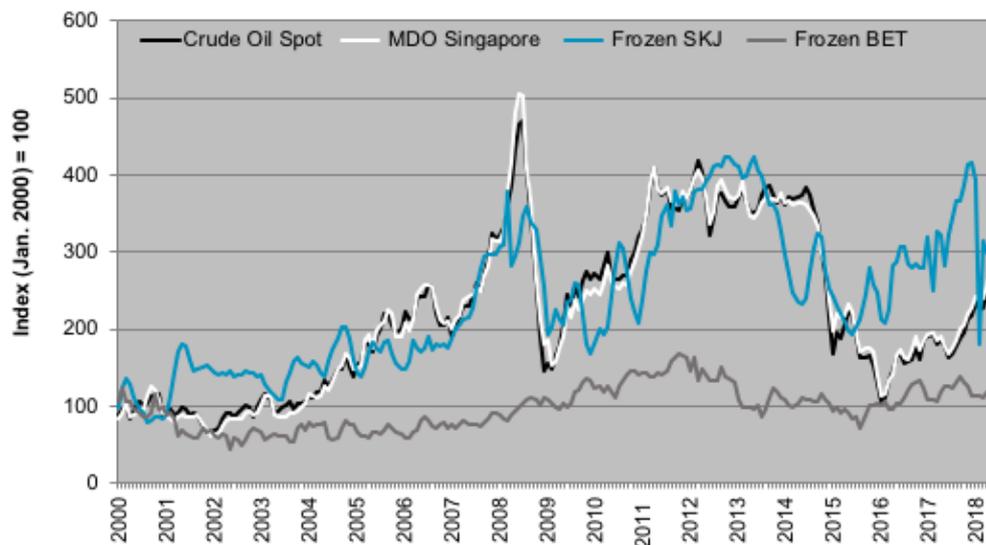
Japan fresh sashimi prices (origin Oceania) to May 2018⁶⁴



US imported fresh sashimi prices to April 2018⁶⁵



Crude oil, canning-grade frozen skipjack (SKJ) and frozen bigeye (BET) price index to May 2018⁶⁶



⁰ Prepared for the FFA Fisheries Development Division by Dr 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 Mike Batty for his 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.

¹ This article summarizes key points from numerous presentations delivered during the 14th 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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⁵ This TIN story draws from this report, on which one of the authors contributed (Campling), unless otherwise indicated. Commonwealth Secretariat 2018, *Global Value Chain Perspective: Adapting to Competitiveness Challenges Arising from LDC Graduation – Case study: Solomon Islands tuna fisheries*, London: Commonwealth Secretariat

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