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Virtual

**INFORMATION PAPER NO. 12:**

**IMPACTS OF COVID-19 ON ECONOMIC BENEFITS FROM THE TUNA FISHERY**

**Purpose and Summary of Issues**

**Purpose**

This paper has been prepared by the Pacific Islands Forum Fisheries Agency (FFA) to provide an overview of the economic impact of the COVID-19 pandemic on tuna markets, the tuna harvesting sector and the onshore sector.

**Summary of Issues**

- i. FFA undertook a regional overview of the impacts on the economic benefits from tuna fisheries with the outcome being presented to Officials at Forum Fisheries Committee 114. A copy of this is provided as Attachment A of Annex 1.
- ii. The FFA paper is attached as Annex 1.

**A. Overview/Summary**

The key findings from the overview of the impacts of COVID-19 includes:

- The lock-down induced closure of restaurants, hotels and catering businesses, compounded by the loss of tourism, significantly reduced the demand for fresh tuna. Trade has also faltered, as transportation restrictions disrupt supply chains, particularly for longline catch, with exports of fresh tuna from Members being severely impacted. Transportation and logistical challenges linked to lockdowns and port closures have increased costs and lead to delays throughout the supply chain.

- A significant loss of income and other economic benefits to FFA members has occurred as a result of the tying up of local and locally based foreign longline vessels, the closure of fresh chilled processing facilities and the repatriation of observers, with the potential loss of knowledge or skills if individuals do not return in the future.
- A shifting in effort from the tropical longline fishery targeting bigeye and yellowfin to the southern longline fishery targeting albacore.
- There had been no clear indication that purse seine fishing activity, or the utilisation of VDS days, had been reduced as a result of the COVID-19 pandemic. With regards to future revenue from the sale of purse seine VDS days it was noted that VDS days are primarily sold in advance (with 2020 days being predominantly sold in 2019) so immediate impacts, if any, will likely be muted.

Pacific Island Forum Fisheries Agency  
24 July 2020



**Title:** **INFORMATION PAPER ON THE IMPACTS OF COVID-19 ON ECONOMIC BENEFITS FROM THE TUNA FISHERY**

**Purpose of the paper:**

1. This paper has been prepared by the Pacific Islands Forum Fisheries Agency to provide an overview of the economic impact of the COVID-19 pandemic on tuna markets, the tuna harvesting sector and the onshore sector.

**Summary:**

2. FFA undertook a regional overview of the impacts on the economic benefits from tuna fisheries with the outcome being presented to Officials at Forum Fisheries Committee 114. A copy of this paper is attached as Attachment A.
3. Key findings from this work include:
  - The lock-down induced closure of restaurants, hotels and catering businesses, compounded by the loss of tourism, significantly reduced the demand for fresh tuna. Trade has also faltered, as transportation restrictions disrupt supply chains, particularly for longline catch, with exports of fresh tuna from Members being severely impacted. Transportation and logistical challenges linked to lockdowns and port closures have increased costs and lead to delays throughout the supply chain.
  - A significant loss of income and other economic benefits to FFA members has occurred as a result of the tying up of local and locally based foreign longline vessels, the closure of fresh chilled processing facilities and the repatriation of observers, with the potential loss of knowledge or skills if individuals do not return in the future.
  - A shifting in effort from the tropical longline fishery targeting bigeye and yellowfin to the southern longline fishery targeting albacore.
  - There had been no clear indication that purse seine fishing activity, or the utilisation of VDS days, had been reduced as a result of the COVID-19 pandemic. With regard to future revenue from the sale of purse seine VDS days it was noted that VDS days are primarily sold in advance (with 2020 days being predominantly sold in 2019) so immediate impacts, if any, will likely be muted.
4. The regional overview provided does not seek to infer that any particular impact necessarily applies to any specific Member. Undertaking specific national assessments requires information specific to that country and knowledge of its specific circumstance. FFA is currently assisting two

members conduct national assessments on the economic impacts of the COVID-19 pandemic on their domestic industry. Assistance will also be provided to other Members as requested.

5. Given the current difficulties of, and lack of profitability associated with, sending products to the Japanese and US markets, as a result of reduced air freight capacity and significant increases in costs, the Secretariat has also engaged with some regional SMEs to assist them to access tuna markets in Australia and New Zealand. If it proves successful, FFA will look to expand the concept to include other SMEs in the region and other accessible markets.
6. The economic crisis arising from the COVID-19 pandemic has included the rise of unemployment and loss of family incomes. This has underlined the resilience provided by our fisheries resources not just for economic development but also importantly for food security, and the importance of enhancing this. A number of studies have been conducted in recent years examining contribution to food security related to tuna fisheries including the volume of product that enters local markets from locally based vessels and from canneries operating in member countries. In addition, SPC collates data on tuna catches from artisanal fisheries.
7. FFA will investigate potential ways in which tuna fisheries and associated industries can increase their contribution to food security, including a study of how much tuna enters local markets as a result of transshipment activity. In addition, in preparation for a gender forum to be hosted in this fiscal year, FFA will undertake a study on the impacts of COVID-19 on women in Pacific offshore fisheries.

## **Attachment A:**

### **Regional Overview: Impacts of COVID-19 mitigation measures on the economic benefits generated to FFA Members from tuna fisheries and associated industries<sup>1</sup>**

#### **Introduction**

1. In an attempt to mitigate the spread of COVID-19 many countries, including FFA members, have put in place strict measures, including travel restrictions, lockdowns and border closures. These mitigation measures have, and continue to, significantly impact tuna markets as well as operations in tuna fisheries and related industries. Impacts on tuna markets, the harvest sector and other related industries in turn affect the economic benefits that are generated to FFA members from tuna fisheries.
2. The purpose of this paper is to provide a regional overview of these impacts. It is important to note that mitigation measures in place in different countries can change rapidly, for example, a number of countries have recently announced relaxation of various restrictions, particularly with regard to local movement and the congregation of groups at public venues. It is also important to note that the assessment provides a regional overview and does not seek to infer that any particular impact necessarily applies to any specific Member. Undertaking specific national assessments requires information specific to that country and knowledge of its specific circumstance and is beyond the scope of this paper.
3. The first section of the paper examines the impact of COVID-19 mitigation measures on tuna markets, the tuna harvest sectors and the processing and ancillary services sectors. These impacts are often interrelated, for example, border closures may impact on air freight capacity which in turn impacts on the operation of vessels which impacts on onshore sectors servicing these vessels. The second section of the paper examines how such impacts may in turn impact on the economic benefits that FFA members currently extract from their tuna fisheries, including, access and license fee revenue, employment and trade.

#### **Impacts on market, harvest, processing and ancillary services sectors**

##### **Tuna markets**

4. There is a large variety of markets to which tuna from the WCPO is supplied. Which tuna is sent to a particular market depends on a range of factors including the species of the tuna, the gear type used, and how the fish is stored on board the vessel and transported to the market. In this section, an overview of the impact of COVID-19 on the fresh yellowfin and bigeye, longline caught frozen yellowfin and bigeye and the raw material for canning markets are provided.

##### *Fresh yellowfin and bigeye*

5. The impact of COVID-19 mitigation measures implemented both at the local and the global level on the market for fresh (or chilled) tuna has been significant on both demand and supply. Demand has fallen significantly driven by closures of, or severe trading restrictions imposed on, the food services sector, restaurants and sushi bars in major markets.

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<sup>1</sup> The information provided in this paper is based on a range of sources including market reports, industry sources and PNA papers and reports.

6. The supply side has also been significantly affected with travel restrictions and border closure leading to reductions in air freight capacity and an associated significant increase in airfreight costs impeding operators' ability to supply this market. The latest available trade data indicates that total US imports of fresh yellowfin and bigeye in March were, respectively, 45% and 70% lower than compared with the same period in 2019 while imports from Oceania were down 70% for fresh yellowfin and 56% for fresh bigeye. Imports into Japan of fresh yellowfin were down 25% in March compared with the same period in 2019 while bigeye imports were down only 12%. However, reductions in Japanese import volumes from Oceania were more pronounced with volumes for both fresh yellowfin and bigeye around 50% lower in March 2020 than in March 2019. While the import volume data, which is only available with a lag, does not indicate that prices in March declined significantly, market reports indicate price declines have since occurred with various sources reporting yellowfin and bigeye prices at least 20-30% lower than for the same period in 2019.
7. It is also understood that some relaxation of COVID-19 mitigation measures has, or will soon, occur in major markets for these products. For example, the state of emergency in Japan has recently been lifted with restaurants allowed to reopen (although with strict controls). This may assist in at least some recovery in demand going forward.

*Longline caught frozen yellowfin and bigeye*

8. Demand has reportedly fallen leading to lower prices and a slower turnover of stock in cold storages forcing carrier vessels to wait in port, which raises costs and has become a significant issue. Reports from Japan in mid-May indicate that cold storage facilities were nearly full and that prices for frozen bigeye and yellowfin were down by 20-30%. Other reports indicated even larger price falls.
9. As for fresh markets relaxations in some COVID-19 mitigation measures may result in some increase in demand going forward. At the same time if cold storages inventories continue to grow and the capacity to absorb further supplies declines further deterioration in demand could result.

*Raw material for canning*

10. Reports indicate different, and opposing, factors have impacted on the demand for raw material for canning. On the one hand retail demand surged as outbreaks occurred and consumers stockpiled canned tuna. While this impact appears to have waned retailers are reportedly expecting demand to remain 5-10% higher in the intermediate term. On the other hand, demand for foodservice or industrial pack tuna have slumped.
11. From the supply side perspective, purse seine catch rates in the 1<sup>st</sup> quarter were reportedly poor, at around 25mt/day compared to around the 35mt/day more normally observed but have since returned to more normal levels. While this is unlikely related to the COVID-19 pandemic it will have impacted on the profitability of fishing operations and increased the required time per trip to fill a vessel's wells.
12. In addition, there have been a number of logistical issues related to Conservation and Management Measures (CMMs) of the Western and Central Pacific Fisheries Commission (WCPFC) that have had the potential to significantly disrupt supplies. These include difficulties in fulfilling the requirements for 100% observer coverage and in port transshipment for purse seine vessels. These issues had the potential to significantly constrain the ability of vessels to continue to operate and to significantly restrict supplies but have been addressed by the WCPFC through the

suspension of certain obligations in a manner that has allowed fishing activity to continue and maintain supplies to canneries

13. For albacore it is understood that with the continuing elevated price and disruptions to the longline caught yellowfin and bigeye markets some vessels that previously concentrated on bigeye/yellowfin have reportedly shifted to targeting albacore (both in southern and northern areas).
14. With regard to prices, while skipjack prices have fluctuated in recent months there has been no sudden, large or exceptional price movements. For example, Bangkok skipjack prices (4-17.5lbs, c&f) increased from around \$1,050/mt at the beginning of the year to around \$1,500/mt in late March before then falling to \$1,400/mt in April, where they remain at the time of writing, a level similar to the monthly average over the period 2015-19. Thai import prices for Albacore in March were around \$3,700/mt, their lowest level since late 2018 but nonetheless around 15% higher than that averaged over 2014-19.

### **Tuna harvest sectors**

#### *Longline*

15. The longline harvest sector supplies fresh/chilled products, frozen albacore (primarily as raw material for canning) and bigeye and yellowfin. Individual vessels can supply more than one market, for example, many domestic vessels supply albacore to canneries while supplying bigeye and yellowfin to the fresh/chilled market in, for example, Japan or the US. Typically, each market segment is critical to ensuring the economic viability of the vessel. For example, while a vessel operator may primarily catch and sell albacore to canneries, if they are unable to also sell their yellowfin or bigeye catch on fresh markets this may render their fishing operation economically unviable.
16. With fresh tuna markets being significantly impacted by COVID-19 mitigation measures, as outlined previously, this has resulted in some operators being unable to access international fresh tuna markets or it becoming unprofitable to do so. This has resulted in some vessels supplying fresh markets being forced to stop operations and tie up with reports indicating that this has occurred in a number of FFA member countries. At this stage, vessels that supply fresh markets appear to have been most severely impacted by COVID19 mitigation measures and it is these vessels that make up local or locally based fleets. However, it is important to note that some vessels and processing facilities supplying international fresh tuna markets continue to operate.
17. With the frozen bigeye and yellowfin markets also being significantly impacted on by COVID-19 mitigation measures there has likely been a significant impact on the profitability of the fishery and some reduction in fishing activity. Further, high cold storage inventories in major markets, such as Japan, mean that the capacity for further absorption of excess supplies is limited. If inventories continue to grow the situation may arise where even if vessels can operate and supply markets, there is no demand. Also, the inability or difficulty with access to ports near fishing grounds to rotate crew, obtain provisions or undertake repairs and maintenance is likely to become an increasingly limiting factor as time progresses. Any need for vessels to steam to more distant or home ports will reduce the time the vessels spend fishing.

18. By way of indication of impacts on longline fishing activity in April, SPC estimates on the number of seadays expended in the longline fishery<sup>2</sup> indicate that longline seadays fell by 21% between January and April 2020 while seadays in April 2020 were 32% lower than in January 2019. However, the data also indicates that there are significant variations in longline seadays over time and comparing April 2018 against April 2020 it can be seen that seadays were marginally higher in April 2020. Nonetheless, longline seadays for April 2020 was the lowest monthly total for any month over the period 2016 to April 2020 with the exception of the first half of 2018 when longline seadays were exceptionally low.
19. With the market for frozen albacore remaining firm some vessels that previously concentrated on bigeye and/or yellowfin have reportedly shifted to targeting albacore (both in southern and northern areas). If this leads to a sustained increase in the level of effort targeted at albacore previous experience indicates that catch rates in the albacore fishery are likely to decline. Conversely, reductions in the effort targeted at bigeye/yellowfin may lead to increase in catch rates in this fishery.
20. Fuel, a major component cost in the operation of longline vessels, saw significant price reductions this year with the Singapore MGO price falling from around \$700/mt in early January to around \$220/mt in late April before recovering to some degree to be around \$300/mt in late May. While this has led to significant reductions in vessel operating costs it is understood that these reductions have not been sufficient to offset revenue declines and other cost increases with many vessels still operating believed to be doing so at a loss.

#### *Purse seine*

21. Data from SPC indicates that seadays for the purse seine fleet in the waters of VDS participants<sup>3</sup> was around 12% lower in April than January 2020 and about 14% lower in April 2020 compared with April 2018. Nonetheless, overall effort for the period January to April 2020 is around 3% higher than for the same period in 2019 although lower than in 2018. In addition, while imports into Thailand for the first quarter were down significantly (around one third) compared with 2019, April levels were much closer to that seen in 2019 (around 8% less). The decline in Thai imports earlier in 2020 appears to be more a factor of poor catch rates than the impact of COVID-19 mitigation measures.
22. Similarly, while prices have fluctuated in recent months there has been no sudden, large or exceptional price movements that appear directly attributable to COVID-19 measures unlike in the longline fishery. The ability of WCPFC Commission members (including FFA members) to move with relative quickness to address operational issues arising from the implementation of COVID-19 measures, including those with regard to requirements for 100% observer coverage (by granting a temporary suspension of this requirement) and in port transshipment (by allowing purse seine vessels to tranship in designated areas outside of ports) appears to have mitigated the potential impacts that may have occurred and allowed purse seine operations to continue.
23. It is important to note, however, that while the temporary suspension with regard to 100% observer coverage achieved its objective of ensuring that vessels are allowed to continue to

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<sup>2</sup> Based on VMS data and covering all flags and the areas for 20°N to 25°S, 130°E-WCPFC eastern boundary.

<sup>3</sup> Based on VMS data and covering all flags in the waters of VDS participants.



operate, it has had a significant impact on observer employment and income and is likely to continue to do so for several months at least. This also gives rise to potential issues with regard to retaining observers and their future availability when observer requirements are reinstated. In addition, transshipment in areas outside ports may take longer (due to rough seas, for example) than previously and potentially reduce the time vessels spend fishing. In addition, the cost of repatriation observers is believed to have resulted in additional costs for some vessels.

24. In addition, as noted previously, the inability of vessels to rotate crew, obtain provision or undertake repairs near their fishing grounds may become a greater issue going forward as increases in the time required to get to a port to allow for these activities has the potential to reduce fishing activity.
25. If restrictions do lead to a reduction in the time vessels actually spend fishing this will likely result in a reduction to a vessel's overall catch, increasing the cost per tonne of fish landed and reducing vessel profitability and, potentially their demand for VDS days.
26. As with longline vessels fuel is a major cost component for purse seine vessels and the significant price reductions in fuel seen this year and heavily linked to the COVID-19 pandemic will have led to significant reductions in vessel operating costs.

#### **Processing and ancillary services sectors**

27. As with the harvest sectors, there appears to have been a significant difference in the impact on different components of the processing and ancillary services sectors. Processing facilities focused on chilled and or fresh tuna have struggled due to the impact of flight restrictions, increased freight costs and vessel tie ups. Those providing ancillary services which rely on vessels visiting ports, such as net repairs and supplying provisions, have also been hit hard. Canneries on the other hand have generally seen less impact and have continued to operate. While in some cases production levels have been reduced due to workforce issues (for example, loss of key expatriate personnel who have returned to their home countries) in other cases production has increased in order to meet increased demand. It is understood that access to raw materials is the major production constraint for many processors in FFA member countries at the moment.
28. Further, there is a risk of COVID-19 infections significantly disrupting the supply chain through impacting on a major offloading port, such as Bangkok, or forcing the closure of a significant number of canneries. However, a number of factors mitigate against this including the fact that there is significant processing capacity in a number of locations in the region which may allow any resulting slack, or at least part of it, to be picked up elsewhere, and the early and ongoing introduction of preventative measures at many processing facilities, particularly in Thailand. It is also worth noting that the number of confirmed cases in Thailand, the major processing hub for tuna caught in the region, has been low recently (11 during the week of May 18 to 25).

#### **Economic impacts on FFA members**

29. FFA members derive a range of economic benefits from the WCPO tuna fisheries and the impact of COVID-19 on activities in the harvest, processing and ancillary services sectors will, in turn, have an impact on these benefits. In this section impacts on some of these benefits including government revenue from access and license fees, employment, exports and the contribution of these sectors to national GDP are examined.

## **Access and license fee revenue**

30. Assessing the impact of the COVID-19 pandemic on access and license fees involves assessing whether these measures have or will have an impact on the demand for fishing access. In this section this is looked at with regard to the purse seine fishery and longline fishery drawing on the information provided above with regard to market and harvest sector impacts.

### *Purse seine fishery*

31. In examining the likely impact on purse seine access and license fee revenues, it is important to note that VDS days (and other FFA members, including the Cook Islands, purse seine days) for a given year are predominately sold in the preceding year, for example, most available 2020 VDS days were sold in 2019. These sales are made on a “use it or lose it” basis so even under an extremely negative scenario the impact on purse seine access and license fee revenues associated with the sale of 2020 days will be muted to some degree. However, there is potential for the demand for those 2020 VDS days that remained unsold to be impacted noting that the uptake of 2020 days in 2019 is believed to have been lower than usual due to low skipjack prices in late 2019 and the uncertainty these prices created. There is also potential for the demand for 2021 and future VDS days to be reduced which will begin to impact government revenues in late 2020/early 2021 as payments for purchased days become due.

32. In assessing whether demand for the remaining 2020 VDS days and 2021 VDS days (and beyond) will be impacted by the COVID-19 pandemic it is important to note that future prices for VDS days will be determined by purse seine vessel operators’ expectations (and degree of uncertainty as to whether their expectations will be met) of future profitability and the future availability of days. Future profit expectations are in turn driven by expectations of future tuna prices, fishing costs (particularly fuel), and catch rates. These expectations will be influenced by a range of factors not just the current COVID-19 pandemic although that may have a significant influence with regard to expectation of fish or fuel prices and the availability of days but may not with regard to catch rates expectations.

33. In recent months Bangkok skipjack prices (4.7.5lbs, c&f) have not seen significant movement in either direction (and are currently around the average price seen over the period 2015-19) while fuel prices have fallen significantly. At the same time operational issues that threatened to cause significant disruption to fishing activity including observer placements and requirements to tranship in port have been addressed and the actions taken appear to have allowed purse seine fishing to continue and there is, at this time, no clear indication that purse seine fishing activity has been reduced as a result of the COVID-19 pandemic. These outcomes provide an indication that demand for VDS days has not been impacted to any significant degree so far. Reports also indicate that industry sources note that little, or no, impact on the usage of VDS days has been observed.

34. In addition the inability of vessels to rotate crew, obtain provision or undertake repairs near their fishing grounds may become a greater issue going forward as increases in the time required to get to a port to allow for these activities has the potential to reduce fishing activity. This in turn has the potential to reduce demand for VDS days and access fee revenues from the sale of remaining unsold 2020 days and for 2021 days.

### *Longline*

35. While access and licence fee revenue obtained from the longline fishery is much lower than that obtained from the purse seine fishery they are often an important source of revenue for some

member countries. Given the mixed nature of the longline fishery and the different impact of the COVID-19 pandemic on different components, the impact on the demand for access by longline vessels will also likely vary between members. Those with fisheries predominately targeting albacore may see an increase in demand for access while those with fisheries predominately supplying fresh tuna markets may see a decline in the demand for access.

### **Employment**

36. Employment in tuna related industries in Member countries has been impacted in a number of ways including through the tying up of local and locally based foreign longline vessels, the closure of fresh/chilled processing facilities and the impact on observer placements related to the temporary exemption from the requirement to carry observers.
37. In addition to the loss of income faced by the individuals losing employment, the loss of knowledge or skills if these individuals do not return in the future may be considerable. This also gives rise to potential issues with regard to retaining observers and their future availability when observer requirements are reinstated. Considerable training has been invested in developing a substantial pool of observers and if these individuals leave the industry as a result of the current situation these skills will be lost and substantial further investment will then be required to build the pool up again.

### **Exports**

38. As noted above, the sector that appears to have been hardest hit by measures to mitigate COVID-19 is that supplying fresh markets and it is likely that there will be a significant reduction in the value of fresh exports as a result of the current COVID-19 situation. In 2018 the value of imports of fresh albacore, yellowfin and bigeye into Japan and the US totalled around \$26 and \$18 million respectively. While the value of fresh tuna imports into Japan have been falling for a number of years (they were \$40-45 million around 5 years ago) the value of fresh tuna imports into the US has been steadily rising having more than doubled in the last 5 years. As previously noted, data for both these markets indicate that imports of fresh tuna from the region declined significantly in March and there would appear to be little prospect of an immediate recovery.
39. With regard to canned tuna and loins, imports into the EU and the US from FFA members were worth \$248 and \$71 million respectively in 2018 with rapid growth being seen in imports into the EU (up 64% in 5 years). There appears to have been mixed outcomes to date with some processors indicating a reduction in production and exports while others have seen an increase. If the recent increase in demand for canned tuna is sustained to at least some degree this may provide an opportunity for further growth in canned tuna and loin exports.

### **Contribution to GDP**

40. The reduction in economic activity linked to the fresh tuna sector through domestic and locally based foreign vessels tying up and the closure of fresh/chilled tuna processing facilities will reduce the contribution of these sectors to GDP in some member countries. With regard to investments in tuna related industries in the region the Secretariat is not aware of any recent announcement of delays or cancellation of proposed investments. Finally, as previously noted, it is difficult to forecast exactly what will happen with regard to exports of canned tuna/loins and for other shore-based areas in which tuna related industries contribute to members' GDP.