

**FFA**

FORUM FISHERIES COMMITTEE
ONE HUNDRED AND EIGHTEENTH MEETING

Virtual
25-28 May 2021

Agenda Item:	
Paper Number:	<i>FFC118-INFO.13</i>
Title:	Update on FFA Study - An assessment of fishing vessels plastic waste generation in the WCPO region

Summary:

Under the OFMP II project FFA commissioned a study on the current regional fishing vessel plastic waste disposal practices in the context of WCPFC CMM 2017-04 and the MARPOL convention. The study commenced in late January and a draft report was received by the Secretariat for presentation at MCSWG 24 in March. The report is substantial with 84 pages and has been reviewed by the Secretariat for release to Members.

Clearly, fishing vessel plastic waste disposal is a matter of concern for all and a significant challenge which needs to be confronted and managed as a priority matter. The report includes a section on strategy to eliminate dumping of waste at sea followed by a summary of proposed actions to take.

Recommendations:

The Committee is invited to:

- i. note of the study findings and give consideration as to how the strategy and associated actions might be progressed; and
- ii. work with the Secretariat to follow up on actions that can be taken to mitigate the dumping of plastic waste in the ocean.

Introduction

In 2018, FFA commissioned a study of Fishing Vessel Waste Management at Three Pacific Island Ports—A Brief Profile and Discussion on Best Practice Waste Management (Bulman, 2018). The objective of this study was to prepare a report on developing a business model for the application of environmental services for the servicing of fishing vessels operating in the waters of Pacific Island countries for disposal of waste - in particular plastic waste, oils, food waste, and other materials as appropriate.

Towards this objective, the study undertook a scoping mission to attempt identify the types and amounts of wastes originating from fishing vessels at three major fishing ports: Suva (domestic and foreign longline vessels); Majuro (mainly foreign purse seine transshipment and domestic longline vessels); and Noro (small domestic purse seine and pole/line fleets and foreign longline offloading).

The report provided a brief ‘waste supply profile’ of the wastes originating from fishing vessels as observed and researched at each of the three major fishing ports visited. With reference to MARPOL guidelines it also provides some background on best practice waste management and disposal systems, the current regulatory frameworks and discusses some regulatory options that could further improve and facilitate best practice waste management for fishing vessels and port reception facilities.

Prior to this study there was very limited data documenting the types and amounts of wastes originating from fishing vessels and the accounts of waste management practices advised in the course of the study varied greatly as did the practices observed at the ports.

The 2018 Study focused broadly on all types of waste management and the Study took place not long after the adoption of Commission Management Measure (CMM) 17/04 on Marine Pollution, as championed by the Republic of the Marshall Islands and prior to the CMM coming into force. The passing of the CMM was considered one of the big wins for FFA Members from WCPFC 14 in 2017.

This landmark measure came into effect on 1 January 2019 and clause 2 of the CMM specifically states:

“CCMs shall prohibit their fishing vessels operating in the WCPFC Convention area from discharging any plastic (including plastic packaging, items containing plastic and polystyrene) but not including fishing gear.”

As of January 1, 2019, all fishing vessels operating in the WCPFC Convention Area are specifically prohibited from dumping any plastics into the ocean. This is potentially an excellent step towards curbing drastic levels of plastic marine pollution. However, the reality of current plastic disposal methods is in stark contrast to the intention of the measure.

Background

The 2021 study was commissioned to undertake research, investigation and consultation to provide a detailed analysis of the following:

- An estimate of the amounts of plastic waste generated on a per vessel basis by vessel type and operation.

- A summary of current fishing vessel plastic waste disposal practices in FFA Member Countries and adjacent high seas areas.
- An estimate of the volumes of fishing vessel plastic waste that is being directly dumped into the ocean and a review of the potential impacts of this practice.
- A summary of the range of mechanisms for plastic waste disposal from fishing vessels other than oceanic dumping and how these could potentially be applied.
- Consideration and recommendation of practices that could be adopted to mitigate oceanic plastic waste disposal from fishing vessels, the associated costs, and how these practices might be applied.
- In considering mitigation practices, take account of the current and potential impact on port waste disposal infrastructure using three examples of high fishing vessel traffic ports such as Suva, Noro, Majuro or Pohnpei.
- Provide consideration as to possible strategies and actions that could be taken at both national and regional levels to eliminate all plastic waste disposal at sea

Issues

The report notes in the first instance that waste generation in any field is only ever amenable to broad estimates, as the amount changes every day, as well as a large number of variables such as vessel size, crew numbers, type of fishing, length of voyage, condition of the vessel and operating standards on board. Similarly, given that waste management practises on board vessels can vary widely, it is not realistic to make any meaningful estimate of the waste that might be dumped unless an extensive, real-time study of a number of vessels in operation is conducted.

For longline vessels the study notes:

The actual plastic waste products from bait boxes is estimated at between 402 and 935 tonnes, of which the median value would be about 670 tonnes per annum.

Cardboard waste is much larger and estimated at between 2958 and 6879 tonnes for the 1669 active vessels in the WCPO, of which the median value would be about 4,920 tonnes per annum.

The study further notes that when estimating how much goes overboard, the domestic (and chartered in the case of RMI) fleet seems to be more compliant, however, there is no way to verify that claim that there is zero dumping. The study therefore includes this as a whole figure for the 1669 longliners active in the WCPO and using 60% as a proxy it is estimated that between 241 and 560 tonnes of plastic waste from bait only is being dumped at sea, while the figures for cardboard is in between 334 tonnes and 776.

For purse seine vessels the study notes:

We estimate that the plastic waste production from salt bags is 210 tonnes which is equivalent to 2,800,000 individual bags.

Conservative reports from vessel operators quote plastic dumping at 25% but also it is used in FAD construction. Furthermore, and as quoted before, Richardson *et al* (2015) reports that plastics (including salt bags) are the largest portion of total pollution incidents recorded at 37%.

Using this 37% proxy, the study estimated that, potentially, the Purse Seine fleet in the FFA VGS disposes 77.7 tonnes of woven plastic salt bags (equivalent to 1036000 individual bags) a year into the ocean.

Analysis

The study suggested the following key points for consideration in relation to fishing vessel plastic waste reduction with key recommendations highlighted in italics:

1. Waste is either dumped into the sea, or it is returned to port at some point, and in some form. MARPOL does not allow the ocean dumping of any of the solid wastes considered in this study, including incinerator ashes, thus:

All vessels should be returning some quantity of waste to port.

2. If something is to be managed, then it will need to be measured. Therefore, the questions are: *how much?* and *how do we measure that?* There are two separate waste streams to consider, Fishing Operations Waste, and O&M waste. The first is related to fishing effort and the second related to crew and vessel size, and the number of days at sea, thus:

A measure of expected waste generation by vessel is required.

3. The overall framework of institutional and technical standards and guidelines already exists with the MARPOL Convention and IMO. The overall aim must be to ensure that those vessels who do not currently have good waste management practices, must do so, thus:

Under the FFA HMTCS all licensed fishing vessels must comply with MARPOL, whether the flag state is a Party or not.

4. There is actually an economic incentive to operate a vessel with poor waste management; an economic incentive must be created to improve waste management, thus:

Create an economic incentive to follow MARPOL requirements.

5. Measures must be simple to implement where possible for both FFA and fishing companies. Onerous and complex reporting systems that require significant additional manpower and cost to report, monitor and enforce are unlikely to be adopted, thus:

Use simple metrics, and focus effort on a smaller number of key locations.

6. The issue of waste management on board a ship is fundamentally a logistical challenge; all the materials that become waste were put on the ship either in port or during a Carrier transshipment, thus:

Use existing reversed logistical pathways.

7. Pacific Island ports already have a domestic waste crisis and are in very large part unsuitable to take foreign wastes generated by overseas business operations, so aside from local-based fishing vessels, wastes need to be returned to originating home ports, thus:

Wastes from DWFN vessels should not be off-loaded at Pacific Island ports.

8. Larger vessels are much better placed to have better waste management systems, as they have more space, can operate small compactors to increase waste density, can operate safe, compliant incinerators, and can handle and stow larger waste containers, thus:

Carrier vessels should be required to accept wastes from fishing vessels.

9. There must be a long-term element to the strategic actions which is aimed at changing the culture on board over time on those fishing vessels that do not currently have good waste management systems in place, thus:

Start with easier measures and lift the bar over time.

10. Ship owners and operators who can show that they have MARPOL compliant systems already in place, and already take waste management seriously, must be recognised. Those who do not must be held accountable:

Reward good businesses and target poor operators.

These Strategic Points rest on two fundamental pillars: simple ways to measure and monitor the wastes in order to know that change is occurring; and the development of incentives to reward those already doing the right thing, encourage change in those who need to, and sanction those who resist.