



**SCIENTIFIC COMMITTEE  
NINETEENTH REGULAR SESSION**

Koror, Palau  
16 –24 August 2023

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**PROJECT 114 UPDATE:**

**Progress in improving CANNERY RECEIPT DATA for WCPFC scientific work**

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**WCPFC-SC19-2023/ST IP-06**

Oceanic Fisheries Programme (OFP)  
Pacific Community (SPC)  
Noumea, New Caledonia.

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## 1. INTRODUCTION

1. The Nineteenth Regular Session of the WCPFC (WCPFC19; Anon., 2023) approved Project 114 to be conducted over three years (2023–2025); the agreed plan for Project 114 is shown in [ANNEX 1](#).
2. This brief paper provides an update of activities under Project 114 in the first six months of 2023 and an indication of the planned activities in the short-medium term.

## 2. PROJECT 114 – work conducted from January to June 2023

3. The anticipated work in the first year of Project 114 (2023) covers “...the cost of an appropriate consultant and travel to cover Objectives 2, 3 and 5, and Objective 1, in collaboration with the SSP” (refer to [ANNEX 1](#)). The WCPFC Science Service Provider (SSP) is yet to engage a consultant but has conducted some of the required work in the first six months of Year 1 of Project 114 and the details are provided below. This report also satisfies Objective 5 covering part of the first year of the Project.

### ***OBJECTIVE 1. Identify the gaps in the cannery receipt data submissions to the WCPFC***

4. Work has commenced on this objective through the review of past studies (e.g. Lewis, 2017) and a start on the compilation and consolidation of available information which will be used to construct an understanding of product flow to canneries/processors from available purse-seine transshipments/unloadings data and other sources of data (for example, Vessel Monitoring System–VMS trip-level data for purse seine carrier vessels). The cannery data already provided by affiliate companies of the International Seafood Sustainability Foundation (ISSF) will then be used to identify and confirm the main gaps in the cannery receipt data for catches in the WCPFC Area.

5. A preliminary summary of this work will be provided in an updated version of this paper for WCPFC20 (December 2023).

### ***OBJECTIVE 2. In Year 1 of the project (as an initial step)***

2(a) Collaboration with one interested port state CCM, to approach several (but at least one) companies to request the provision of cannery data, using the *WCPFC Guidelines for the Voluntary Submission of Purse seine Processor data by CCMs to the Commission*<sup>1</sup>. It is envisaged that agreement to submit cannery data will require agreement for data confidentiality and other aspects, to be set out in a Memorandum of Understanding (MOU) similar to that outlined in Lewis (2017).

6. The WCPFC SSP had preliminary discussions with several WCPFC member countries (CCMs) during WCPFC19 to request their assistance in organizing visits to key canneries in their countries during 2023 in relation to Objective 2 of Project 114. Further communications were made in the weeks following WCPFC19 to confirm arrangements for potential visits to the countries that responded favourably. The WCPFC SSP subsequently visited General Santos City, Mindanao, Philippines in January 2023 and Busan, Korea in April 2023.

7. **PHILIPPINES.** A meeting with the key stakeholders in the Philippines canning industry was arranged through the facilitation of the Executive Director of SOCSKSARGEN Federation of Fishing & Allied Industries, Inc. (SFFAI). The meeting to discuss the requirements of Project 114 was subsequently held in General Santos City, Mindanao, Philippines during January 2023 and was attended by the Chair of the General Santos City (GSC, Philippines) Tuna Manufacturers Association of the Philippines (TMAP), and the Vice President of one of the largest of the GSC canneries. The meeting noted that one of the GSC canneries is already submitting cannery receipt data to the WCPFC through the ISSF initiative. The response to the request for the other (six) GSC canneries to submit data was positive and the request would be presented to the canneries not yet providing data. A confidentiality agreement has been arranged to protect the interests of the

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<sup>1</sup> <https://www.wcpfc.int/doc/data-07/guidelines-voluntary-submission-purse-seine-processor-data-ccms-commission>

canneries and the association, and the WCPFC SSP is continuing discussions with the relevant representatives on the protocols for data submission.

8. **KOREA.** An initial meeting with representatives from the main Korean purse seine industries was arranged at the Korean Overseas Fisheries Association (KOFA) headquarters in Seoul in April 2023, through considerable facilitation by Korea's head of delegation to the WCPFC and the WCPFC Science Manager. This meeting was used to, *inter alia*, introduce the need and the initiative to improve the submission of cannery receipt data for WCPFC scientific work. This meeting was followed by an invitation to one of the main canneries outside Busan several days later to discuss the information they compile on tuna receipts and potential mechanisms for how they might submit data to the Commission.

9. The senior management of this canning/processor company clarified that collection of the data desired under the project is compiled by their fishing company (after collection of raw data by the processor company) for processing landed tuna into the cannery system, and that 'outturns' were provided to the National Fishery Products Quality Management Service, which (subject to further confirmation) would potentially be a better source from which to obtain the required data for Project 114 from not only this cannery, but the other canneries in Korea.

10. After the visit, the WCPFC SSP was provided with an example of species/size category data compiled for this processor company, and the SSP review showed that it contains most of the essential data fields listed in the WCPFC guidelines for the submission of cannery data, and the missing fields could easily be found from other data sources by the WCPFC SSP.

11. The WCPFC SSP, with the valuable assistance of the WCPFC Science Manager, will continue to follow-up with both the Korea National Fishery Products Quality Management Service and this processor company to hopefully identify a mechanism for the efficient submission of these data, which will need to include an appropriate confidentiality agreement.

12. One of the outcomes from discussions with representatives from these two countries is the need to identify existing company documentation that satisfy the data requirements of Project 114 rather than placing any burden on the companies to undertake additional work in formatting data for potential data submission under Project 114. This arrangement would also include the need to consider filtering out any confidential information before it is submitted.

***OBJECTIVE 2. In Year 1 of the project (as an initial step)***

2(b) As a key activity, document the protocols for how cannery receipt data are collected, including an assessment of the accuracy of species identification, particularly on how to distinguish juvenile bigeye and juvenile yellowfin tuna, and any requirements for sub-sampling certain size/species categories, noting the confidentiality of this information;

13. There has been no work to date on this objective (2(b)), and the WCPFC SSP is currently planning to engage a consultant in the second half of 2023 to visit some of the main canneries submitting data under the ISSF initiative to document the protocols for collecting cannery receipt data. This work will also take into consideration past studies in this area, several of which are listed in the [References](#).

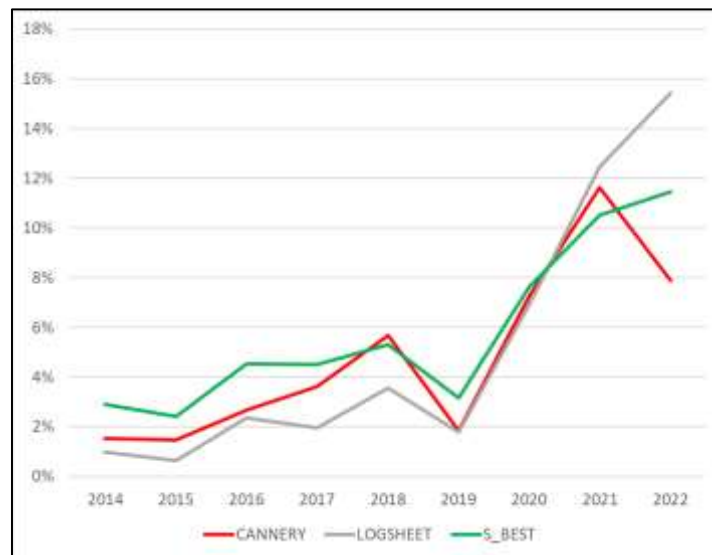
***OBJECTIVE 3. The documentation of the experience from Year 1 to outline a plan for approaching other processor companies in Years 2 and 3 of the project;***

14. This report provides a brief summary of the work conducted in the first six months of Year 1 (2023), and more detailed notes are available in the trip reports conducted to address OBJECTIVE 2 of Project 114. The work conducted in the second half of 2023 will confirm what needs to be done in Years 2 and 3 of this project, and preliminary discussions with other countries with canneries will be undertaken during the WCPFC meetings in the second half of 2023. The update of this report to be submitted to WCPFC20 will include a plan for Year 2 (and a tentative plan for Year 3), hopefully including confirmed visits to other countries.

### 3. Example of recent purse seine species composition for difference sources of data

15. Figure 1 shows an example of the potential of cannery data to cross-check estimates of observer species composition. In this example, the proportion of bigeye tuna in the US catch has increased for all sources no doubt due to (i) the component of the US fleet that usually fishes in the more western tropical areas of the WCPFC exited the fishery in recent years, and (ii) a shift further east in the tropical WCPFC area for the remaining vessels, extending into EPO, where bigeye tuna catch is higher and to some extent, easier for vessels to estimate for logbook reporting.

16. In any event, further review of the cannery data presented here is required since, for example, some of the cannery catch data may include catches outside the WCPFC Area (since the linking to logbook data has not been undertaken to identify trips which straddle the WCPFC-IATTC boundary), and catches of large yellowfin (and bigeye tuna) destined for canneries not providing data will bias the overall species composition from the available cannery data. The higher bigeye tuna proportion in the total catch according to logbook data in 2022 also needs review and explaining. These adjustments are possible but have not been considered in the figure presented below.



**Figure 1. Annual trends of the proportion of bigeye tuna (%) in the purse seine catch for US vessels according to different sources of data.**

“CANNERY” – unadjusted cannery data, coverage incomplete;

“S\_BEST” – represents aggregated logbook data, with species composition adjusted from observer estimates (see Peatman 2020a and 2020b).

### 4. RECOMMENDATIONS

17. SC19 is invited to review and comment on the progress made on Project 114 activities to date, and note the planned activities for the rest of 2023.

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## ANNEX 1 – WCPFC Project 114 – Terms of Reference

### WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

#### TERMS OF REFERENCE

#### WCPFC Project 114: Improved Coverage of Cannery Receipt Data for WCPFC Scientific Work<sup>2</sup>

#### BACKGROUND

Observers on purse seine vessels collect tuna species composition data which is a fundamental input to estimating the purse seine tuna catch by species. However, even at 100% observer coverage, only ~0.1% of the catch can be sampled for species composition estimation, given the disruptions sampling causes to the brailing operation (see Hampton and Williams, 2016, Lawson, 2014 and Peatman, 2020a). At this level of sampling, the precision of the estimates declines with progressively higher resolution of the strata required (that is, estimates at the set level are not precise).

Purse seine processor (cannery) data have been identified as a potentially important source of data for verifying the estimates of purse seine tuna species catch determined from observer data (Lewis and Williams, 2016; Williams, 2017). The COVID-19 pandemic has resulted in a reduction in observer coverage in recent years (~50% in 2020 and ~10% in 2021), and therefore represents another important reason for considering the use of cannery data in estimation of purse seine tuna species composition as a supplement to observer information (Peatman et al., 2022).

Peatman (2020b) demonstrates the utility of cannery receipts data (for the US purse seine fleet) as an independent dataset for validation of observer sample-based species composition estimates.

Wider availability of comprehensive cannery receipts data would enable the benefits of cannery data to be realized for other purse seine fleets operating in the WCPO.

The Guidelines for the Voluntary Submission of Purse seine Processor data by CCMs to the Commission provide a mechanism for improving the coverage of cannery data for potential use.

Achievement of the objectives is subject to the following assumptions:

- Cooperation with relevant port state CCM authorities;
- Cooperation with processor companies;
- Cannery receipt data align to the *Guidelines for the Voluntary Submission of Purse seine Processor data by CCMs to the Commission*;
- The quality of cannery receipt data is appropriate;

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<sup>2</sup> [WCPFC-SC18-2022/ST-IP-11 rev1](#)

## OBJECTIVES

This project's overarching objective is to continue the work first started by Lewis (2017) to improve the coverage of cannery receipt data through collaboration with relevant port state CCM authorities.

The specific objectives will cover:

1. Identifying the gaps in the cannery receipt data submissions to the WCPFC;
2. In Year 1 of the project (as an initial step),
  - a) collaboration with one interested port state CCM, to approach several (but at least one) companies to request the provision of cannery data, using the *WCPFC Guidelines for the Voluntary Submission of Purse seine Processor data by CCMs to the Commission*<sup>3</sup>. It is envisaged that agreement to submit cannery data will require agreement for data confidentiality and other aspects, to be set out in Memorandum of Understanding (MOU) similar to that outlined in Lewis (2017).
  - b) As a key activity, document the protocols for how cannery receipt data are collected, including an assessment of the accuracy of species identification, particularly on how to distinguish juvenile bigeye and juvenile yellowfin tuna, and any requirements for sub-sampling certain size/species categories, noting the confidentiality of this information;
3. The documentation of the experience from Year 1 to outline a plan for approaching other processor companies in Years 2 and 3 of the project;
4. In Years 2 and 3 of the project, continuation of the work in collaborating with additional relevant port state CCMs, to approach companies to request the provision of cannery data. Also, to revise/improve the protocols as mentioned in 2(b) as necessary;
5. The provision of annual reports of project activities to the WCPFC Scientific Committee;
6. Where coverage of cannery data is adequate, the continuation of the analyses started in Peatman (2020b);
7. The WCPFC Science Service Provider (SSP) continuing the management and data quality assurance of purse seine processor data submission, including the identification of key gaps and resolving duplicate processor data (e.g. when valuable Final Outturn [FOT] data are provided from a different source).

## SCOPE OF WORK

The proposed activities include:

- Seeking interest from relevant port-state CCMs to participate in Year 1 of the project;
- Selection of a suitable contractor;
- Initial collaboration (through email/virtual meetings) to plan a visit to the port state CCM country, include potentially identifying a cooperative processing company before the visit;
- Informing relevant flag and coastal state CCMs of any planned visits, and engaging with these CCMs during the project as required;
- Conduct the visit (1-2 weeks) under Year 1 objectives;
- Contractor liaison with the WCPFC Secretariat and SSP;
- Preparation of consultant report for year 1 activities (objectives 1, 2 and 3), including a plan for Year 2 and 3 activities;
- Consultant conducting Year 2 and 3 activities (Objective 4), in liaison with SSP and WCPFC Secretariat;
- Preparation and presentation of reports to SC;
- Ongoing work required under Objectives 6 and 7.

It is intended that annual reports will be prepared for SC19, SC20 and SC21.

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<sup>3</sup> <https://www.wcpfc.int/doc/data-07/guidelines-voluntary-submission-purse-seine-processor-data-ccms-commission>



**TIMEFRAME**

36 months (from January 2023 through December 2025)

**BUDGET**

The consultant will be managed/coordinated through the WCPFC Secretariat and the SSP.

Note that the involvement and resources provided by the SSP to manage this project are anticipated to be covered under the WCPFC SSP contract. The SSP will be directly involved in activities under Objectives 1, 5, 6 and 7, and under other Objectives as required to most efficiently undertake the work.

A revision to the indicative budgets for Years 2 and 3 (2024 and 2025) may be necessary after the first year's activities.

Year	Indicative budget	Anticipated work
2023	US\$35,000	Covers the cost of an appropriate consultant and travel to cover Objectives 2, 3 and 5 (and Objective 1, in collaboration with the SSP).
2024	US\$60,000	Covers the cost of an appropriate consultant and travel to cover Objectives 4 and 5 (in collaboration with the SSP).
2025	US\$35,000	Covers the cost of an appropriate consultant and travel to cover Objectives 4 and 5 (in collaboration with the SSP).

**OUTPUTS and SCHEDULE**

The principal outputs of the assignment will be:

- Submission of a preliminary/progress report for the Project 114 to the WCPFC Secretariat ([SungKwon.Soh@wcpfc.int](mailto:SungKwon.Soh@wcpfc.int); [Elaine.Garvilles@wcpfc.int](mailto:Elaine.Garvilles@wcpfc.int)) by 28 July 2023;
- Presentation of the Project 114 to SC19 (no travel cost required for the contractors' presentation); and
- Submission of a 2023 final report for Project 114 to the WCPFC Secretariat by 31 December 2023 or earlier.
- This contract shall be renewed subject to the decision of project extension by WCPFC20 and WCPFC21.

