

# Western Pacific East Asia Improved Tuna Monitoring Activity Mid-term Evaluation

Author: Andrew Wright  
Date: 26 November 2021

### **Acknowledgements**

Many people freely shared their WCPFC and WPEA experience and knowledge during the MTE. The three National Coordinators, Fayakun Satria (Indonesia), Suzette Barcoma (Philippines) and Vu Duyen Hai (Vietnam) and their colleagues were responsive to information requests and provided regular opportunities, at sometimes short notice, to connect virtually. Alice MacDonald (WPEA-ITM Project Manager) and Peter Williams (SPC) were very supportive in accessing information and providing advice. Insights and suggestions were also gratefully received from Dr Tony Lewis, Pham Viet Anh, and Keith Symington.

---

The views expressed in this report are those of the author and do not necessarily reflect the position of the New Zealand Government, the New Zealand Ministry of Foreign Affairs and Trade, the Western and Central Pacific Fisheries Commission, or any other party. Nor do these entities accept any liability for claims arising from the report's content or reliance on it.



## ABBREVIATIONS

ADD	Activity Design Document
AP2HI	Asosiasi Perikanan Pole & Line Dan Handline Indonesia
ARF	Activity Results Framework
APR	Annual Progress Report
BFAR	Bureau of Fisheries and Aquatic Resources, Philippines
CCM	WCPFC Member, Cooperating Non-member and Participating Territory
CFRD	Indonesia's Centre for Fisheries Research and Development
CMM	WCPFC Conservation and Management Measure
CTI	Coral Triangle Initiative
DAC	OECD's DAC Network on Development Cooperation (EvalNet)
DARD	Department of Agriculture and Rural Development, Vietnam
EEZ	Exclusive Economic Zone
FIP	Fishery Improvement Project
GEF	Global Environment Facility
GN	Gillnet
HL	Handline
HMS	Highly Migratory Fish Stocks
IPNLF	International Pole and Line Foundation
IUU	Illegal, unreported and unregulated fishing
IPDPC	Indonesia Philippines Data Collection Project
MARD-DOF	Directorate of Fisheries, Ministry of Agriculture and Rural Development, Vietnam
MFAT	Ministry of Foreign Affairs and Trade, New Zealand
MMAF	Ministry of Marine Affairs and Fisheries, Indonesia
MTE	Mid Term Evaluation
NFRDI	Philippines National Fisheries Research and Development Institute
NSAP	Philippines National Stock Assessment Programme
OECD	Organisation for Economic Cooperation and Development
DAC EvalNet	OECD's Development Assistance Committee's (DAC) Network on Development Evaluation (EvalNet)
P&L	Pole and line
PS	Purse seine
PUSDATIN	Pusat Data Statistik dan Informasi (Centre for Statistics and Information Data), Indonesia
RIMF	Research Institute of Marine Fisheries (one in Vietnam and one in Indonesia)
RITF	Research Institute for Tuna Fisheries, Indonesia
SC	WCPFC Scientific Committee
SCG	Scientific Coordinating Group
SEAFDEC	South East Asian Fisheries Development Centre
SFFAII	SOCSKSARGEN Federation of Fishing and Allied Industry Inc.
SPC	Secretariat of the Pacific Community (Oceanic Fisheries Programme)
TCC	WCPFC Technical and Compliance Committee
TRP	Target Reference Point
VMS	Vessel monitoring system
WCPFC	Western and Central Pacific Fisheries Commission
WCPO	Western and Central Pacific Ocean
WPEA-ITM	Western Pacific East Asia Improved Tuna Management Activity
WPEA-OFM	West Pacific East Asia Oceanic Fisheries Management Project
WPEA-SC	Western Pacific East Asia – Improved Tuna Management Activity Steering Committee
WPEA-SM	Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas Project
WWF	World Wide Fund for Nature
MDPI	Yayasan Masyarakat dan Perikanan Indonesia



## Contents

Abstract	1
Executive Summary	2
Background	5
THE ACTIVITY	5
EVALUATION PURPOSE AND DESIGN	6
PURPOSE	6
SCOPE	6
DESIGN	7
Overarching Findings	9
Evaluation Conclusions	32
Candidate activities for support under the WPEA-ITM or a future phase of the WPEA	37
Lessons Learned	41
Recommendations	42
Appendices	47
APPENDIX A. People consulted	48
APPENDIX B. Country profile: Indonesia	50
APPENDIX C. Country profile: Philippines	58
APPENDIX D. Country profile: Vietnam	65
APPENDIX E. WCPFC data submission summary for Indonesia, Philippines, and Vietnam	70
Appendix F. WPEA-ITM Results Monitoring Framework: MTE proposed revision	74
APPENDIX G. WPEA-ITM financial considerations	100
APPENDIX H. Bibliography	104



Intentionally left blank



# 1

## Abstract

The WPEA-ITM MTE evaluated progress with implementation against the activities described in the Activity Design Document, its associated Activity Results Framework and revisions endorsed by the WPEA-ITM Steering Committee since implementation commenced in 2017. Based on experiences to December 2020, the MTE identified possible refinements to planned activities to be considered for implementation in the time remaining for the project (currently March 2023 but proposed for a no-cost extension to March 2024).

Primary stakeholders were the key implementing agencies in the three partner countries, Indonesia, Philippines, and Vietnam, the WCPFC Secretariat, as project manager, SPC as the data management and science services provider to the Activity and to the WCPFC, and MFAT staff who were involved with the Activity. Travel restrictions associated with the pandemic meant that consultation with stakeholders was restricted to virtual meetings on-line which constrained the ability of the MTE to undertake detailed in-country research.

Six criteria were evaluated: relevance, coherence, effectiveness, efficiency, impact, and sustainability. In addition, Activity attention to cross cutting issues such as gender, social inclusion, labour rights and environmental considerations were briefly considered.

The Activity has had a positive impact in terms of building national capacity and improving the quality and scope of scientific information available to support regional and national initiatives associated with the conservation and management of shared WCPO tuna resources. While the Philippines has reached an encouraging level of self-reliance in relation to fishery monitoring to the standards required by WCPFC, additional work is still required in Indonesia and Vietnam.



# 2

## Executive Summary

This MTE was undertaken for the West Pacific East Asia Improved Tuna Monitoring (WPEA-ITM) Activity. The Activity, which focusses on Indonesia, Philippines and Vietnam, commenced with funding support from the New Zealand Government, through its Ministry of Foreign Affairs and Trade, in 2017. It is implemented by the Secretariat of the Western and Central Pacific Fisheries Commission (WCPFC) and was scheduled to run to March 2022. The total funding support, originally programmed to be disbursed over 5 years, is NZ\$4,912,052. In early 2021 MFAT agreed to a no-cost extension of the Activity to March 2023.

The total reported catch of oceanic (i.e., not including neritic) tunas by fleets operating out of Philippines, Vietnam, and Indonesia in the WCPFC Statistical Area in 2020 was 825,557 tonnes taken by more than 8,000 vessels (including carrier and support vessels) supporting a variety of fishing gears. These vessels operate within the Exclusive Economic Zones (EEZs) of these countries, the EEZ's of other members of the Commission (in the case of Philippines only) and the high seas of the WCPO. This accounted for approximately 30.1% of the total reported catch of oceanic tunas in the WCPFC Statistical Area, and approximately 16.4% of the total global tuna harvest, in 2020.

The MTE considered progress with implementation of the WPEA-ITM Activity against the outputs, outcomes and associated activities described in the Activity Design Document (ADD) and its associated Activity Results Framework (ARF) prepared in 2016. Based on the Activity's experiences to December 2020, the MTE was requested to identify possible refinements to planned activities to be considered for implementation in the time remaining for the project (currently March 2023). A key objective of the Evaluation, as presented in the Terms of Reference for the MTE ([www.wcpfc.int/vacancies-opportunities](http://www.wcpfc.int/vacancies-opportunities)), was also to inform the design and implementation of a possible future phase of the project.

The MTE was expected to provide recommendations on any improvements needed to update the existing workplan and targets in the ARF. The MTE was formulated to assess the level of country ownership, progress with development of an exit strategy, and consider the potential use of any savings for related and prioritised work that is not part of the ADD.

New Zealand Ministry of Foreign Affairs and Trade (MFAT) guidelines, which use the principles and criteria described by the Organisation for Economic Cooperation and Development's (OECD) DAC Network on Development Evaluation (EvalNet), were utilised for the Evaluation. The scope of the MTE focussed on the ARF and project-supported interventions including in relation to MFAT's development assistance priorities as outlined in its *Strategic Intentions (2020-2024)* publication.

In addition to cross cutting issues such as gender, social inclusion and environmental considerations, the six DAC EvalNet criteria for evaluation were: relevance, coherence, effectiveness, efficiency, impact, and sustainability.

Primary stakeholders were the implementing agencies in the three partner countries, the WCPFC Secretariat, as project manager, SPC as the data management and science services provider to the Activity and to the WCPFC, and MFAT staff who were involved with the Activity.

To address the key evidence needs of this MTE the ADD, the ARF, WPEA-ITM Steering Committee Reports and Annual Progress Reports (APRs) were the primary reference documents used to systematically assess:



- to what extent Activity implementation to date has achieved its planned outputs and short- and medium-term outcomes;
- the major factors that influenced the implementation of the Activity's activities achievement of outcomes, and
- how the lessons learned from that experience can be harnessed or mitigated to strengthen the Activity's performance for the remainder of the planned implementation period and/or support the design of a potential future phase.

The approach primarily relied on information and data collected through key stakeholder interviews, relevant documentation, and analysis of Activity-related data.

Numerous constraints experienced in the first two years of implementation, and more recently because of the covid pandemic, has not dramatically affected the WPEA-ITM's capacity to provide valuable support to these countries consistent with the objectives of the original WPEA-ITM design document. The benefits of the Activity have accrued to each participating country in terms of building national capacity and improving the quality and scope of information available to support conservation and management initiatives for fisheries targeting tuna resources within areas under their national jurisdiction. Benefits have also accrued to the Commission membership by reducing uncertainties associated with scientific data that supports assessments of the status and trends of shared regional fish stocks so strengthening scientific advice available to support the fishery management decisions of the Commission.

The Activity is directly relevant to New Zealand's international engagement strategy, as elaborated in MFAT's *2020-2024 Strategic Intentions*. It is also complementary to regional initiatives such as the *Sustainable Development Strategy for the Seas of East Asia*.

The original ADD noted that a significant amount of information required to complete the ARF was not available at the time of designing the Activity in 2016 with the result it recommended that the ADD required further development in the inception phase. There are several deficiencies in this regard. A formal Inception Plan was not developed and considered by the Steering Committee, exit strategies have not yet been prepared and although there is strong evidence of positive project impacts (for example in the reports of SPC's data audits), some baselines and targets were not confirmed. Taking account of the implementation status at the time of the MTE, a revised ARF, which is intended to address elements that have not been attended to to date, is appended for review by project management and eventual endorsement by the Steering Committee.

In general, through the support of the Activity, there has been on-going improvements in all three countries in respect of the quality and scope of fishery monitoring activities as evidenced in various data audit reports prepared by SPC for the three participating countries and associated reports presented to the WCPFC Scientific Committee regarding scientific data available to the Commission and related data gaps. This is validation that the WPEA-ITM is having a positive impact in terms of supporting national compliance with the obligations of WCPFC and in improving the data available to assessments of WCPO oceanic tuna stocks.

Despite the relatively strong position of Philippines in terms of its support for strengthened fishery monitoring, there is, as in Vietnam and Indonesia, increasing budgetary pressure associated with a re-programming of government resources, including in response to the pandemic. The implication is that increased, sustained, government financial support to WPEA-related activities will be a challenge to secure in the medium term. Nevertheless, against this background, additional effort is required in Vietnam and Indonesia to assume greater responsibility for activities and services supported by the WPEA so that both countries move towards a situation that Philippines has largely been able to achieve since 2015 in relation to sustaining project-related activities. This will take time and is likely to require support beyond the conclusion of the WPEA-ITM.





The Activity directly addresses cross cutting environmental issues particularly in respect of conservation and resource management and supporting sustainable livelihoods. All participating countries are aware of gender-related considerations in Activity implementation and have recently started reporting in more detail in this regard.

Recommendations for strengthening the implementation of the Activity, which continues to address an important need in relation to the management of WCPO tuna resources, are provided for the consideration of the WPEA-ITM SC, MFAT, as the funding partner and the WCPFC Secretariat as the implementation partner. As drawdown of project funds has been adversely affected by issues such as a slow start and the pandemic, a no-cost extension to the Activity of a further 12 months, to March 2024, is recommended. Candidate projects for support for the remaining time for the WPEA-ITM are identified together with activities that could be included in a future intervention to build on the outcomes of the WPEA-ITM.



# 3

## Background

### THE ACTIVITY

The Preparatory Conference convened to commence work on the implementation of the 2000 *Convention for the Conservation and Management of Highly Migratory Fish Stocks (HMS) in the Western and Central Pacific Ocean* in the early 2000's reaffirmed the importance of the conservation and management of HMS stocks throughout their range<sup>1</sup>. Of particular concern was the relative lack of information relating to the utilisation of Western and Central Pacific Ocean (WCPO) stocks in the waters of the Pacific Ocean's western seaboard. The Scientific Coordinating Group (SCG), established by the Preparatory Conference following the adoption of the Convention, advised that the lack of data from Indonesia and the Philippines was a *serious concern because they contributed substantially to the uncertainties in the stock assessments*<sup>2</sup>.

In 2002, with financial support provided through participants in the Participatory Conference, significant work commenced to address this concern under the auspices of the Indonesia Philippines Data Collection Project (IPDCP). This Project, which was sustained by the Western and Central Pacific Fisheries Commission (WCPFC) through until 2009, confirmed the catch from this region accounted for approximately 30% of the annual WCPO tuna harvest at that time<sup>3</sup>.

The significance of the tuna fisheries of Philippines, Indonesia and Vietnam in the WCPO in 2020 is evident from the information presented in Annual Reports, Part 1 submitted by each country to the 17<sup>th</sup> Regular Session of WCPFC's Scientific Committee, 11-19 August 2021<sup>4,5,6</sup>. The total reported catch of oceanic (i.e., not including neritic) tunas by fleets operating out of Philippines, Vietnam, and Indonesia in the WCPFC Statistical Area in 2020 was 825,557 tonnes taken by more than 8,000 vessels (including carrier and support vessels) supporting a variety of fishing gears. These vessels operate within the Exclusive Economic Zones (EEZs) of these countries, the EEZ's of other members of the Commission (in the case of Philippines only) and the high seas of the WCPO. This accounted for

---

<sup>1</sup> The Convention entered into force in 2004 six months after the deposit of the 13<sup>th</sup> instrument of ratification.

<sup>2</sup> Preparatory Conference for the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific. Fifth Session, Rarotonga, Cook Islands, 29 September – 3 October 2003. WCPFC/PrepCon/28. 20 pages.

<sup>3</sup> Hodge, S. 2016. *Terminal Evaluation Report*. Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas. PIMs 4753. GEF Activity ID: 5393. December 2019. 105 pages.

<sup>4</sup> Vietnam. 2021. *Annual Report to the Commission, Part 1: Information on fisheries, research and statistics*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-AR/CCM-38. 9 pages.

<sup>5</sup> Philippines. 2021. *Annual Report to the Commission, Part 1: Information on fisheries, research, and statistics*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-AR/CCM-20 (Rev.01). 24 pages.

<sup>6</sup> Indonesia. 2021. *Annual Report to the Commission, Part 1: Information on fisheries, research, and statistics*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-AR/CCM-09. 33 pages.



approximately 30.1% of the total reported catch of oceanic tunas in the WCPFC Statistical Area, and approximately 16.4% of the total global tuna harvest, in 2020<sup>7</sup>.

During 2008 and 2009, the WCPFC Secretariat took the lead on drafting a Project submission to the Global Environment Facility (GEF) for funding to provide on-going support to scientific data collection initiatives in Philippines, Indonesia and Vietnam and to improve governance and management arrangements nationally in those countries to strengthen their engagement in the Commission. The subsequent project, the West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFM), supported by the GEF and other donors, was implemented between 2010 and 2013.

Through a series of project extensions and renewals, GEF support, with co-funding from a variety of sources including from members of the Commission, continued until 2019 when the last iteration under that initiative, the Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas Project (WPEA-SM), concluded.

In 2016, New Zealand agreed to support a complementary 6-year Activity (comprising a financial contribution of NZ\$4.91 million) to further strengthen Philippines, Indonesia and Vietnam's capacity to contribute to the work of the Commission including through improved data and information to support stock assessments, partially generated through improved port monitoring and at-sea human observer programmes, strengthened institutional and governance arrangements to support national commitments to regional cooperation in the implementation of the Convention and the decisions of the Commission, and to counter illegal, unreported and unregulated fishing (IUU). Full implementation of this initiative, the Western Pacific East Asia Improved Tuna Monitoring Activity (WPEA-ITM), was delayed (until 2017) and, with New Zealand's endorsement, is now scheduled to conclude in March 2023. This MTE provided an opportunity to review strategies to strengthen effective implementation of the remainder of the Activity, where considered appropriate.

## EVALUATION PURPOSE AND DESIGN

### PURPOSE

The MTE was required to consider progress with implementation of the WPEA-ITM Activity against the outputs, outcomes and associated activities described in the Activity Design Document (ADD) and its associated Activity Result Framework (ARF) prepared in 2016. Based on the Activity's experiences to December 2020, the MTE was requested to identify possible refinements to planned activities to be considered for implementation in the time remaining for the project (currently March 2023).

The key objective of the Evaluation, as presented in the Terms of Reference for the MTE ([www.wcpfc.int/vacancies-opportunities](http://www.wcpfc.int/vacancies-opportunities)), is also to inform the design and implementation of a possible future phase of the project.

### SCOPE

Using the principles and criteria described by the Organisation for Economic Cooperation and Development's (OECD) DAC Network on Development Evaluation (EvalNet), the scope of the

---

<sup>7</sup> Williams, P. and Ruaia, T. 2021. Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2020. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC- SC17-GN-IP-01. 66 pages.



MTE was Activity-supported interventions from December 2016 to December 2020<sup>8</sup>. It focussed on the ADD, the ARF with consideration to MFAT's development assistance priorities as outlined in its *Strategic Intentions (2020-2024)* publication.

The focus of the MTE was the East Asian countries that participate in the project, Indonesia, Philippines and Vietnam. Primary stakeholders were the key implementing agencies in the three partner countries, SPC as the data management and science services provider to the Activity and to the WCPFC, the WCPFC Secretariat, as project manager, and MFAT staff who were involved with the Activity.

The MTE was expected to provide recommendations on any improvements needed to update the existing workplan and targets in the ARF. The MTE was formulated to assess the level of country ownership, progress with development of an exit strategy, and consider the potential use of any savings for related and prioritised work that is not part of the ADD.

Other WCPFC CCMs were to be consulted on Activity visibility, outputs and performance opportunistically. However, most of the MTE was based on engagement with National Coordinators and associated national staff, the WCPFC Secretariat, WPEA-ITM SC members, the contracted Project Manager, experts occasionally contracted to the project, SPC staff that have supported project interventions and MFAT staff. Other stakeholders, such as the fishing industry or NGO representatives in the participating countries, and Steering Committee observers were also invited to engage. People, and their affiliations, consulted during the MTE are listed at **Attachment A**.

## DESIGN

The MTE design was based on MFAT guidance using the principals and criteria for evaluations described by the OECD's Development Assistance Committee's (DAC) Network on Development Evaluation (EvalNet). The two principles that guide EvalNet's approach are:

*Principle 1:* The criteria should be applied thoughtfully to support high quality, useful evaluation. They should be contextualized – understood in the context of the individual evaluation, the intervention being evaluated, and the stakeholders involved. The evaluation questions (what you are trying to find out) and what you intend to do with the answers, should inform how the criteria are specifically interpreted and analysed.

*Principle 2:* The use of the criteria depends on the purpose of the evaluation. The criteria should not be applied mechanistically. Instead, they should be covered according to the needs of the relevant stakeholders and the context of the evaluation. More or less time and resources may be devoted to the evaluative analysis for each criterion depending on the evaluation purpose. Data availability, resource constraints, the impact of extrinsic factors (such as a pandemic), timing, and methodological considerations may also influence how (and whether) a particular criterion is covered.

In addition to cross cutting issues such as gender, social inclusion and environmental considerations (see below), the six DAC EvalNet criteria for evaluation are: relevance, coherence, effectiveness, efficiency, impact, and sustainability. These criteria provide a basis for "evaluative analysis".

---

<sup>8</sup> The Activity Results Framework provides for an MTE at the end of Year 2. The RFP notes that Activity implementation was delayed, and that the MTE will cover the period December 2016 to December 2020 (with some consideration of activities supported through to August 2021). An extension of the Activity has been approved to March 2023.



To address the key evidence needs of this MTE the ADD, the ARF, WPEA-ITM Steering Committee Reports and Annual Progress Reports (APRs) were the primary reference documents to systematically assess:

- to what extent Activity implementation to date has achieved its planned outputs and short- and medium-term outcomes;
- the major factors that influenced the implementation of the Activity's activities achievement of outcomes, and
- how the lessons learned from that experience can be harnessed or mitigated to strengthen the Activity's performance for the remainder of the planned implementation period and/or support the design of a potential future phase.

The approach primarily relied on information and data collected through key stakeholder interviews, relevant documentation, and analysis of Activity-related data. The data and information were analysed against the key MTE questions and sub-questions identified in the MTE Matrix (see below).

The MTE design describes the evaluation's approach, method and tools that were used to meet the Evaluation's purpose, objectives and respond to key questions. It included consideration of cross-cutting issues including environmental and social impacts under the relevant criteria (relevance, coherence, efficiency, effectiveness, impact and sustainability).

The MTE was conducted in four phases. Phase One included planning and initial analysis. It involved preliminary reviews of Activity-related documentation and an Inception Meeting. The principal output of Phase One was an Evaluation Plan, which included the MTE Matrix. The Evaluation Plan was submitted to MFAT and the WCPFC Secretariat at the start of the MTE and is a companion document to this MTE report. Phase Two focussed on stakeholder consultation and primary data collection, data analysis and interpretation. Phase Three was dedicated to drafting the MTE Report for review by key stakeholders and for discussion on findings, preliminary conclusions, and recommendations. This included presentation and discussion of the Draft Report to an WPEA-ITM SC meeting in November 2021. Phase Four provide the opportunity for the Reviewer to respond to comments by the SC, WCPFC Secretariat, SPC staff and MFAT on the Draft MTE Report and finalise the Report.



# 4

## Overarching Findings

The purpose of the MTE was to evaluate progress with the implementation of the WPEA-ITM Activity against the forecast outcomes and outputs described in the ADD, its associated ARF and any revisions endorsed by the Steering Committee since implementation commenced in 2017. Based on the Activity's experiences to December 2020, the MTE was to identify possible refinements to planned activities to be considered for implementation in the time remaining for the project (currently March 2023). In addition, a key objective of the Evaluation was to inform the design and implementation of a possible future phase of the project.

The evaluation methodology involved a relatively high-level assessment of three key questions relating to achievements, influences and lessons learned to date. More detailed consideration of the six DAC EvalNet criteria, guided by the lines of inquiry outlined in the MTE matrix, supplemented the high-level assessment.

***The extent Activity implementation to date has achieved its planned outputs and short- and medium-term outcomes.***

In general, through the support of the Activity, the three participating countries have demonstrated on-going improvements in respect of the quality and scope of fishery monitoring data that is submitted to the WCPFC in compliance with scientific data reporting obligations (see **Appendix B to E** inclusive). Given the relative importance of tuna fisheries in Indonesia, Philippines, and Vietnam, this makes a significant contribution to reduce uncertainties in the data available for assessments. Compliance with WCPFC's CMMs, and other decisions of the Commission, including efforts to eliminate IUU fishing by the three participating countries, have contributed to a precautionary assessment that the fishing mortality on yellowfin and bigeye tuna stock should not be increased from the level that maintains spawning biomass at 2012-2015 levels until the Commission can agree on an appropriate target reference points (refer to: <https://www.wcpfc.int/current-stock-status-and-advice>). The stocks are currently assessed as not being overfished and that overfishing is not currently occurring which is consistent with the long-term outcomes identified in the ADD.

The Activity directly contributes to WCPFC priorities related to data gaps and deficiencies. It contributes to the improvement in the quality and the scope of data available to support scientific assessments, reduce uncertainties and strengthen confidence in the scientific advice available to support decision making associated with efforts to sustainably manage WCPO oceanic tuna fisheries.

At this stage, there is no apparent need to review the Activity theory and adapt the workplan for future years based on emerging priorities. The priorities identified in the 2016 ADD remain valid and appropriate and efforts should be sustained to address them more completely. That said, all three participating countries advised of increasing attention to the development and application of national-level harvest strategies, or related initiatives, for the management of tuna fisheries within waters under national jurisdiction, a subject that has considerable momentum in relation to regional stocks in the Commission.

However, since early 2020 the pandemic has had a significant impact on project implementation causing a delay to planned activities spanning almost two years. Unfortunately, as of September 2021, prospects for normalisation of project activities in the next 12 months remain bleak and, apart from on-going remote virtual support, project activity to address these priorities is likely to remain subdued in the medium term.



Additional attention is required to build on achievements to date. The characterisation of fisheries in all three countries, particularly Indonesia and Vietnam, requires additional work. The issues requiring attention have been identified in the annual national audits undertaken by SPC and summarised in SPC's annual reports summarising scientific and observer data available to the Commission for WCPFC's Scientific Committee<sup>9</sup>. In relation to the WPEA-ITM, these issues mainly relate to Outputs 1, 2 and 3.

Partially as a consequence of covid, developments relating to the at-sea observer programmes in Indonesia and Vietnam have not progressed as planned (Output 3). There is potential for significantly more work related to strengthen the capacity of the national at-sea observer programmes in Indonesia and Vietnam to generate observer data, consistent with WCPFC standards, for submission to WCPFC.

Capacity building in stock assessment and database management and development (Outputs 4 and 5), including the integration of systems supported by SPC with national systems, will also benefit from additional Activity effort during the remaining period. Attention in this regard will also assist national agencies to utilise data generated under all WPEA initiatives since 2010 to inform national-level fisheries management initiatives. Achievements in relation to this would be enhanced with increased capacity building and training related to data analysis and fish stock assessment.

Future support through the WPEA-ITM has the potential to have a significant impact in terms of addressing these outstanding issues.

Although participating country independence (in respect of financial support for fishery monitoring) was not a stated output for the Activity, the expectation that exit strategies would be formulated early in project implementation implied participating countries would have moved towards reduced reliance on Activity funding to support compliance with the data submission obligations to WCPFC by the completion of the Activity. Since 2015 the Philippines has assumed increasing financial responsibility for its fishery monitoring activities with BFAR providing the necessary funds for data acquisition, assimilation and processing across all landing sites and for an at-sea observer programme.

Despite the strong position of Philippines in terms of its support for strengthened fishery monitoring, there is, as in Vietnam and Indonesia, increasing budgetary pressure associated with a re-assignment of limited government resources, including to combat the pandemic. The implication is that increased, sustained, government financial support to WPEA-related activities will be a challenge to secure in the medium term. It is anticipated that the three countries will require extended support after the conclusion of the WPEA-ITM, particularly in the areas of mentoring and capacity building. It would be prudent to start preparations for securing such support both within country and through the WCPFC Secretariat.

***The major factors that have influenced the implementation of the Activity's programme of work and the achievement of outcomes.***

---

<sup>9</sup> Panizza, A., Williams, P., Falasi, C., Loganimoce, E. and Schneiter, E. 2021. *Status of observer data management*. Seventeenth Regular Session, WCPFC Scientific Committee, Online Meeting, 11 –19 August 2021 WCPFC-SC17-2021/ST-IP-02. Oceanic Fisheries Programme (OFP) Pacific Community (SPC). 24 pages. SPC. 2021. *Scientific data available to the Western and Central Pacific Fisheries Commission*. Scientific Committee, Seventeenth Regular Session. Online Meeting, 11 –19 August 2021, WCPFC-SC17-2021/ST-WP-01 (Rev.01). 34 pages.



The time that elapsed between project design, which was mostly undertaken in 2016, and project implementation (late 2017) had implications for activities programmed for support early in project implementation. Start-up activities were affected by a relatively short term for the first project manager who did not benefit from a strong background in WCPO fisheries and, not being based at the WCPFC Secretariat in Micronesia, did not benefit to the extent needed from the accumulated knowledge and prior WPEA project experience of Micronesia-based Secretariat colleagues. The overlap between the WPEA-SM and the WPEA-ITM, which was intended to be beneficial in terms of providing for a seamless transition between the two projects, did not materialise as in-country resources were reported to be fully occupied concluding the WPEA-SM project. Countries also experienced some adjustment challenges because the WPEA-SM subsidised the time of National Coordinators. This support was not available under the WPEA-ITM. In addition, changes in ministerial and senior department personnel in-country, the issue of the yellow card in Vietnam in 2017 and the fact that, since the original ADD design, the three participating countries had started work on revising national arrangements for the management of their domestic tuna fisheries, all had implications for the planned WPEA-ITM roll out. An Inception Plan would have provided the opportunity to address some of these issues collectively.

These matters aside, the extent that the Activity has been able to achieve meaningful outcomes in regard to fishery monitoring and in complying with the data submission obligations associated with WCPFC is a credit to the commitment the national affiliate agencies and project-associated staff. It also reflects an appreciation of the importance of the Activity as a vehicle for strengthening the engagement of participating countries in the WCPFC. A key factor in this regard is the quality of service to the Activity provided by SPC staff who serve in both a mentoring and technical oversight role. In addition, effective administration provided by the WCPFC Secretariat and the flexibility demonstrated by the Secretariat and MFAT in efforts to accommodate changes in project circumstances have served to optimise opportunities for achieving meaningful project outcomes under challenging circumstances.

***How lessons learned to date inform actions to strengthen the Activity's performance for the remainder of the planned implementation period and/or support the design of a potential future phase.***

Covered in additional detail in **Section 6**, the lessons learned to date include:

- Complex multinational projects working in diverse multi-gear fisheries for oceanic tunas require significant investment over a long period of time to achieve sustainable outcomes.
- Responsibilities for project implementation vested in the WCPFC Secretariat has been broadly beneficial in terms of efficient access to technical advice and services and in relation to capacity building.
- SPC is a critical partner in fishery monitoring capacity building initiatives associated with WCPO tuna fisheries.
- Valuable supplemental support to SPC's technical oversight is achieved through contracting experts with a strong combination of experience in WCPFC institutional processes, direct engagement with the participating countries and detailed understanding of WCPO tuna fisheries.
- The ARF, with appropriate baseline and target descriptions, needs to be used more strategically and actively as a tool to monitor and report on implementation progress. It has more value than simply an occasionally updated annex to a Steering Committee Report.
- The importance of MFAT and the WCPFC Secretariat's efforts to manage the Activity's budget in an adaptive manner to accommodate unforeseen circumstances, particularly those associated with the pandemic.
- On-line virtual meetings can generate positive outcomes but technical training delivered on-line is less productive. Practical modules delivered in a face-to-face





setting are required as a follow-up to virtual delivery to optimise technical training outcomes.

- A formal Evaluation undertaken virtually is constrained in terms of engagement with stakeholders, and accessibility to documents particularly 'grey' literature, that may be examined during a physical visit.

The six DAC EvalNet criteria evaluated on the basis of a series of key questions were: relevance, coherence, effectiveness, efficiency, impact, and sustainability. Several of these criteria are inter-related with the result that, in the assessment, the MTE examined activities and progress towards outcomes under more than one criteria. Activity consideration of cross cutting issues such as gender, social inclusion, labour rights and environmental considerations were also reviewed.

## CRITERIA AND KEY MTE QUESTIONS

**Relevance:** *The extent to which the Activity design and objectives are relevant to partner (country and institutional) changing needs, policies, and priorities and will continue to do so if circumstances change.*

- *How relevant is the Activity to the priority needs of the partner countries (WPEA region) and the Commission (WCPO region) in relation to tuna fisheries data collection, monitoring and management?*
- *Is there a need to review the Activity theory and adapt the workplan for future years based on new emerging priorities (since Activity design in 2016)?*

The original Theory of Change incorporated into the ADD stated "*.....the Activity ring-fences its support to what is considered a foremost priority; monitoring, data collection and data management and communication, in a manner properly coordinated with other stakeholders and existing initiatives*". This statement remains relevant.

The WPEA-ITM design, objectives and associated activities are directly relevant to the sustainable conservation and management of oceanic tuna fisheries in the three participating countries and to the WCPO region. Given the shared nature of WCPO oceanic tuna resources and the fact that Indonesian, Philippine, and Vietnamese tuna fisheries account for 30% to the total tuna catch from the WCPO, comprehensive catch information is required from those fisheries for input to assessments of the status and trends of WCPO tuna resources and to inform decisions on appropriate fishery management options including regional and national harvest strategies and associated WCPFC CMMs. In addition, while useful progress has been achieved through various WPEA initiatives since 2010 in relation to improved characterization of tuna fisheries in Indonesia, Philippines and Vietnam there is significant work yet required to achieve full monitoring of the catch and effort for all gears used to harvest WCPO oceanic tuna resources from western regions, to describe the species composition for all gears and to support sampling to better inform research to describe biological parameters and stock dynamics.

In February 2019, the first APR noted that the Steering Committee meeting in December 2018 provided an opportunity to *re-design project activities, targets, indicators and budget to ensure the project was more relevant to the many significant changes in the fisheries sectors in each country since the project was designed several years ago*".

The "many significant changes" were not elaborated upon. They may have included developments in the WCPFC, given the on-going nature of the development and implementation of revised and new CMMs, the increasing interest by the Commission in addressing data gaps impacting uncertainties in assessments of WCPO oceanic tuna stocks and attention to by-catch and broader ecosystem considerations. In addition, changes in ministerial and senior department personnel in-country, the issue of the yellow card in Vietnam in 2017 and the fact that, since the original ADD design, countries had moved forward with their own efforts to strengthen areas such as reviews of policy and legal



frameworks and national tuna management plans including through engagement in Fishery Improvement Projects (FIPs – see below - *Coherence*).

In relation to adaptation of the work plan, in addition to a delayed implementation of previously planned project activities, and against the experience of a slow start in 2017/18, the loss of project momentum because of the pandemic, apart from in relation to annual reporting to the Commission which has been maintained, will require time and resources to re-establish. There will be significant challenges to re-establish project momentum in the 18 months remaining under the current extension to March 2023 agreed by MFAT.

The less than anticipated draw down of project funds up to the end of 2020 means that approximately 61% of the original WPEA-ITM Activity budget remains available for disbursement from the end of 2020 (**Appendix G**).

A key limiting factor to the effective utilisation of these funds in the time currently remaining for Activity implementation, including the possible scaling up of project activities, relates to the competing demands on SPC's resources and SPC's limited capacity to service increased WPEA-ITM demands. The remaining budget could comfortably support WPEA activities to at least March 2024 delivering an annual programme of work broadly aligned with that delivered during pre-COVID times.

**Coherence:** *The compatibility of the Activity with other similar initiatives so that value is added, and duplication of effort is avoided.*

- *How well does this Activity fit with WCPFC priorities?*
- *To what extent is this Activity coherent with other New Zealand Aid Activities?*
- *What needs are there in respect to a refinement of the Activity's strategic approach, ownership, partnerships and progress towards an exit strategy?*

Partially because of the inability to undertake in-country research to support the MTE, it was difficult to adequately assess the compatibility of the Activity with other similar initiatives in relation to the extent value is added and duplication of effort is avoided. Nevertheless, the value of the WPEA, and its contribution to other initiatives relating to the conservation and management of WCPO tuna resources was verified through the WPEA's direct contribution to national efforts to establish effective fishery monitoring and fishery management arrangements.

A key consideration for initiatives to estimate catches of oceanic tuna in each participating country is to engage other stakeholders besides the project's main partner in the national fisheries agency. The ADD anticipated on-going WPEA-ITM engagement with the South East Asian Fisheries Development Centre (SEAFDEC) and the Coral Triangle Initiative (CTI). This does not appear to have materialised although, at least in the Philippines, BFAR/NFRDI are involved in SEAFDEC and CTI activities. As noted in the 2019 APR (February 2020) in the Philippines the Philippines Statistical Authority (PSA), the Philippine Fisheries Development Authority (PFDA), port authorities and fishing industry associations have contributed, in varying capacities, to WPEA initiatives. In Indonesia, the One Data Program of the Government (Pusdatin), implemented through the National Development Planning Agency of the Ministry of National Development Planning under Presidential Regulation No. 39/2019, is a key partner, along with the fishing industry and NGOs. In Vietnam, VNFishBase, which consolidates data for all fisheries in Vietnam, was implemented by MARD in January 2019 and efforts to integrate WPEA data assimilation and processing systems with VNFishBase are on-going. In addition, the fishing industry, primarily through the Vietnam Tuna Association (Vinatuna) and WWF, have been regular participants in WPEA-related consultations in Vietnam and, under Fishery Improvement Projects (FIPs), are supporting increased fishery monitoring initiatives in-port and at-sea in close consultation with MARD.

FIPs have been a feature of efforts to strengthen fisheries management arrangements in the three participating countries for several years. In Philippines, in addition to a FIP initiative involving BFAR and WWF for yellowfin that started in 2011, the SOCKSARGEN Federation of



Fishing and Allied Industry Inc. (SFFAII) started work on the tuna handline fishery out of General Santos City in 2018. Indonesia has supported several FIPs. These included initiatives by the Asosiasi Perikanan Pole & Line Dan Handline Indonesia (AP2HI), the industry association for the pole-and-line and handline tuna industry, and the International Pole and Line Foundation (IPNLF), in collaboration with other NGOs (including Yayasan Masyarakat dan Perikanan Indonesia (MDPI)), a national NGO and WWF-Indonesia coordinated through MMAF. Other FIPs underway in Indonesia in the period the WPEA-ITM was establishing included one for hand line YFT (MDPI and ANOVA Food (USA)), one for longline and purse seine tuna (with PT Intimas Surya, a processing and export company and WWF-Indonesia) and several supported through the Sustainable Fisheries Partnership (SFP) initiative including a national tuna longline FIP announced in mid-2019. In Vietnam, in 2014, WWF-Vietnam launched a FIP for YFT in association with VinaTuna and MARD, through the Directorate of Fisheries (D-Fish) and the Research Institute of Marine Fisheries (RIMF), coordinating with provincial Departments of Agriculture and Rural Development (DARD) through the FIP Coordination Unit. Prior to 2020, the YFT FIP included longline gear but vessels historically using longline have largely converted to handline<sup>10</sup>. In all three participating countries, stakeholders associated with FIP projects who were consulted during the MTE reported positively on the contribution of the WPEA to national efforts to improve national-scale tuna fishery monitoring and management arrangements and the contribution of WPEA-related initiatives to FIP processes.

In addition to coordinating and harmonising WPEA-ITM activities with initiatives such as these, there are several other initiatives which are relevant to the WPEA and relate to MTE assessment criteria including coherence, efficiency, impact, and sustainability. These include initiatives by multilateral institutions, such as the World Bank's pipeline project for Sustainable Fisheries Development in Vietnam that includes a component "*to improve fisheries management capacity for complying with illegal, unreported and unregulated fishing (IUU) and upgrade the national database fisheries system for management*"<sup>11</sup>. In addition, an initiative that offers opportunities for close collaboration relates to the Bank's interest in strengthening Vietnam's engagement in WCPFC<sup>12</sup>.

It is a national responsibility to facilitate linkages between the WPEA and such initiatives to add value for mutual benefit and avoid duplication of effort.

Significantly, although the transition from the WPEA-SM to WPEA-ITM caused strain for some of the national fisheries administrations in relation to their capacity to adequately service the two projects simultaneously, coherence between the two initiatives was achieved through co-financing for WPEA activities, such as the national catch estimation meetings in 2018, shared by both projects.

In relation to both coherence and relevance, the Activity directly identifies with New Zealand's international engagement strategy, as elaborated in MFAT's *2020-2024 Strategic Intentions* document in relation to:

- building and leveraging international relationships,
- promoting sustainable international solutions to global environmental and natural resource challenges,
- embedding New Zealand as an active and integral partner in shaping Indo-Pacific order that delivers regional stability and economic integration, and

---

<sup>10</sup> Keith Symington, *pers comm*.

<sup>11</sup> <https://projects.worldbank.org/en/projects-operations/project-detail/P171352>

<sup>12</sup> Mizushi Satoh, *Environmental Specialist*, Environment, Natural Resources and Blue Economy, The World Bank. *pers. comm. August 2021*.



- strengthening and protecting the use of international rules and institutions to pursue New Zealand values and interests.

The Activity is also complementary to the *Sustainable Development Strategy for the Seas of East Asia* which provides the overarching framework for sustainable development of the East Asian Seas aimed at securing the sustainable use of coastal and marine resources in that region (see PEMSEA, updated in 2015).

As discussed above, exit strategies have not yet been formulated by the participating countries. This is fortunate because an exit strategy drafted prior to the pandemic would have had little practical benefit under the changed circumstances now being experienced. Nevertheless, countries should be invited to provide a submission to WCPFC project management that describes the arrangements that they will put in place to maintain the fishery monitoring activities currently supported by the project once the WPEA-ITM concludes.

**Effectiveness:** *The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.*

- *What progress has been made against the outputs and short- and medium-term outcomes described in the Results Diagram?*
- *What are major factors that have affected the achievement of results?*
- *What (if any) unintended outcomes (positive and negative) were there? Why?*
- *How effective has the Activity been?*

The ADD noted that close harmonisation with the WPEA-SM was considered essential/critical for efficiency and effectiveness, recommending that:

- The Activity should share the WPEA-SM's project management, that is, by the WCPFC Secretariat.
- The Activity should use the same planning, budgeting and reporting cycles that the WPEA-SM uses, where the financial year used is July-June.
- The Activity should adopt, to the extent possible, the same performance indicators and use the same activity nomenclature and norms as the WPEA-SM. The Activity will also need to plan, budget, measure and report to a standard that as a minimum meets MFAT's requirements. It was suggested that this may necessitate more detailed reporting than was the case under the WPEA-SM, and
- To the extent possible, the Activity should use the same governance structures and the same national coordinators and focal points, at least until 2017, as they were paid from WPEA-SM.

The foundations provided by preceding WPEA initiatives were beneficial to the WPEA-ITM. That said, the transition between the two initiatives could have been more effective and efficient.

The original ADD noted that a significant amount of information required to complete the ARF was not available at the time of designing the Activity in 2016 with the result it recommended that the ADD required further development in the inception phase. This was considered an important exercise to secure full stakeholder ownership of, and commitment to, the Activity. Considered important for both efficiency and effectiveness, the ADD proposed that, where possible, the ARF align with the WPEA-SM activities and the associated indicators that were used for activities and outputs. The ADD noted that "*.....much information required to complete the Results Framework was not available at the time of designing the Activity and so the Framework presented in this ADD needs to be further developed in the inception phase.* The ADD rationalised that this was an important exercise to secure full stakeholder ownership of, and commitment to, the Activity. The ADD also noted that "*..... the Terminal Evaluation of the WPEA-SM should be drawn upon to establish a more complete and up-to-date baseline for the Activity (taking into account developments since the start of the WPEA-ITM) and to establish the counter-factual needed for future evaluations*".



There are several deficiencies in this regard. A formal inception phase, involving the development and consideration of an Inception Plan and review of the ARF, was not considered by the Steering Committee, exit strategies<sup>13</sup> have not yet been prepared and although there is strong evidence of positive project impacts (for example in the reports of SPC's data audits), baselines were largely not confirmed nor SMART (specific, measurable, attainable, relevant, and time-bound) indicators and targets described.

The MTE reviewed effectiveness in terms of progress towards achieving expected outcomes, as described in the ARF, ADD design considerations and implementation status to the time of the MTE. Subsequently, the MTE revised the ARF to address elements that were left open at the time the ADD was prepared. The revisions reflect decisions relating to the removal or modification of several activities presented in the original ADD and make provision for new activities for consideration of the Steering Committee, WCPFC, participating countries and MFAT (**Appendix F**). Participating country profiles provide additional information on the status of WPEA-related subject-areas (**Appendices B** (Indonesia), **C** (Philippines) and **D** (Vietnam)).

In general, through the support of the Activity, and despite the adverse impacts of the pandemic, there have been on-going improvements in relation to fishery monitoring in all three countries. This is evidenced by the quality and scope of fishery monitoring activities reported in various data audits completed by SPC and associated reports presented to the WCPFC Scientific Committee regarding scientific data available to the Commission and related data gaps<sup>14</sup>. This is validation that definite progress is being achieved for some of the more significant objectives of the WPEA-ITM. Positive impacts are evident in respect of national compliance with data-related obligations of WCPFC by the three participating countries and in improving the data available to support assessments of WCPO tuna stocks, despite disruptions to field and training activities caused by the pandemic.

That said, issues that the MTE was unable to explore with a range of local stakeholders concerned the coverage of national fleets in relation to operational level catch and effort data, the coverage of total port landings of tuna fleets by enumerators, the comprehensiveness of data reporting in relation to species composition by fishery or gear type and the completeness of reporting on by-catch, particularly sharks. These issues, which have been discussed in SPC data audits, mainly relate to the programmes in Indonesia and Vietnam. The integration of data processing systems used by WCPFC members (TUFMAN2 and DORADO), which have been introduced to the participating countries under the WPEA, and national systems (Pusdatin in Indonesia and VNFishBase in Vietnam) would benefit from closer examination in an effort to promote efficiency through harmonisation, standardisation and integration to a similar degree that has been achieved with the Philippines NSAP under NFRDI.

Finally, apart from Philippines which now administers a Government-funded observer programme supporting more than 500 observers and almost 20 de-briefers, there has been limited progress in Vietnam and Indonesia regarding the objectives described for Output 3 in the ADD. While this may partially be explained by the limited, if any, activity by fleets from Indonesia and Vietnam on the high seas in the WCPFC Statistical Area, the first WPEA Steering Committee Meeting in 2018 noted that the biggest remaining uncertainty about the

---

<sup>13</sup> As discussed above, a consequence of the pandemic, the fact that exit strategies have not been prepared is, in hindsight, fortuitous. Any exit strategy prepared earlier in the WPEA-ITM would now require significant review.

<sup>14</sup> SPC. 2021a. *Scientific data available to the Western and Central Pacific Fisheries Commission*. Scientific Committee, Seventeenth Regular Session. Online Meeting, 11 –19 August 2021, WCPFC-SC17-2021/ST-WP-01 (Rev.01). 34 pages.



project was how to proceed with Output 3. That meeting recorded concerns regarding Indonesia and Vietnam's capacity to achieve the target of adding up to 75 observers, basing them in new ports, and increasing the number of annual observer trip days. It was noted that project activities relating to training of both observers and de-briefers would be determined by progress establishing the national programmes. The WPEA SC noted that Vietnam would be particularly challenged as there was no national fisheries observer program at that time and that it was important to schedule, as early as possible in 2019, an Observer Policy and Strategy Meeting with key stakeholders to develop national plans and budgets. This occurred in March 2019, but follow-up and a sustained commitment is required for progress towards the outcomes anticipated in the ADD for Vietnam to materialise.

In Vietnam, in recognition of the challenges of i) securing Government administered observers for deployment on tuna vessels, ii) the current lack of a legal requirement for a vessel to take an observer, iii) the expectation that vessels will cover all observer costs, and iv) the limited space on small vessels to accommodate observers, Vinatuna, as part of the yellowfin handline FIP, has commenced trials using a mobile application called COPPA (Captain Observer Photographic Protocol Application). The app. developed under a partnership between Vinatuna, Sea Delight and ANOVA Foods (USA), provides a vessel captain with the capability to collect some information normally collected by human observers. In recognition of similar challenges, Indonesian stakeholders inquired into the possibility of WPEA-ITM support for a pilot trial for electronic monitoring on some Indonesian vessels. Such developments, while useful for supplementing information normally collected by observers, are unlikely to be able to meet all at-sea human observer programme requirements for some time. In addition, EM requires a significant foundation in appropriate infrastructure and data systems to appropriately support trials.

The MTE recommends that, in addition to providing on-going training and advisory support to continue to build capacity in the Philippines Fisheries Observer Programme, the WPEA-ITM re-invigorate efforts to achieve Output 3 aspirations in Vietnam and Indonesia. The potential for existing observer activity in Indonesia (through DGCF, RITF and NGOs such as IPNLF and AP2HI) to contribute observer data to WCPFC should undergo detailed assessment once travel restrictions are eased. The assessment would then provide a foundation for generating Indonesian observer data for WCPFC. Given the challenges associated with establishing an observer programme in Vietnam, WPEA-ITM efforts in the medium term should focus on securing formal recognition of a national observer programme strategy, building on the work commenced at the workshop in March 2019.

**Efficiency:** *The extent to which the Activity is delivering results in an economic and timely way.*

- *Have outputs been achieved in a timely manner? If yes/no why?*
- *Could similar outputs be achieved with fewer funds or in a different way?*
- *Were there any impacts on the efficiency in achieving the outputs due to the COVID-19 pandemic situation?*
- *What needs to be done to strengthen the efficiency of the Activity now and into the future?*

The Activity experienced a stuttered start. Project Activities in 2017 were limited to the last 6 months. The slow commencement of the WPEA-ITM in 2017 was ascribed to several factors:

- the extension of the WPEA-SM through 2018 which reportedly placed demands on limited in-country resources while also attempting to engage in the WPEA-ITM.
- despite the WPEA-ITM receiving preliminary approval from the appropriate government officials in each country in late 2016 the official process of project endorsement and registration and attending to administrative needs, such as establishing bank accounts, took longer than anticipated. Countries were unable to start Project activities until such administrative processes were completed. In December 2018 these processes were still not complete in all three countries, and



- a reported focus in the WCPFC Secretariat on WPEA-SM activities with WPEA-ITM implementation receiving limited attention pending the recruitment of a Project Manager.

In 2018, 2019 and 2020 project expenditure did not meet budget (**Appendix G**). This was considered to partially be a consequence of the departure of the first Project Manager in May 2019, after a short appointment. The second Project Manager, who has a strong background in WCPO fisheries which should be beneficial to the project, commenced in October 2019, shortly prior to the pandemic.

The extension of the WPEA-SM was beneficial in providing continuity to the WPEA-ITM. Without it, the delays associated with the official government endorsement of the WPEA-ITM would have meant that some key activities, such as the work of the enumerators in Vietnam and Indonesia, may have been significantly disrupted. The WPEA-ITM work in 2018 was designed to complement the activities of the WPEA-SM Project in its last year, theoretically making it possible for 2018 to be a reasonably effective transitional year from one project to the other (2018 Steering Committee Report).

In addition, the delayed commencement of the WPEA-ITM meant that the implementation environment had changed relative to that at the time of the ADD preparation. Changes included ministerial and senior official changes in some of the participating countries, the issue of a yellow card to Vietnam by the European Union and progress with initiatives such as FIPs in all countries. The re-designed project activities and associated budget allocation recognised in the first Variation to the Grant Agreement in September 2019 was a positive response to the changes that had occurred in the fisheries sectors in each country since the project was designed in 2016 (see discussion above under *Relevance*).

Change has not necessarily proven easy to manage for the Activity in general. The 2019 APR noted that the demonstrated flexibility of the project to adapt to changing circumstances, which resulted in the revision of some activities and associated budgets, posed challenges to implementation where national bureaucracies were less flexible. Vietnam was cited as an example where changes need to be formally notified for the revisions to be adopted for implementation and that the required approvals took considerable time.

In addition, the WPEA-ITM policy of not providing financial support for National Coordinators created some challenges in participating countries. While Government-supported National Coordinators may be legitimately assessed as a contribution, and commitment, by Government to the Activity, National Coordinators were all Government officials with a range of other demanding responsibilities. The WPEA-SM acknowledged this and provided partial funding support to secure National Coordinator time for the Project. This arrangement was not maintained under the WPEA-ITM and, at least initially, resulted in less than ideal allocation of national level resources to Activity implementation. Managing such processes through challenging bureaucratic processes contributed to delays, resulted in inefficient use of project resources and potentially frustrated confirmed or potential partners.

Despite the impact of COVID, partially with the support of the WPEA-ITM, all three countries have, each year since 2017, been able to meet the Part 1 data reporting obligations to WCPFC stipulated in the Commission's *Scientific Data to be provided to the Commission*. In addition, while some gaps remain, there have been notable improvements in the quality of some of the data provided to the Commission (see **Appendix E**).

The 2020 APR (prepared in February 2021) noted that, in response to the increasing impact of the covid pandemic on project activities, project administrators (the project manager, SPC, the WCPFC Secretariat and MFAT) consulted and subsequently advised national counterparts of the potential for flexibility in the budget. Countries were encouraged to identify alternative mechanisms to enhance project objectives. A revised budget to reflect the anticipated underspend associated with travel restrictions and to provide some flexible funding lines under Outputs 3 and 4 was approved in May 2020. This demonstrated the



ability of project administration to provide a flexible and timely response in an environment that was not possible to plan for. However, the uptake of this offer is reported to have been slow.

The 2020 APR also noted that activity management and administration (Output 0) expenditure has reduced from 56% in Year 1 to less than 30% in year 3 with the result that over 70% of the 2020 costs were used directly on the implementation of project activities. This efficiency was forecast to improve further over time as implementation continues to gain momentum.

A review of the WPEA-ITM finances is at **Appendix G**. Due to a lower level of disbursement than was originally anticipated, and considering forecast commitments for 2021, approximately \$US1,471,093 is available for programming from the end of 2021. Based on experience to date, it will not be possible to program the disbursement of all these funds in the 15 months remaining to March 2023. MFAT, in consultation with the WCPFC Secretariat, can consider three options:

- accept that funds will remain in the project budget come March 2023 and that those funds will be returned to MFAT, and/or
- call for expressions of interest from the participating countries for some additional or supplementary activities to utilise the funding available, or
- consider an additional extension of the Project.

The MTE is supportive of the third option which would involve a further no-cost extension to March 2024. This will provide an opportunity for project activities to re-establish themselves once the impacts of covid start to recede and provide the WCPFC Secretariat with adequate time to source on-going support for WPEA-related activities beyond the conclusion of current MFAT funding.

The question of value for money (i.e. if similar outcomes could have been achieved with fewer funds or in a different way) is difficult to assess. Similar outcomes may have been achieved, with fewer project funds, if the respective Governments were in a position to assume greater financial responsibility for project-related activities. This may include Governments requiring industry to assume some, or all, of the costs associated with fishery monitoring. Apart from Philippines, this has not been the case and Indonesia and Vietnam continue to benefit from external financial support, from development assistance partners or NGOs, to assist with support for some of these types of activities.

The impact of the pandemic aside (discussed further below), it is possible that an appropriately resourced initiative, implemented through a Government agency, an NGO, or a development assistance partner, could deliver similar results as the WPEA-ITM. However, there is significant advantage in WCPFC being the implementation body. Not only does the WCPFC offer a direct means for engagement in the work of the Commission but WCPFC's relationship with SPC, as the Commission's Science Service Provider, has provided the WPEA participating countries with direct access to fishery monitoring advice, data administration support and expert fishery conservation and management assistance that would have otherwise been more challenging to access. This has been beneficial to the three participating countries, in terms of building their capacity to administer and manage their fisheries, and to the Commission itself through improved data and information supporting assessments of the status and trends of regional fish stocks.

Finally, two housekeeping matters that relate to efficiency. The first relates to the MoUs that describe roles and responsibilities of the primary partners in the Activity. The MoU for SPC is renewed each year. The MoUs with Philippines and Vietnam are adequate to support the Activity going forward. The MoU for the WPEA-ITM in Indonesia will require some review. Once a final date for conclusion of the Activity is determined, the MoUs should be reviewed to ensure roles and responsibilities are clearly described and obligations recorded.





The second relates to the two websites that have been established for the WPEA ([www.wcpfc.int/wpea](http://www.wcpfc.int/wpea) and [www.wpeaproject.org/](http://www.wpeaproject.org/)). The two sites should be rationalised by the WCPFC Secretariat and consolidated under one site on the WCPFC/wpea webpage. The [www.wpeaproject.org](http://www.wpeaproject.org) site should then be de-commissioned.

**Sustainability:** *The extent to which the net benefits of the Activity will continue, or are likely to continue, including ownership and political will and an examination of the financial, economic, social, environmental, and capacities of the systems needed to sustain net benefits over time.*

- *What critical success factors, including donor support, are in place to maintain the provision of critical services and activities beyond the life of this Activity?*
- *Considering catch reporting is the obligation of WCPFC CCMs, what, if anything, needs to be changed to ensure sustainability of the current services by the three participating countries?*
- *How cost effective is the approach employed to deliver results? See 'efficiency' above.*

Through its CMMs, WCPFC has demonstrated a capability to reduce threats to overfishing in the WCPO and to manage levels of exploitation at levels that can be sustained. At the regional level, primary target WCPO tuna stocks taken in Philippine, Indonesian and Vietnamese tuna fisheries are not overfished, and overfishing is not occurring although the Commission advises that fishing on YFT and BET should not be increased from the level that maintains spawning biomass at 2012-2015 levels until the Commission can agree on an appropriate target reference points (refer to: <https://www.wcpfc.int/current-stock-status-and-advice>). Indonesia, Philippines and Vietnam have increasingly contributed to the WCPFC assessments by providing improved fishery monitoring data across gear types and fisheries. Various WPEA projects have made strong contributions to these improvements which, despite the impacts of COVID, have been maintained under the WPEA-ITM.

Considering catch reporting is the obligation of WCPFC CCMs it is a long-term goal that the three participating countries are self-sufficient in terms of meeting their obligations associated with data submission to WCPFC. Baselines were described and targets agreed in relation to the transition from Project financial support to national financial support, without compromising national reporting obligations to WCPFC, at the 2018 Steering Committee meeting in Honolulu. While some national responsibility has been assumed, a significant amount of work remains in this regard, particularly in Indonesia and Vietnam.

The 2020 APR (February 2021) reported that, over the first three years of the project, the three beneficiary countries increasingly utilised national government funding to support data collection activities. Activities supported included training, workshops, enumerators, observers, port sampling and database development. Project Management expected the trend to continue and for participating Governments to assume greater responsibility for funding project-related activities in future. The 2020 APR reported increasing self-sufficiency was evident through:

- the Observer Planning and Strategy workshops held in Indonesia and Vietnam in 2019 produced plans for the establishment and further development of national observer programs. Vietnam was progressing the development of a national observer diploma/certificate,
- the importance of the observer program in Indonesia was recognised by the Government which, in 2020, fully funded observer training for the first time and also funded the deployment of 14 observers,
- Indonesia and Vietnam were assuming an increasing share of enumerators salaries, with Indonesia funding 29 enumerators at 12 locations in 2020, leaving the project to fund 15 staff at only one site in 2020. Reduced project funding was also provided to support enumerators in Vietnam in 2020 (See **Appendices B and D**).
- the Philippines continues to fund activities that the original project planned to support, such as catch estimation and data review workshops (with SPC facilitation



supported by the WPEA-ITM), a significant number of observers and related activity, and enumerator salaries, with project funding applied to support staff to monitor and coordinate data collection (See **Appendix C**),

- the ACE workshops in each country have become important annual activities with clear benefits to the participating countries and the WCPFC. These workshops are a regular feature of the annual work plan in all three countries and are likely to continue as a key activity in meeting WCPFC data requirements (with the need to maintain expert facilitation and support through SPC). The WPEA projects have been influential in establishing the structure of these meetings.

Aspirations for increased self-sufficiency has been severely affected by the pandemic and, consequently, countries requested the maintenance of the 2020 budget for workshops, training, and enumerators in 2021.

The sustainability issue and data gaps were highlighted during the 2019 WPEA-SM Terminal Evaluation which identified improved data collection through observer deployment and logbooks, improved data collection for Endangered, Threatened and Protected (ETP) species and bycatch and support for the development of a harvest strategy in Indonesian archipelagic waters as priority subjects for support. Some of these issues remain. In 2021 SPC noted that although some areas still require attention (characterisation of the catch by some gear types particularly in mixed gear fisheries and identification of by-catch species, for example) there has generally been a steady increase in compliance with the data submission obligations to WCPFC by all three countries (**Appendix E**)<sup>15</sup>.

SPC (2021) reported positive developments to resolve gaps during the previous 12 months included:

- Vietnam had revised their national logbook to adhere to WCPFC operational data field requirements, and
- Indonesia had commenced providing the catch in number of fish in their logbook data submissions.

Although no significant non-compliance issues were identified for the three countries based on submissions of 2020 data, SPC (2021) reported the following gaps in relation to operational level catch and effort data:

- the low coverage in the data to generate aggregate data provided for the Indonesian and Vietnam fleets,
- most data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements for some of the scientific work of the Commission. SPC estimated that for Indonesian PS, LL and P&L fisheries approximately 50% of required data fields were provided and that, although the catch of shark species had been provided, not all key shark species were covered and the coverage of shark species was considered low,
- for Vietnam, SPC reported that 92% of PS and GN and 95% of HL and LL required data fields were provided,
- several required fields in the Indonesia operational data, for example, the hooks set and hooks between floats for the longline fishery, were lacking,
- catches of key shark species were not included in the Indonesian aggregated fleet data,
- SPC reported to SC17 that aggregate data was not provided but was

---

<sup>15</sup> SPC. 2021a. *Scientific data available to the Western and Central Pacific Fisheries Commission*. Scientific Committee, Seventeenth Regular Session. Online Meeting, 11 –19 August 2021, WCPFC-SC17-2021/ST-WP-01 (Rev.01). 34 pages.



generated from annual catch estimates and operational data provided to SPC directly for stock assessments and landings data collected under the WPEA-ITM project,

- SPC noted that coverage for Indonesian PS, LL and P&L and Vietnamese LL, GN, PS and HL was less than 10%. The determination was based on VMS trip coverage where possible. Where VMS data were incomplete or not available, in some cases, coverage was determined by comparing the total target tuna catch from operational data for that gear to the total target tuna catch from annual catch estimates.

These assessments serve to inform future decisions on priorities under Outputs 1 and 2 for the time remaining for the WPEA-ITM.

The 2020 APR identified the primary sustainability challenges as being:

- Indonesia and Vietnam's capacity to increase their logbook program (for larger vessels) to a sufficient level of coverage,
- the processing of increasing amounts of data (from logbooks and observers) and its submission to WCPFC in compliance with obligations,
- commitments associated with the gradual assumption of the costs of enumerators over the life of the project and on-going responsibilities associated with maintaining enumerators after the conclusion of the project,
- the capacity of Indonesia, Philippines and Vietnam fund their engagement in other key WCPFC activities associated with monitoring and assessing regional tuna fisheries. Such activities include national catch estimation (ACE) meetings, SPC stock assessment workshops, SPC Tuna Data Review Workshops (TDR), database management development and training and participation in WCPFC meetings (SC, TCC and the Commission, etc.), and
- Indonesia and Vietnam's ability to continue Observer Program activities supported by the project, particularly training programs, briefing and debriefing workshops, and cost recovery programs.

The Philippines Fisheries Observer Program (FOP) is primarily funded by the Government through BFAR, under the General Appropriations Act. This covers the salary of personnel employed in the Program Management Office, training, travel and supplies. The fishing companies that require observers take responsibility for observer costs associated with each trip completed for the company. The roles and responsibilities of the fishing companies and observers are formalised in a contract between BFAR, the observer and the fishing company. Vietnam and Indonesia have expressed a strong interest in learning more about the administration of the Philippines FOP.

Although significant progress has been achieved in each participating country significant work remains. While Philippines has demonstrated a commendable capacity to gradually assume responsibility for the costs associated with fishery monitoring, external support is still required to build capacity in fishery data systems and processes and in stock assessment. There will be a need, for some time, for the WCPFC Secretariat's and SPC's advice and nurturing across all facets of fishery monitoring, data systems development and application, and stock assessment capacity building through the TDR and ACE Workshops, the stock assessment workshops in Noumea and continued mentoring support to the observer programme.

Significantly increased government financial support to WPEA-related activities will be a challenge to secure from participating countries in the medium term. As a result, it is recommended that the WCPFC Secretariat start consultations with prospective partners to secure funding to support the on-going development and strengthening of fishery monitoring in Indonesia, Philippines and Vietnam focusing on operational level catch and effort data, port landings and sampling and at-sea observation capacity development.

Finally, in relation to the possibility of a new Activity to follow on from the conclusion of the



WPEA-ITM, it is recommended that, this be discussed in the 2022 SC meeting. Discussion should be supported by an assessment of further needs, fishery monitoring constraints and engagement in the WCPFC across the three participating countries. If SC endorses the need for a follow-on activity, the Project Manager, with the support of WCPFC Secretariat colleagues, should take the lead on drafting a new project concept for consideration at the SC. Dependent on decisions concerning the possible extension of the WPEA-ITM to March 2024, the intention would be to secure funds for the new project so that it may commence with a minimal amount of time between its start and the conclusion of the WPEA-ITM. Candidate activities for potential on-going support in future WPEA-related initiatives are presented below (**Section 5**).

**Impact:** *The positive and negative changes produced by the Activity, directly or indirectly, intended or unintended.*

- *Have outputs been achieved in a timely manner? If yes/no why?*
- *Were there any impacts on the efficiency in achieving the outputs due to the COVID-19 pandemic situation?*
- *What needs to be done to strengthen the efficiency of the Activity now and into the future?*

The WPEA-ITM has had significant impact across several areas that are illustrated in improved national systems and processes for fishery monitoring and compiling and submitting tuna fishery data in compliance with WCPFC reporting obligations. The 2020 APR (February 2021) reported that Indonesia and Philippines both worked with SPC on the preparation of papers on their “other commercial fisheries” for WCPFC Scientific Committee, which included workshops to discuss these fisheries and collate the relevant data. In addition, provisional 2019 and 2020 catch estimates and size data were submitted by all three participating countries before the WCPFC deadline; Philippines submitted 2019 and 2020 operational catch and effort logbook data before the deadline. Vietnam reported that, while efforts continue to align national data forms with WCPFC requirements, 1500 logbooks from 2019 and 2020 were entered to TUFMAN2 and port sampling data were uploaded. Philippines was also using TUFMAN2 to administer their logbook, observer and size data.

The 2020 APR reported that ACE and TDR workshops, initiated under the WPEA, have become regular activity for each country with clear recognised benefits. The close alignment of industry and NSAP estimates in Philippines in 2019 and 2020 is indicative of significant improvement in data quality. In 2020, for the first time, SPC’s data audit review for Indonesia identified no major problems and improved data convergence. While data quantity and quality from logbooks, observers and port sampling continues to improve, SPC continued to highlight uncertainty in the annual catch estimates from Indonesia, especially in relation to the characterisation of fisheries using small-scale gears (see ‘Sustainability’, above).

A considerable impact has been in relation to the efforts by Indonesia and Philippines, with the support of SPC, through the WPEA-ITM, to describe their “other commercial fisheries” for SKJ, YFT and BET identified in WCPFC’s CMM 2020-01 and preceding Measures<sup>16</sup>. The 2021

---

<sup>16</sup> Indonesia and SPC. 2020. Availability of catch estimates from the other commercial fisheries in Indonesia. Scientific Committee, Sixteenth Regular Session, Online Meeting. 11 –20 August 2020. WCPFC-SC16-2020/MI IP-18. Ministry of Marine Affairs and Fisheries Indonesia Oceanic Fisheries Programme (OFP) and the Pacific Community (SPC) 4). 26 pages. Indonesia and SPC. 2021. Update01: Availability of Catch Estimates from the Other Commercial Fisheries in Indonesia. Scientific Committee, Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-2021/ST-IP-09. Ministry of Marine Affairs and Fisheries Indonesia and Oceanic Fisheries Programme (OFP) Pacific Community (SPC). 31 pages. Philippines and SPC. 2020. Availability of catch estimates from the other commercial fisheries in Philippines. Scientific Committee, Sixteenth Regular Session, Online Meeting. 11 –20 August 2020. WCPFC-SC16-2020/MI IP-17. National Fisheries Research and Development Institute (NFRDI), Department of Agriculture and the Bureau of Fisheries and Aquatic Resources Department of



Session of WCPFC's Scientific Committee (SC17) considered the latest information concerning these fisheries provided by Indonesia and Philippines and recommended to the Commission that CMM 2020-01 should not apply to small-scale fisheries restricted to territorial seas and archipelagic waters. SC17 recommended that the Measure should apply to the Indonesian P&L fishery outside archipelagic waters and territorial seas for vessels >30GT and the "large-fish" HL fishery in Indonesia and the Philippines fishing outside archipelagic waters and territorial seas for vessels >30 GT. SC17 recognized that insufficient data exist to derive a baseline for the Indonesia large-fish handline fishery and suggested that WCPFC consider developing a baseline using years where data are available. SC17 advised that, although CMM 2020-01 is not applicable to archipelagic waters, it encouraged Indonesia and the Philippines to provide data from fisheries that operate in those areas for scientific purposes.

These impacts manifest themselves across other initiatives in the tuna sector in the participating countries. Stakeholders associated with FIPs in Indonesia and Vietnam, for example, advise that participation in WPEA activities has provided valuable knowledge and experience that has been adapted to various FIP initiatives for national fisheries. The harvest strategy work for archipelagic waters in Indonesia has reported similar benefits (Hoshino *et al.* 2020).

Additional impacts of the WPEA include:

- an important contribution to national capacity building in fishery monitoring, data assimilation, administration and tuna fisheries management,
- broad national-level stakeholder awareness raising in relation to WCPFC obligations and requirements including an understanding of required standards,
- supporting the engagement of a broad constituency in tuna fisheries conservation and management particularly among active NGOs and industry,
- the added value committed partners such as NGOs and industry can meaningfully contribute to strengthening national capacity to engage,
- improving Government's appreciation of its role and responsibilities associated with obligations in WCPFC,
- strengthened engagement with industry in relation to responsibilities and expectations associated with fishing WCPO tuna stocks, and
- an appreciation of the resources required, and capacity building needs, to effectively service WCPFC obligations.

### **Cross cutting considerations**

In relation to cross cutting issues such as social and environmental considerations, the conclusion of OECD DAC peer reviews and donor evaluations were that while many donors have committed to mainstreaming cross-cutting issues, most of them are still struggling to bridge the gap between policy and implementation by undertaking the organisational changes needed to achieve this<sup>17</sup>. Generally, there is a reliance on easy, non-disruptive, changes, at the expense of those more difficult to implement. Effective mainstreaming of cross-cutting themes in development co-operation requires concerted and sustained, integrated, action at different levels grouped under seven interconnected categories:

---

Agriculture, Philippines and the Oceanic Fisheries Programme (OFP) Pacific Community (SPC). 18 pages. Philippines and SPC. 2021. Estimates of annual catches of tropical tuna by the Philippines relevant to WCPFC CMM on Tropical Tunas "other commercial fisheries". Scientific Committee, Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-2021/ST IP-08. National Fisheries Research and Development Institute (NFRDI) Department of Agriculture Philippines Bureau of Fisheries and Aquatic Resources Department of Agriculture Philippines Oceanic Fisheries Programme (OFP) Pacific Community (SPC). 21 pages.

<sup>17</sup> Thiroleron, E. 2014. *Mainstreaming cross-cutting issues: 7 Lessons from DAC Peer Reviews. Mainstreaming cross-cutting issues advancing gender equality and environmental sustainability.* Organisation for Economic Cooperation and Development. 40 pages.



leadership and commitment; policy and strategic framework; policy and political dialogue; guidelines and tools; incentives and accountability linked to results; financial and human resources; and learning.

To consider cross cutting issues, the MTE explored environmental and social (gender, human rights, youth and disadvantaged) topics during virtual consultations as presented in **Table 1**. Partly as a consequence of undertaking the review remotely using virtual platforms such as Zoom<sup>18</sup> these lines of inquiry were mostly directed to senior officials in participating countries, including National Coordinators, with verification sought from published policy documents, formal reports, and the Project Manager. Nevertheless, consideration of these issues was not as comprehensive as may have been possible during a country visit.

---

<sup>18</sup> Copyright © 2021 Zoom Video Communications, Inc. All rights reserved.



**Table 1.** Thematic lines of inquiry in relation to cross cutting considerations (environment and social - gender, human rights, youth and disadvantaged) in implementation of the WPEA-ITM.

Theme	Generic questions and findings
Consistent leadership and sustained commitment	<p><i>Can stakeholders identify champions or drivers of change?</i>  <i>Are senior staff actively and regularly engaged in the Activity?</i>  <i>Are institutional linkages active and clearly articulated?</i></p> <p><i>MTE assessment:</i> The Activity has benefited from a relatively low turnover of key staff associated with the Project in all three countries. All National Coordinators demonstrate a genuine commitment to the Activity. They acknowledge, with appreciation, the WPEA-ITM's valuable contributions to national efforts to strengthen engagement by their country in the WCPFC. That said, challenges remain. In Vietnam, additional effort is necessary to achieve a shared understanding of the importance of fishery monitoring such as that supported by the WPEA across senior levels of government and in some Provinces. In Indonesia, as is the case in many countries, inter-departmental/agency linkages and collaborative responsibilities require on-going nurturing. All participating countries were aware of the MTE's interest in cross-cutting, particularly gender, issues in WPEA-ITM-supported activities and were generally able to produce gender-related information for project activities such as training exercises and workshops (see "Gender" below and country profiles at <b>Appendix B, C and D</b>).</p>
Policy or strategic framework	<p><i>Is mainstreaming reflected in corporate documents?</i>  <i>Is mainstreaming policy adapted to the local context?</i>  <i>Are policy strategies consolidated across agencies or does each maintain its own?</i></p> <p><i>MTE assessment:</i> These criteria was not extensively evaluated but the Activity is directly related to environmental and sustainable resource management considerations which are in the long-term interests of community health and wellbeing and which are referenced, either explicitly or implicitly, in supporting national legislation and policy documents such as National Tuna Management Plans in each participating country. In addition, labour rights are specifically acknowledged in all three participating countries. In Vietnam, for example, Labour Law No. 45/2019/QH14, which applies to all sectors, provides that people less than 18 years old are prohibited from working on the offshore fishing vessels. Similarly, Indonesian employment law is governed by the Labour Law (13/2003), the Law on Industrial Relations Dispute Settlement (2/2004) and the Law on Labour Unions (21/2009). The Act of the Republic of Indonesia Number 13, Year 2003 relates to, among other provisions, labour, work agreements, employment relations, termination of employment. The 1987 Philippine Constitution recognizes and guarantees the following rights of workers, among other provisions: i) Self-organization, collective bargaining and negotiations, and peaceful concerted activities, including the right to strike in accordance with the law, ii) Security of tenure, humane conditions of work, and a living wage, iii) Participation in policy- and decision-making processes affecting the workers' rights and benefits as provided by the law. The Labour Code of the Philippines is the country's primary reference for employment law.</p>
Policy and political	<p><i>What is the starting point for cross cutting policy engagement?</i>  <i>What formal or informal vehicles are used to consider cross cutting issues?</i></p>



Theme	Generic questions and findings
dialogue	<p><i>Is consideration of cross cutting issues nationally-driven or driven by external actors?</i></p> <p><i>MTE assessment:</i> It was not possible to evaluate these criteria as part of this MTE.</p>
Implementation guidelines and tools	<p><i>What, if any, implementation tools and guidelines are applied to consider cross cutting issues?</i> <i>Who developed these tools and were they adapted for the local context?</i> <i>What are the key concepts and objectives behind any tools that have been adopted?</i></p> <p><i>MTE assessment:</i> The methodology for this MTE did not provide an opportunity to explore this issue in detail. However, at least in relation to gender considerations, the three beneficiary countries were aware of New Zealand’s interest in cross cutting issues including gender-related information and the participation of women in the Activity. Information relating to the participation of women in project activities was generally readily available (See country profiles Appendices and below).</p>
Incentives and accountability	<p><i>Are performance targets set, and audited, for cross cutting issues?</i> <i>Have incentives been considered to motivate staff or senior officials to actively engage in strengthened consideration of cross cutting issues in their Activity-related work?</i> <i>Has experience with efforts to integrate cross cutting considerations been documented? If so, can the document(s) be made available?</i></p> <p><i>MTE assessment:</i> Other than in relation to environmental considerations, and sustainable management and conservation of the national tuna resource it was not apparent that performance targets relating to cross cutting issues had been formally recorded in any project-related activity in any of the three countries. The encouragement to report gender disaggregated information for activities supported by the Project was the only incentive to reflect on cross cutting issues as an integral consideration in Activity-related projects.</p>
Financial and human resources	<p><i>Is there a budget to support cross cutting issues? Is it adequate? If not, what cannot be achieved as a consequence of an inadequate budget?</i> <i>What capacity building to strengthen consideration of cross cutting issues in mainstream activities has occurred for staff?</i></p> <p><i>MTE assessment:</i> The MTE was unable to research national budgetary provisions to support cross cutting issues in any of the three countries. The WPEA-ITM budget does not specifically provide for cross cutting issues. That said, it doesn’t exclude it either. The Activity is specifically designed to address issues related to the environment and social wellbeing. There has been no apparent restriction on the participation of women in any project-related activity.</p>
Learning culture	<p><i>How are lessons learned considered for adoption in future initiatives and activities? Are they documented?</i> <i>Are project activities, such as those supported by the WPEA-ITM, ever independently evaluated locally? If not, why? If yes, are the outcomes available?</i></p> <p><i>MTE assessment:</i> Apart from generally positive feedback regarding capacity building activities supported by the WPEA, and the learning environment they nurture, there has been no formal evaluation of WPEA training. Some commentary</p>





Theme	Generic questions and findings
	<p>regarding training initiatives supported by the WPEA in Vietnam concerned the selection of training participants who apparently had limited on-going responsibilities in data collection and fishery monitoring and appeared to be involved primarily to observe training exercises and learn how they are administered. It is possible that this was a deliberate strategy to raise awareness among key staff of the importance of fully documenting fisheries activity, to broaden the local understanding of the WCPFC and to encourage initiatives associated with fishery monitoring in general. It was noted that, at least in Vietnam, there are currently significant challenges attracting under-graduates to fisheries studies with the result there is a shortage of appropriately trained personnel to undertake fishery monitoring and analytical work. Several stakeholders in Vietnam observed that additional effort is required to build national scientific capacity through initiatives, such as scholarships, with institutions such as RIMF and Nha Trang University's Marine Science and Fishing Technology Institute.</p>



## Gender considerations

The APR for 2018 (February 2019) did not report gender disaggregated information for WPEA-ITM activities. The 2019 APR (February 2020) simply noted that an observer training workshop in Vietnam had 13 participants, all male.

The 2020 APR (February 2021) reported that, during 2020, there was an active effort to collect gender disaggregated information for WPEA-supported activities. For eight workshops supported in 2020 30% of participants were female. The Philippines had a very strong level of female participation with females comprising 72% of the 43 participants in their ACE workshop in 2020. In addition, females occupied the project National Coordinator role and senior executive roles relevant to the project. The National Coordinators in Indonesia and Vietnam are male.

The Philippines provided gender disaggregated information for fishery monitoring staff employed across all regions (**Table 2**). The data confirms that, at least since 2018, almost 50% or more of fishery monitoring positions in Philippines are occupied by women.

**Table 2.** Gender-related information for landing site monitoring in Philippines.

Year	Project Leaders		Assistant Project Leaders		Analyst		Enumerators	
	M	F	M	F	M	F	M	F
2018	3	11	5	4	35	61	311	331
2019	3	11	5	5	29	64	288	282
2020	2	12	6	5	32	60	284	276
<b>Total</b>	8	34	16	14	96	185	883	889
<b>%</b>	19%	81%	53%	47%	34%	66%	50%	50%

In response to questions from the MTE, for the period starting in 2018, Indonesia reported that 18% of the 28 enumerators employed in port sampling across fishery management regions (FMAs) 713 to 718 inclusive were female. In Philippines, all 558 observers and 18 observer de-briefers are male, all supported from the BFAR budget or through arrangements with industry. Philippines reported that, in 2017, 4 females were trained as observers, out of a total of 59 trained, in 2018 four of an additional 91 trained were female and in 2019, two females were among 60 new observers trained. No females were subsequently deployed at sea and, instead, the majority went on to be employed as data processors.

Vietnam advised that, across all WPEA-supported activities, 12 of 60 participants were female in 2019 and 14 of 138 participants were female in 2020. The 12 Provinces supporting the monitoring of port landings at 26 sites in 2019 and 2020 (12 supported by the WPEA-ITM), had 48 enumerators of which 4 were female, all supported by the WPEA (**Table 3**).

**Table 3.** Gender disaggregation for enumerators working at landing sites in Vietnam.

Coverage	Year		
	2018	2019	2020
Number of Provinces supporting WPEA monitoring activities	9	12	12
Number of landing sites monitored	20	26	26
Number of landing sites supported (wholly or partially) by the WPEA	9	12	12
Total number of enumerators	36	48	48
Total number of female enumerators	4	4	4
Number of enumerators supported (wholly or partially) by the WPEA	9	12	12
Number of female enumerators supported (wholly or partially) by the WPEA	4	4	4

The WPEA Steering Committee has had an average of 30% female participation. The 2020 APR advised that, in future years, additional gender disaggregated information for all activities supported by the WPEA will be assimilated.



## IMPACTS OF THE COVID PANDEMIC

The 2020 APR reported that the Activity's Risk Matrix had been revised to reflect the impact of the pandemic on prospects for sustaining project-related activities in the absence of support such as that provided under the WPEA-ITM. Activities planned for 2020 that were not able to be undertaken as a result of COVID-related restrictions included:

- the tri-country technical meeting to continue the mutual exchange of experience, successes and lessons learnt in improving tuna data collection. This was to be reviewed in 2021 to determine if an in-person forum will be possible in 2021. If not, the potential for a virtual knowledge exchange was to be considered,
- SPC attachments were not possible and cannot be substituted with virtual arrangements,
- all Commission, TCC and SC meetings were conducted online. The 2020 APR identified that on-line meetings meant that more national staff were able to participate in all or parts of these meetings which was considered a benefit,
- travel costs were saved for possible re-deployment to other programme activities.
- the placement and training of observers in 2020 was impacted in Vietnam and Indonesia (less so in Philippines) with few observers being deployed and very limited training of new observers conducted, and
- training and coordination workshops some of which were adapted for virtual engagement with reduced agenda and time slots. However, translation proved a challenge and the technical nature and practical modules associated with some workshops were not considered conducive to an online approach.

Although these activities would have been beneficial, and their postponement contributed to a 45% underspend of the forecast budget in 2020, the core data collection activities, submission of data to the Commission and participation in WCPFC meetings were all able to continue. The three participating countries all demonstrated strong commitment to meeting WCPFC reporting obligations despite the challenges associated with the pandemic.

The 2020 APR reported country-specific impacts to include:

### *Indonesia*

- Some skilled/trained enumerators and observers resigned when they found better jobs and earnings, therefore additional effort had to be made to train new recruits.
- Increasing enumerators and observer capacities through offline training (where online training was ineffective) was delayed.
- Direct supervision from CFR to the enumerators and observers was not possible with the result it was substituted with online supervision.
- Integrating existing national data collection (observer, logbook, landing at port), including data collection conducted by NGOs, fishing industries into one automatic reporting system was delayed pending the availability of expert technical assistance.
- IT and communication tools used by enumerators and the coordinator were inadequate for virtual meeting support.

### *Philippines*

- A significant reduction in the NFRDI budget as funds were re-assigned to support the government's response to the pandemic.
- Virtual meetings/workshops were challenging as a consequence of limited internet connectivity and IT equipment/infrastructure. All personnel were required to follow health and safety protocols imposed by the government (e.g. undergo COVID-19 testing, social distancing, wearing face masks and face shields, etc.) all of which impacted services.

### *Vietnam*

- The Vietnamese fisheries management system was reformed from open-access to a regulated regime. The fisheries data collection was decentralized to the provincial level and responsibilities were shifted from the fisheries authorities to the fishing port authorities. Adaptations associated with this change caused disruption and a



reluctance to collect and report data in some Provinces which was compounded by the pandemic.

- It has not been possible to support the required consultations, involving experts, to reconcile differences in data format between WCPFC requirements and the Vietnamese system e.g. for logsheets. In addition, a national fisheries database – VNFishBase, which is used for all fisheries, is being developed. In a COVID environment, where person-to-person dialogue is not possible, this has caused difficulties which require more resources (financial and human) to support TUFMAN and VNFishBase concurrently.
- Efforts to develop the policy and regulatory environment to implement a professional fisheries observer program stalled with the result tuna observer programs were not rolled out as a national initiative but are implemented within specific projects, such as the WPEA.
- Efforts to engage senior officials and raise awareness about the responsibilities of Vietnam, as a Cooperating Non-member of WCPFC, have been more challenging in a covid environment. This has adversely impacted on senior level support for tuna data collection and associated fishery management initiatives.

Although several activities in the ambitious work plan agreed in February 2020 were not possible, significant progress towards achieving the outputs was still reported for 2020. Important progress was reported for Outputs 1, 2 and 4, with significant improvements having been made in data quality, as shown in the data audits conducted by SPC. The revision of the data forms in Vietnam to reflect WCPFC requirements, and the entry of a backlog of logsheets in to TUFMAN2 also signalled progress in data collection in Vietnam. Unfortunately Output 3, where there had been significant progress in 2019, suffered most from the disruptions in 2020, with limited observer placements and training of observers, briefers and debriefers largely not possible. All three countries expressed their commitment to progressing the development of their national programs in 2021, including through conducting more training using remote mechanisms, and are particularly enthusiastic to conduct the study tour to the Philippines observer program as soon as possible. SPC maintained remote support for database systems development and operations.

Similar impacts have been experienced in 2021 due to the ongoing nature of the pandemic.



# 5

## Evaluation Conclusions

At the time of Activity design, there was a demonstrated need for support to Indonesia, Philippines, and Vietnam to strengthen their fisheries monitoring capacity to meet obligations associated with their participation in the WCPFC and to improve data available to assessments of WCPO tuna stocks. Despite numerous constraints experienced in the first two years of implementation, and more recently as a consequence of the covid pandemic, the WPEA-ITM has provided valuable support to these countries consistent with the objectives of the original WPEA-ITM design document. The benefits of the Activity accrue equally to each participating country in terms of building national capacity and improving the quality and scope of information available to support conservation and management initiatives for fisheries targeting oceanic tuna resources within areas under their national jurisdiction. Benefits also accrue to the Commission membership by reducing uncertainties associated with scientific data that supports the Commission's assessments of the status and trends of those regional fish stocks and so strengthens scientific advice available to support decision making.

### **Relevance**

The WPEA-ITM design, objectives and associated activities are directly relevant to the sustainable conservation and management of tuna fisheries in the three participating countries and to the WCPO region.

### **Coherence**

The Activity is directly relevant to New Zealand's international engagement strategy, as elaborated in MFAT's *2020-2024 Strategic Intentions*. It is also complementary to regional initiatives such as the *Sustainable Development Strategy for the Seas of East Asia*.

The value of the WPEA, and its contribution to other initiatives relating to the conservation and management of WCPO tuna resources was verified through the WPEA's direct contribution to national efforts to establish effective fishery monitoring and management arrangements. This primarily manifests itself in relation to FIPs that have been a feature of efforts to strengthen management arrangements for selected fisheries in the three participating countries for several years.

### **Effectiveness**

The original ADD noted that a significant amount of information required to complete the ARF was not available at the time of designing the Activity in 2016 with the result it recommended that the ADD required further development in the inception phase. Considered important for both efficiency and effectiveness, the ADD proposed that, where possible, the ARF align with the WPEA-SM activities and the associated indicators that were used for activities and outputs.

There are several deficiencies in this regard. There appears to have been no formal inception phase, exit strategies<sup>19</sup> have not yet been prepared and although there is strong

---

<sup>19</sup> As a consequence of the pandemic, the fact that exit strategies have not been prepared is, in hindsight, fortuitous. Any exit strategy prepared earlier in the WPEA-ITM would now require significant review.



evidence of positive project impacts (for example in the reports of SPC's data audits), baselines and targets were largely not confirmed.

Taking account of the implementation status at the time of the MTE a revised ARF was drafted to address elements that have not been attended to date (**Appendix F**). The draft is intended for review by project management and eventual endorsement by the Steering Committee.

### **Efficiency**

The Activity experienced a slow start and in 2018, 2019 and 2020 project expenditure did not meet budget. The reasons for this, including the relationship between the WPEA-SM and the WPEA-ITM, are described. Change has not necessarily proven easy to manage for the Activity in general.

The 2020 APR noted that, in response to the increasing impact of the covid pandemic on project activities, project administrators (the project manager, SPC, the WCPFC Secretariat and MFAT) consulted and subsequently advised national counterparts of the potential for flexibility in the budget. A revised budget to reflect expected underspend associated with travel restrictions and to provide some flexible funding lines under Outputs 3 and 4 was approved in May 2020. This demonstrated the ability of project administration to provide a flexible and timely response in an environment that was not possible to plan for. However, there was limited uptake of this opportunity.

A review of the WPEA-ITM finances is at **Appendix G**. Due to a lower level of disbursement than was originally anticipated, and considering anticipated commitments in 2021, approximately US\$1,471,093 is available for programming beyond the end of 2021. On the basis of experience to date, it will not be possible to program the disbursement of all these funds in the 18 months remaining to March 2023. Three options are presented for the considerations of MFAT, in consultation with the WCPFC Secretariat:

- accept that funds will remain in the project budget come March 2023 and that those funds will be returned to MFAT, and/or
- immediately call for expressions of interest from the participating countries for some additional or supplementary activities, consistent with WPEA-ITM objectives, to utilise the funding available, or
- consider an additional no-cost extension of the Project.

The MTE is supportive of the third option which would involve a further no-cost extension to at least March 2024. This will provide an opportunity for project activities to re-establish themselves once the impacts of covid start to recede and provide the WCPFC Secretariat with adequate time to source on-going support for WPEA-related activities beyond the conclusion of the WPEA-ITM. It is recommended that this issue be discussed in detail at the 2022 SC meeting.

It is efficient for the WCPFC Secretariat to be the implementing body for the Activity. Not only does the WCPFC offer a direct means for engagement in the work of the Commission but WCPFC's relationship with SPC, as the Commission's Science Service Provider, has provided the WPEA participating countries with direct access to fishery monitoring advice, data administration support and expert fishery conservation and management assistance that would have otherwise been more challenging to access. This has been beneficial for project implementation.

### **Sustainability**

Despite the relatively strong position of Philippines in terms of its support for strengthened fishery monitoring, there is, as in Vietnam and Indonesia, increasing budgetary pressure associated with a re-programming of government resources, including in response to the pandemic. The implication is that increased, sustained, government financial support to



WPEA-related activities will be a challenge to secure in the medium term. Nevertheless, against this background, additional effort is required in Vietnam and Indonesia to assume greater responsibility for activities and services supported by the WPEA so that both countries move towards what Philippines has been able to achieve since 2015 in relation to responsibilities for sustaining project-related activities. This will take time and is likely to require support beyond the conclusion of the WPEA-ITM.

### **Impact**

Despite the impact of COVID, partially with the support of the WPEA-ITM, all three countries have, each year since 2017, been able to meet the Part 1 data reporting obligations to WCPFC stipulated in the Commission's *Scientific Data to be provided to the Commission* in advance of the submission deadline. In addition, while some gaps remain, there have been notable improvements in the quality and scope of data provided to the Commission (see **Appendix E**).

The WPEA-ITM has had significant impact across several areas that is illustrated in improved national systems and processes for fishery monitoring, and in compiling and submitting tuna fishery data in compliance with WCPFC reporting obligations. In addition, the 2020 APR (February 2021) reported that Indonesia and Philippines both worked with SPC on the preparation of papers on their "other commercial fisheries" for WCPFC Scientific Committee, which included workshops to discuss these fisheries and collate the relevant data. This work continued in 2021 and the outcomes were discussed at the 2021 Session of WCPFC's Scientific Committee (SC17).

The 2020 APR reported that ACE and TDR workshops, initiated under the WPEA, have become a regular activity for each country with clear recognised benefits. While data quantity and quality from logbooks, observers and port sampling continues to improve, the process has identified where uncertainty remains and provides countries with guidance regarding future priorities. These are significant achievements to which the WPEA-ITM has made a material contribution in the three participating countries.

Impacts manifest themselves across other initiatives in the tuna sector in the participating countries. Stakeholders associated with FIPs in Indonesia and Vietnam, for example, advise that participation in WPEA activities has provided valuable knowledge and experience that has been adapted to various FIP initiatives for national fisheries. The harvest strategy work for archipelagic waters in Indonesia is an example.

Additional impacts of the WPEA include:

- an important contribution to national capacity building in fishery monitoring, data assimilation, administration and tuna fisheries management,
- an appreciation of the human and financial resources, and associated capacity building, required to effectively service those obligations,
- improving Government's appreciation of its role and responsibilities associated with obligations in WCPFC,
- broad national-level stakeholder awareness raising in relation to WCPFC obligations and requirements including an understanding of required standards,
- strengthened engagement with industry in relation to responsibilities and expectations associated with fishing WCPO tuna stocks, supporting the engagement of a broad constituency in tuna fisheries conservation and management particularly among active NGOs and industry, and
- the added value committed partners such as NGOs and industry can meaningfully contribute to strengthening national capacity to engage.

### **Cross cutting issues**

The Activity directly addresses cross cutting environmental issues particularly in respect of conservation and management, responsible resource use and sustainable livelihoods. All



participating countries are aware of gender-related considerations in Activity implementation and have recently started reporting in more detail in this regard.

### ***The pandemic***

Activities planned for 2020 that were not able to be undertaken as a result of COVID related restrictions included:

- the tri-country technical meeting,
- SPC attachments,
- In-person participation in all Commission, TCC and SC meetings,
- the placement and training of observers in Vietnam and Indonesia,
- training and coordination workshops, particularly those requiring translation support.

Although these activities would have been beneficial, and their postponement contributed to a 45% underspend of the planned budget in 2020, the core data collection activities, submission of data to the Commission and participation in WCPFC meetings were all able to continue.

The 2020 APR reported country-specific impacts to include:

#### *Indonesia*

- Increasing enumerators and observer capacities through offline training (where online training ineffective) was delayed.
- Direct supervision from CFR to the enumerators and observers was not possible with the result it was substituted with online supervision.
- Integrating existing national data collection (observer, logbook, landing at port), including data collection conducted by NGOs, fishing industries into one automatic reporting system) was delayed pending the availability of expert technical assistance.
- IT and communication tools used by enumerators and the coordinator were inadequate for virtual meeting support.

#### *Philippines*

- A significant reduction in the NFRDI budget as funds were re-assigned to support the government's response to the pandemic.
- Virtual meetings/workshops were challenging as a consequence of limited internet connectivity and IT equipment/infrastructure.

#### *Vietnam*

- Adaptations associated the reform of the Vietnamese fisheries management system from an open-access to a regulated regime and decentralization of responsibilities for fisheries data collection to the provincial level fishing port authorities caused disruption in some Provinces which was compounded by the pandemic.
- It was not possible to support consultations, involving experts, to reconcile differences in data format between WCPFC requirements and the Vietnamese system e.g. for logsheets. In addition, a national fisheries database – VNFishBase, which is used for all fisheries, is being developed and this has caused difficulties which require more resources (finance and human) to support TUFMAN and VNFishBase concurrently.
- Efforts to develop the policy and regulatory environment to implement a professional fisheries observer program has stalled.
- Efforts to engage senior officials and raise awareness about the responsibilities of Vietnam, as a Cooperating Non-member of WCPFC, have been more challenging in a covid environment. This has adversely impacted on senior level support for tuna data collection and associated fishery management initiatives.

Similar impacts will be experienced in 2021 due to the on-going nature of the pandemic.





### ***Project in-country presence***

Constraints on travel as a consequence of the pandemic were manifest across the project. In participating countries this was mainly apparent through severe limitations placed on domestic travel between landing sites and in terms of bringing people together for a workshop or meeting.

It was also not possible to provide regular, in-country, in-person support to the participating country initiatives through project management. Particularly in the case of the Project Manager, whose appointment occurred less than six months before covid-related impacts started to materialise, this affected opportunities to engage one-on-one with a broad range of stakeholders in-country and to learn of specific national strengths and weaknesses, constraints and needs, associated with project implementation.

This also adversely impacted other support provided through the WPEA-ITM such as through SPC and short-term contracted experts.

This aspect of the Activity should be resumed as soon as travel restrictions permit on the proviso that all personnel engaged in Activity-related travel are fully vaccinated for COVID.

### ***Financial matters***

The WCPFC Secretariat's Finance and Administration Manager, in association with the Project Manager where possible, should undertake a high-level review of national level finance systems and accountabilities.

Participating countries should be required to submit 6-monthly financial reports for project expenditure against disbursements received from the WCPFC Secretariat.

If a March 2023 termination is confirmed, preparations should commence for an Activity Completion Report with associated financial reporting, as required by MFAT.

### ***Start planning for a future activity***

It is anticipated that the three countries will require on-going dedicated support for some period after the conclusion of the WPEA-ITM and it would be prudent for the WCPFC Secretariat to start preparations for that within country, with the broader WCPFC membership and with potential financing partners.

### ***Administration***

#### *Memoranda of Understanding*

The MoU for SPC has been renewed each year for 12 months. Once a final date for conclusion of the Activity is determined, the MoUs with Indonesia, Philippines and Vietnam should be refreshed to ensure roles, responsibilities and expectations are clearly described and acknowledged.

#### *Website*

The two websites that support WPEA projects, [www.wcpfc.int/wpea](http://www.wcpfc.int/wpea) and [www.wpeaproject.org/](http://www.wpeaproject.org/), should be rationalised and consolidated under one site on the WCPFC/wpea webpage. The [www.wpeaproject.org](http://www.wpeaproject.org/) site should then be de-commissioned.

#### *Outreach and communications*

Some awareness raising and public relations support would possibly be beneficial for the Activity in general. This is particularly the case in Vietnam where effort is required to



increase awareness of project activities among senior officials and Government Ministers. This needs to include increased attention to the importance of fishery monitoring to support effective fisheries management nationally and the relationship of Vietnam to the WCPFC including obligations associated with its CNM status. In Indonesia and Vietnam, benefits would accrue from initiatives to increase the understanding of fishery monitoring and reporting obligations among vessel operators. If this is pursued, it may be possible to sub-contract this activity to a well-regarded local NGO.

National Coordinators should be encouraged to report to the WPEA-ITM Steering Committee on partnerships and initiatives related to the WPEA-ITM.

## Candidate activities for support under the WPEA-ITM or a future phase of the WPEA

Based on the Activity's experiences to December 2020, the purpose of the MTE was to assess possible refinements to planned activities to be considered for implementation in the time remaining for the project (currently March 2023). In addition, a key objective of the Evaluation was to inform the design and implementation of a possible future phase of the project. Activities for on-going support, and for consideration under a future WPEA-related initiative, include:

### **Indonesia**

#### *Fishery monitoring and analysis*

- Improve operational level catch and effort data reporting by gear type including raising awareness among vessel operators regarding logsheet data fields and their completion.
- Maintain support for at least 13 enumerators in Indonesia through until the end of the Project. Indonesia should take responsibility for 50% of their costs in the final year of the WPEA-ITM.
- Increase sampling from the LL fishery, for which there are few samples with the result current available data may not be representative of the fishery,
- investigate the on-going reduction in samples from the PS fishery to determine if it reflects a relative downturn in catch or reduced access to landings by the port samplers,
- Explore means to improve sampling from Kendari for the P&L fishery,
- Investigate apparent annual fluctuations in HL samples from Sorong over the past 2 years,
- Continue efforts to increase coverage for weight frequency data,
- Support efforts to achieve 50% coverage for operational level catch and effort data reporting for PS, LL, and P&L fleets to WCPFC by 2025>
- Strengthen the representativeness of port landings (including size composition, numbers, and weight of fish) and operational level reporting for LL fishery by increasing monitoring sites, for example Ambon Kendari, Sorong and Gorontalo, and other sites where port sampling is yet to commence.
- Continue to support efforts to provide annual catch and effort estimates and operational level data by geographic area and gear type (including renewing efforts for the HL fishery to re-establish levels achieved prior to 2018).
- Support on-going efforts to maintain recent enhancements, such as weight frequency data, including for P&L and PS sampling from Kendari and weight frequency data from the HL fishery from Nutrindo (NFI).
- Inventory all data generated under Indonesia's fishery monitoring activities and expand the data audit to cover all data received and processed as opposed to that selectively made available to WCPFC



- Continue work to characterize Indonesia's tuna fisheries including improved data on species composition by gear type thereby reducing the "other species" component with particular attention to sharks.
- Investigate the differences in species composition at different landing sites (for example differences between Kendari and Sodohoa) to describe the reasons for differences (for example composition of gear types landing at each site, selective unloading, or fleets using the same port operating in different regions (AW/EEZ, etc.).
- Continue to support efforts to fully characterize Indonesia's "other commercial" fisheries.
- Explore possibilities for providing dedicated support for a pilot program for EM in Indonesia.

#### *Fishery management support*

- Tailor stock assessment capacity building to utilise data generated from the Indonesian fishery, including from the WPEA, to inform national decisions regarding the conservation and management of tuna resources within Indonesia's EEZ including in relation to on-going work associated with harvest strategies.
- Support Harvest strategy capacity building for Indonesia to effectively participate in the WCPFC Harvest Strategy process and to inform National Managements decisions.

#### *At-sea observer programme*

- Provide support for strengthening the Indonesian national observer programme for tuna fleets operating in the WCPFC area. Develop a strategy and operational plan inclusive of capacity building needs.

#### *Data systems*

- Develop a strategy, and provide support, for the continued integration of WCPFC-related tuna fisheries databases (e.g., TUFMAN2) to Pusdatin.
- Consider supporting a formal training gaps and needs analysis (fisheries data and fisheries data management)
- Continue development and associated training for database systems TUFMAN2 and DORADO including, where appropriate, translation of related documentation.

#### *Communications and outreach*

- Commission an NGO to run a series of educational workshops for fishing vessel owners and captains relating to WCPFC reporting requirements and CMM obligations.

#### *General capacity building*

- Continue to support project-related attachments at SPC for up to 4 weeks (rather than 5 days), sponsored by the Activity.

## **Philippines**

#### *Fishery monitoring and analysis*

- Support detailed analysis of size, catch and effort data maintained by NSAP (for example, coverage by month and size class distributions, potential of standardisation of effort for each gear) to support national stock assessments and harvest strategy work.
- Support SPC staff to work with NFRDI staff to investigate apparent trends in fisheries (e.g., differences in the areas fished, the fishing methods and seasonality).
- Continue to support efforts to increase the coverage of operational data for each gear type (PS, RN and, when operating in the WCPFC Convention Area, LL) so that the trend for each gear type is towards 100% coverage.



- Support efforts to increase the coverage of logsheet or operational data for other fisheries (including HL, HK, and troll).
- Strengthen efforts to maintain species composition and species size distribution data collection by gear type and region, from archipelagic waters, the EEZ and HSP1.
- Support more detailed analysis of tuna size and catch/effort (CPUE) from NSAP data (e.g., coverage by month and size class distributions, the potential of standardisation of effort for each gear). Explore the apparent variability in trends that possibly relate to differences in the areas fished, the fishing methods and seasonality.
- Continue to support efforts to fully characterise Philippines "other commercial" fisheries.

#### *Fishery management support*

- Tailor stock assessment capacity building to utilise data generated from the Philippine fishery, including from the WPEA, to inform national decisions regarding the conservation and management of tuna resources within Philippine's EEZ.
- Support Harvest strategy capacity building for Philippines to effectively participate in the WCPFC Harvest Strategy process and to inform National Managements decisions.

#### *At-sea observer programme*

- Provide annual capacity building (briefer and de-briefer training, data processing and analytics) and on-going mentoring support to the FOP to maintain accreditation to the WCPFC ROP.

#### *Data systems*

- Maintain support, including capacity building, for the on-going integration of SPC data systems into NSAP programmes

#### *General capacity building*

- Continue to support project-related attachments at SPC for up to 4 weeks (rather than 5 days), sponsored by the Activity.

### **Vietnam**

#### *Fishery monitoring and analysis*

- Support D-Fish/MARD and Fish Port Management efforts to strengthen/reform the legal framework for tuna fishery data collection (data forms, gears, samples, catch estimate methods, etc.) covering landings, port sampling and observer data consistent with WCPFC data protocols.
- Provide on-going support D-Fish, Sub-D-Fish and Fish Port Management offices to secure resources for collecting and processing port sampling data (length frequency/species composition data) consistent with WCPFC requirements with a focus on HL and PS vessels in Binh Dinh and GN vessels in Khanh Hoa.
- Maintain support for at least 12 enumerators in Vietnam through until the end of the Project. Vietnam should take responsibility for 50% of their costs in the final year of the WPEA-ITM.
- Continue to revise national logbooks to incorporate WCPFC data requirements for operational data.
- Continue work to characterize Vietnam's tuna fisheries including improved data on species composition by gear type thereby reducing the "other species" component.
- Improve operational level catch and effort data by gear type including raising awareness among vessel operators regarding logsheet data fields and their completion.
- Strengthen processes and systems to increase the scope and quality of operational level data from Vietnamese PS, LL/HL and GN
- Support efforts to achieve 50% coverage for operational level catch and effort data from PS, HL/LL and GN fleets by 2025.



- Support efforts to achieve 50% coverage for sampling of port landings from PS, HL/LL and GN fleets by 2025.
- Enhance capacity of data collection for staffs working at local ports.

*Fishery management support*

- Tailor stock assessment capacity building to utilise data generated from the Vietnamese fishery, including from the WPEA, to inform national decisions regarding the conservation and management of tuna resources within Vietnam's EEZ.
- Support Harvest strategy capacity building for Vietnam to effectively participate in the WCPFC Harvest Strategy process and to inform National Managements decisions.

*At-sea observer programme*

- Renew efforts to establish a national observer programme for Vietnamese tuna fleets. Support the finalisation of an Observer Program Development Strategy and operational plan inclusive of capacity building needs.
- Explore possibilities for providing dedicated support for a pilot program for observers in association with Vinatuna.

*Data systems*

- Develop and strategy, and provide support, for the integration of WCPFC-related tuna fisheries databases (e.g., TUFMAN2) to VNFishBase.
- Consider supporting a formal training gaps and needs analysis (fisheries data and fisheries data management)
- Continue development and associated training for database systems TUFMAN2 and DORADO including, where appropriate, translation of related documentation.

*Port State controls*

- Build capacity and develop tools for implementing PSMA to monitor tuna imported to Vietnam.

*Communications and outreach*

- For Vietnam, provide support to the National Coordinator to raise awareness about the WCPFC and advertise WPEA-ITM fishery monitoring activities.
- Commission an NGO to run a series of educational workshops for fishing vessel owners and captains relating to WCPFC reporting requirements and CMM obligations.

*General capacity building*

- Continue to support project-related attachments at SPC for up to 4 weeks (rather than 5 days), sponsored by the Activity.



# 6

## Lessons Learned

What was learned from the evaluation? Key lessons include:

1. Engage stakeholders in a review of the ARF during a formal inception event at the start of the MTE.
2. Establishing effective and efficient fishery monitoring capacity in countries with diverse, largely small-scale fleets, and a range of national and sub-national governance roles and responsibilities (Provinces, municipalities, districts, regencies), requires significant investment over a long period of time to achieve sustainable outcomes.
3. A dedicated project implementation capacity administered from within the WCPFC Secretariat has benefitted participating countries in terms of efficient access to technical advice and services and in relation to capacity building.
4. Staffing the WCPFC's project management facility has been through a part-time post located either in one of the participating countries, or elsewhere. A part-time post located in Pohnpei is difficult to justify but a location elsewhere means the service is less integrated to Secretariat advice and services.
5. The value of SPC as a project partner for the WPEA-ITM is immeasurable and is obviously valued by participating countries. The Activity is unlikely to have achieved the significant improvements in scope and quality of data generated in the absence of SPC's oversight and advisory role.
6. Contracted short term experts with a strong combination of experience in WCPFC institutional processes, direct engagement with the participating countries and detailed understanding of WCPO tuna fisheries make important contributions to project implementation.
7. The ARF needs to be used strategically as a tool to monitor and report on implementation progress. At least in the initial years of the WPEA-ITM the ARF was not effectively utilised as a monitoring and evaluation tool.
8. MFAT and the WCPFC Secretariat have demonstrated adaptive management of the Activity budget which is essential. However, national level processes are not as flexible or responsive. It is necessary to budget a significant block of time, and in-country backstopping, to improve national level responsiveness.
9. On-line virtual meetings can achieve useful outcomes. However, technical training delivered on-line is less productive and, to achieve most benefit, requires the delivery of practical modules in a face-to-face environment as a follow-up to more theoretical delivery on-line (preferably with limited time between the two).
10. Opportunities to engage with a range of stakeholders, and to research Activity-related initiatives, including documents and reports, first-hand during a physical visit, are not possible for an MTE undertaken virtually.
11. Virtual meetings for WCPO tuna fisheries stakeholders have proliferated during the pandemic – they are easier to organise and can engage a range of expertise and interests. A heavy calendar of meetings means scheduling time to discuss a MTE with key individuals requires patience, flexibility, and forward planning.



# 7

## Recommendations

Recommendation <sup>20</sup>	Considerations and next steps
<i>Administrative</i>	
1. The Activity be extended, at no-cost, to March 2024.	As drawdown of project funds has been adversely affected by issues such as a slow start and the pandemic, a no-cost extension to the Activity of a further 12 months, to March 2024, is recommended. <i>The Project Manager will need to discuss this possibility with MFAT. The outcome of that discussion will determine appropriate action (prepare to conclude in March 2024 or prepare for an additional 12-month no-cost extension to March 2024) to be discussed with National Coordinators and the Steering Committee.</i>
2. Review and revise, as appropriate, the ARF to support the remainder of the implementation of the WPEA-ITM.	The Project Manager review revised ARF and prepare a new version, confirming baselines and targets, for consideration by the WPEA-ITM SC. The Activity Budget will then need to be revised to support the revised ARF (incorporating the decision on the time remaining for WPEA-ITM implementation). MFAT will then review and endorse the revised ARF and associated budget. A new Grant Funding Agreement will need to be executed. The ARF and budget are reviewed at each annual WPEA-ITM SC.
3. Encourage participating countries to report on cross cutting issues to each WPEA-ITM SC.	The Project Manager should raise awareness with project-affiliated personnel in each participating country of the expectation that consideration of cross cutting matters be incorporated into the planning of activities under the WPEA-ITM and reported upon. Some progress has been made in this regard in relation to gender disaggregated information but attention to cross cutting social issues such as the youth and disadvantaged, welfare, safety and environmental linkages warrant improved attention in national reporting. <i>Subsequently, the Project Manager will assimilate reports received for inclusion in the APR.</i>
4. Each participating country to prepare a transition/'exit' strategy that will describe on-going support to WPEA-ITM activities once project funding terminates.	Each National Coordinator should draft a transition or 'exit' strategy that describes roles, responsibilities and needs as the WPEA-ITM approaches its conclusion and proposed arrangements to support WPEA-ITM-related activities beyond its conclusion, including resourcing options for addressing those priorities. Proposed arrangements should be tabled at the 2022 Steering Committee meeting, for information.

<sup>20</sup> All personnel engaged in Activity-supported travel, which might be contemplated as soon as travel restrictions permit, should all be fully vaccinated for COVID.



5. Resume in-country visitations by project management, support agencies such as SPC and the WCPFC Secretariat, and short-term contracted experts as soon as travel restrictions ease.	As covid travel restrictions lift the Project Manager should check with participating countries regarding post-covid related travel policy. In consultation with National Coordinators, Project Manager should schedule in-country activities. The Project Manager, in consultation with National Coordinators, will assess requirements to support the implementation of activities identified and determine the availability of any expert assistance required.
6. Start preparations for a possible follow-up Activity at the conclusion of the WPEA-ITM.	Contingent on decisions concerning the possible extension of the WPEA-ITM to March 2024, the Project Manager to complete an assessment of further needs, fishery monitoring constraints and engagement in the WCPFC across the three participating countries. The assessment should lead to the presentation of a discussion document to the 2022 SC. If SC endorses the need for a follow-on activity, the Project Manager, with the support of WCPFC Secretariat colleagues, should take the lead on drafting a new concept document for consideration at the WPEA-ITM SC. The Goal would be to secure funds for the new project so that it may commence with a minimal amount of time between its start and the conclusion of the WPEA-ITM.  Candidate activities for potential on-going support in future WPEA-related initiatives are presented in <b>Section 5</b> above.
7. Complete an in-country review of project-related financial management and reporting systems.	As covid travel restrictions ease, it is recommended that the Project Manager and WCPFC Secretariat's Finance and Administration Manager: <ul style="list-style-type: none"> <li>○ Draft, and distribute to partners, WPEA-ITM financial reporting expectations,</li> <li>○ liaise with National Coordinators regarding in-country visits to review financial reporting expectations, and</li> <li>○ coordinate an in-country review of financial management and reporting systems.</li> </ul> It is recommended that participating countries be required to submit 6-monthly financial reports for project expenditure against disbursements received from the WCPFC Secretariat. Such requirements will need to be appropriately incorporated in MoUs.
8. MoUs and LoAs	The MoU for SPC is renewed each year. Once a decision is made on the date for the conclusion of the WPEA-ITM, the MoUs with each participating country will need to be refreshed and formalised. This is the responsibility of the Project Manager in consultation with National Coordinators.
9. Project website	Two websites are in existence for the WPEA ( <a href="http://www.wcpfc.int/wpea">www.wcpfc.int/wpea</a> and <a href="http://www.wpeaproject.org/">www.wpeaproject.org/</a> ). The WCPFC Secretariat should rationalise the two sites and consolidate them under one site on the WCPFC/wpea webpage. The <a href="http://www.wpeaproject.org">www.wpeaproject.org</a> site should then be de-commissioned
10. Activity Completion Report	If confirmed by MFAT as a requirement the Project Manager will need to start preparations for an Activity Completion Report.
<i>Fishery monitoring</i>	
11. Characterization of tuna fisheries.	Significant work remains to achieve full monitoring of the catch and effort for all gears used to harvest WCPO oceanic tuna resources from each participating country, to describe the species composition for all gears and to





	support sampling to better inform research to describe biological characteristics and stock dynamics. Preparations of annual programmes of work should focus on activities supporting these endeavours (see <b>Section 5</b> ).
12. Fishery monitoring in Vietnam and Indonesia	The Activity should maintain support for at least 12 enumerators in Vietnam and 13 enumerators in Indonesia through until the end of the Project. Each country should take responsibility for 50% of their costs in the final year of the WPEA-ITM. The Project Manager should initiate discussions with Vietnam and Indonesia regarding a strategy for transition from WPEA-funding support to national support so that fishery monitoring activities are sustained once WPEA-ITM funding is exhausted.
13. Electronic monitoring trial	Noting that EM requires a significant foundation in appropriate infrastructure and systems to provide a sound basis for trials, funding permitting, the Steering Committee could consider support to robustly formulated proposals to support EM trials consistent with the fishery monitoring objectives of the WPEA-ITM.
<i>At-sea observer programmes</i>	
14. At-sea observer programme	Re-invigorate WPEA-ITM Output 3 aspirations in Vietnam and Indonesia. The potential for existing observer activity in Indonesia (through DGCF, RITF and NGOs such as IPNLF and AP2HI) to contribute observer data to WCPFC should undergo detailed assessment once travel restrictions are eased. The assessment would then provide a foundation for generating and Action Plan leading to Indonesian observer data being submitted to WCPFC.  Given the challenges associated with establishing an observer programme in Vietnam, WPEA-ITM efforts in the medium term should focus on securing formal recognition of a national observer programme strategy, building on the work commenced at the workshop in March 2019.  The WPEA-ITM Project Manager, in consultation with Indonesia and Vietnamese National Coordinators and relevant WCPFC and SPC staff, agree to terms of reference to support this work. Relevant SPC and WCPFC staff schedule the preparation of the reviews and development of national strategies in consultation with National Coordinators.  The strategy to strengthen national observer programmes for fisheries targeting WCPO tuna resources in Vietnam and Indonesia will include a capacity development plan to provide for on-going training and certification needs. A similar plan, describing WCPFC and SPC support requirements, will be drafted for Philippines.  The draft strategies will be reviewed and endorsed by national officials.  On-going mentoring and capacity building support to the Philippines FOP should also be maintained.
<i>Communications and outreach</i>	
15. Invite participating	<ul style="list-style-type: none"> <li>The Project Manager to write to National Coordinators advising of (limited) funding available to support</li> </ul>



countries to submit proposals to support improved communications, including supporting infrastructure, to strengthen both national, and project-wide engagement and communications.	<p>the acquisition of IT infrastructure and equipment and invite proposals.</p> <ul style="list-style-type: none"> <li>The Project Manager will consider proposals received and advise of funding decisions.</li> </ul>
16. Communications and outreach	<p>Support for communications and outreach should be considered for each participating country. This may focus on building an understanding of the WCPFC among vessel operators in relation to obligations and reporting requirements.</p> <p>A local NGO may be one of the options available to develop and deliver such awareness raising. Awareness raising and outreach may also be beneficial for senior officials and Government Ministers in Vietnam. Outreach of this nature might be facilitated by the Project Manager.</p>
<i>Data systems</i>	
17. Data systems integration/harmonization	<p>Duplicate systems for data management in national institutional arrangements should be avoided. The integration of data processing systems used by WCPFC members (TUFMAN2 and DORADO), which have been introduced to the participating countries under the WPEA, and national systems (Pusdatin in Indonesia and VNFishBase in Vietnam) would benefit from closer examination to promote efficiency through harmonisation, standardisation and integration to a similar degree that has been achieved with the Philippines NSAP under NFRDI.</p> <p>This is an initiative for consultation with National Coordinators, SPC and the Project Manager.</p>
<i>Capacity building</i>	
18. Capacity building in data systems and stock assessment	<p>There will be a need, for some time, for the WCPFC Secretariat's and SPC's advice and nurturing across all facets of fishery monitoring, data systems development and application, and stock assessment capacity building through the TDR and ACE Workshops, the stock assessment workshops in Noumea and continued mentoring support to the national observer programmes as listed in <b>Section 5</b>.</p> <p>Attention in this regard will assist national agencies utilise data generated under all WPEA initiatives since 2010 to inform national-level fisheries management initiatives.</p> <p>Annual programmes of work should be designed to include support for capacity building needs in this regard.</p>
19. Capacity building: SPC and WCPFC Secretariat attachments	<p>Once travel permits, one attachment to SPC and/or the WCPFC Secretariat should be made available to one candidate from Indonesia, Philippines, and Vietnam for up to 4 weeks (rather than 5 days), sponsored by the Activity, each year.</p> <p>The SPC attachments will focus on data systems, data analysis, fishery modelling and stock assessment. The WCPFC Secretariat attachments will be designed to strengthen knowledge and experience in WCPFC institutional processes.</p> <p>The Project Manager should consult with SPC and WCPFC regarding topics for possible support during such attachments, supporting arrangements (logistics and administration) and possible timing. Criteria for support might also be documented.</p>



	Once these arrangements are established, participating countries could be invited to provide nominations.
<i>Fishery management</i>	
20. Fishery management	National-level harvest strategies, or related initiatives, for the management of oceanic tuna fisheries within waters under national jurisdiction are receiving increasing attention in all three participating countries. Countries are particularly supportive of initiatives to use of data generated under the WPEA to support assessments associated with the development of national tuna fisheries management arrangements. Preparations of annual programmes of work should include activities supporting these endeavours (see <b>Section 5</b> )



# Appendices



## APPENDIX A. People consulted

### Indonesia

*Ministry of Marine Affairs and Fisheries*

Fayakun Satria  
Senior Scientist  
Research Institute for Marine Fisheries,  
WPEA-ITM National Coordinator  
E: [fsatria70@gmail.com](mailto:fsatria70@gmail.com)

Lilis Sadiyah  
Senior Scientist  
Centre for Fisheries Research (CFR)  
E: [sadiyah.lilis2@gmail.com](mailto:sadiyah.lilis2@gmail.com)

*Sustainable Fisheries Development,  
Indonesia*

Gayatri Lilley  
Director  
Indonesian Nature Foundation (LINI -  
Yayasan Alam Indonesia Lestari)  
E: [gayatri.lilley@sustainablefish.org](mailto:gayatri.lilley@sustainablefish.org)

Dessy Anggraeni  
Indonesia SFD Country Director  
E: [dessy.anggraeni@sustainablefish.org](mailto:dessy.anggraeni@sustainablefish.org)

Agus Budhiman  
Senior Policy Adviser  
E: [agus.budhiman@sustainablefish.org](mailto:agus.budhiman@sustainablefish.org)

### Vietnam

*Directorate of Fisheries*

Vu Duyen Hai  
Deputy Director  
WPEA-ITM National Coordinator  
E: [vuduyenhai10@gmail.com](mailto:vuduyenhai10@gmail.com)

*Research Institute for Marine Fisheries*

Nguyen Khac Bat  
Dr. of Marine Science  
Director  
E: [nkbat2005@gmail.com](mailto:nkbat2005@gmail.com); [nkbat@rimf.org.vn](mailto:nkbat@rimf.org.vn)

*Vietnam Tuna Association (Vinatuna)*

Mr Tran Van Hao  
Representative  
E: [haovinatuna@gmail.com](mailto:haovinatuna@gmail.com)  
W: [www.vinatuna.org.vn](http://www.vinatuna.org.vn)

*WWF-Vietnam*

Vuong Trong Binh  
Oceans Practice Focal Point and  
"Mitigating Marine Plastic Debris in Viet  
Nam" Project Officer  
E: [binh.vuongtrong@wwf.org.vn](mailto:binh.vuongtrong@wwf.org.vn)

*Freelance adviser*

Pham Viet Anh  
Previous Government contact for the  
WPEA and WCPFC

### New Zealand

*Ministry of Foreign Affairs and Trade*

Emma Hodder  
Senior Foreign Policy Officer  
E: [emma.hodder@mfat.govt.nz](mailto:emma.hodder@mfat.govt.nz)

### Philippines

*Bureau of Fisheries and Aquatic Resources*

Atty. Benjamin F.S. Tabios Jr  
Office of Special Concerns  
Internal Audit Unit  
E: [benjo\\_tabios@yahoo.com](mailto:benjo_tabios@yahoo.com);  
[benjotabios@gmail.com](mailto:benjotabios@gmail.com)

Rafael Ramiscal  
Director  
Capture Fisheries Division  
E: [rv\\_ram55@yahoo.com](mailto:rv_ram55@yahoo.com)  
Suzette Barcoma  
WPEA-ITM National Coordinator  
E: [suzette\\_barcoma@yahoo.com](mailto:suzette_barcoma@yahoo.com)

Marlo Demo-os  
BFAR Fisheries Observer Programme  
Manager  
E: [mbdemoos@bfar.da.gov.ph](mailto:mbdemoos@bfar.da.gov.ph)

### Others

*Secretariat of the Pacific Community*

Peter Williams  
Senior Scientist  
E: [peterw@spc.int](mailto:peterw@spc.int)

Sika Fukofuka  
Observer Programme Training Coordinator  
E: [siosifaf@spc.int](mailto:siosifaf@spc.int)



*Western and Central Pacific Fisheries  
Commission*

Feleti Teo OBE  
Executive Director  
[Feleti.teo@wcpfc.int](mailto:Feleti.teo@wcpfc.int)

Alice McDonald  
Project Manager  
WPEA-ITM Activity

Aaron Nighswander  
Finance and Administration Manager  
[Aaron.nighswander@wcpfc.int](mailto:Aaron.nighswander@wcpfc.int)

Karl Staisch  
Regional Observer Programme Coordinator  
E: [karl.staisch@wcpfc.int](mailto:karl.staisch@wcpfc.int)

Dr Sung Kwon Soh  
Science Manager  
E: [sungkwon.soh@wcpfc.int](mailto:sungkwon.soh@wcpfc.int)

Elaine Garvilles  
Assistant Science Officer  
E: [elaine.garvilles@wcpfc.int](mailto:elaine.garvilles@wcpfc.int)

*The World Bank*

Mizushi Satoh  
Environmental Specialist  
Environment, Natural Resources and Blue  
Economy  
E: [msatoh@worldbank.org](mailto:msatoh@worldbank.org)

*Experts*

Dr Antony Lewis  
Fisheries adviser  
E: [alewis9@bigpond.com](mailto:alewis9@bigpond.com)

Keith Symington  
Freelance Consultant  
Vietnam  
E: [keithsymington@yahoo.ca](mailto:keithsymington@yahoo.ca)

Dale Withington  
Country Director  
Peacecorp Caribbean  
First WPEA-ITM Project Manager  
E: [drwithing@yahoo.com](mailto:drwithing@yahoo.com)



## APPENDIX B. Country profile: Indonesia

Indonesia has participated in the WCPFC as an observer or CNM since 2003. It became a Member of the Commission in 2013.

### **Legal, policy and institutional**

Fisheries Law 30/2004 as amended by 45/2009 describes Indonesia's participation in international fisheries arrangements including regional fisheries management organisations (RFMOs). This is partially operationalised for tuna fishing in the WCPO region under Presidential Regulation 61/2013 (28 August 2013). Ministerial Decree of MAF 107/2015 provides for a national tuna management plan (NTMP) for oceanic and neritic tunas which is revised every 5 years. Ministerial Regulation No. 30/2012 jo. 26/2013 jo. 48/2014 jo. 26/2015 regulates capture fisheries enterprises, fishing licensing, the database sharing system and stipulates that all catches be landed in port. Ministerial Regulation No. 12/2012 regulates Indonesian vessels operating in EEZ and the high seas. Other legislation relevant to the fisheries sector include Law 11/2020 concerning job creation, and application in the marine and fisheries sector (PP 5/2021), KP Regulation No. 18/2021 and 10/2021 concerning standards for business activities and risk-based business licensing for the marine and fisheries sector. These are of particular interest given Indonesia's announcement at the 2020 Regular Session of the WCPFC that it was working with New Zealand on a draft CMM relating to crew welfare and employment standards on fishing vessels<sup>21</sup>. This initiative is on-going.

The NTMP sets a 5-year plan for implementing action plans including development and implementation of harvest strategies and to gain MSC certification. The development and implementation of harvest strategy framework for tuna and neritic species was a priority action of the NTMP between 2015 and 2017 as described in the Ministerial Decree of Marine Affairs and Fisheries of the Republic of Indonesia Number 107/KEPMEN-KP/2015. The harvest strategy and its associated action plan for YFT, SKJ and BET fisheries in archipelagic waters (Indonesia Fisheries Management Areas/FMA numbers 713, 714 and 715) is an on-going process (see Satria *et al.* 2019 and Hoshino *et al.* 2020). In addition to the above relating to licensing and operations on the high seas, observer deployment is regulated under Ministerial Decree No. 1/PERMEN-KP/2013.

Since 2017, data collection has been coordinated by Centre of Data, Statistic, and Information (CDSI) within the Ministry of Marine and Fisheries Affairs (MMAF) through its Directorate Generals. Data is assimilated through Indonesia's One Data initiative under the One Data Policy (Pusdatin). CDSI is responsible for designing and supervising surveys, and preparation of National Capture Fisheries Statistics. The data validation process is conducted within a hierarchical scheme commencing at the district level, to provincial to then to the central government (MMAF). Data collection conducted at fishing ports is derived from logbook, landing, vessel inspections and observer programs. Annual data assimilation draws on CFR/WPEA data, SILOPI (logbook/e-logbook), license data, catch certification, export data, observer, port sampling, SIMKADA, PIPP, as well as data from fishery associations and NGOs such as MDPI, AP2HI, SFP/LINI, YKAN and YII, to support data validation conducted by MMAF. The fishery monitoring systems that were operational in 2018 have been described by Satria *et al.* 2018 and Ismayanti, 2018<sup>22</sup>.

---

<sup>21</sup> Indonesia. 2020. *Proposal for a CMM on Labour Standards for Crews on Fishing Vessels*. Seventeenth Regular Session, Electronic Meeting, 8-15 December 2020. WCPFC17-2020-DP09. 8 pages.

<sup>22</sup> Satria, F., Merta, B.S., Sadiyah, L. Mahiswara and Widodo, A. 2018. *Existing data collection workshop on harvest strategy implementation for tuna fisheries in FMAs 713, 714 and 715: Current systems and on-going improvement*. Bogor, 21-23 November 2018. 19 pages. And Ismayanti. 2018. *The progress of One data of Marine and Fisheries*. Presentation to the 9<sup>th</sup> Indonesian Annual Tuna Fisheries Catch Estimates Review Workshop, June 22, 2018.



### **Indonesia 2020 tuna fisheries (WCPO area) production**

Indonesia reported a provisional total catch from the WCPO (Sulawesi Sea and Pacific Ocean) in 2020 of 33,566 mt of skipjack, 30,666 mt of yellowfin, 4.742 mt of bigeye for a total reported catch from the WCPO area of 68,975 mt<sup>23</sup>. Confirmation of the catch was the subject of an ACE Workshop that was arranged in mid-June, 2021. The principal outcomes of the Workshop were:

- a. the need to disaggregate large- and small-fish from HL estimates,
- b. assess small-fish catch estimates from surface gear, compile catch estimates from the large-fish component only (e.g., from processing plant data) and deduct this figure from the total handline catch estimate determined by DGCF,
- c. review:
  - i. 2019 and 2020 P&L catch estimates prior to the next ACE Workshop,
  - ii. catch estimates for the troll fishery for years 2017-2019-2020,
  - iii. catch estimates for the GN fishery in 2018 particularly apparent high reported catches in Sarmi, Jayapura and Taliabu,
- d. encouraged on-going cooperation of other participating government agencies, NGOs and associations,
- e. recommended DGCF prepare data summaries (gear, FMA Areas 713/714/715 and 716/717, catch by oceanic tuna species) for the top 10 landing sites,
- f. review estimates for certain gears and areas between 2019 and 2020 including:
  - i. apparent increased P&L catches in FMAs 713/714/715,
  - ii. apparent increased GN catches in FMAs 716/717 from Jayapura, Kota Jayapura, Nabire and Sarmi, and
  - iii. 'other gear' catches in FMAs 716/717 for the large bigeye tuna catch from the RAWAI DASAR and other gears.

In 2020, the Indonesian fleet on the WCPFC RFV numbered 394 consisting of purse seiners, longliners, gillnetters, hand-liners, pole and line and support vessels. Approximately 52% of the reported catch from the WCPO area was taken by purse seine, 23% by longline, 18% by handline, 7% by troll vessels with the remainder taken by a variety of gears.

The WPEA-ITM has supported efforts in Indonesia and the Philippines to describe their "other commercial fisheries" for SKJ, YFT and BET identified in WCPFC's CMM 2020-01<sup>24</sup>. The 2021

---

<sup>23</sup> Indonesia. 2020. *Annual Report to the Commission, Part 1: Information on fisheries, research and statistics*. Sixteenth Regular Session, Electronic Meeting, 11-20 August 2020. WCPFC-SC16-AR/CCM-09 (Rev.01). 32 pages and Indonesia. 2021. *Annual Report to the Commission, Part 1: Information on fisheries, research and statistics*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-AR/CCM-09 (Rev.01). 30 pages.

<sup>24</sup> Indonesia and SPC. 2020. Availability of catch estimates from the other commercial fisheries in Indonesia. Scientific Committee, Sixteenth Regular Session, Online Meeting. 11 -20 August 2020. WCPFC-SC16-2020/MI IP-18. Ministry of Marine Affairs and Fisheries Indonesia Oceanic Fisheries Programme (OFP) and the Pacific Community (SPC) 4). 26 pages. Indonesia and SPC. 2021. Update01: Availability of Catch Estimates from the Other Commercial Fisheries in Indonesia. Scientific Committee, Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-2021/ST-IP-09. Ministry of Marine Affairs and Fisheries Indonesia and Oceanic Fisheries Programme (OFP) Pacific Community (SPC). 31 pages. Philippines and SPC. 2020. Availability of catch estimates from the other commercial fisheries in Philippines. Scientific Committee, Sixteenth Regular Session, Online Meeting. 11 -20 August 2020. WCPFC-SC16-2020/MI IP-17. National Fisheries Research and Development Institute (NFRDI), Department of Agriculture and the Bureau of Fisheries and Aquatic Resources Department of Agriculture, Philippines and the Oceanic Fisheries Programme (OFP) Pacific Community (SPC). 18 pages. Philippines and SPC. 2021. Estimates of annual catches of tropical tuna by the Philippines relevant to WCPFC CMM on Tropical Tunas "other commercial fisheries". Scientific Committee, Seventeenth Regular





Session of WCPFC’s Scientific Committee (SC17) considered the latest information concerning these fisheries provided by Indonesia and Philippines and recommended that CMM 2020-01 would not apply to small-scale fisheries restricted to territorial seas and archipelagic waters. SC17 recommended that the Measure should apply to the Indonesian P&L fishery outside archipelagic waters and territorial seas for vessels >30GT and the “large-fish” HL fishery in Indonesia and the Philippines fishing outside archipelagic waters and territorial seas for vessels >30 GT. SC17 recognized that insufficient data exist to derive a baseline for the Indonesia large-fish handline fishery and suggested that WCPFC consider developing a baseline using years where data are available. SC17 advised that, although CMM 2020-01 is not applicable to archipelagic waters, it encouraged Indonesia and the Philippines to provide data from fisheries that operate in those areas for scientific purposes. At the time of the preparation of the MTE, WCPFC CCMs were engaged in an inter-sessional process to review CMM 2020-01 the outcomes of which were scheduled for further consideration at the Commission’s annual session in December 2021.

### Port sampling

In its Part 1 Annual Report to the WCPFC Scientific Committee in August 2021, Indonesia reported that port sampling activities continued under WPEA-ITM at two landing sites in 2020 (Bitung (12 enumerators) and Sorong (1)). The national data collection program administered by Research Institute for Marine fisheries (RIMF) also conducted port sampling at Bulukumba (2 enumerators, Kwandang (2 enumerators) and Manado (2 enumerators) and Sikka, Maumere (2 enumerators). It was also reported that some data collection activities had been supported through port sampling and observer initiatives of non-government organizations (NGOs) such as the Sustainable Fisheries Partnership (SFP) which was linked to DGCF and the harvest strategy work of the FMA 713,714, and 715 (Archipelagic Waters).

A summary of data collected with the support of the WPEA since 2013 in presented in the **Appendix**. The sampling of tuna landings at 13 Indonesian ports covering FMAs 713-718 by approximately 30 enumerators in 2019/20 is summarised in **Table 1**.

**Table 1.** Information relating to enumerators deployed by GOI to monitor port landings at Indonesian ports including those supported under the WPEA-ITM.

FMA	Locations	Periods	Enumerators				Gears	Target species	
			WPEA-supported	IND-Government	Total	Male			Female
713	Bontang	2019-		2	2	1	1	HL; PS	YFT; SKJ
	Donggala	2018-		2	2	1	1	HL; PS	YFT; SKJ
	Bone	2018-		1	1	1	1	PS	SKJ
	Bulukumba	2018-		1	1	1	1	HL	YFT; SKJ; BET
714	Kendari	2019-		2	2	2	2	TR	SKJ
	Ambon	2019-		1	1	1	1	P&L	SKJ
715	Sorong		1	1	1	2			
	Gorontalo	2020-		2	2	1	1	HL; PS	SKJ
716	Gorontalo utara (kw)	2018-		1	1	1	1	HL; PS	SKJ
	Gorontalo kota			3	3	1	2		
	Manado	2018-		1	1	1	1	PS	YFT; SKJ
	Toli Toli	2018-		1	1	1	1	HL; PS; P&L	YFT; SKJ
717	Jayapura	2018-		1	1		1	HL; PS	YFT; SKJ
	Biak	2018-		1	1		1	HL	YFT; SKJ
	Nabire	2018-		1	1	1	1	HL	YFT; SKJ
716-715	Bitung		12	12	10	2			
<b>TOTAL</b>				13	21	33	25	9	

---

Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-2021/ST IP-08. National Fisheries Research and Development Institute (NFRDI) Department of Agriculture Philippines Bureau of Fisheries and Aquatic Resources Department of Agriculture Philippines Oceanic Fisheries Programme (OFP) Pacific Community (SPC). 21 pages.



The annual summary of scientific data available to the WCPFC compiled by the Commission's science services provider, SPC, noted that while the *scope and quality* of data submitted by Indonesia has been improving over the years, several issues remain (SPC, 2021a). They include:

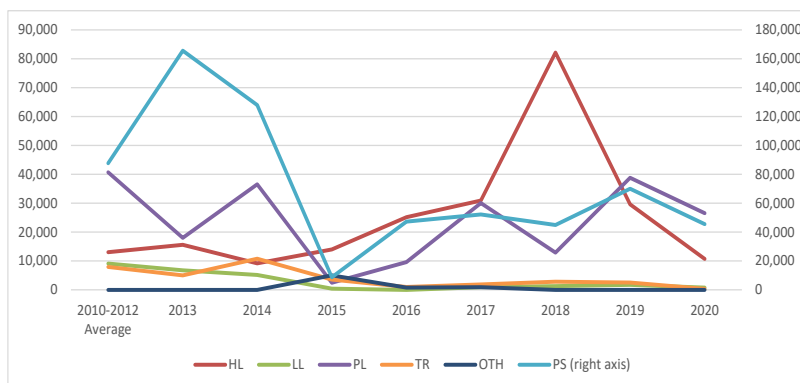
- a. low coverage rates for operational level catch and effort data,
- b. the lack of reporting against some operational level data fields (e.g., number of hooks set, hooks between floats and time of set), and
- c. under-reporting of key shark species in landings.

56 fishing ports are monitored by DGCF's information center for fishing ports (PIPP-DGCF). Each port is assigned 1-3 data enumerators funded by the GOI (Government of Indonesia) (**Table 2**).

FMA	UPT Pusat (Center)	UPT Daerah (Provinces)	Number
713	0	26	26
714	3	5	8
715	1	12	13
716	2	7	9
717	0	0	0
<b>Total</b>	6	50	56

**Table 2.** The number of fishing ports that are included in the PIPP (Information Center for Fishing Ports) supported by the DGCF.

SPC also completed an audit of available 2020 port sampling data submitted to WCPFC by the Indonesia Center for Fisheries Research and Development (CFRD) under the WPEA-ITM<sup>25</sup>. A summary of available data with trends in data sampling by gear type for the period 2010-2020 is presented in **Figure 1** and weight data by gear type since 2010 are presented in **Figure 2** and the **Annex**.



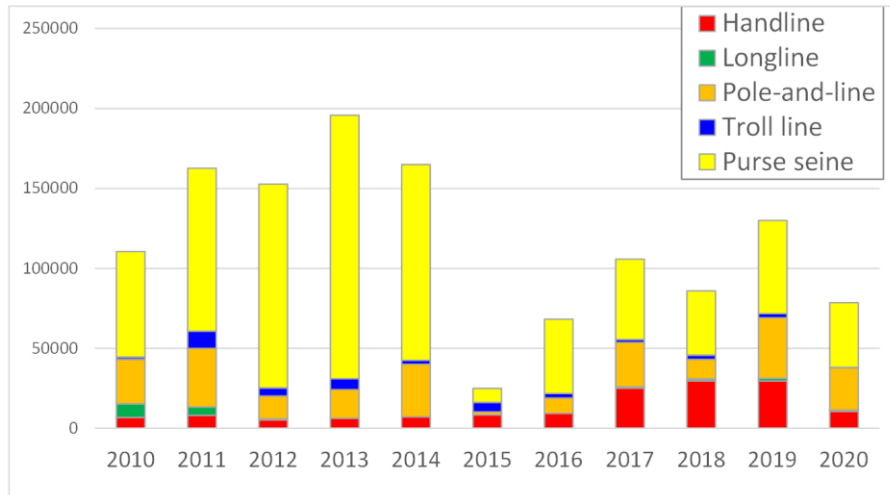
**Figure 1.** Annual trends in individual tuna size sample data collected under the Indonesia WPEA Project

The audit noted a decrease in the number of samples for each gear in 2020 compared with recent years reflecting the impact of COVID-19 on fishery monitoring efforts in Indonesia.

<sup>25</sup> SPC, 2021b. *Preliminary audit of 2020 Indonesia port sampling data*. Western and Central Pacific Fisheries Commission (WCPFC), West Pacific – East Asia (WPEA) Improved Tuna Monitoring (ITM) Project. June 2021. 6 pages. Conducted by SPC on behalf of the WCPFC



Nevertheless, SPC advised that the available processed data appeared to provide sufficient coverage across gears to be used in regional stock assessments. The one caveat in relation to this was limited longline data which was likely not representative of domestic Indonesia fisheries.



**Figure 2.** Annual trends in individual tuna weight data collected under the Indonesia WPEA Project

Key points arising from the audit (in relation to future issues for consideration under the WPEA-ITM) included:

- a. 2019 and 2020 downturn in data collection from handline fisheries following encouraging increases through to 2018. [*Note for possible future support under the WPEA-ITM - reinvigorate monitoring efforts in handline, pole and line and purse seine fisheries to re-establish pre-2018 sampling effort (coverage of landing sites and gear types) while maintaining recent enhancements such as weight frequency data. This includes pole and line and purse seine sampling from Kendari for 2020.*]
- b. the availability and quality of weight frequency data for the handline fishery was welcomed as a useful addition to the data submitted for regional stock assessments,
- c. a decrease in weight frequency data from the handline fishery from Nutrindo (NFI) which had provided substantial sampling data in the past,
- d. an increase in sampling of handline catches from Bitung (which compensated for the decrease in NFI sampling),
- e. a reduction in sampling from the purse seine fishery (since 2015) reflecting the relative downturn in catch and/or access to landings by the port samplers,
- f. a reduction in sampling from the pole and line fishery in 2020 primarily due to the unavailability of samples from Kendari,
- g. limited data for the longline fishery reflecting the few landings where port sampling occurs. It was noted that landings of longline may occur at Ambon, or other sites, where port sampling is yet to commence.
- h. the representativeness of the available port sampled data of the 2020 longline catch also warranted more detailed examination in order to provide greater confidence for annual catch estimates (the proportion of bigeye tuna from the available 2020 sampling data was high). [*Note for possible future support under the WPEA-ITM - Extend overall monitoring of the longline fishery to improve its representativeness.*]
- i. the audit noted that the difference in species composition at different landing sites (for example differences between landings at Kendari and Sodohoa) reflected both differences in primary gear types landing at each site, the fact that vessels may only unload a selective portion of their catch at some sites and whether vessels primarily operated in archipelagic waters or within the EEZ, and



- j. for size composition, although there was some evidence of 2cm rounding in the length data collection, it was noted that regional assessments use data at 2cm intervals and so it was unlikely to be of concern.

The audit did not identify any major issues with data collected during 2020 (including size composition data) other than the possibility additional data was available but had not been processed at the time of the audit. The lack of data from PPS Kendari, which usually includes sampling of HL, P&L and PS vessels, and data from Sorong and Gorontalo, was noted.

The audit noted that the Indonesian WPEA port sampling data continues to be a very useful data set for both national and regional use with a continuous time series now spanning 10 years, a significant milestone.

### **Observer programme**

In 2013, the MMAF issued Ministerial Regulation Number 01 concerning a national observer program. **Table 3** summarises the number of sea-days by gear type and FMA for the period 2016-2020 as presented to the 2021 WCPFC Scientific Committee. The MTE was unable to learn how many observers are currently active in the programme, how many of those observers have been trained under WPEA activities and what coverage the number of sea-days reported represents (in terms of the total number of fishing days reported for each gear type in each of the FMAs).

Gear	FMA	2016	2017	2018	2019	2020
		Sea days	Sea days	Sea days	Sea days	Sea days
LL	714		74			4
	714-715		19			
	715		55			
	716-717		20		57	
	sub-total	0	168	0	57	4
	%	0%	27%	0%	5%	0%
HL	715	8		162	44	50
	716-717				6	
	sub-total	8	0	162	50	50
	%	5%	0%	9%	4%	4%
P&L	714	12	59	23	137	132
	715	69	50	133	164	204
	715-716		7	144		
	716		19	11	26	
	sub-total	81	135	311	327	336
	%	49%	22%	17%	26%	28%
PS	714	12	125	331	457	152
	714-715		8	458		
	715	63	94	127	156	351
	715-716		28	246		
	715-717		17	127		
	716		44	119	127	132
	717				88	176
	sub-total	75	316	1408	828	811
	%	46%	51%	75%	66%	68%
TOTAL		164	619	1881	1262	1201

**Table 3.** Indonesian at-sea observer programme reporting the number of observer sea-days by FMA (2016-2020).

The placement and training of observers in 2020 was impacted by the pandemic with fewer observers deployed and very limited training of new observers. It is unlikely that observer programs will be fully operational until the threats from the pandemic have eased which has significant implications for the further development of the national observer program. Unfortunately, while some adaptation is possible on-line delivery of comprehensive observer training is restricted particularly where translation is necessary.

### **General comments**

The February 2020 APR reported ongoing issues with the collection and submission of WCPFC-required data in Indonesia, with advancements towards meeting requirements slower



than anticipated. It was reported that, although logbook and some observer data are collected, limited data is submitted to WCPFC. The difficulties in collecting logbook and observer data from small-scale artisanal fisheries was acknowledged with the suggestion that efforts focus on collecting the required data from the larger (industrial) vessels. The APR noted that both DGCF and CFR are involved in the project and their respective responsibilities are understood. However, greater clarity was required regarding coordination between the two agencies in relation to scientific and compliance data collection/coverage of the observer programmes.

In relation to the general observations regarding the WPEA-ITM in Indonesia, the 2020 APR reported:

- a. Some skilled/trained enumerators and observers resigned when they found better jobs and earnings, therefore additional effort had to be made to train new recruits.
- b. Increasing enumerators and observer capacities through face-to-face training (where online training is ineffective) had to be delayed due to Covid-19.
- c. Direct supervision by CFR of enumerators and observers was not possible due to COVID, making online supervision the only alternative.
- d. Integrating existing national data collection (observer, logbook, landing at port), including data collection conducted by NGOs and the fishing industry, into one automatic reporting system was waiting on technical assistance from relevant experts, which has been postponed.
- e. IT and communication tools of enumerators and coordinator needed updating

Since late 2018 an electronic logbook programme has been implemented. The programme is mandatory for vessels > 30 GT and voluntary for vessel ≤ 30 GT. The e-logbook was the recently formalized under Ministerial Regulation No. 33/2021 which covers the e-logbook, observer deployment on fishing and carrier vessels and carrier vessel, inspection, vessel marking, and crew management on fisheries vessels.

### **Indonesia and the Technical and Compliance Committee**

The 15<sup>th</sup> Regular Session of the Technical and Compliance Committee (TCC15), 25 September-1 October, discussed the welfare and employment conditions for crew on fishing vessels. The Committee noted that many reports of poor conditions involved Indonesian crew (TCC15, Summary Report, paragraph 231). Indonesia advised the Committee that it intended to facilitate further discussion of this issue in the Commission. Subsequently, at the 2020 Regular Session of the Commission Indonesia tabled a proposal to adopt a CMM relating to crew employment conditions<sup>26</sup>. Following discussion at WCPFC20, CCMs agreed further time was required to consider the issues raised intersessionally before further consideration of the possible adoption of a CMM (WCPFC17, Summary Report, paragraph 306).

TCC15 also recalled that, for many years, it had been concerned about compliance with the limits established in the tropical tuna (SKJ, YFT and BET) CMM for 'other commercial fisheries'. The limits apply to baselines agreed for the 2001-2004 period or 2004 (TCC15, Summary Report, paragraphs 346-348). TCC15 noted that the Scientific Committee had encouraged the Science Services Provider to the Commission, SPC, to work with Indonesia and Philippines to improve the characterization of these fisheries. The Seventeenth Regular Session of the Commission also considered this issue noting the virtual format of the meeting made discussion challenging (WCPFC17, Summary Report, paragraph 196-200). WCPFC17 deferred further discussion to SC17 and TCC17.

---

<sup>26</sup> Indonesia. 2020. *Proposal for a CMM on Labour Standards for Crews on Fishing Vessels*. Seventeenth Regular Session, Electronic Meeting, 8-15 December 2020. WCPFC17-2020-DP09. 8 pages.



As noted above, since 2019, SPC has been working with Indonesia and Philippines on further improving the characterization of their 'other commercial fisheries'.

**Annex**

Coverage and historical length and/or weight data collected under the Indonesia WPEA Project.

GEAR		Site	Individual Size (length and/or weight) Samples by YEAR									
			2010-2012 Average	2013	2014	2015	2016	2017	2018	2019	2020	
HANDLINE	BITUNG	ANL	0	0	0	493	1,170	0	0	0	0	
		BMU	0	0	0	568	1,128	0	0	0	0	
		BTG	136	100	140	0	1,598	4,751	18,001	16,116	8,529	
		MEN	0	0	0	403	0	0	0	0	0	
		NFI	6,295	5,620	5,989	3,936	4,652	8,561	17,128	76	0	
	PKN	1,230	1,200	1,651	755	1,274	138	0	7,932	1,640		
	GORONTALO	GTK	0	0	0	4	809	1,404	1,028	1,006	176	
		KWD	0	0	0	0	3,303	12,948	16,611	1,100	0	
	KENDARI	KDI	5,038	2,973	37	5,419	1,105	816	1,161	1,736	0	
		SDH	333	871	785	562		785	993	1,063	293	
	MAJENE	MJN	0	4,819	579	1,269	874	716	889	591	30	
		CRA	0	0	0	0	7	0	0	0	0	
		JBE	0	0	0	0	9,225	288	0	0	0	
MTM		0	0	0	0	0	0	0	0	0		
SORONG	SOR	0	0	0	562	0	486	26,369	0	0		
	ANL	274	0	1,768	178	0	0	0	0	0		
	BMU	8,357	6,736	3,356	118	0	930	1,251	1,686	747		
LONGLINE	BITUNG	BTG	0	0	0	0	0	0	0	34	0	
		NFI	481	0	0	145	0	0	0	0	36	
		BMB	27,241	16,500	31,800	0	470	1,800	1,775	2,000	2,100	
		BTG	0	0	3,913	1,608	6,608	9,831	960	0	0	
POLE-AND-LINE	BITUNG	JBM	0	0	0	0	0	0	4,594	16,115	0	
		MEN	0	0	0	0	0	5,131	2,544	11,891	0	
		MJS	0	0	0	0	0	0	6,851	19,672	8,354	
		KWD	0	0	0	0	0	0	0	40	0	
	KENDARI	KDI	13,477	1,470	811	825	206	205	798	590	0	
		WUR	0	0	0	0	0	5,802	0	0	0	
	MAUMERE	KCS	0	0	0	0	0	7,260	0	0	0	
		CRA	0	0	0	0	2,356	0	0	0	0	
	PURSE SEINE	BITUNG	BDS	0	0	0	0	0	4,500	0	0	0
			BMB	32,322	63,976	59,300	2,859	20,192	18,852	21,259	24,643	20,622
BMU			0	0	0	25	0	0	0	0	0	
BTG			4,357	5,900	600	270	454	0	210	218	0	
CAR			0	0	0	0	0	12,060	6,077	15,791	6,349	
JBM			0	0	0	0	0	0	0	0	2,302	
MEN			0	0	0	0	0	0	600	500	0	
MJS			0	0	0	0	0	0	6,238	17,798	16,110	
PKN			0	0	0	0	0	0	0	2,932	100	
SPF		34,119	63,301	49,200	2,315	22,986	7,500	0	0	0		
GORONTALO		KWD	0	0	0	0	1,700	2,527	1,750	500	0	
		KDI	16,910	31,578	16,635	3,290	1,925	6,782	7,324	7,671	0	
MAJENE		MJN	0	0	0	0	14	24	0	0	0	
	CRA	0	944	2,322	0	0	0	1,500	0	0		
TROLL	GORONTALO	GTL	0	0	0	0	800	0	0	0		
		KDI	4,506	2,019	6,993	700	198	666	1,231	198		
		SDH	3,407	3,007	3,806	2,859	0	1,189	1,572	2,343		
OTHERS	BITUNG	BMB	0	0	0	145	0	300	0	0		
		BMU	0	0	0	0	365	0	0	0		
		BTG	0	0	0	0	350	600	0	0		
		PKN	0	0	0	0	38	0	0	0		
		SPF	0	0	0	2,182	0	0	0	0		
	KENDARI	SDH	0	0	0	2,703	0	0	0	0		



## APPENDIX C. Country profile: Philippines

Philippines has been a member of the Commission since 2005.

### **Legal, policy and institutional**

BFAR launched a revised NTMP in 2018 to “*establish sustainably-managed and equitably-allocated tuna fisheries by 2026 that will promote responsible fishing practices and trade of tuna products*”. The NTMP covers both municipal (<3 GT) and commercial (>3 GT – restricted to outside municipal waters 15km from shore)) fishing vessels. Municipal handline, troll line, and gill net, among others, are used to catch oceanic tunas. Small-scale and medium-scale commercial vessels (3.1-150 GT) utilising PS, RN, and HL are the primary fishing boats operating beyond municipal waters and the EEZ. Since 2012, Philippine-flagged PS/RN vessels (not more than 250 GT), limited to 36 tuna catchers, operated in High Seas Pocket 1 (HSP1) in accordance with its domestic national regulations (e.g., DA-BFAR FAO 245-4) and WCPFC obligations (e.g., CMM 2012-01 and subsequent CMMs).

In 2008 the Bureau of Fisheries and Aquatic Resources (BFAR) launched the catch documentation scheme which includes the catch and effort logsheet system for PS and RN vessels. BFAR also requires canneries to submit monthly cannery unloading data. The TUFMAN Database and PECAN Database systems are being utilized to process the data collected from logsheets and cannery receipts, respectively. DA-BFAR Fisheries Administrative Order (FAO 238): Rules and Regulations Governing the Implementation of Council Regulation (EC) No. 1005/2008 on Catch Certification Schemes requires all vessels, particularly those exporting to the EU market, to submit catch logsheets as a pre-condition for the issue of Catch Certificates which is reported to have improved timely logsheets data compliance.

### **Philippines 2020 fisheries production**

The Philippines reported a provisional catch of 188,166 mt from its domestic fleets (includes AW, TS, EEZ and HSP1) in 2020 and 23% increase on the reported 2019 catch<sup>27</sup>. The catch consisted of 109,154 mt of skipjack (an increase of 24% on the 2019 catch), 74,618 MT of yellowfin (26% increase), 4,035 mt of bigeye (no change) and 359 mt of albacore (43% decrease). The Philippines has approximately 369 vessels registered to fish for HMS in the WCPO on the WCPFC Record of Fishing Vessels the majority (260) of which are less than 250 GRT. In 2020, 29 vessels operated in the HSP1 taking 32,192 mt of catch over 2,635 fishing days. In addition, between 8 and 25 Philippine flag vessels, plus additional vessels under charter to Pacific Island countries, operate within the exclusive economic zones of other WCPFC CCMs taking an estimated catch that has ranged between 6,000 and 75,000 mt annually between 2014 and 2020.

### **WPEA Activities**

The following information was obtained from a range of reports and documents including SPC’s annual data audits, WPEA-ITM APRs and from responses to questions to national stakeholders during the MTE. Its purpose is to track indicators of progress towards addressing the objectives of the WPEA in relation to fishery monitoring and tuna fisheries management. The fishery monitoring components relate to the strengthening and support to activities associated with port monitoring of landings, sampling of landings in port (species,

---

<sup>27</sup> Philippines. 2021. *Annual Report to the Commission, Part 1: Information on fisheries, research and statistics*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-AR/CCM-20 (Rev.01). 24 pages.



length and/or weight), operational level monitoring from vessel logbooks and at-sea deployment of human observers.

The WPEA-ITM has supported efforts in Indonesia and the Philippines to describe their “other commercial fisheries” for SKJ, YFT and BET identified in WCPFC’s CMM 2020-01<sup>28</sup>. The 2021 Session of WCPFC’s Scientific Committee (SC17) considered the latest information concerning these fisheries provided by Indonesia and Philippines and recommended that CMM 2020-01 would not apply to small-scale fisheries restricted to territorial seas and archipelagic waters. SC17 recommended that the Measure should apply to the Indonesian P&L fishery outside archipelagic waters and territorial seas for vessels >30GT and the “large-fish” HL fishery in Indonesia and the Philippines fishing outside archipelagic waters and territorial seas for vessels >30 GT. SC17 recognized that insufficient data exist to derive a baseline for the Indonesia large-fish handline fishery and suggested that WCPFC consider developing a baseline using years where data are available. SC17 advised that, although CMM 2020-01 is not applicable to archipelagic waters, it encouraged Indonesia and the Philippines to provide data from fisheries that operate in those areas for scientific purposes. At the time of the preparation of the MTE, WCPFC CCMs were engaged in an inter-sessional process to review CMM 2020-01 the outcomes of which were scheduled for further consideration at the Commission’s annual session in December 2021.

### **Port sampling**

Monitoring of port landings (species composition, cannery receipts, length measurements, vessel catch and effort data) at the major landing sites in the Philippines is undertaken under the DA-BFAR’s National Stock Assessment Programme<sup>29</sup> (NSAP).

Since 2018, females have accounted for more than 50% of personnel associated with data collection: 2018 (53.5%); 2019 (52.8%) and 2020 (52.2%) with the majority of Project Leaders and analysts being female (**Table 1**).

SPC completed a preliminary audit of available 2020 port sampling data submitted to WCPFC in April 2021 by the Philippines National Fisheries Research and Development Institute (NFRDI) under the NSAP<sup>30</sup>.

---

<sup>28</sup> Indonesia and SPC. 2020. Availability of catch estimates from the other commercial fisheries in Indonesia. Scientific Committee, Sixteenth Regular Session, Online Meeting. 11 –20 August 2020. WCPFC-SC16-2020/MI IP-18. Ministry of Marine Affairs and Fisheries Indonesia Oceanic Fisheries Programme (OFF) and the Pacific Community (SPC) 4). 26 pages. Indonesia and SPC. 2021. Update01: Availability of Catch Estimates from the Other Commercial Fisheries in Indonesia. Scientific Committee, Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-2021/ST-IP-09. Ministry of Marine Affairs and Fisheries Indonesia and Oceanic Fisheries Programme (OFF) Pacific Community (SPC). 31 pages. Philippines and SPC. 2020. Availability of catch estimates from the other commercial fisheries in Philippines. Scientific Committee, Sixteenth Regular Session, Online Meeting. 11 –20 August 2020. WCPFC-SC16-2020/MI IP-17. National Fisheries Research and Development Institute (NFRDI), Department of Agriculture and the Bureau of Fisheries and Aquatic Resources Department of Agriculture, Philippines and the Oceanic Fisheries Programme (OFF) Pacific Community (SPC). 18 pages. Philippines and SPC. 2021. Estimates of annual catches of tropical tuna by the Philippines relevant to WCPFC CMM on Tropical Tunas “other commercial fisheries”. Scientific Committee, Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-2021/ST IP-08. National Fisheries Research and Development Institute (NFRDI) Department of Agriculture Philippines Bureau of Fisheries and Aquatic Resources Department of Agriculture Philippines Oceanic Fisheries Programme (OFF) Pacific Community (SPC). 21 pages.

<sup>29</sup> [https://www.bfar.da.gov.ph/BFAR\\_REGION\\_NEWS?id=765](https://www.bfar.da.gov.ph/BFAR_REGION_NEWS?id=765)





**Table 1.** Number of male and female data collection-associated personnel at different landing sites in Philippines, 2018-2020. Note enumerators responsibilities are not confined to tuna; they collect data from all fisheries

**2018**

#	Region	Project Leaders		Assistant Project Leaders		Analyst		Enumerators	
		M	F	M	F	M	F	M	F
1	Ilocos Coast		1	1		4	6	32	23
2	Batanes	1			1	3	1	9	18
3	Zambales		1		1		5	22	30
4A	Calabarzon		1	1	1	2	4	25	24
4B	Minaropa		1		1	2	3	21	16
5	Bicol		1			12	13	35	21
6	Visayan Sea		1	1		2	6	42	41
7	Cebu		1			2	6	28	29
8	Samar		1			1	4	30	23
9	Zamboanga		1	1		1	2	23	21
10	North Mindanao	1				3	2	8	22
11	Davao	1					5	10	36
12	General Santos		1			1	2	3	3
	ARMM								
	Caraga		1	1		2	2	23	24
	<b>TOTAL</b>	<b>3</b>	<b>11</b>	<b>5</b>	<b>4</b>	<b>35</b>	<b>61</b>	<b>311</b>	<b>331</b>

**2019**

#	Region	Project Leaders		Assistant Project Leaders		Analyst		Enumerators	
		M	F	M	F	M	F	M	F
1	Ilocos Coast		1	1		4	6	32	23
2	Batanes	1			1	3	2	9	17
3	Zambales		1		1		5	22	29
4A	Calabarzon		1	1	1	2	4	21	21
4B	Minaropa		1		1	2	3	23	12
5	Bicol		1	1		9	11	27	13
6	Visayan Sea		1	1		2	8	40	41
7	Cebu		1			2	6	26	27
8	Samar		1			1	4	25	9
9	Zamboanga		1		1	1	1	19	17
10	North Mindanao	1					3	8	21
11	Davao	1					5	8	25
12	General Santos		1			1	2	3	3
	ARMM								
	Caraga		1	1		2	4	25	24
	<b>TOTAL</b>	<b>3</b>	<b>11</b>	<b>5</b>	<b>5</b>	<b>29</b>	<b>64</b>	<b>288</b>	<b>282</b>

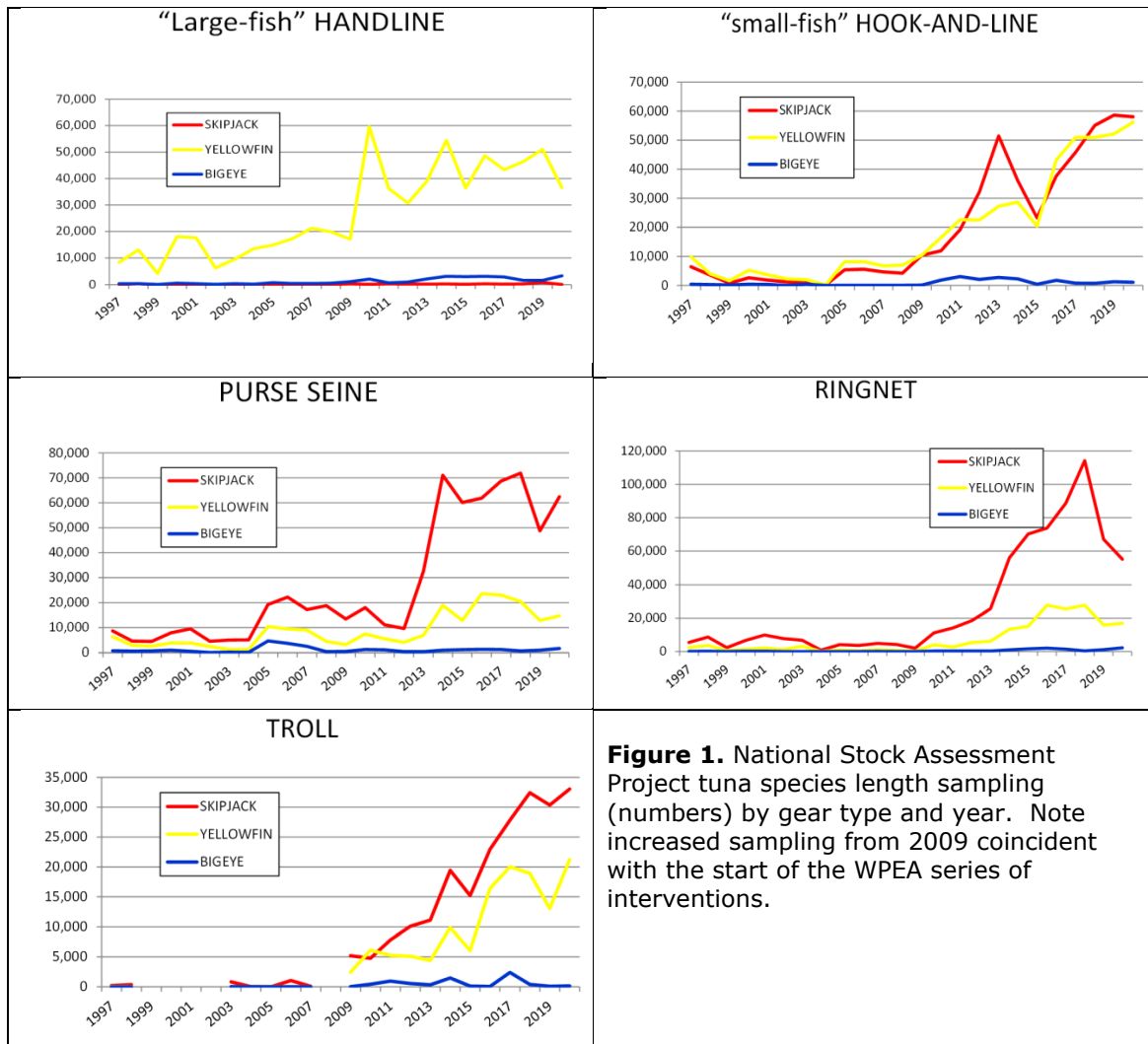
**2020**

#	Region	Project Leaders		Assistant Project Leaders		Analyst		Enumerators	
		M	F	M	F	M	F	M	F
1	Ilocos Coast		1	1		4	6	32	23
2	Batanes	1			1	3	1	10	18
3	Zambales		1		1		5	20	28
4A	Calabarzon		1	1	1	1	4	20	22
4B	Minaropa		1		1	3	4	21	11
5	Bicol		1	1		9	11	28	12
6	Visayan Sea		1	1		2	9	36	40
7	Cebu		1			2	6	25	26
8	Samar		1			2	3	26	8
9	Zamboanga		1		1	1	1	20	15
10	North Mindanao		1	1		2	2	9	22
11	Davao	1					3	9	26
12	General Santos		1			2	2	4	4
	ARMM								
	Caraga		1	1		1	3	24	21
	<b>TOTAL</b>	<b>2</b>	<b>12</b>	<b>6</b>	<b>5</b>	<b>32</b>	<b>60</b>	<b>284</b>	<b>276</b>

Summaries of NSAP port sampling data for 2020, which SPC noted are representative of the relative volume of catch by region, are presented in **Table 2**. The total samples by gear type significantly exceeded the target sampling coverage set more than a decade ago, and in some fisheries, the number of samples continued to increase (**Figure 1**). There was also a considerable amount of size data collected by observers active on the domestic PS fleet, which operates in the EEZ and adjacent high seas areas.

<sup>30</sup> SPC, 2021. *Preliminary audit of 2020 Philippines National Stock Assessment Project (NSAP) data*. Western and Central Pacific Fisheries Commission (WCPFC), West Pacific – East Asia (WPEA) Improved Tuna Monitoring (ITM) Project. *June 2021*. 26 pages. Conducted by SPC on behalf of the WCPFC.





**Figure 1.** National Stock Assessment Project tuna species length sampling (numbers) by gear type and year. Note increased sampling from 2009 coincident with the start of the WPEA series of interventions.

SPC noted that trends in species composition and species size distribution data by gear type and region, from archipelagic waters, the EEZ and HSP1, is valuable in informing selectivity considerations in regional assessments.

SPC concluded the 2020 data satisfy WCPFC requirements for coverage and availability noting that, at the time of the audit, data for Region ARMM were not available and not been included in the preliminary audit<sup>31</sup>. A gap in the data for Region 8 for the years 2015–2018 was also noted and the availability of data for Region 10 for the first time was a positive development.

**Table 2** provides some insights into the small-scale fisheries in the absence of any operational data (e.g., logbooks). SPC recommended more detailed analysis of tuna size and catch/effort (CPUE) from NSAP data (e.g., coverage by month and size class distributions, the potential of standardisation of effort for each gear), all of which would be valuable potential inputs into national assessments and harvest strategy work.

<sup>31</sup> The disruption to monitoring activities in the ARMM region in 2020 was a consequence of severe damage caused by Typhoon Kammuri in December 2019.



		OCEANIC TUNA DATA											
Region No.	Region	Landings data (No. of TRIPS)						Number of Length Measurements					
		Purse seine	Ringnet	Handline	Hook-and-line	Troll	Other gears	Purse seine	Ringnet	Handline	Hook-and-line	Troll	Other gears
1	Ilocos Coast	23	41	1,596	6,236	2,841	0	433	1,080	78	34,572	9,259	0
2	Batanes	0	13	0	365	1,061	0	0	120	0	1,250	4,811	0
3	Zambales	46	73	502	1,315	72	0	708	52	67	2,310	55	0
4A	Calabarzon	21	43	509	5	52	0	0	209	643	744	98	0
4B	Mimaropa	0	111	1,747	1,392	0	0	0	2,893	6,022	8,082	0	0
5	Bicol	6	99	1,181	422	201	0	0	777	771	4,607	428	0
6	Visayan Sea	5	171	446	4,280	1,490	0	0	0	510	4,337	1,455	0
7	Cebu	4	59	11	31	0	0	25	146	0	368	0	0
8	Samar	0	16	804	923	17	0	0	751	1,804	9,843	19	0
9	Zamboanga	291	97	311	650	0	0	3,747	2,345	1,616	7,866	0	0
10	North Mindanao	0	73	0	13	0	0	0	1,500	0	156	0	0
11	Davao	0	0	896	1,771	1,234	0	0	0	2,550	7,808	3,266	0
12	General Santos City	591	265	530	0	0	0	73,868	60,943	24,793	0	0	0
	ARMM	0	0	0	0	0	0	0	0	0	0	0	0
	Caraga	0	85	145	1,596	4,788	0	0	3,579	1,171	33,392	34,996	0
		987	1,146	8,678	18,999	11,756	0	78,781	74,395	40,025	115,335	54,387	0

**Table 2.** Breakdown of Philippines NFRDI landings and length samples of oceanic tuna (SKJ/YFT/BET) by region and gear for 2020.

The variability in some of the trends may relate to the combination of fisheries across the Philippines regions, where there may be subtle differences in the areas fished, the fishing methods and seasonality (for example). Teasing out this variability would require more time and a good understanding of each fishery and region, work that would normally be undertaken by the region's research staff (in conjunction with NFRDI researchers).

Over the last 20 years, NFRDI has established an increasingly competent tuna data collection and verification programme that now provides a valuable resource for informing national and regional tuna assessments. The 2020 audit noted that it has been several years since any major issues have been identified during the audit. The annual audit is a significant process that both recognises the on-going efforts of BFAR and NFRDI to maintain its comprehensive programmes of data collection from Philippine tuna fisheries while at the same identifying potential gaps for future attention.

Priorities for future attention include:

- Maintain species composition and species size distribution data collection by gear type and region, from archipelagic waters, the EEZ and HSP1.
- Undertake more detailed analysis of tuna size and catch/effort (CPUE) from NSAP data (e.g., coverage by month and size class distributions, the potential of standardisation of effort for each gear)
- Explore the apparent variability in trends that possibly relate to differences in the areas fished, the fishing methods and seasonality.
- Complete 2020 data submission to SPC (Region ARMM (if possible) and Region 8).

### **Operational data**

BFAR is the agency responsible for implementing logsheets data submission programmes. Logsheets data or operational data for Philippine HSP1 operation is 100% (PS and RN) but other than this, BFAR acknowledges further refinement is currently challenging. HL, HK, and Troll are included in other fisheries for which BFAR currently does not require logsheet submission. This issue is the subject of on-going discussion. **Table 4** provides a summary of operational data submission by Philippines to WCPFC for 2018-2020.



**Table 4.** Daily operational (catch and effort) logbook data submitted to SPC/WCPFC. Number of vessels that fished and estimated proportion (%) of total vessel trip days covered by logsheets submitted.

Gear	2018		2019		2020		Remarks
	# active vessels	%	# active vessels	%	# active vessels	%	
Large HL							Limited; may operate in AW, TS, PH EEZ, outside PH EEZ
Small H&L							Non-required (logsheets); mainly fishing in AW and TS; artisanal
RN	5	100	5	100	3	100	This covers HSP1 operation
Troll							Non-required (logsheets); mainly fishing in AW and TS; artisanal
PS	28	100	30	100	26	100	This covers HSP1 operation

Note: Refer to: SPC. 2021. *Scientific data available to the Western and Central Pacific Fisheries Commission*. Scientific Committee, Seventeenth Regular Session. Online Meeting, 11 –19 August 2021, WCPFC-SC17-2021/ST-WP-01 (Rev.01). 34 pages and associated notes.

### Observer activities

Currently (Q3, 2021), BFAR has 584 trained observers of which approximately 60% are active in its Fisheries Observer Programme (FOP). 95.5% are male and 4.5% female (**Table 5**). There are also 90 trained de-briefers. Approximately 20% are active. Some trained debriefers are employed in other BFAR Regional Offices (not directly employed by the FOP) and some trained debriefers have taken employment outside BFAR.

**Table 5.** Summary of BFAR’s Fisheries Observer Program (2017-2021).

Observer/de-briefer	2017		2018		2019		2020		2021	
	Male	Female	M	F	M	F	M	F	M	F
<b>Actual</b>										
# active observers	413		500		558		558		558	
# active de-briefers	12		18		18		18		18	
<b>Training</b>										
Total number of new observers trained	55	4	87	4	58	2	NO	NO	NO	NO
# Observers trained using WPEA funds										
# new de-briefers			30	1						
# de-briefers trained using WPEA funds			30	1						

**Table 6.** Actual Observer deployments by gear type for vessels operating in the HSP1 and during the WCPFC Fish Aggregating Device fishing prohibition (2017-2021).

HIGH SEAS POCKET NO. 1										
GEAR	Number of observers deployments/completed trips									
	2017		2018		2019		2020		2021	
	# Observer	No of trips	# Observer	No of trips	# Observer	No of trips	# Observer	No of trips	# Observer	No of trips
Purse seine	54	54	56	56	56	56	44	44	23	23
Ringnet	8	8	8	8	8	8	3	3	1	1
Handline										
Hook and line										
Troll										
Longline										
Other										

FAD FISHING CLOSURE 2017-2021										
GEAR	Number of observers deployments/completed trips									
	2017		2018		2019		2020		2021	
	# Observer Deployed*	No of trips	# Observer Deployed	No of trips	# Observer Deployed	No of trips	# Observer Deployed	No of trips	# Observer Deployed	No of trips
Purse seine	41	49	52	62	53	63	26	32	6	9
Ringnet		43		41		40		19	3	5
Handline										
Hook and line										
Troll										
Longline										
Other										

\*Includes trips on ring net/PS vessels

The FOP has undergone three audits by the Regional Observer Programme Coordinator from the WCPFC Secretariat (2009 and 2014 both of which were completed in-country and a virtual audit in 2020). The latest audit detected no non-conformity with WCPFC standards and noted the increase in the number of de-briefers distributed across the main fishing ports since the 2014 audit.

In terms of financial arrangements, BFAR is responsible for the management and operations of the FOP (staffing, training, equipment, etc.). The budget covers the salary of personnel



employed in the FOP Management Office, training, travel, and supplies. Observer fees are paid by fishing companies that require an observer. Arrangements are stipulated in a contract between BFAR, the observer and the fishing company stipulating respective roles and responsibilities.

Regarding future priorities, the FOP is planning the introduction of electronic forms over the next two years (2022/2023). The COVID situation permitting, the Program plans to increase observer coverage for the domestic fleet, as specified under BFAR FAO 261, and maintain training for observers (2 batches per year).

### **Philippines and the Technical and Compliance Committee**

At the 15<sup>th</sup> Regular Session of the WCPFC's Technical and Compliance Committee (TCC15), 25 September to 1 October 2019, Philippines advised the Committee that it was in the process of replacing its existing vessel monitoring system (VMS) to a hybrid system that would integrate AIS that would apply to all Philippine-flag vessels (paragraph 220). This was confirmed at TCC16 in 2020 where Philippines advised of the implementation of its Integrated Marine Environment Management Systems (IMEMS) representing an investment of ₱1.6 billion (TCC16, Summary Report, paragraph 218).

TCC15 also recalled that, for many years, it had been concerned with compliance with the limits established in the tropical tuna (SKJ, YFT and BET) CMM for 'other commercial fisheries'. The limits apply to baselines agreed for the 2001-2004 period or 2004 (TCC15, Summary Report, paragraphs 346-348). TCC15 noted that the Scientific Committee had encouraged the Science Services Provider to the Commission, SPC, to work with Indonesia and Philippines to improve the characterization of these fisheries. As noted above, since 2019, SPC has been doing this through the WPEA-ITM.

In addition, at TCC15, the Committee expressed concern regarding the use of Philippine nationals as at-sea observers on Philippine flag fishing vessels operating in the high seas in the WCPFC Convention Area (TCC15, Summary Report, paragraph 244). This is contrary to the provisions of WCPFC's Regional Observer Programme which requires observers to be sourced from a CCM other than the flag State. Philippines advised of its intention to comply with this obligation.



## APPENDIX D. Country profile: Vietnam

Vietnam first formally participated as an Observer in the WCPFC in 2005. It was accepted as a Cooperating Non-Member (CNM) in 2010, a status it has maintained since.

### Legal, policy and institutional

The Fisheries Development Strategy through 2030 with a Vision Toward 2045 (Decision No. 339/QĐ-TTĐ; issued on March 11, 2021) replaces a similar plan developed in 2013 for the period through to 2020.

The amended 2017 Law on Fisheries, which entered into force in 2019, provides the legal basis for improving fisheries governance through promoting sustainability and monitoring, control, and surveillance (MCS) regime. These are supplemented by numerous policy/legal documents that include decrees and administrative notes.

The 2017 Fishery Law establishes quotas linked to fishing licenses. Decree no.26/2019/ND-CP (March 2019) describes the implementation arrangements for the Fishery Law. It states that MARD is responsible for determining and establishing quotas for licenses granted to offshore fishing boats and assigns a quota for offshore fishing permits for 28 coastal provinces. Decision 1481/QĐ-BNN-TCTS by MARD stipulates the quota for offshore exploitation for each province. The People's Committee in the Provinces determine quotas for inshore vessels. Circular No. 19/2018/ TT-BNNPTNT (November 15, 2018) describes procedures and guidelines for the investigation and assessment of aquatic resources and the living environment of aquatic species, including gears banned from use in commercial fishing and marking of fishing gears. Circular No. 21/2018/ TT-BNNPTNT (November 15, 2018) describes procedures for the preparation and submission of fishing reports and fishing logbooks, listing of designated fishing ports with sufficient systems for reporting fishery products processed from catches; publishing of the IUU vessel list; and validation of catch statements for raw materials and catch certificates. Circular No. 23/2018/ TT-BNNPTNT (November 15, 2018) describes procedures for granting and withdrawing technical seals and cards of fishing vessels registries; establishment of eligible fishing boat registry; ensuring technical safety for fishing boats, approving fishing vessel registrations, and marking of fishing vessels. Circular No. 24/2018/ TT-BNNPTNT (November 15, 2018) stipulates the usage, management and updating of a national fisheries database.

Stock assessment results inform policymaking in the following sequence:

- 1) The Directorate of Fisheries (D-Fish)/Provinces conduct fishery dependent data collection.
- 2) The Research Institute for Marine Fisheries (RIMF) conducts fisheries surveys (fisheries independent data) and then performs stock assessments and provides recommendations on quotas of fishing licenses and (starting from 2021) catch volume.
- 3) D-FISH reviews the RIMF recommendations and makes amendments, as needed; and
- 4) MARD determines the quotas.

### Vietnam's 2020 tuna fisheries production

In 2020, Vietnam reported that its tuna fleet consisted of 7,439 vessels a decrease of 3.2% relative to 2019. 2,921 were reported as LL/HL, 1,821 GN and 2,697 PS all of which operated within Vietnam's EEZ<sup>32</sup>. The reduction was explained by a transfer of GN vessels to

---

<sup>32</sup> Vietnam. 2021. *Annual Report to the Commission, Part 1: Information on fisheries, research, and statistics*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-AR/CCM-38. 9 pages.



other fisheries. Total catches in 2020 were estimated to be 102,326 mt a decrease of 6% on the reported catch for 2019. Of that catch, skipjack tuna contributed 81,009 mt (79%), 17,587 mt of yellowfin tuna (17%) and 3,730 mt of bigeye tuna (4%) landed at 12 coastal provinces<sup>33</sup>. The Viet Nam Directorate of Fisheries (D-Fish) reported to WCPFC that it continues its efforts, in collaboration with a range of stakeholders, to improve its tuna fisheries management systems, fisheries data collection and international cooperation.

### WPEA Activities

The following information was obtained from a range of reports and documents including SPC's annual data audits, WPEA-ITM APRs and from responses to questions posed during the MTE. Its purpose is to track indicators of progress towards addressing the objectives of the WPEA in relation to fishery monitoring and tuna fisheries management. The fishery monitoring components relate to the strengthening and support to activities associated with port monitoring of landings, sampling of landings in port (species, length and/or weight), operational level monitoring from vessel logbooks and at-sea deployment of human observers.

#### Port sampling

A summary of the Vietnamese port monitoring programme, and the WPEA-ITM involvement, is presented in **Table 1**.

**Table 1.** A summary of port sampling support under the WPEA to Vietnam (2018-2020)

Vietnam	2018	2019	2020
<b>Output 2</b>			
Number of Provinces supporting WPEA fishery monitoring activities <sup>34</sup>	09	12	12
<i>Landing sites (P)</i>			
Total number of landing sites monitored	20	26	26
Number of landing sites supported (partly or wholly) by the WPEA	9	12	12
<i>Enumerators (E)</i>			
Total number of enumerators supported	36	48	48
Total number of female enumerators	4	4	4
Number of enumerators supported (partially or wholly) by the WPEA	9	12	12
Number of female enumerators supported (partially or wholly) by the WPEA	4	4	4

**Table 2.** Landings, logbook, and port sampling data for Vietnam ports 2019-20 with a summary for 2020-21. HL: Handline, LL: longline, PS: Purse seine, GN: Gillnet

All Provinces combined 2019/20	Gear	Est. trips	Landings		Logbooks		Port sampling	
			#	%	#	%	#	%
	HL/LL	11 433	1,102	10	1,624	14	214	2
	PS	10 8537	1,380	13	456	4	774	7
	GN	9 229	1,722	19	681	7	533	6
<b>2020/21</b> <sup>35</sup>	na		7,082		11,330		854	
<b>Nominal target</b>	Short term			40		40		10
	Long term			100		100		20

<sup>33</sup> Quang Tri, Thua Thien-Hue, Da Nang, Quang Nam, Quang Ngai, Binh Dinh, Phu Yen, Khanh Hoa, Ninh Thuan, Binh Thuan, Ba Ria-Vung Tau and Tien Giang.

<sup>34</sup> The 2019/2020 Data Audit undertaken by SPC scientists (SPC. 2021) records 9 Provinces: Binh Dinh, Bing Thuan, Ba Ria – Vung Tau, Da Nang, Khan Hoa, Ninh Thuan, Phu Yen, Quang Nam and Quang Ngai.

<sup>35</sup> Vietnam and WPEA-ITM. 2021. Report of the tenth Vietnam Tuna Fishery annual catch estimates workshop (VTFACE-10), 22-23 April 2021. Nha Trang, Viet Nam. Table 2.



The 2019/20 landings, logbook, and port sampling data for 12 provinces is summarised in **Table 2**<sup>36</sup>. The 2020/21 data in Table 2 was provided by Vietnamese officials in response to an MTE questionnaire.

The 2019/20 data audit undertaken by SPC staff noted that the recent fishery monitoring has made good progress towards an arbitrary short-term target of 40% for landings and logbooks (with a long-term goal towards 100% which is consistent with other WCPFC CCMs). For port sampling of PS and GN, the coverage is very close to the short-term target of 10%, with more improvement for HL/LL sampling required.

The species composition data for HL/LL landing data for all gear types for 2019/2020 comprised 63% yellowfin with 11% recorded as "other fish". SPC advised additional effort is required to categorize species currently recorded as "other species". When reconciled against logbook data the yellowfin catch was reported to account for 74% of the catch. Although the unidentified component of the catch still accounted for 9%, more species, including sharks, were identified in the logbook data than was reported from the landing data.

By gear type, skipjack accounted for 52% of purse seine landings. A relatively high proportion (22%) was recorded for "other fish". The remaining 26% of landings were identified to species level with few fish names (such as 'bluefish' and 'pearl eyes') requiring verification. There was some inconsistency between the landings data and logbook data with logbooks reporting 58% to be skipjack. 8% was reported to be unidentified species while the remainder of the logbook data was recorded to species level.

Noting the transition away from GN reported in 2021, skipjack also accounted for 52% of GN landings. "Other fish" were recorded as comprising 14% of landings with the remainder of the catch identified to species level. There was good agreement between the landings (52%) and logbook data (53%) for the recorded GN skipjack catch. "Other fish" accounted for 14% of the logbook data with a good break down of the remaining logbook data to species level. The audit noted differences in the landings and logbook data for frigate mackerel and bullet tuna which was recommended for further scrutiny.

The audit also commented on new logbooks that had been deployed across the different gear types, noting:

- some HL vessels continue to use the LL logbook,
- the positive inclusion of a fish count for each species
- that non-fishing days are recorded
- some fields left blank in logsheets for GN (such as number of net pieces set and days not fishing) and apparent difficulties with fish identification (frigate and bullet tuna and separating YFT and BET), and
- similarly, for PS few vessels recorded time of start and end of set and days not fished for example when transiting.

---

<sup>36</sup> SPC. 2021. *Review of 2019/2020 Vietnam tuna fishery data*. Tenth Vietnam/WCPFC Annual Tuna Fisheries Catch Estimates Workshop, 22-23 April 2021, Nha Trang, Khanh Hoa, Vietnam. Powerpoint presentation. Western and Central Pacific Fisheries Commission (WCPFC), West Pacific – East Asia (WPEA) Improved Tuna Monitoring (ITM) Project. Conducted by SPC on behalf of the WCPFC.





### Observer programme

WPEA-ITM Output 3: Increased port catch measurement and sampling

**Table 3.** A summary of activity in relation to at-sea observers in Vietnam under the WPEA-ITM for the period 2018-2020.

Vietnam	2018	2019	2020
<b>Output 3</b>			
Total number of ports receiving tuna landings that Observers are stationed at	NA	NA	NA
Number of ports receiving tuna landings that have an Observer supported (wholly or partially) by the WPEA	NA	NA	NA
Total number of observers trained to WCPFC standards	0	13	13
Male	0	13	13
Female			
Total number of observers actively reporting data to WCPFC	0	0	0
Male			
Female			
Number of observers reporting data to WCPFC supported (partially or wholly) by the WPEA-ITM	0	0	0
Male			
Female			
Total number of WCPFC-related observer sea days/year	0		0 due to covid-19
Handline/Longline			
Male			
Female			
Purse seine			
Male			
Female			
Gillnet		120	
Male		6	
Female			
Total number of WCPFC-related observer sea days/year by WPEA-supported observers	200		
Male			
Female			
Number of observers trained using WPEA funds			
Male		13	13
Female			
Number of observer debriefers trained using WPEA funds	0	0	0
Male			
Female			
<b>Other</b>			
<i>Was there any other observer or observer de-briefer training undertaken using funds from other sources? If so, please provide details such as the year the training occurred, how many participants, and the funding source.</i>			
<i>e.g. Training activity-1 Species identification Workshop (2019) (18 participants) (WWF funding)</i>			

Note "Other": Three observers were trained in the US under a WWF/NOAA program in 2012 and about 10 observers were trained under the WWF program in 2012-2016.

In 2021, in recognition of the challenges of i) securing Government administered observers for deployment on tuna vessels, ii) the shortage/availability of trained observers, iii) the lack of a legal requirement for a vessel to take an observer, iv) the expectation that vessels will cover all observer costs, and v) the limited space on small vessels to accommodate observers, Vinatuna, as part of the yellowfin handline FIP, commenced trials using a mobile application called COPPA (Captain Observer Photographic Protocol Application). The app., developed under a partnership between Vinatuna, Sea Delight and ANOVA Foods (USA), provides a vessel captain with the capability to collect some information normally collected



by observers. In recognition of similar challenges, Indonesian stakeholders inquired into the possibility of the WPEA-ITM supporting a pilot trial for electronic monitoring on some Indonesian vessels. Such developments, while useful for supplementing information normally collected by observers, are unlikely to be able to meet all at-sea human observer programme requirements for some time. Nevertheless, in the almost total lack of an observer programme, they are better than nothing at all particularly as the utility of such developments is likely to improve over time.

**Training activities and workshops**

Activity	2019		2020		2021	
	M	F	M	F	M	F
<i>Observer Planning Meeting, 22-23 March</i>	12	2				
<i>Eighth Vietnam Tuna Fishery Annual Catch Estimates Workshop (VTFACE-8), 20-21 June</i>	22	3				
<i>Training Workshop for Fishery Observers, 22-30 October</i>	14	1				
<i>Training Workshop on TUFMAN2, 14-22 November</i>	10	6				
<i>Ninth Vietnam Tuna Fishery Annual Catch Estimates Workshop (VTFACE-9), 17-18 December</i>			32	5		
<i>Develop a Fisheries Observer Diploma/Certificate Program in Vietnam, 24 June</i>			17	2		
<i>Data Collection Training Workshop, 09-10 July</i>			39	4		
<i>Observer Training Course for Tuna Longline/Handline, 21-26 September</i>			14	1		
<i>Training Workshop on TUFMAN2, 21-27 October</i>			24	2		
<i>Tenth Vietnam Tuna Fishery Annual Catch Estimates Workshop (VTFACE-10), 22-24 April</i>					36	2

**Vietnam in WCPFC’s Technical and Compliance Committee**

As Vietnam is not yet a Member of WCPFC, the Technical and Compliance Committee (TCC) does not consider operational matters relating to the Vietnamese fishery; its review of Vietnam’s engagement in the Commission is generally confined to administrative matters such as Vietnam’s annual application for Cooperating Non-member status and financial contributions associated with that status. The 15<sup>th</sup> Regular Session of the TCC, 25 September to 1 October 2019 noted that Vietnam had made a financial contribution in 2019 (TCC15, Summary Report, paragraph 85). The 16<sup>th</sup> Regular Session of TCC, 23-29 October 2020 recorded no financial contribution from Vietnam at the time of the meeting (TCC16, Summary Report, paragraph 65).



## APPENDIX E. WCPFC data submission summary for Indonesia, Philippines, and Vietnam

### Overall compliance evaluation for the provision of 2020 scientific data to the WCPFC

Philippines was assessed to be 100% compliant with WCPFC scientific data provisions in 2020.

For LL, PS, PL, HL, TR, OT, Indonesia was assessed as 50% compliant in respect of aggregate catch and effort data, 85% compliant in respect of operational catch and effort data, 100% compliant in relation to size data with an overall compliance assessment of 84%.

For LL, PS and GN, Vietnam was assessed as 93% compliant in respect of aggregate catch and effort data, 100% compliant in respect of operational catch and effort data and in relation to size data with an overall compliance assessment of 98%.

### WCPFC data submission summary (2019 and 2020) <sup>37</sup>

**Table 1.** Summary of data submission to WCPFC, and issues identified, for Indonesia, Philippines, and Vietnam (2019 and 2020). [Source: SPC. 2021. *Scientific data available to the Western and Central Pacific Fisheries Commission*. Scientific Committee, Seventeenth Regular Session. Online Meeting, 11 -19 August 2021, WCPFC-SC17-2021/ST-WP-01 (Rev.01). 34 pages.]

CCM	Gear	Annual catch estimates		Aggregated			Operational				Size data
				2020			2019				
		2019	2020	C&E data	Data gaps	Tier scoring	C&E data	Data gaps	Key attributes	Coverage	
IND	LL	F	F	QOST	18	50%	K	1,2,4,5,6,9,10	72%	<10%	AK
	PS	FJ	FJ	QOST	18	50%	K	1,2,4,5,6,9,10	72%	<10%	AK
	P&L	FJ	FJ	QOST	18	50%	K	1,2,4,5,6,9,10	72%	<10%	
	HL	FJ	FJ	NQ			GK			#	
	TR	FJ	FJ	NQ			GK			#	
	GN			NQ			GK				
	OT	FJ	FJ	NQ			GK			#	AK
PHI	LL	D	D	E			A			na	G
	PS	FGH	FGH	MQ			JK	11		80%*	AHK
	HL	FJ	FJ	MNQT			GK			#	
	OT	FJ	FJ	MNQT			GK			#	AHK
	RN	FJ	FJ	MNQT			GK			#	AHK
VN	PS	FL	FL	MQST	18	92%					M
	GN	FL	FL	MQST	18	92%	GHKFN		75%	<10%	M
	HL/LL	FL	FL	MQST	18	95%	GHKFN	6.8	85%	<10%	M

<sup>37</sup> Extracted from: Panizza, A., Williams, P., Falasi, C., Loganimoce, E. and Schneiter, E. 2021. *Status of observer data management*. Seventeenth Regular Session, WCPFC Scientific Committee, Online Meeting, 11 -19 August 2021 WCPFC-SC17-2021/ST-IP-02. Oceanic Fisheries Programme (OFF) Pacific Community (SPC). 24 pages. SPC. 2021. *Scientific data available to the Western and Central Pacific Fisheries Commission*. Scientific Committee, Seventeenth Regular Session. Online Meeting, 11 -19 August 2021, WCPFC-SC17-2021/ST-WP-01 (Rev.01). 34 pages.



**WCPFC-SC17-2021/ST-WP-01 (Rev.01) Notes:**

*Provisional 2019 and 2020 annual catch estimates provided to WCPFC*

D	Fleets inactive in the calendar year in WCPFC CA
F	Provisional estimates initially provided, and final estimates provided prior to SC14.
G	Estimates of all KEY shark species have been provided in aggregate catch/effort data, operational catch/effort data and/or observer data provisions
H	Estimates of discards provided in aggregate catch/effort data, operational catch/effort data or observer data provisions
J	No Discards reported - advised that full retention is assumed in these fisheries (except for protected species).
L	Breakdown of vessels by GRT not provided but breakdown by HP provided and an understanding that most vessels are < 50 GRT
Data have been provided, there are no gaps in the data provided and the coverage of data is according to the requirements	

*Provision of 2020 aggregated catch and effort data to the WCPFC*

E	This fleet was inactive in the WCPFC Convention Area
M	Aggregate data not provided, but have been generated from Annual catch estimates and operational data provided to SPC directly for stock assessments
N	"It is recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compiling operational data for fleets comprised of small vessels."
O	Logsheet forms used by this fleet cover the collection of each of the key shark species and these logsheet data have been aggregated and provided to the WCPFC
Q	Flag State advised that there is full retention in their fishery (except for protected species which must be released), so no discards.
S	Coverage of data provided is less than 50% (non-binding)
T	Aggregate data not provided but can be estimated from Operational data submitted to the WCPFC and landings data collected under the WPEA project.
<i>Data gaps</i>	
18	Catches of key shark species have been provided, but (i) not all key species covered, and/or (ii) coverage of shark species catches are considered low.
II	Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the WCPFC data submission guidelines.

*Provision of 2019 Operational catch and effort data to the WCPFC*

A	No activity in the WCPFC Convention Area during this year
F	Coverage of operational data is not 100%, but Annual Catch and Effort estimates by areas of national jurisdiction (EEZs) and High Seas are available.
G	"It is recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compiling operational data for fleets comprised of small vessels."
H	Operational Logsheet data provided to SPC for analyses related to stock assessments.
J	Logsheet forms used by this fleet cover the collection of each of the key shark species.
K	Flag State advised that there is full retention in their fishery, so no discards.
N	
<i>Data gaps</i>	
1	For longline gear - "Branch lines between floats" not provided



2	For longline gear - "Hooks per set" not provided
4	"Time of set" not provided
5	For purse seine gear - categories of "School Association" were not provided
6	Coverage of data provided is < 50%
8	Catches of key shark species have not been provided
9	Catches of key shark species have been provided, but (i) not all key species covered, and/or (ii) coverage of shark species catches are considered low.
10	The catch data are in units of weight (kgs or metric tonnes) only, rather than both numbers of fish and weight
11	Coverage of data provided is > 50% but < 100%
Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the WCPFC data submission guidelines.	
*	Instances where coverage of operational data is less than 100%, but annual catch/effort estimates by geographic area have been made available and together with the operational level catch and effort data that has been submitted, is sufficient to allow the scientific work of the Commission to be undertaken
#	"It is recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compiling operational data for fleets comprised of small vessels."

*Provision of 2020 size data to the WCPFC*

A	Length data provided and length intervals comply with the WCPFC Requirements where data provided (SKJ – 1cm, ALB – 1cm, YFT – ideally 1cm, but not more than 2 cm, BET – ideally 1cm, but not more than 2 cm, Billfish – ideally 1cm, but not more than 5 cm)
K	Includes data collected through Port sampling by flag State.
H	Includes data provided through the WCPFC Regional Observer Programme (ROP) data
I	Includes data collected through port sampling by coastal States and provided to SPC on a regular basis
G	No activity by this fleet in the WCPFC Convention Area
M	Data not provided, despite activity in this fishery. However, this gap is not considered a WCPFC compliance issue.



**Observer data submission summary**

**Table 2.** Summary of purse seine observer data received at SPC, by year and flag.

CCM	Year	Estimated PS trips	Trips with unknown status	Trips with known placements	Trip data submitted		Trip data received		
					Trips	%	Trips	% of total available trips	% trip data received
PHI	2017	93	0	93	93	100	82	88	88
	2018	75	0	75	75	100	75	100	100
	2019	58	0	58	58	100	58	100	100
	2020	74	0	74	70	95	69	93	99

Observer data from the Philippines fleet fishing in the High Seas Pocket #1 are included in this table.

**Table 3.** Provisional 2019 and 2020 longline Regional Observer Programme (ROP) coverage by CCM – based on reporting from CCMs and data submissions the fleet breakdown, metric and reporting by CCMs is based on WCPFC11 Summary Report para 483-486 and Attachment L (Anon., 2010a). Flag CCM reporting is from Annual Report Part 1.

CCM	Fishery	Metric for coverage	estimated effort	As reported by flag State		estimated effort	As per data submission		Notes
				Observer	%		Observer	%	
IND	Domestic	# trips	-	-	-	-	-	-	2,19,21
PHI	Distant water	# trips	-	-	-	-	-	-	1,16

**WCPFC-SC17-2021/ST-IP-02 Notes:**

1	The fleet breakdown, metric and reporting by CCMs is based on WCPFC11 Summary Report para 483-486 and Attachment L (Anon., 2010a). Flag CCM reporting includes information from Annual Reports - Part 1.
2	Domestic fleet fishing within their EEZ. There is no fishing in other EEZs but there may be very infrequent activities in adjacent high seas area. The activities of this fleet are therefore not relevant to the requirements for ROP longline coverage.
16	No longline vessels from Philippines active in 2018.
19	Observer data provided does not satisfy all the ROP minimum data field standards.
21	The number of total trips for the Indonesian domestic longline fleet is not known but has been estimated based on the annual catch estimate and approximate catch per trip.



## Appendix F. WPEA-ITM Results Monitoring Framework: MTE proposed revision

[[Provide with annotated original for explanation/notes?]]. The baseline is the revised MTE baseline. Refer to the ADD ARF for the original baselines. Red text are revisions. Most strike out text is from the original ARF.

Results	Indicator(s)	Baseline Information and Targets	Verification sources
<b>Long term outcomes</b>			
National and international cooperation for the management of highly migratory fish stocks in the west Pacific Ocean and east Asia (Indonesia, Philippines, and Vietnam) results in the sustainable management of WCPO stocks and reduced Illegal, Unreported and Unregulated (IUU) fishing.	<p>Status of harvesting of shared oceanic tuna stocks in the WPEA Statistical Area vis-à-vis sustainability criteria set by the WCPF Convention<sup>38</sup></p> <p>Number of oceanic fish stocks within safe biological limits</p>	<p><b>Baseline:</b> Primary target WCPO oceanic tuna stocks taken in Philippine, Indonesian and Vietnamese tuna fisheries (YFT, SKJ and BET) are not overfished and overfishing is not occurring. However, WCPFC's 16<sup>th</sup> Session of its Scientific Committee recommended, as a precautionary approach, that the fishing mortality on YFT and BET should not be increased from the level that maintains spawning biomass at 2012-2015 levels until the Commission agrees on appropriate target reference points (TRPs).</p> <p><b>Target:</b> Primary target oceanic tuna stocks taken in Philippine, Indonesian and Vietnamese tuna fisheries (YFT, SKJ and</p>	<p>WCPFC Scientific Committee Reports and meeting papers.</p> <p>Annual national TDW Reports</p> <p>Annual national ACE Reports</p> <p>Annual national Part 1 Reports to WCPFC</p>

<sup>38</sup> This is the Outcome level Indicator of the WPEA project



		<p>BET) are not exploited beyond agreed TRPs.</p> <p><del>WCPF Convention and its adopted Conservation and Management Measures (CMMs) on e.g., IUU fishing, by catch.</del></p> <p><b>Baseline:</b> <del>Current catch monitoring coverage is cited (WPEA SM project document) as averaging 15%</del></p> <p><b>Target</b><sup>39</sup>: <del>Improved monitoring of oceanic tuna fisheries in the EAS and coverage increased to 40%.</del></p> <p>(Insert new section after consultation)</p>	
<p><b>Medium term outcomes</b></p>			

---

<sup>39</sup> These are the long-term outcome targets established for the WPEA project.





Integrated fishery monitoring programmes for tuna species implemented by Philippines, Indonesia & Vietnam which are compliant with WCPFC requirements.	Indonesia, Philippines, and Vietnam's compliance to the WCPF Convention requirements and standards for fishery monitoring.	<p><b>Target:</b> Indonesia, Philippines and Vietnam submit Annual Part 1 Reports to the Commission in compliance with obligations. No gaps are identified, and data gaps reported in 2021<sup>40</sup> are systematically addressed.</p> <p><b>Baseline:</b> The three participating countries met submission deadlines in both 2019 and 2020. The data gaps reported to the WCPFC Scientific Committee in 2021<sup>2</sup> serve as the baseline.</p>	<p>WCPFC Scientific Committee Reports and meeting papers.</p> <p>Annual national TDW Reports</p> <p>Annual national ACE Reports</p> <p>Annual national Part 1 Reports to WCPFC</p>
	<del>Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported, and unregulated fishing.</del>		
Uncertainties in WCPO catch and	Regional tuna stock assessment results	<p><b>Target:</b> Assessment results accepted by</p>	WCPFC Scientific Committee Reports and

<sup>40</sup> SPC. 2021a. *Scientific data available to the Western and Central Pacific Fisheries Commission*. Scientific Committee, Seventeenth Regular Session. Online Meeting, 11 –19 August 2021, WCPFC-SC17-2021/ST-WP-01 (Rev.01). 34 pages.



<p>stock estimates reduced.</p>	<p>presented to annual Scientific Committee and independent peer reviews of those.</p>	<p>the annual Scientific Committee of WCPFC, and independent peer reviews are favourable.</p> <p><b>Baseline:</b> Periodic scheduled stock assessments considered by the WCPFC Scientific Committee. One peer review, for BET, was undertaken in 2011. A second, for YFT, was planned for 2022.</p> <p>Uncertainties associated with data from Indonesia and Vietnam as described in SPC (2021a).</p>	<p>meeting papers.</p> <p>Peer review reports submitted to the WCPFC Scientific Committee.</p>
<p>Improved national catch estimates and stock assessments inform national fisheries management and harvest strategies</p>	<p>Convergence of national data collection and stock estimate methodologies with the WCPFC management and harvest strategy recommendations and standards.</p>	<p><b>Target:</b> National catch estimates and regional stock assessments inform national fisheries management and harvest strategies.</p> <p><b>Baseline:</b> National fisheries management plan in Philippines relies on regional assessments of the status of target tuna resources. Vietnam is introducing a quota system and Indonesia is in the process of developing a harvest strategy for tropical tuna in archipelagic waters. All participating countries utilise international expertise to assist in these initiatives.</p>	<p>ACE and TDR Workshops</p> <p>National fisheries management and harvest strategies</p> <p>WCPFC documents on harvest strategies and management objectives.</p>



Short term outcomes			
<p>For Vietnam, Philippines &amp; Indonesia, adequate resources for tuna monitoring and assessments are provided within coordinated and supportive, policy and legal frameworks.</p>	<p>National and RFMO tuna monitoring and stock assessment functions resourced and staffed.</p>	<p><b>Baseline [[check country profiles]]:</b></p> <p>No exit or transition strategy.</p> <p>Vietnam: Provinces cover costs for 29 enumerators in 12 locations previously paid by WPEA-SM Project. WPEA-ITM was funding 15 staff at one site in 2020. No project-related observer programme under Output 3.</p> <p>Philippines: Observer program does not draw on Project funds. Project funding still required for workshops and meetings.</p> <p>Indonesia: covered 29 enumerators salaries in 2020, leaving only 1 location fully covered by the project (while 1 of 3 enumerators in a second location was funded by WPEA). No project-related observer programme under Output 3.</p> <p><b>Target:</b> exit or transition strategy developed for each country before the 2022 SC. Strategies will identify specific future (i.e., beyond the conclusion of the WPEA-ITM) needs for potential external technical and financial support.</p>	<p>Each participating country develops an exit or transition strategy.</p> <p>Quantitative (e.g., budget/staff number comparisons, increasing self-sufficiency, etc.) and qualitative periodic reports regarding support for national tuna monitoring and stock assessment functions.</p> <p>WPEA-ITM Steering Committee meetings.</p>



	<p>Status of NTMPs, associated harvest strategies and related legislation and regulations.</p> <p>Number of fisheries legislations, plans, strategies, that have been agreed and implemented.</p>	<p><b>Baseline:</b></p> <p>The Philippines revised and re-issued its NTMP in 2018. It is scheduled to run from 2019 to 2023.</p> <p>Indonesia is developing interim harvest strategies for tropical tuna in archipelagic waters under its 2015 NTMP (2015-2019) NTMP.</p> <p>Vietnam’s revised Fisheries Law entered into force in 2019. It is supplemented by many decrees and administrative orders.</p> <p><b>Target:</b> <i>Philippines completes the next review of its NTMP in 2022 which will support the development of a new plan for the period beyond 2023. Indonesia completes a review of its NTMP in 2022 and harvest strategies for tropical tuna in AW are finalised. Vietnam undertakes a review of policy and legislation relating to the administration and management of its tuna fisheries with a view to harmonisation and rationalisation.</i></p>	<p>NTMPs, associated review documents and related legislation and regulations.</p> <p>Review reports</p> <p>Revised NTMP’s and associated documents</p> <p><b>Note:</b> At the 2018 Steering Committee in Honolulu Indonesia and Philippines advised that funding was no longer required from the Project to support policy reviews and legislative development. Vietnam did request funding to facilitate the translation of two new policies that were to be developed with project support. A small amount of funding is available to support such activities.</p>
<p><b>Strengthened national capacities in fishery monitoring and catch estimation</b></p>	<p>Adequacy of national vessel logbook, observer and port monitoring programmes in Indonesia continue to meet WCPFC Regional</p>	<p><b>Baseline:</b></p> <p>Operational level data: PHI (2020): 100% IND (2020): &lt;10% VN (2020): &lt;10%</p> <p>Port landings:</p>	<p><i>Note: The original indicator relating to strengthened capacity in at-sea observer programmes was confined to Indonesia. This is likely incorrect as the objective of strengthened national capacities in fishery monitoring and catch estimation applies equally to all three</i></p>



	<p>Observer Programme (ROP) standards.</p>	<p>PHI (2020): 14 regions/677 enumerators/41,566 landings/362,923 length measurements IND (2020): 6 FMAs (713-718)/14 sites/28 enumerators/83,804 length-weight measurements. VN (2020): 12 Provinces/26 landing sites/48 (12 supported by WPEA) enumerators.</p> <p>All countries using ACE Workshops to generate annual catch estimates. <i>Observer programmes:</i> IND (2020): FMAs 714-717/1,201 sea days PHI (2020): 584 observers/90 debriefers/Trips PS (66) RN (22) VN: Draft Planning document (Workshop report, March 2019)</p> <p><b>Target:</b> <i>Operational level data:</i> PHI: 100% coverage IND: 50% VN: 50%</p> <p><i>National port monitoring:</i> All participating countries: primary landing sites are monitored. Monitoring data submitted to WCPFC demonstrates i) an increasing trend in coverage, ii) strengthened monitoring of all landed species.</p> <p><i>National observer programmes:</i> All three participating countries: National Observer programmes assessed to be in compliance with the ROP standards. Total</p>	<p><i>participating countries. The original ADD text associated with this outcome did not confine the activity to Indonesia. WPEA-ITM budget was assigned to strengthening national capacity in fishery monitoring in the three participating countries. In addition, fishery monitoring extends to operational data submitted on logsheets.</i></p> <p>TDW Workshop reports</p> <p>ACE Workshop Reports</p> <p>Observer training reports</p> <p>SPC Audits of the Annual Reporting of Catches of Oceanic Tuna and By-Catch</p> <p>SPC's annual reports on data gaps and scientific data available to the Commission</p> <p>Observer Programme accreditation assessments</p> <p>Port monitoring/enumerator training reports</p>
--	--	---	---



		number of observers available for deployment, total number of de-briefers and number of sea-days observed are either stable (PHI) or demonstrate an increasing trend (IND and VN).	
	Number and percent of people showing improvements in knowledge, attitude, or practice after receiving training/support.	<p><b>Baseline:</b> No post-training surveys or questionnaires are associated with WPEA-ITM training and workshop events. There are no follow-up surveys to learn the status of a trainee or workshop participant 6- or 12-months post-training.</p> <p><b>Target:</b> Appropriately formulated surveys and/or questionnaires are routinely distributed to participants for completion prior to the conclusion of the event.</p> <p>Participants in workshops and training events are surveyed 6 to 12 months after the event to gather information on the application of learnings to current employment responsibilities<sup>41</sup>.</p> <p>At the end of training programs, enumerators, port monitoring personnel, observer trainers, observer briefers and debriefers, are assessed as qualified.</p>	<p>Annual ACE workshop reports</p> <p>Annual TDW Workshop reports</p> <p>Annual audits of port monitoring/landings data</p> <p>Miscellaneous workshop reports</p> <p>Survey and questionnaire results and trends</p>
	<del>Original were— National observers, debriefers and enumerators using</del>	<del>Original was: Post-training assessments of observers, debriefers and enumerators (by WCPFC and by National Data Acquisition Advisers)</del>	

<sup>41</sup> *The WPEA-ITM Project Manager can facilitate arrangements for survey/questionnaire design.*



	<p><i>skills/knowledge received in training, 6 months later</i></p> <p><i>Adequacy of national observer and port monitoring programmes in meeting Regional Observer Programme (ROP) standards</i></p> <p><i>where/when was the change made?</i></p>		
--	---	--	--



Improved national data & knowledge management systems and processes for catch estimation and stock assessment.

Adequacy of annual national catch estimates and operational catch effort data.

National database systems that provide complete and accurate information to the RFMOs are compliant with WCPFC requirements

**Baseline:**  
 The application of WCPFC tuna fishery monitoring software in Philippines is not uniform nationally nor at the Provincial level and the relationship between WCPFC software to the national system, One Data, is inadequate.  
 The redevelopment of the Philippines National Stock Assessment Project (NSAP) database in 2020 were ready for testing by NFRDI. The move to a web-based platform was designed to provide regional offices with improved access and autonomy to manage their data. Philippines was also using TUFMAN2 to administer their logbook, observer, and size data. Vietnam supports a national data management system for all fisheries, VNFishBase. Although VN has received training in TUFMAN, and some customisation has been supported, uptake is also inadequate. Vietnam reported that, while efforts continue to align national data forms with WCPFC requirements, 1500 logbooks from 2019 and 2020 were entered to TUFMAN2 and port sampling data were uploaded.

**Target:**  
 Trained personnel in all countries using TUFMAN and DORADO to administer tuna fisheries monitoring data. Integration to national data systems complete.

Countries submitting estimates of annual catches (ACE) and operational catch effort data (C/E) to WCPFC by 30 April each year and with improved completeness (reduced gaps) and quality.

Western Pacific East Asia Improved Tuna Monitoring Activity Reports and reviews of national tuna fishery monitoring data management systems. Mid-term Evaluation

ACE Workshop Reports

TDR Reports

SPC's annual reports on data gaps and scientific data available to the Commission





Outputs			
<p>1. National policy, institutional, governance and coordination arrangements implemented.</p>	<p>1.1. Activity Results Framework and Implementation Schedule (timeline) confirmed/updated with country stakeholders, complementary to WPEA project.</p>	<p>1.1. Baseline = none. Target: Y1 first Steering Committee meeting approves Activity Results Framework, budgets and workplans</p>	<p>Annual ARF update complemented by APR.</p>
	<p>1.2 MOUs developed with the national fisheries authority of each country to define respective parties' roles and responsibilities an appropriate exit strategy which gradually transfers funding responsibility to the national government.</p>	<p>1.2 Baseline = 0 Target: MOUs with each of the 3 countries developed by the end of the first 6 months in Y1 and exit or transition strategy confirmed by middle of Y2022.</p>	<p>MoU's with each participating country Transition or exit strategies for each participating country</p>
	<p>1.3 WCPFC-SPC Service provider MOU updated to incorporate this new Activity</p>	<p>1.3 Baseline = existing MOU Target= MOU amended in Y1, Q1 and periodically reviewed to service the WPEA-ITM through to project completion.</p>	<p>MoU between WCPFC and SPC</p>
	<p>1.4 Reviews of</p>	<p>1.4 Country specific policy/legal</p>	<p>Review documents for national NTMPs and</p>



	<p>supportive policy/legal frameworks in Indonesia, Philippines, and Vietnam (Number)</p>	<p>framework reviews conducted in Vietnam, Philippines, and Indonesia.</p> <p><b>Baseline:</b> In relation to NTMPs, the Philippines NTMP services the period 2019 to 2023.</p> <p>Indonesia is developing interim harvest strategies for tropical tuna in archipelagic waters under its 2015 NTMP (2015-2019).</p> <p>Vietnam’s revised Fisheries Law entered into force in 2019. It is supplemented by decrees and administrative orders that are periodically issued.</p> <p><b>Target:</b> Revised NTMP for Philippines for the next management period from 2023. Indonesia has revised its 2019 NTMP for a new period from 2023 which includes harvest strategies for tropical tuna in AW. Vietnam has completed a gap and needs assessment of the provisions of its 2017 Fisheries Law, and associated decrees and administrative orders<sup>42</sup>.</p> <p><i>Original ADD - Baseline = existing national policy and framework reviews. Target: 2</i></p>	<p>associated regulatory documents.</p> <p>Revised NTMPs and associated regulatory documents</p>
--	---	--	--

<sup>42</sup> Note that, apart from in support of the establishment of national observer programmes and improved monitoring, legislative reviews are outside the scope of the WPEA-ITM Activity. Consultation is required with the MFAT and project partners to determine if WPEA-ITM support should extend to legislative and policy issues in support of fishery management



		<i>country specific policy/legal framework reviews conducted in each of the 3 countries.</i>	
	1.5 Technical meetings conducted demonstrating good participation and exchange of knowledge between countries (number of meetings, number and type of participants, M/F).	1.5 Baseline (qualitative) and target: Technical exchanges and collaborations: Two biennial technical meetings (in Years <del>3 4 and 5</del> to 5)	Technical meetings reports and associated documents.
2 Increase port catch measurement and sampling—Indonesia and Vietnam	2.1. Number and location of new landing sites consistently providing port catch measurement and sampling data selected based on needs assessment.	2.1. Baseline: Number of landing sites and sampling data provided to WCPFC  <i>Port landings:</i> IND (2020): 6 FMAs (713-718)/14 sites/83,804 length-weight measurements. VN (2020): 12 Provinces/26 landing sites/sampling data =0. PHI (2020): 14 regions/41,566 landings/362,923 length measurements  <b>Target:</b> By Year 5 (2022), for all principal sites receiving WCPO tuna from domestic tuna fleets, the catch is monitored, and routine sampling is supported with data provided to WCPFC. <del>Number of landing sites supported by end of Year 5 (2022) 1?</del>	WPEA APR and Steering Committee Reports  WPEA Financial Reports  TDW Reports  ACE Workshop Reports  Participating country Annual Reports Part 1 to WCPFC  Annual SPC submission to the WCPFC Scientific Committee relating to <i>Scientific Data Available to the Commission.</i>
	2.2 Change in number of	2.2 <b>Baseline:</b> <i>Port landings:</i> IND (2020): 6 FMAs (713-718)/14 sites/28	



	<p>enumerators(E) and ports sampled(P) and reports(R)</p>	<p>enumerators (13 supported by WPEA). VN (2020): 12 Provinces/26 landing sites/48 (12 supported by WPEA) enumerators. PHI (2020): 14 regions/677 enumerators (all supported by BFAR).</p> <p><b>Targets:</b> All principal landing sites for WCPO tuna in Vietnam (26?) and Indonesia (14?) sustain at least <b>two</b> full time enumerators and data is made available in a timely manner, in WCPFC formats, to annual TDW and ACE Workshops. By the end of the Project, all enumerators are 100% financially supported by Government.</p> <p><del>Y2, 3 and 5 Vietnam E=min. B+15 P=B+3 R=?12 Indonesia: E=min. B+15 P=B+5 R=B+5</del></p>	
	<p>2.3 Trainings, supervisory and technical support visits arranged by WCPFC for each participating country.</p>	<p>2.3: <b>Baseline:</b> WCPFC and SPC provides capacity building, technical support and mentoring to IND, PHI and VN fisheries agencies and personnel on an as needed basis.</p> <p><b>Target:</b> In-person or on-line training and technical support provided to national</p>	<p>TDW Reports</p> <p>ACE Workshop Reports</p> <p>Documents relating to other initiatives, such as in relation to "other commercial fisheries"</p> <p>APR's and WPEA Steering Committee Reports</p> <p>WPEA-ITM Project Manager Back-to-Office Reports</p>



		<p>fisheries staff in relation to fishery monitoring (at-sea and at landing sites), data administration and management and at-sea observer programmes based on an agreed annual programme of support. A training needs assessment has been undertaken by national agencies to support an annual training and capacity building programme.</p> <p><del>Target: 1 visit per year per country by WCPFC.</del></p>	
	<p>2.4 Tuna monitoring workshops in Indonesia, Vietnam, and Philippines</p>	<p><del>2.4: baselines and targets to be established.</del></p> <p><b>Baseline:</b> In-person or on-line support provided to annual TDR, ACE Workshops and meetings associated with data audits by WCPFC Secretariat and SPC staff in IND, VN and PHI. SPC provides technical assistance to IND and PHI (in-country or virtually) in relation to the documentation of “other commercial fisheries”.</p> <p><b>Target:</b> SPC provides technical support to TDR, ACE and other fishery monitoring related capacity building initiatives in IND, PHI and VN. Post-covid, and when it is possible to travel again, SPC should be represented in person for at least one in-country meeting or workshop (which, for efficiency should be held back-to-back, if practical) annually. The WPEA-ITM</p>	



		Project Manager visits to each country should coincide with such events.	
	<del>2.5 Support for enumerators previously funded under WPEA-SM.</del>	Included in 2.2	
	2.6 Training workshops for provincial staff in Vietnam [and Indonesia?] covering improved sampling of tuna catch and analysis and interpretation of data.	<b>Baseline:</b> Vietnam: One workshop in 2019 and two in 2020 (TUFMAN2 (x2) and one data collection training workshop). Indonesia: Nil <b>Target:</b> At least one training workshop for provincial staff in Indonesia and Vietnam in each year remaining for the Project (2022 <b>and 2023 if Activity extended</b> )	SPC staff reports submitted to the WPEA-ITM Project Manager  APRs and Steering Committee Reports
	<del>2.4 [In original ADD Manuals, guidelines developed]</del>		The 2018 APR noted that there was limited support for this activity among participating countries. In addition, there was no provision in the budget to support activities under 2.4.
3 Expanded Observer Programme – Indonesia and Vietnam	3.1. Increases in numbers of observers (N), ports (P) they are stationed at and observer trips days (TD) for Vietnam and Indonesia.	<b>3.1. Baseline:</b> <i>IND (2020): Undocumented number of observers/FMAs 714-717/1,201 sea days VN: Active observers on offshore tuna vessels=13/Ports or regions hosting observers=0/Trip days observed=120 (2019). Draft Planning document (Workshop report, March 2019)</i>	APRs and Annual Steering Committee Reports  TDW Reports  Audits and training reports completed by the WCPFC ROP Coordinator  National at-sea human observer policy

		<p><b>Target: By Project conclusion, IND: ?30? trained observers/FMAs 714-717/3,000 sea days. VN: ?30? trained observers/stationed in 12 Provinces/Sea days=1,000. <sup>43</sup></b></p> <p><i>Original ADD Vietnam N=0 P=0 TD= 0 Indonesia N= P= TD= Y2 Vietnam N=30 P=3 TD=200 Indonesia N=30 P=2 TD=200 Y4 Vietnam N=60 24 P=5 4 TD= 400 Indonesia N= 60 80 P=6 TD=500 300 Y5 Vietnam N=75 36 P=5 6 TD= 600 Indonesia N=75 80 P=6 TD=600 360</i></p>	documents and guidelines.
	3.2 Training for observer trainers and/or observers in each country. (total participants, M/F)	<p>3.2 <b>Baseline</b> = One planning workshop in Vietnam in 2019 and one in 2020. A second Observer Policy and Strategy Workshop was planned for 2020 (covid impacted). Number of Observers trained = 0. Indonesia: Nil activity.</p> <p><b>Target:</b> One training event for at least 15 participants (observers and/or observer trainers) in Vietnam and Indonesia each year.</p>	<p>Workshop and training event reports</p> <p>Back-to-Office Reports WCPFC ROP Coordinator and SPC support staff</p> <p>APR's and Annual Steering Committee Reports</p>
	3.3 Observer briefing and	<p>3.3 <b>Baseline:</b> Vietnam =0 Indonesia=0</p>	Number of observer briefer/de-briefer

<sup>43</sup> Requires additional discussion with National Coordinators



	debriefing workshops (total participants, M/F)	<b>Target:</b> one training for 15 participants (both de-briefer and briefers) in Vietnam and Indonesia each year.	workshops and number of observers/debriefers trained. Back-to-Office Reports WCPFC ROP Coordinator and SPC support staff APR and Annual Steering Committee Report
	3.4 Observer programme cost recovery study and associated issues - Indonesia and Vietnam.	3.4 Observer cost recovery study completed by Y5 <del>2</del> for Indonesia and Vietnam with recommendations and options provided. [Dependent on covid situation – difficult to achieve remotely]	Cost Recovery Options Report for Vietnam and Indonesia APRs and Annual Steering Committee Financial disbursements to support the studies
	<del>3.5 Philippines observer programme design and cost recovery study for internal waters</del>	<del>3.5 completed by Y2 with recommendations and options provided</del>	The December 2018 Steering Committee noted this was no longer needed as funding had been sourced elsewhere.  Activity 3.5 was deleted in the Variation to the Grant Agreement following discussions at the 2018 Steering Committee meeting.
4 National sampling plans, data analysis, catch estimates	4.1 Number of participants from each country attending annual	4.1 <b>Baseline:</b> The February 2019 APR reported that one participant from each country attended the annual regional data review workshop. At least two participants	SPC Workshop and Meeting reports APRs and Annual Steering Committee Reports





<p>and reporting implemented.</p>	<p>regional workshops on tuna data review and stock assessment (total, M/F).</p>	<p>from each country participated in the regional SPC TDW in 2019 and the one held online in 2020.</p> <p><b>Target:</b> At least two participants from each participating country participate in each of the regional workshops on data review and stock assessment each year for the remainder of the Project. The responsibilities of those participants in subsequent national ACE and TDW workshops is documented.</p> <p><del>One participant per country Y1&amp;2 and 2 per country Y3&amp;5</del></p>	
	<p>4.2 Number of participants at in-country national tuna data and catch estimate workshops (total, M/F).</p>	<p>4.2 <b>Baseline:</b> ACE Workshops were conducted in all three participating countries in 2020: Indonesia 41 participants (25M/16F), Philippines 43 (12/31) and Vietnam 37 (32/5). In addition, in March 2020, SPC undertook the annual review of the quality and completeness of the port sampling data collected from tuna fisheries in Indonesia.</p> <p><b>Target:</b> Annual ACE Workshop and TDW attract at least 30 participants annually that are representative of all key stakeholders in the tuna sector (Government agencies, fishery monitoring personnel, industry, and NGOs) in each participating country.</p> <p><del>All of the enumerators and participants from key agencies such as RIMF (VN), OneData (IND) and Philippines Statistical</del></p>	<p>National Workshop and Meeting reports</p> <p>APRs and Annual Steering Committee Reports</p>



		Authority, Fishing industry representatives, etc.	
4.3 SPC participating in annual country catch meetings in each country.	<p><b>4.3 Baseline:</b> SPC staff remotely participated in all TDW and ACE workshops undertaken in 2020.</p> <p><b>Target:</b> SPC staff attend, in person or virtually, national tuna data review and catch meetings each year for the duration of the project.</p> <p><del>Target = 10 for project period, for outputs 4&amp;5.</del></p>		<p>National ACE Workshop reports</p> <p>APRs and Annual Steering Committee Reports</p> <p>National TDW Reports</p>
4.4 WCPFC financial and technical support for participation at meetings	<p><b>4.4 Baseline:</b> The WCPFC Secretariat, including the Project Manager, participated remotely in 2 ACE Workshops and three other training or TDW workshops in 2020. Participants from all three countries remotely participated in the online sessions of the Scientific Committee, Technical and Compliance Committee and the WCPFC Regular Session in 2019. The WPEA-ITM did not support any participants to WCPFC and SPC meetings and workshops in 2020.</p> <p><b>Target:</b> The WCPFC Secretariat's Finance and Administration Manager and WPEA-ITM Project Manager will undertake at least one visit, ideally to coincide with a WPEA-ITM supported activity, to each participating country annually. The WPEA</p>		<p>Meeting Reports</p> <p>APRs and Annual Steering Committee Reports</p> <p>Financial Reports</p> <p>Back-to-Office Reports by WCPFC staff</p>



		<p>will support <del>X2?X</del> participants from each participating country at each of the SC, TCC and Commission meetings each year for the remainder of the Project. The WCPFC Secretariat's ROP Coordinator, in conjunction with SPC if possible, will, covid permitting, support (in-person) at least one in-country Observer-related activity in Years 4 and 5.</p> <p>No target</p>	
	<p><del>4.5 Annual Regional Stock Assessment Workshops.</del></p>	<p><del>Two people from each country annually.</del></p> <p>Covered in 4.1?</p>	<p><del>Two participants from Vietnam attended the introductory Stock Assessment Workshop at SPC in 2019. There was no SAW in 2020.</del></p>
	<p><del>4.6 Attendance at SC, TCC, and WCPFC meetings by participants from each country</del></p>	<p><del>Covered in 4.4?</del></p> <p><del>4.6</del></p> <p><del>One staff member from each country to attend each SC, TCC and WCPFC each year.</del></p>	
	<p>4.7 Number of staff from the 3 countries completed training attachments with SPC. (total, M/F).</p>	<p>4.7 <b>Baseline:</b> Two participants from Vietnam attended the Introductory Stock Assessment workshop at SPC in 2019. There were no other attachments to SPC in 2019 and no stock assessment workshops were undertaken in 2020 due to covid.</p> <p><b>Target:</b> To be discussed with SPC and dependent of SPC capacity. [3] people from each country annually <b>once workshops resume.</b></p>	<p>Training attachment reports</p> <p>APRs and Annual Steering Committee Reports</p> <p>SPC expenditure reports to the WPEA</p>



	<p>4.8 Training programs in Vietnam on sampling, data analysis, tuna management plans, revising management plan (in relation to NTMPs see 1.4 above).</p>	<p>4.8 <b>Baseline:</b> Two training workshops (one on TUFMAN2 and the other data collection) were held in Vietnam in 2020 (with support from SPC remotely). No training supported by the WPEA in relation to the Fisheries Law and associated arrangements in Vietnam.</p> <p><b>Target:</b> At least one training workshop annually related to sampling and data analysis for national and provincial staff. Provide support to any review of the Fisheries Law relating to tuna management plans, including training as it relates to tuna fisheries in Vietnam.</p> <p>one national and 12 provincial workshops annually?</p>	<p>Training attachment reports</p> <p>APRs and Annual Steering Committee Reports</p> <p>SPC expenditure reports to the WPEA</p> <p>Any review documents associated with the Fisheries Law.</p>
<p>5 National databases developed, functional and utilised</p>	<p>5.1 Number of national fisheries staff receiving training and assistance in use of common platforms for data management, analysis and reporting that is tailored to national needs and meets regional reporting requirements (total, M/F)</p>	<p>5.1 <b>Baseline:</b> Two training workshops (one on TUFMAN2 and the other data collection) were held in Vietnam in 2020 (with support from SPC remotely). In 2018, 20 fisheries staff in the Philippines were trained in the use of TUFMAN2. The Philippines NSAP database, TUFMAN2 observer and logsheet components was enhanced in 2020 and SPC was providing <i>ad hoc</i> technical advice to Indonesia's database manager.</p> <p><b>Target:</b> At least one data management training workshop annually on a common platform for national and provincial staff in each participating country.</p>	<p>Training attachment reports</p> <p>APRs and Annual Steering Committee Reports</p> <p>SPC expenditure reports to the WPEA</p>



	<p>5.2 additional custom development of database systems to satisfy WPEA countries requirements:</p>	<p>5.1. <b>Baseline:</b> The February 2019 APR reported that 20 fisheries staff in the Philippines were trained in the use of TUFMAN2, which was installed by an SPC team in October 2018. TUFMAN2 was customised for Vietnam in 2019, with revisions made to suit local language and match national forms. The 2020 APR (February 2021) reported that project funding was provided to upgrade critical data collection IT needs and strengthen remote operating capacity in the Philippines and Vietnam. Vietnam completed further training in TUFMAN2 in October 2020. In the Philippines in 2020 the WPEA-ITM supported the redevelopment of the Philippines NSAP database system by SPC. By the end of 2020, the data entry components of the new NSAP system had been completed and were to be tested by NFRDI in early 2021. Ongoing improvements were reported for Indonesia’s One Data system but integration of the existing national data collection (observer, logbook, port landings), including data collected by NGOs and the fishing industry into one reporting system was still waiting on technical assistance from relevant experts, which had been postponed.</p> <p><b>Target:</b> (i) provincial offices have ability to enter and manage data without seeing other provincial offices data (but the central office can view all data, (ii) cloud-hosted database system set up in the central office of each country (at the</p>	<p>APRs and Annual Steering Committee Reports</p> <p>SPC expenditure reports to the WPEA Any review documents associated with database harmonisation and integration strategies. WCPFC disbursements to countries</p>
--	--	---	---



		moment the system is only hosted at SPC), (iii) complete redevelopment of the Philippines NSAP database system as a cloud-hosted database system and potential integration with a mobile device application assessed, and iv) a strategic plan for the integration of the existing national data collection (observer, logbook, port landings) agreed and funded.	
	5.3 Review of existing frame survey used by Philippines Statistics Authority (PSA) and design of new frame survey completed	5.2. — <del>Baseline = two conflicting sources of official tuna catch estimates. Target = review and design of new frame survey completed by end of Y2</del>	The February 2019 APR reported that Philippines had advised that a new Frame Survey already has been designed by the Philippines Statistical Authority.
0. Efficient, responsive, value-for-money project management.	0.1. Timely financial and progress reports meeting agreed standards	0.1 <b>Baseline:</b> Narrative and financial reporting for the WPEA-ITM for each year of the Project has been timely with no feedback that it does not meet MFAT’s minimum requirements and international accounting standards. Budget and workplan performance show no evidence of unexplained/unagreed variances apart from those resulting from the impacts of the pandemic on budget drawdown. Two Grant Funding Agreement variations have been formalised (September 2019 and May 2021).  <b>Target:</b> Meets MFAT minimum requirements and international accounting standard, showing satisfactory budget and workplan performance with no unexplained/unagreed variance.	APRs and Annual Steering Committee Reports WCPFC Financial Reports to MFAT WCPFC Audit Reports Annual Reports of the Executive Director of the Commission



	<p>0.2. <del>WCPFC-SPC Service Provider</del> MOUs with SPC and each participating country amended to reflect the new Activity budget and workplan.</p>	<p>0.2 <b>Baseline:</b> At the time of the MTE the MoU with SPC was current but at least one participating country MoU required review.</p> <p><b>Target:</b> SPC's and participating country MoUs are current.</p> <p><del>MOU with SPC amended by end of first three months.</del></p>	
	<p>a. Unqualified audits submitted annually.</p>	<p>0.2 <b>Baseline:</b> Commission audits for each year of the WPEA-ITM have been unqualified. No audits are required for participating country project disbursements.</p> <p><b>Target:</b> Annual external auditors report without qualifications. The WCPFC Secretariat's Finance and Administration Manager has undertaken at least one visit to each participating country and completed a review of the national WPEA-ITM accounts, or a local firm has completed an audit of project accounts.</p>	<p>Annual financial and audit reports APRs and Annual Steering Committee Reports WCPFC Annual Audits Reports generated as a result of an examination of national WPEA-ITM accounts.</p>
	<p>0.4 Mid-term review conducted on progress against Results Frameworks and provides recommendations on any improvements needed to workplan and targets.</p>	<p>0.4 <b>Baseline:</b> None.</p> <p><b>Target:</b> mid-term review completed at the end of Year 24</p> <p><i>Note – there is currently no provision for an Activity Completion Report/Terminal Review identified in the original ADD. Discuss with MFAT?</i></p>	<p>MTR Report</p>



	0.5 Steering Committee's leadership of the Activity efficient and effective.	0.5 <b>Baseline:</b> None. <b>Target:</b> Annually, progress assessed. Matters Arising actioned in a timely manner.	Annual Steering Committee Reports APRs
--	--	--	---

ADD ARF for the original baselines. Red text are revisions. Most strike out text is from the original ARF.

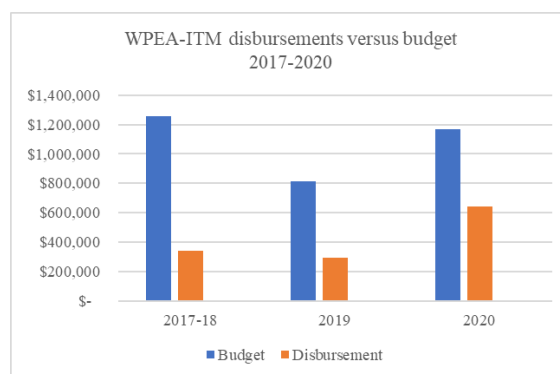




## APPENDIX G. WPEA-ITM financial considerations

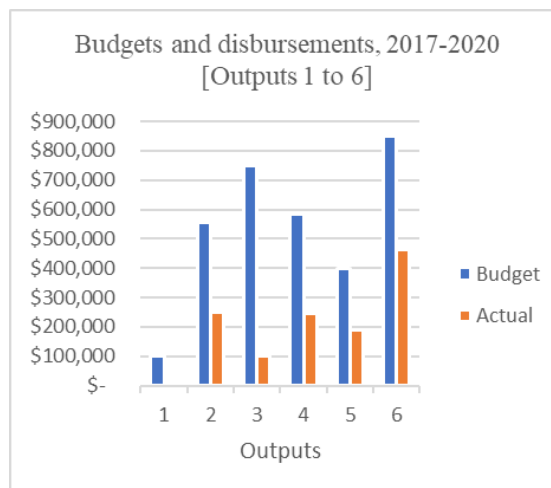
The total budget provided for the WPEA-ITM Activity in the original ADD was NZ\$4,912,052. This remains unchanged. For the reasons discussed elsewhere (see **Section 4**), delays during the first 18 months of the project, and then the pandemic, significantly affected Activity expenditure.

Approved annual budgets, as of the last variation endorsed in September 2019, and associated drawdown for the Activity are presented in **Table 1** (below). Limited expenditure, relative to budget, in 2017 and 2018 is partially explained by co-funding for project activities provided by the WPEA-SM. WPEA-ITM drawdown of funds relative to budget was 27% in year 1, 36% in 2019 and, as project activity increased, 55% in 2020 (**Figure 1**).



**Figure 1.** Disbursements relative to budget for the WPEA-ITM (2017-2020)

The trends in annual approved budgets and actual drawdown against each of the six outputs for the Activity (**Figure 2**), and for each country and project management (**Figure 3**), illustrate the variation between actual utilisation of available funds and forecasts.



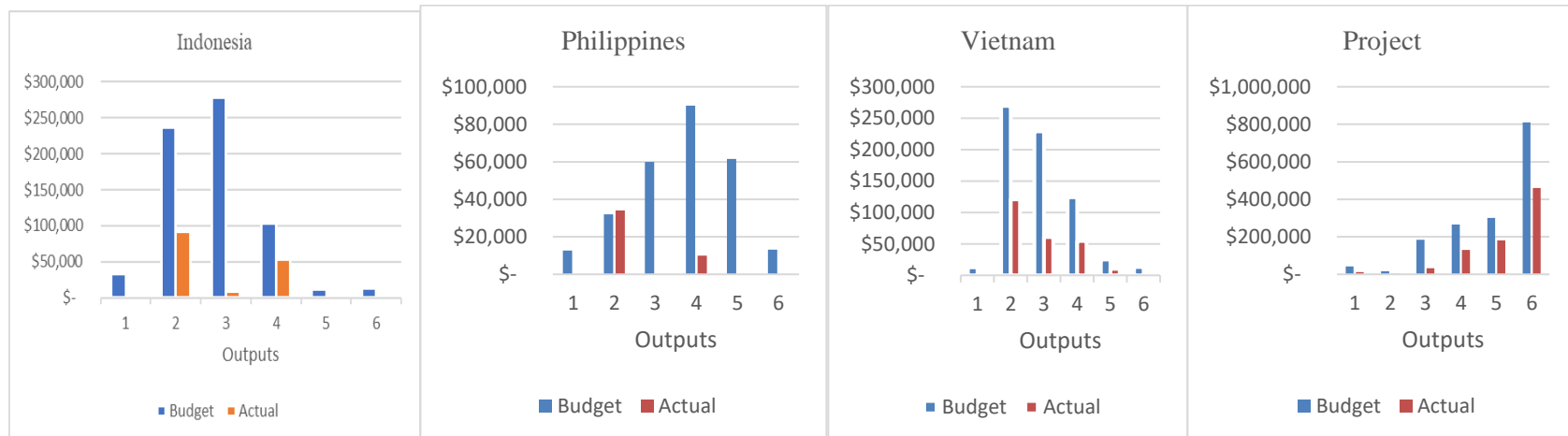
**Figure 2.** WPEA-ITM budget and actual draw down to 2020 for each Activity output. "Output 6" is Activity "Output 0" in project documents.



Output		Budget and Actual to 2020 (US\$)										
		IND		PHI		VN		Project		TOTAL		Forecast Budget 2021-2023
		Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	
1	National policy, institutional, governance, coordination and technical networking implemented	\$ 25,400	\$ -	\$ 5,400	\$ -	\$ 5,400	\$ -	\$ 34,250	\$ 11,144	\$ 70,450	\$ 11,144	\$ 118,500
2	Increased port catch measurement and sampling – Indonesia and Vietnam - and Expanded Observer Programme – Indonesia and Vietnam	\$ 158,200	\$ 92,280	\$ 28,000	\$ 34,000	\$ 205,651	\$ 120,085	\$ 9,779	\$ 3,203	\$ 401,630	\$ 249,568	\$ 198,300
3	National sampling plans, data analysis, catch estimates and reporting.	\$ 84,233	\$ 51,152	\$ 70,399	\$ 8,263	\$ 104,799	\$ 54,705	\$ 140,875	\$ 133,040	\$ 400,307	\$ 247,160	\$ 557,963
4	National databases developed, functional and utilised	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 11,000	\$ 10,300	\$ 181,252	\$ 180,211	\$ 207,252	\$ 190,511	\$ 157,134
5	Activity Management and Administration (WCPFC + SPC)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 488,854	\$ 469,057	\$ 488,854	\$ 469,057	\$ 486,341
<b>TOTAL</b>		\$ 431,486	\$ 152,998	\$ 126,299	\$ 42,263	\$ 483,503	\$ 245,884	\$ 940,665	\$ 829,217	\$ 1,981,954	\$ 1,270,362	\$ 2,027,978

**Table 1.** Budget and actual expenditure summary for the WPEA-ITM (2017 to 2020) and projections through to March 2023.

**Figure 3.** Budget versus actual drawdown for each of the six outputs of the WPEA-ITM for Indonesia, Philippines, Vietnam, and project management to 2020. (Output “6” = Output “0” in project documentation).



The draw down by each participating country to the end of 2020 ranged from 21% to 32% of approved budgets (**Table 1**). Project management utilised 61% of the budget that had been approved up to the end of 2020. The project management component includes estimates for funds that were expended on behalf of participating countries during 2017 and 2018 as some country disbursements were recorded against the project, not individual countries. It also includes costs for WCPFC and SPC support. For the Activity as a whole, 39% of the Activity budget had been drawn down to the end of 2020.

In terms of budget allocation through to 2020, Philippines was allocated 6%, Indonesia (22%), Vietnam (24%) and Project management, from which funding for regional activities were disbursed was 47%. Actual disbursements for the same period were Philippines (3% of actual disbursements), Indonesia (12%), Vietnam (19%) and Project management (65%).

Total disbursements to the end of 2020 were US\$1,269,819. The balance remaining is approximately US\$2,027,978 or 61% of the Activity budget. Although difficult to forecast, projected disbursements for 2021 are US\$556,885. If this was to eventuate, funds remaining for the 15-month period through 2022 to March 2023 will be US\$1,471,093. Experience to date suggests it unlikely that this could be effectively applied in full to project activities in the 15 months remaining.

Three options appear to be available:

- accept that funds will remain in the project budget come March 2023 and that those funds will be returned to MFAT, and/or
- call for expressions of interest from the participating countries for some additional or supplementary activities to utilise the funding available within that timeframe, or
- consider an additional no-cost extension of the Project.

Based on experience to date, the funds remaining are sufficient to support a further no-cost extension through to March 2024, i.e., an additional 12 months from March 2023.

Given limitations on scaling up SPC activities to provide elevated support to the WPEA-ITM discussed elsewhere, the significant impact that can be achieved by maintaining Activity engagement in initiatives that have been supported since 2017, re-programming and a further no-cost extension to March 2024 is recommended. This will secure achievements to date and significantly increase the prospects for sustaining Activity outcomes in the long-term.

### **Financial management**

The February 2020 APR (February 2021) noted that the variation to the GFA in September 2019 was positive acknowledgement of the need for an adaptive approach to address the differing levels of progress in the three countries particularly as they assume more of the cost of in-country monitoring programs and to address the changing dynamics of tuna fisheries. The APR noted the need for effective communication regarding changing needs consistent with the overall intent and outcomes of the Activity.

The 2020 APR recorded that national tuna data collection programs continued despite the disruptions caused by covid, with enumerators and port sampling continuing in all three countries with support of the project, annual catch estimates workshops completed, either remotely, in-person or using a combination of both. Provisional WCPFC reporting obligations were met on time. With offices largely closed and national coordinators forced to work from home maintaining these core data collection activities throughout 2020 was a significant achievement.

As the impact of the covid pandemic on project activities became obvious, the project administrators (the project manager, SPC, the WCPFC Secretariat and MFAT) consulted and subsequently advised national counterparts of the potential for flexibility in the budget. Countries were encouraged to identify alternative mechanisms to enhance project objectives.



A revised budget was approved to reflect expected underspend associated with travel restrictions and to provide some flexible funding lines (\$50,000) under Outputs 3 and 4 in May 2020.

While this demonstrated the ability of project administration to provide a flexible and timely response to changing circumstances it was not taken up by countries. Project management reported to MFAT in the February 2021 APR that given the disruptions to personal health, work and life being experienced by project staff and national agencies, difficulties delivering on activities in the agreed work plan was already challenging and creating, approving, and implementing new proposals in the pandemic environment was simply not possible.

Financial and progress reports have been prepared in a timely manner by the WCPFC Secretariat and no unexplained/unagreed variances have been identified. Two Grant Funding Agreement variations have been formalised (September 2019 and May 2021).

Annual audits of the Commission's accounts for the duration of the WPEA-ITM have been unqualified. That said, while the WCPFC maintains accurate records of disbursements to countries, the same level of review is not verifiable for national-level expenditure. Beneficiary countries are not required to submit periodic or annual financial statements or audit reports and the acquisition of statements from local accounting systems in English is challenging particularly when liaising remotely.

The need for monitoring and recording expenditure at the country level was identified as an area requiring attention by the Terminal Evaluation of the WPEA-SM. The WPEA-ITM ADD explicitly advised that the financial management and accounting systems that were utilised for the WPEA-SM in participating countries be adopted for the WPEA-ITM.

The Finance and Administration Manager (FAM) at the WCPFC Secretariat explained the challenges associated with obtaining timely financial records from the beneficiary countries. He was of the view that based on the extensive audit conducted under the WPEA-SM phase of the project no significant issues of concern have been reported nor identified.

Nevertheless, once travel can be resumed, it is recommended that either i) the FAM visit each country, perhaps in conjunction with a scheduled project activity such as a meeting or workshop and undertake a high-level examination of project accounts and finance processes, or ii) commission a local firm to complete an audit of project accounts.



## APPENDIX H. Bibliography

EJF. 2019. *Illegal fishing and child labour in Vietnam's fishing fleet*. Environment Defence Fund, London, United Kingdom. 31 pages

Gillett, R. 2013. *West Pacific East Asia Oceanic Fisheries Management Final Independent Evaluation Report*. United Nations Office for Project Services (UNOPS) and the Western and Central Pacific Fisheries Commission (WCPFC). January 2013. 88 pages.

Ha, V.V., Giang, N.V., Doan, N.S. Anh, D.T., Lien, D.T. and Hau, V.T. 2019. *Impacts of oceanic tuna fisheries on sharks and sea turtles*. Hai Phong Research Institute for Marine Fisheries and WWF. 28 pages.

Hai, Vu Duyen and Anh, Nguyen Quoc. 2012. *National Tuna Management Plan in Vietnam*. Report prepared with the support of the WPEA-OFM Project. Western and Central Pacific Fisheries Commission and the Department of Capture Fisheries and Fisheries Resource Protection (DECAFIREP). 34 pages.

Hodge, S. 2016. *Terminal Evaluation Report*. Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas. PIMs 4753. GEF Activity ID: 5393. December 2019. 105 pages.

Hoshino, E., Hillary, R., Davies, C., Satria, F., Sadiyah, L., Ernawati, T. and Proctor, C. 2020. Development of pilot empirical harvest strategies for tropical tuna in Indonesian archipelagic waters: Case studies of skipjack and yellowfin tuna. *Fish. Res.* 227. <https://doi.org/10.1016/j.fishres.2020.105539>.

Ianelli, J., Maunder, M. and Punt, A.E. 2011. Independent review of 2011 WCPO bigeye tuna stock assessment. Scientific Committee, Seventeenth Regular Session, 7-15 August 2011 Busan, Republic of Korea. WCPFC-SC8-2012/SA-WP-01. Western and Central Pacific Fisheries Commission. 31 pages

Indonesia and SPC. 2020. Availability of catch estimates from the other commercial fisheries in Indonesia. Scientific Committee, Sixteenth Regular Session, Online Meeting. 11 -20 August 2020. WCPFC-SC16-2020/MI IP-18. Ministry of Marine Affairs and Fisheries Indonesia Oceanic Fisheries Programme (OFP) and the Pacific Community (SPC) 4). 26 pages.

Indonesia and SPC. 2021. Update01: *Availability of Catch Estimates from the Other Commercial Fisheries in Indonesia*. Scientific Committee, Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-2021/ST-IP-09. Ministry of Marine Affairs and Fisheries Indonesia and Oceanic Fisheries Programme (OFP) Pacific Community (SPC). 31 pages.

Indonesia, Philippines, and Vietnam and the WCPFC Secretariat. 2017. *Update on the WPEA Project*. Fourteenth Regular Session, Manila, Philippines 3-7 December 2017. WCPFC14-2017-28. 23 November 2017. 7 pages.

Indonesia. 2012. *National Tuna Management Plan for Indonesia, November 2012*. Directorate of Fish Resource Management and Fisheries Directorate General for Capture Fisheries, Ministry of Marine Affairs, Jakarta and the Western and Central Pacific Fisheries Commission, Pohnpei, Federated States of Micronesia. 60 pages.

Indonesia. 2018. *Interim harvest strategies for tropical tuna in archipelagic waters of Indonesia*. Ministry of Marine Affairs and Fisheries, the Republic of Indonesia 2018. 32 pages.  
Indonesia. 2020. *The 11<sup>th</sup> Indonesia tuna fisheries annual catch estimates review workshop (ITFACE-11)*. Bogor, 16-17 July 2020. Workshop Report. Centre for Fisheries Research. Western and Central Pacific Fisheries Commission (WCPFC). West Pacific - East Asia (WPEA) - Improved Tuna Monitoring (ITM) Project. July 2020. 40 pages.



Indonesia. 2021. *Annual Report to the Commission, Part 1: Information on fisheries, research, and statistics*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-AR/CCM-09. 33 pages.

Lenoci, J. 2017. *Midterm Review Report April 2017 Version: 23 May 2017 final*. Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas UNDP PIMS ID: 4753 GEF Project ID: 539. 116 pages.

McDonald, A. 2021. WPEA-ITM Project Update. Scientific Committee, Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-2021/RP-WPEA-01 (Rev.01). 4 pages.

MFAT. 2014. *Evaluation Policy for the New Zealand Aid Programme*. Business Process Board. New Zealand Ministry of Foreign Affairs and Trade, Wellington. 8 pages.

MFAT. 2014. *Evaluation Policy for the New Zealand Aid Programme*. As revised and approved by the Evaluation and Research Board. 8 pages. <https://www.mfat.govt.nz/en/aid-and-development/our-approach-to-aid/evaluation-and-research/>

MFAT. 2014. *Strategic Results Framework, 2015-2019*. New Zealand Ministry of Foreign Affairs and Trade, Aid Programme, Wellington. 1 page.

MFAT. 2016. *Activity Quality Policy*. Updated: February 2015. Business Process Board. New Zealand Ministry of Foreign Affairs and Trade, Wellington. 8 pages.

MFAT. 2016. *Final Activity Design Document: Indonesia, Philippines and Viet Nam Catch Monitoring and Management*. New Zealand Ministry of Foreign Affairs and Trade. 97 pages. Document Id: A12423.

MFAT. 2016. *Grant Funding Arrangement*. Western Pacific East Asia - Improved Tuna Monitoring between Ministry of Foreign Affairs and Trade and Western and Central Pacific Fisheries Commission Secretariat. December 2016. Activity Code: A12423. 63 pages.

MFAT. 2019. *Grant Funding Arrangement Variation No. 1*. Western Pacific East Asia - Improved Tuna Monitoring between Ministry of Foreign Affairs and Trade and Western and Central Pacific Fisheries Commission Secretariat. September 2019. Activity Code: ACT-OA12423. 24 pages.

MFAT. 2020. *Strategic Intentions (2020-2024)*. New Zealand Ministry of Foreign Affairs and Trade, Wellington. 23 pages.

MFAT. 2021. *Grant Funding Arrangement Variation No. 2*. Western Pacific East Asia - Improved Tuna Monitoring between Ministry of Foreign Affairs and Trade and Western and Central Pacific Fisheries Commission Secretariat. May 2021. Document Id: DOC-40a7733. 7 pages.

MFAT. No date. *New Zealand's International Development Principles*. New Zealand Ministry of Foreign Affairs and Trade, Aid Programme, Wellington. 3 pages.

MFAT. No date. *New Zealand Aid Programme Results-Based Management Toolkit*. New Zealand Ministry of Foreign Affairs and Trade, Aid Programme, Wellington. INTD-86-1132. 5 pages.

Nguyen, Thanh Viet. 2012. *Vietnamese tuna fisheries profile (Binh Dinh, Phu Yen and Khanh Hoa)*. Department of Capture Fisheries and Fisheries Resources Protection (DECAFIREP), Vietnam and the Western and Central Pacific Fisheries Commission, Pohnpei, Federated States of Micronesia. 46 pages.



OECD. 2010. *Quality Standards for Development Evaluation*. DAC Guidelines and Reference Series. Organisation for Economic Co-operation and Development (OECD). 20, rue des Grands-Augustins, 75006 Paris, France. ISBN 978-92-64-08390-5 (PDF). 24 pages.

OECD. 2014. *Mainstreaming cross-cutting issues: 7 Lessons from DAC Peer Reviews. Mainstreaming cross-cutting issues advancing gender equality and environmental sustainability*. Organisation for Economic Co-operation and Development (OECD). 20, rue des Grands-Augustins, 75006 Paris, France. 40 pages.

OECD. 2019. *Better Criteria for Better Evaluation: Revised Evaluation Criteria Definitions and Principles for Use*. OECD/DAC Network on Development Evaluation. Organisation for Economic Co-operation and Development (OECD). 20, rue des Grands-Augustins, 75006 Paris, France. 13 pages.

Panizza, A., Williams, P., Falasi, C., Loganimoce, E. and Schneiter, E. 2021. *Status of observer data management*. Seventeenth Regular Session, WCPFC Scientific Committee, Online Meeting, 11 -19 August 2021 WCPFC-SC17-2021/ST-IP-02. Oceanic Fisheries Programme (OFF) Pacific Community (SPC). 24 pages.

PEMSEA. 2015. *Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)*. Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), Quezon City, Philippines. Updated 2015. 112 pages. <http://pemsea.org/sites/default/files/SDS-SEA%202015%20FINAL%2002222016%20FULL.pdf>

Philippines and SPC. 2020. Availability of catch estimates from the other commercial fisheries in Philippines. Scientific Committee, Sixteenth Regular Session, Online Meeting. 11 -20 August 2020. WCPFC-SC16-2020/MI IP-17. National Fisheries Research and Development Institute (NFRDI), Department of Agriculture and the Bureau of Fisheries and Aquatic Resources Department of Agriculture, Philippines, and the Oceanic Fisheries Programme (OFF) Pacific Community (SPC). 18 pages.

Philippines and SPC. 2021. Estimates of annual catches of tropical tuna by the Philippines relevant to WCPFC CMM on Tropical Tunas "other commercial fisheries". Scientific Committee, Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-2021/ST IP-08. National Fisheries Research and Development Institute (NFRDI) Department of Agriculture Philippines Bureau of Fisheries and Aquatic Resources Department of Agriculture Philippines Oceanic Fisheries Programme (OFF) Pacific Community (SPC). 21 pages.

Philippines. 2018. Rules and regulations on Fisheries Observer Program (FOP) in the Philippines and in distant water fishing targeting straddling and highly migratory fish stocks. *Fisheries Administrative Order No. 261, (Series of 2018)*. Department of Agriculture, Bureau of Fisheries and Aquatic Resources. 16 pages.

Philippines. 2018. *BFAR's Tuna Management Plan. 2015-2019*. Department of Agriculture, Bureau of Fisheries and Aquatic Resources (DA-BFAR) and the SOCCSKSARGEN Federation of Fishing & Allied Industries, Inc (SFFAII). <http://www.tunapacific.org/2019/08/12/bfars-tuna-management-plan/>. *Updated for 2020-2024??*

Philippines. 2018. *National Tuna Management Plan of the Philippines*. Department of Agriculture, Bureau of Fisheries and Aquatic Resources. Manila, Philippines. 39 pages.

Philippines. 2020. 13<sup>th</sup> Philippines annual tuna fisheries catch estimates review workshop report. 11-15 June 2020. Virtual Meeting. Bureau of Fisheries and Aquatic Resources. 11 pages.

Philippines. 2021. *Annual Report to the Commission, Part 1: Information on fisheries, research, and statistics*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-AR/CCM-20 (Rev.01). 24 pages.



- Satria, F., Sadiyah, L. and Bay, I.G. 2020. *Harvest strategies for tropical tuna in archipelagic waters of Indonesia*. Scientific Committee, Sixteenth Regular Session, Online Meeting. 11 – 20 August 2020. WCPFC-SC16-2020/MI-IP-24. 12 pages.
- Satria, F., Merta, B.S., Sadiyah, L. Mahiswara and Widodo, A. 2018. *Existing data collection workshop on harvest strategy implementation for tuna fisheries in FMAs 713, 714 and 715: Current systems and on-going improvement*. Bogor, 21-23 November 2018. 19 pages.
- Satria, F., Sadiyah, L., Yunanda, T. and Suadela, P. 2019. *Harvest strategies for tropical tuna in archipelagic waters of Indonesia: Update*. Fifteenth Regular Session of the Scientific Committee, Pohnpei, Federated States of Micronesia, 12-20 August 2019. WCPFC-SC15-2019/MI-IP-11. 7 pages.
- SPC. 2020. *Preliminary Audit of 2019 Indonesia Port Sampling data*. Western and Central Pacific Fisheries Commission (WCPFC). *West Pacific – East Asia (WPEA) - Improved Tuna Monitoring (ITM) Project*. March 2020. 19 pages.
- SPC. 2020. *Preliminary Audit of 2019 Philippines National Stock Assessment Project (NSAP) data*. Western and Central Pacific Fisheries Commission (WCPFC). *West Pacific – East Asia (WPEA) - Improved Tuna Monitoring (ITM) Project*. May 2020. 24 pages.
- SPC. 2021a. *Scientific data available to the Western and Central Pacific Fisheries Commission*. Scientific Committee, Seventeenth Regular Session. Online Meeting, 11 –19 August 2021, WCPFC-SC17-2021/ST-WP-01 (Rev.01). 34 pages.
- SPC. 2021b. *Preliminary Audit of 2020 Indonesia Port Sampling data*. Western and Central Pacific Fisheries Commission (WCPFC). *West Pacific – East Asia (WPEA) - Improved Tuna Monitoring (ITM) Project*. June 2021. 18 pages.
- SPC. 2021c. *Preliminary Audit of 2020 Philippines National Stock Assessment Project (NSAP) data*. Western and Central Pacific Fisheries Commission (WCPFC). *West Pacific – East Asia (WPEA) - Improved Tuna Monitoring (ITM) Project*. May 2021. 26 pages.
- Suharsono, A., Mustofa, A., Nuraini, Hizbulloh, L., Bellmann, C., Irschlinger, T. and Tolvanen, S. 2021. *Supporting Marine Fishing Sustainably: A review of central and provincial government support for marine fisheries in Indonesia*. International Institute for Sustainable Development Published by the International Institute for Sustainable Development. 83 pages.
- Thiroleron, E. 2014. *Mainstreaming cross-cutting issues: 7 Lessons from DAC Peer Reviews. Mainstreaming cross-cutting issues advancing gender equality and environmental sustainability*. Organisation for Economic Cooperation and Development. 40 pages.
- Thomson, W. 2016. *New Zealand’s support to the WPEA – Consultation Brief*. Informal document. 10 pages.
- Vietnam-WPEA. 2019. *Draft 2019-2021 plan for the initiation of a national observer program in Vietnam*. Observer Planning/Strategy Meeting, Viet Nam, March 22-23, 2019. 1 page.
- Vietnam. 2020. *Annual Report to the Commission, Part 1: Information on fisheries, research and statistics*. Sixteenth Regular Session, Electronic Meeting, 11-20 August 2020. WCPFC-SC16-AR/CCM-37. 8 pages.
- Vietnam. 2020. *Report of the ninth Vietnam tuna fishery annual catch estimates workshop. (VTFACE-9)*. Western Pacific East Asia – Improved Tuna Monitoring. 17-18 December 2020, Da Nang, Viet Nam. 14 pages.





Vietnam. 2021. *Annual Report to the Commission, Part 1: Information on fisheries, research and statistics*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC-SC17-AR/CCM-38. 9 pages.

Vietnam. 2021. *Review of 2019/2020 Vietnam tuna fishery data*. Tenth Vietnam/WCPFC Annual Tuna Fisheries Catch Estimates Workshop. 22-23 April 2021, Nha Trang, Khanh Hoa, Vietnam. Powerpoint presentation.

WCPFC. 2003. *Report of the Second Meeting of the Scientific Coordinating Group. (SCG2)*. Preparatory Conference for the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific. Fifth Session, Rarotonga, Cook Islands, 29 September – 3 October 2003. WCPFC/PrepCon/28. 20 pages.

WCPFC. 2018. *Implementing Arrangement between the Agency for Marine and Fisheries Research and Human Resources (AMFRHR) the Ministry of Marine Affairs and Fisheries of the Republic of Indonesia (MMAT) and the Western and Central Pacific Fisheries Commission (WCPFC) concerning Western Pacific and East Asia Improved tuna Monitoring Activity. (WPEA-ITM)*. 6 pages.

WCPFC. 2019. *Memorandum of Understanding between the Western and Central Pacific Fisheries Commission and the Viet Nam Directorate of Fisheries*. Western and Central Pacific Fisheries Commission. Pohnpei, Federated States of Micronesia. 4 pages.

WCPFC. 2019. *Memorandum of Understanding between the Western and Central Pacific Fisheries Commission and the Bureau of Fisheries and Aquaculture (BFAR) the National Fisheries Research and Development Institute (NFRDI), Philippines*. Western and Central Pacific Fisheries Commission. Pohnpei, Federated States of Micronesia. 7 pages.

WCPFC. 2020. *Contract between the Oceanic Fisheries Programme of the Pacific Community (SPC) and the Western and Central Pacific Fisheries Commission (WCPFC)*. Western and Central Pacific Fisheries Commission (WCPFC). 7 pages.

WCPFC. 2021. *Summary Report*. Seventeenth Regular Session of the Scientific Committee, Williams, P. and Ruaia, T. 2021. *Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2020*. Seventeenth Regular Session, Electronic Meeting, 11-19 August 2021. WCPFC- SC17-GN-IP-01. 66 pages.

World Bank. 2021. *A trade-based analysis of the economic impact of non-compliance with illegal, unreported and unregulated fishing: The case of Vietnam*. International Bank for Reconstruction and Development / The World Bank, Washington, DC. 78 pages.

WPEA-ITM. 2018. *Minutes for the WPEA-ITM Project Steering Committee Meeting*. December 7, 2018. Ala Moana Hotel, Honolulu, Hawaii, USA. Western and Central Pacific Fisheries Commission, Pohnpei, Federated States of Micronesia. 17 pages.

WPEA-ITM. 2020a. *WPEA-ITM Steering Committee Meeting, 17 November 2020 – Online. FINAL Meeting Report*. Western and Central Pacific Fisheries Commission, Pohnpei, Federated States of Micronesia. 9 pages.

WPEA-ITM. 2020b. *WPEA-ITM Steering Committee Meeting 14-15 February 2020 – Manila, Philippines. DRAFT Meeting Report*. Western and Central Pacific Fisheries Commission, Pohnpei, Federated States of Micronesia. 9 pages.

WPEA-ITM. 2020c. *2020 Activity Progress Report: WPEA – Improved Tuna Monitoring Activity*. Western and Central Pacific Fisheries Commission, Pohnpei, Federated States of Micronesia. 41 pages.



Yunanda, T. 2018. *Review of National Tuna Management Plan (2015-2019): Milestone an Achievement Today*. Directorate General of Capture Fisheries, Ministry of Marine Affairs and Fisheries – Republic of Indonesia. Powerpoint presentation to the 3rd Bali Tuna Conference, 31 May 2018, International Coastal Tuna Business Forum, 1 June 2018: [http://kkp.go.id/component/media/upload-gambar-dukungan/kkp/DATA%20KKP/Bahan%20Materi%20Bali%20Tuna%20Conference%202018/4\\_BTC\\_Trian%20Yunanda.pdf](http://kkp.go.id/component/media/upload-gambar-dukungan/kkp/DATA%20KKP/Bahan%20Materi%20Bali%20Tuna%20Conference%202018/4_BTC_Trian%20Yunanda.pdf)

