



West Pacific East Asia Improved Tuna Monitoring Activity (WPEA-ITM)

End of Project Gap Analysis Report

Final Report

28 July 2023

Abbreviations

ACE	Annual catch estimates
ADD	Activity Design Document
APR	Activity Progress Reports
BFAR	Bureau of Fisheries and Aquatic Resources, Philippines
NFRDI	National Fisheries Research and Development Institute
BRIN	National Research and Innovation Agency, Indonesian <i>Badan Riset dan Inovasi Nasional</i>
CMMS	Conservation and Management Measures
DJPT KKP	Directorate General Capture Fisheries, Ministry of Maritime Affairs and Fisheries
DGCF	Directorate General of Capture Fisheries (Indonesia)
EEZ	Exclusive Economic Zone
FIP	Fisheries Improvement Projects
GFA	Grant Funding Arrangement
ID	Indonesia
IMEMS	Integrated Marine Environment Monitoring System
IPDCP	Indonesia Philippines Data Collection Project (IPDCP), 2002-2009
IUU	Illegal, Unreported and Unregulated fishing
LL	Longline
MTE	Mid-Term Evaluation
MOU	Memorandum of Understanding
NSAP	Philippines National Stock Assessment Programme
NZ MFAT	New Zealand Ministry of Foreign Affairs and Trade
PH	Philippines
PSA	Philippines Statistics Authority
PUSDATIN	Pusat Data Statistik dan Informasi (Centre for Statistics and Information Data), Indonesia
RFMOs	Regional Fisheries Management Organisations
SFFAI	SOCCSKSARGEN Federation of Fishing and Allied Industries Inc. Southeast Asian Fisheries Development Centre, an inter-governmental body established in 1967 for 11 Asian countries including Vietnam, Indonesia and the Philippines.
SEAFDEC	
TORs	Terms of Reference
Vinatuna	Vietnam Tuna Association
VN	Vietnam
WCPFC	Western Central Pacific Fisheries Commission (Convention)
WCPFC ROP	Western Central Pacific Fisheries Commission (Regional Observer Programme)
WPEA-ITM	West Pacific East Asia – Improved Tuna Monitoring
WPEA-OFM	UNDP/GEF West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFM), 2010-2013
WPEA-SM	Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (WPEA-SM), 2013-2019
WWF	World Wildlife Fund

Table of Contents

Abbreviations	2
Executive Summary	4
BACKGROUND	7
Purpose	9
Scope	9
Gap Analysis Methodology	10
<i>Preparation</i>	10
<i>Consultations</i>	11
<i>Gap Analysis Report</i>	12
EVALUATION SUMMARY	12
SECTION A. PROGRESS OF ACTIVITIES	13
<i>General observations of activities progress</i>	13
SECTION B. EXIT STRATEGY AND FUTURE PROJECT DESIGN	14
Transitioning - Activity end	15
Transition/Exit Strategies	20
Drafting Transition/Exit Strategies	22
Mid Term Evaluation Candidate Activity Recommendations	22
Developing a Future Phase	24
<i>Identified activity priorities</i>	24
<i>New activities</i>	25
<i>Cost estimates</i>	26
RECOMMENDATIONS	31
APPENDICES	33
<i>Appendix A List of Consultations</i>	33
<i>Appendix B Information Paper to WPEA Country Consultations, Sydney Australia, May 2023</i>	35
<i>Appendix C Results Framework for Progress of Activities</i>	53
<i>Appendix D WPEA Country Responses to MTE Candidate Activities</i>	71
<i>Appendix E Project Design Framework for a Future Phase of 5 Year Duration</i>	84

Executive Summary

The progress of WPEA-ITM to assist participating countries, Indonesia, Philippines and Vietnam to improve tuna data collection to meet their WCPFC obligations, despite the disruption of a global pandemic, remains 'on track'. This assessment does not divert from the project mid-term review (MTE) and subsequent annual reviews. The increasing contributions to WCPFC assessments from the outcomes of the WPEA-ITM should be acknowledged.

The WPEA countries remain fully engaged and committed to progressing data collection programmes so that they are sustainable and self-funded, at the same time recognising that they have diverse multi-gear fisheries for oceanic tunas which are likely to require significant investment over a long period of time to achieve sustainable outcomes. Despite this, as is the case with the Philippines, project assessments report that WPEA countries have increasingly relied on national budgets, or as with Indonesia and Vietnam, engaged with eNGO projects, to support data collection activities.

While participating countries are expected to assume greater responsibility for funding project-related activities in the future, they are facing challenges presently due to residual budgetary effects from responses to the pandemic, and in the case of Indonesia and Vietnam government restructuring.

The comprehensive MTE of the WPEA-ITM Activity funded by the New Zealand government, in its assessment raises the matter of a further phase of the project. It identifies a number of activities in each of the participating countries that would address the gaps in data collection programmes that remain. These suggestions would require a process of verification for inclusion in a further phase of assistance if it was to be developed. It would also be the point at which, based on accumulated project experiences and consultation, that new activities that would contribute to progress could also be identified to formulate the next phase.

The End of the Project Gaps Analysis was scheduled between April and June 2023 to undertake relevant review and consultations. Its aim was to inform the design and implementation of a possible future phase of support for improved tuna data monitoring in the WPEA countries participating in the project. It took into consideration the progress of WPEA-ITM activities, recommendations from the MTE, and consultations with relevant stakeholders to recommend, cost and assess activities that should continue after the WPEA-ITM concludes. Additionally, the gap analysis also considered transition strategies for Vietnam, Indonesia and the Philippines that consider sustainability and the capacity to self-fund activities from national budgets in the future. Donor required Transition/Exit strategies by countries have yet to be developed for a number of reasons but can be supported by information gathered during the Gap Analysis to formulate indicative strategies if they can be prepared this late in the project. Any further phase of assistance would need to commence with

agreement and endorsement of on clear transition/exit strategies to manage expectations of all stakeholders.

The End of Project Gap Analysis concludes that every effort should be made to identify and secure donor commitment in the first instance to support a 5-year programme of assistance that will provide further support so that WPEA countries can continue to improve the collection of tuna related data and information to meet their data obligations. This in turn will continue to contribute to the wider assessments of tunas across the WCPFC Convention area, acknowledging the relatively high catch volumes taken from the waters of the WPEA countries and the complexities in monitoring their diverse small-scale tuna fisheries.

Technical assistance for WPEA-ITM and previous projects, have relied on the ability of WCPFC regional service providers such as the SPC, to resource assistance to the project's needs on an activity-by-activity basis. A further phase of assistance would benefit greatly from the availability of a level of technical assistance that is dedicated and coordinated to help countries close their data gaps and meet their WPEA obligations.

The focus on communication and outreach will also be important for the sustainability of WPEA countries data collection programmes by raising the profile of WCPFC obligations nationally and by reaching standardized protocols for collecting data including coverage and quality in the participating countries. Gains from closer sub-regional coordination building on common challenges across the participating countries is also expected to be a way to strengthen participation at WCPFC and exchanges between the countries in terms of shared training and experiences.

All WPEA-ITM participating countries have indicated that while they are not quite in a position to transition to completely nationally funded work in the development and improvement of their tuna data collection programmes, they all aspire to do so. The process to secure donor commitment to design a further phase of assistance should commence as soon as possible given the end of the WPEA-ITM implementation in late 2024¹. That process should include building clear and concise and agreed exit strategy for any new work.

In summary, the end of project gap analysis conclusions and recommendations are that:

- WPEA-ITM progress remains on track despite pandemic disruptions and that participating countries remain committed to making inroads to data collection improvements necessary for them to meet their WCPFC data obligations,
- Any process to build a further phase of assistance should include clear and concise Transition/Exit strategies agreed to by all stakeholders before commencement of a new project. With some assistance indicative strategies can be prepared before project end so

¹ As the contract itself will end on 31 March 2025

that participating countries can determine realistic time frames towards a reduced dependency on donor funding to support data collection programmes,

- Every effort should be made to identify and secure donor commitment, preferably for a 5-year period. Three options for further assistance based on the gap analysis are all significant investments and there should be some expectation that further prioritization may be necessary. The options include a full sized 5-year programme of assistance (USD 6.8 million), a programme of work over 3-year period (USD 4.4 million) and a third option also over a period of 3 years but in which activities have arbitrarily prioritized (USD 3.5 million).
- The quality and level of technical assistance and regional training opportunities provided to WPEA countries supported by the succession of WCPFC funding initiatives has played a significant role in the improvements to data collection programmes in WPEA countries and this should remain a feature of any new project.
- Communication and outreach aspects should be integrated into any new programme of assistance primarily to raise awareness of the WPEA countries obligations to WCPFC but to also address gaps in data collection and build sustainable data collection programmes in each of the countries. The countries also benefit from closer sub-regional coordination building on common challenges in their tuna fisheries which in turn should strengthen participation at WCPFC.

West Pacific East Asia – Improved Tuna Monitoring (WPEA-ITM)

End of Project Gap Analysis Report

BACKGROUND

The western boundary of the convention area for the Western and Central Pacific Fisheries Commission (WCPFC) undulates around the waters of Vietnam, the Philippines and the eastern part of Indonesia, a collective marine area that has long been recognized as significant in the management of the key tuna stocks² of the western and central Pacific. The Exclusive Economic Zones (EEZs) of Indonesia, Philippines and Vietnam catch of oceanic tuna 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. Most of the catch is taken in Indonesia particularly within its archipelagic waters. The majority of the catch in the Philippines is also within its' archipelagic waters. Vietnam is currently a cooperating non-member of the WCPFC and tuna is caught in a more recently developed fishery.

The gap in the tuna catch data in the south east Asian area of the WCPFC boundary was considered fairly significant when the Convention was negotiated in the late 1990s³. The Philippines and Indonesia fell within the scope of “parties with the real interest” in the oceanic tuna fishery that extends across the Pacific Ocean warm pool large marine ecosystem, but outside the membership of regional organizations that traditionally provided management and scientific advice to the Pacific Island countries and others in the central and western Pacific. The economic importance of oceanic tunas to Indonesia, the Philippines and Vietnam is not dissimilar to that of developing Pacific Island countries in terms of livelihoods and aspirational development, therein a collective interest for maintaining a healthy and sustainable fishery. While the key tuna species are currently considered ‘healthy’, changes in environmental conditions such as those from a stronger El Niño are expected to affect the distribution, abundance and catchability of tuna and consequently is certain to have associated economic impacts.

The West Pacific East Asia – Improved Tuna Monitoring (WPEA-ITM) continues to advance the aims of the prior series⁴ of WCPFC implemented initiatives to build the capacity in Vietnam, the Philippines and Indonesia to engage in regional initiatives to conserve and manage fisheries for highly migratory fish stock. The proceeding projects had made significant inroads to reducing the uncertainty in stock assessments and improving the knowledge of oceanic fish stocks and related ecosystems. National capacities are recognised as strengthened for oceanic fishery monitoring and assessment, fisheries

² The countries also have significant catches of coastal/neritic tunas

³ Although SEAFDEC has the mandate and maintains a database for SE Asian tunas for its 11 members, it is recognized as incomplete and focuses more on neritic rather than oceanic tunas.

⁴ IPDCP, 2002-2009, WPEA-OFM, 2010-2013 and WPEA-SM, 2013-2019.

management and participation and contributions to the management of shared migratory stocks for the Philippines and Indonesia⁵ and later with the inclusion of Vietnam with the rapid growth of the tuna fishery in its waters in more recent times.

Commencing in 2016 - 17, the New Zealand Government funded the WPEA-ITM Activity for the sum of NZD \$4.91 million, to further strengthen Vietnam, the Philippines and Indonesia's capacity to collect data and to participate in the work of the WCPFC. The Activity focuses on; improved data and information to support stock assessments, generated through improved port monitoring and at-sea human observer programmes, strengthen 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).

In 2021, the New Zealand supported Activity conducted a comprehensive mid-term evaluation (MTE)⁶ of the WPEA-ITM to review strategies to strengthen effective implementation for the remainder of the project. The MTE was also tasked to provide information that could be used to design a further phase of the project building on the progress of the WPEA-ITM and in doing so, presented a suite of candidate activities for consideration and validation.

Of note, the MTE determined that the WPEA-ITM support had resulted in *“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.”* This assessment is qualified by also highlighting the impacts on the implementation of activities by the COVID pandemic, and therein the increased budgetary pressure this placed on Vietnam, the Philippines and Indonesia associated with the need to re-programme government resources. The MTE concluded, that increased and sustained government support in all three countries for financial support to WPEA-related activities will be challenging at least in the medium term, but that additional effort would be required to assume greater responsibilities in Indonesia and Vietnam to achieve a situation that Philippines has largely been able to achieve since 2015. The MTE further notes in relation to sustaining project-related activities, that *“this will take time and is likely to require support beyond the conclusion of the WPEA-ITM”*.

⁵ Robert Gillett Gillett, Preston and Associates. January 2013. West Pacific East Asia Oceanic Fisheries Management Final Independent Evaluation Report

⁶ <https://www.wcpfc.int/doc/2021/western-pacific-east-asia-improved-tuna-monitoring-activity-mid-term-evaluation-report>

Purpose

The key objective of the WPEA-ITM End of Project Gap Analysis is to inform the design and implementation of a possible future phase of support for improved tuna data monitoring in the WPEA countries participating in the project. This is to be done by considering the progress of the WPEA-ITM activities, recommendations from the MTE, and consultations with relevant stakeholders to recommend, cost and assess activities that should continue after the WPEA-ITM concludes. Additionally, the gap analysis should also consider transition strategies for Vietnam, Indonesia and the Philippines for those activities which the countries have developed some capacity, or, for which are no longer relevant for project support.

Scope

The WPEA-ITM participating countries are the Republics of Indonesia, the Philippines and Vietnam in East Asia and the gap analysis examines relevant information available from the commencement of the WPEA-ITM in December 2018, to the time of writing. Based on the information collected and reviewed, the analysis will be forward looking also to the end of the project implementation in 2024.

The information and evidence for the gap analysis has been sourced from the Activity Design Document (ADD) and variation and the appendices work plans and budget spreadsheets, Progress Reports (APR) and reports of the WPEA-ITM Steering Committee, the MTE, the reports of the 2023 Annual Catch Estimate workshops including recommendations, individual interviews, and development quality principal policy guidelines⁷.

The gap analysis required engagement with the key implementing agencies in the three participating countries, including WPEA-ITM appointed national coordinators and other relevant officials in-country, the WCPFC Secretariat, primarily the Project Manager for the WPEA-ITM, and through him the relevant NZ MFAT staff; and the SPC.

In conducting the gap analysis, the following criteria were assessed to establish:

- the relevance and priority of the proposed future activities set out in the MTE, particularly in relation to the Activity objectives and outcomes, along with identification of any new activity if necessary to accomplish the project objectives;
- the willingness and ability of each country to nationally support the ongoing relevant activities; and
- activities that will need continued external support including, needs such as technical expertise and communication and their associated cost estimates for 3 – 5 years (after 2024), and an assessment of if, when, or how each can be mainstreamed into national responsibilities.

⁷ <https://www.mfat.govt.nz/assets/Aid-Prog-docs/Policy/New-Zealands-International-Development-Principles.pdf>

The gap analysis also includes the development of participating countries' transition strategies with the recommendations for the scope of a further possible phase of the Activity⁸, including an indicative timeframe.

Gap Analysis Methodology

The methodology has been designed to generate credible evidence to support the purpose of the End of Project Gap analysis, reflecting the progress of the Activity and the needs and costs assessed for a future phase of the Activity. It takes into consideration any potential risks relating to the delivery of the work plan including ongoing, or longer termed impacts arising from COVID pandemic responses imposed in the countries as well as other national circumstances such as organizational restructures.

The gap analysis methodology complies with the New Zealand International Development Cooperation Programme policies⁹ including the MFAT Supplier Code of Conduct and Value of Money Guidelines. Although there are no equivalent guidelines supplied by the WCPFC Secretariat, the work was undertaken using the principles of best professional practice.

The gap analysis approach did not divert in any significant way from the areas of service (outputs) and the deliverables tasks and outputs for the gap analysis described in the terms of reference (TORs), although there was a slight delay in the scheduling of the in-country consultations with flow on effect causing a slight shift in target date for the draft report.

The agreed work plan for the End of Project Analysis comprised three phases that included firstly, the review of relevant documentation, preparatory discussions for the commencement of the gap analysis; then the consultations themselves; and finally, the preparation of this report, and its recommendations. The End of Project Gap analysis was completed as follows:

Preparation

- a) The review of relevant documents and familiarization included the key documents which are principally:
 - Activity Design Document for *Western Pacific East Asia Improved Tuna Monitoring Activity*,¹⁰
 - Activity Progress Reports for Years 1,2, 3, and 4 and reports of the Activity Steering Committee¹¹, and the
 - Mid-Term Evaluation (MTE) Report and its recommendations.

⁸ 'Activity' and 'Project' are used interchangeably in this report.

⁹ <https://www.mfat.govt.nz/en/aid-and-development/working-with-the-aid-programme/tools-and-guides-for-aid-activities/>

¹⁰ <https://www.wcpfc.int/doc/2016/wpea-itm-grant-funding-agreement-and-activity-design-document>, and

<https://www.wcpfc.int/doc/2019/wpea-itm-activity-design-document-variation>

¹¹ <https://www.wcpfc.int/wpea>

- b) An online meeting with WCPFC for the purpose of a briefing on the WPEA-ITM activity, the mid-term evaluations and its recommendations made for each of the three respective countries. The online meeting served the purposes of constructing an outline for an agreed work plan.
- c) Ongoing constant communication with the WCPFC WPEA Project Manager to facilitate and coordinate arrangements with stakeholders and consultation planning, and the
- d) Establishment of direct early communication with principal contact officials in each of the WPEA-ITM countries during a WPEA Stock Assessment workshop at Sydney, Australia between 27 - 30 March 2023.

Consultations

- a) In consultation with WPEA-ITM countries and the WCPFC WPEA Project Manager, country visits were scheduled and timed to coincide with the Activity supported annual catch estimate (ACE) workshops in each of the participating countries. Discussions were first held with officials in the margins of the WPEA Stock Assessment workshop at Sydney held at the end of March 2023 and the ACE workshops in all three countries¹². A number of interviews with individuals attending the 16th PTUNASTAT ACE workshop were also conducted. A list of people consulted is appended at **APPENDIX A**.
- b) An opportunity arose to address national WPEA national coordinators at the scheduled project activity of the WPEA Stock Assessment workshop at Sydney 27 – 31 March 2023. Dedicated time was allocated at the end of the workshop on Friday 31 March to introduce the End of Project Gap Analysis and commence discussions with all three country representatives, SPC and the WPEA ITM Project Manager. An overview of the gap analysis work was presented and provided in an information paper distributed by the consultant in advance. The paper also included a survey template based on the proposed candidate activities described in the 2020 MTE. A copy of the paper is appended at **APPENDIX B**.
- c) The first of the in-country consultation was to Vietnam and was timed to coincide with the Vietnam national annual catch estimate workshop at which a broad range of relevant stakeholders were present. This took place between 3 – 4 April, 2023 in Da Nang. The workshop was attended by both central government fisheries officials, provincial and industry and academic stakeholders. The gap analysis presentation was translated into Vietnamese and comments captured in the record of the meeting in English. This approach was necessary given the language barriers with most of the participants.
- d) Country visits to the Philippines and Indonesia were coordinated so that the End of the Project Gap Analysis consultations would also coincide with their respective annual catch estimate workshops. Visits to the Legazpi, Philippines took place from 24 – 28 May and

¹² Vietnam held at Da Nang from 3 – 4 April, 2023, Philippines at Legazpi from 25 – 26 May 2023, and Indonesia at Jakarta and Bogor City from 29 May – 1 June 2023.

between 29 May – 2 June, 2023 for Jakarta and Bogor, Indonesia. Consultation and engagement with individual and groups of officials was more extensive without any significant language barriers.

- e) The data collected included completed survey forms by National WPEA Project Coordinators, personal comments of SPC Data Scientist and the WPEA Project Manager, the workshop records and recommendations of each of the annual catch assessment workshops, the notes for individual and group interviews in the margins of ACE workshops; and notes from time allocated during annual catch assessment workshop to discuss the gap analysis.

Gap Analysis Report

The final phase of the gap analysis required the preparation of a draft report of findings and recommendations based on the examination of the data and information provided by country stakeholders, WCPFC (WPEA Project Manager), and the SPC Data Scientist providing technical support to the annual catch estimate workshops in all three countries. The final draft report will be submitted to the WCPFC and NZ MFAT.

The WPEA End of Project Gap Analysis Report and its' recommendations are to be presented to the 19th regular session of the WCPFC Scientific Committee to be held at Koror, Palau in August 2023 by the WCPFC Secretariat. Subsequently, the gap analysis is expected to be further considered by the 19th regular session of the Technical and Compliance Committee, Pohnpei, Federated States of Micronesia in September 2023, and then the 20th annual meeting of the WCPFC to be held at Rarotonga, Cook Islands in December 2023.

EVALUATION SUMMARY

The End of Project Gap Analysis' aim is primarily to *'inform the design and implementation of a possible future phase of the project by considering the progress of the WPEA-ITM activities, determining the relevance and priority of the candidate activities set out in the MTE in relation to the WPEA-ITM project objectives and outcomes, as well as the identification of any new activity to accomplish the project's objective'*. The willingness and the ability of each participating country to sustain the relevant activities without external support, should also be determined, as well as which activities would need continued support.

The assessment of the activities and their indicative costs identified as a priority to the contribution of the overarching project objectives are addressed in the second part of this results section. This is both the existing activities that will require ongoing support, and those identified as new activities. The estimates are best guess for a period of 3 – 5 years commencing in 2025, with the assumption that they would be revisited during the preparation of a new project.

The source of the information used to assess activity progress, and information relating to national level exit or transition strategies, is taken from the survey responses from participating countries

themselves, in-country interviews and data collection; including the report and recommendations from the annual catch estimate workshops; the MTE, and the annual project reports and steering committee reports.

The results of the End of the Project Gap Analysis are presented in the following two sections. Section A addresses the requirement to assess the progress of project activities whilst determining the participating countries exit strategies; and the Section B provides the recommendations for a further phase of the Activity and their estimated cost.

SECTION A. PROGRESS OF ACTIVITIES

The most recent report of the WPEA-ITM Activity progress was made to a virtual meeting of the project steering committee in February, 2023 at which the Project Manager reported project implementation progress in 2022. This included high-level outcomes of progress assessment against the Activity results framework, which the Committee noted progress as being ‘tangible’. The comprehensive 2022 Activity Progress Report (APR)¹³ reported the Activity’s significant achievements, the assessment of progress against development quality principles such as effectiveness, key issues and challenges, the contribution of cross cutting issues, and work plan and budget accounting.

Using the last annual report of Activity, an assessment focused on project activities against the results framework was conducted. It makes no attempt to apply an assessment of activity progress to high level project outcomes. This assessment was done using the information collected for the gap analysis, country responses to the survey to validate the recommended MTE candidate activities review of the endorsed 2023 work plan and budget, the 2022 APR and feedback from officials and personal comments of the Project Manager. The adjusted results framework shows progress of the medium and short terms outcomes and the activities against the intended outcomes and outputs. The results framework table is appended at **APPENDIX C**.

General observations of activities progress

The pandemic impacts began to wane in mid-2022 and effective project coordination was maintained virtually. With the travel restrictions easing in the later part of 2022, the resumption of most aspects of project activity implementation began in 2023, allowing face to face meetings and progress across all outputs. The convening of the virtual standing committee for the Activity in early 2023 was well timed to provide an opportunity to agree on a reset of the work and budget going forward that took into account the agreement by New Zealand for a no-cost extension, and adjustments for the delays and impacts of the pandemic on the delivery of outputs.

Some notable progress in 2023, included all three countries having successfully held their annual catch estimate workshops supported by SPC and the Project Manager. This places them well for the preparation and submission of WCPFC Part 1 Report and for meeting their reporting obligations.

¹³ <https://www.wcpfc.int/doc/2022/wpea-itm-activity-progress-report-2022>

Vietnam at the time of writing had submitted their report to WCPFC, albeit without shark data; the collection of which needs to be addressed to a degree across all three WPEA countries. This is particularly an issue for Indonesia; with eNGOs data collection programmes reporting the reluctance of artisanal fishers to report shark catches for fear of sanctions.

Restructuring of the national fisheries management agencies in both Vietnam and Indonesia, has challenged the progress of activities in those countries due to budget reductions and uncertainty due to shifting responsibilities and mandates across relevant government departments. The impacts of which were demonstrated in Indonesia recently, with difficulty experienced in the signing of an implementing arrangement with the WCPFC WPEA-ITM project; thereby disrupting and delaying the transfer of funds to maintain the additional enumerators supported by the Activity. Subsequently, Indonesia managed to source and make payments to enumerators for some months after WPEA funds stopped, but this was not sustainable and data collection ceased abruptly. Four of the trained 12 enumerators have since been re-engaged since funding resumed.

The MTE determined that *“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”*. Scientific data submissions by WPEA countries to the WCPFC information, provided by SPC to the Sydney WPEA Stock Assessment workshop showed the status of data collection at 2010, and then again for 2022 demonstrating improvement gains but also identified scientific gaps, particularly with regards to the limited collection of aggregated catch and effort data and the coverage for size data.

The WPEA-ITM National Coordinators and officials in all three countries display high levels of engagement in project activities making progress commendable for the complex multi geared tuna fisheries in their waters. The progress gains can also be attributable to a project manager who has considerable experience in the WCPFC, and the scientific and technical assistance from the SPC to support the 3 countries who sit outside their membership, but whose fisheries directly contribute to WCPFC priorities related to data gaps and deficiencies.

SECTION B. EXIT STRATEGY AND FUTURE PROJECT DESIGN

Reviewing the project’s output/activities in the context of identifying gaps, but at the same time anticipating the development of a further programme of assistance targeting WPEA country tuna data collection and analysis, implies the need to address the following broad key issues and questions. Simply, they can be described as:

- Has there been progress/impact of the current intervention and value for money?
- What has not progressed well, or reached a point at which it can be sustainably managed by countries themselves?
- What is likely to occur when the current Activity concludes? and
- What are countries priorities to build on progress and allow them to meet long term objectives for data collection and fully meeting their WCPFC objections, including their exit/transition

strategies as required by the Grant Funding Arrangement and as recommended by the MTE; and what would a further programme of targeted assistance look like to help them meet those objectives?

The assessment of activities progress and impacts by examining the more recent Activity progress reports; including the MTE, and consultations, is covered in the Section A. The assessments support the results of those reviews that progress has been made; despite pandemic disruptions and, that tangible improvements have been achieved; with the qualification that there are still ongoing challenges be addressed. It would not be untrue to suggest, that the activities progress has continued to track positively and in the same trajectory since its last substantial review; that being the MTE. The MTE was comprehensive in its assessment, by an individual with substantial experience and knowledge of the evolution of the WCPFC and tuna fishery management in the western and central Pacific Ocean; including at the onset of assistance to address the data gap in the south east Asia early 2000s.

The following section addresses exit or transition strategies by country, and the likely status of each of the oceanic tuna data collection programmes in WPEA countries in the absence of external funding support. The final part of this section addresses the need to determine the relevance and priority of recommended and new activities to accomplish overarching objectives for improved data collection in the WPEA countries; and the willingness and capacity of each of the countries to continue to make progress towards objectives regardless.

Transitioning- Activity end

The development of exit or transition strategies for each of the participating WPEA countries is a condition of the original Grant Funding Arrangement (GFA)¹⁴ for the WPEA-ITM, and the Memorandum of Understandings (MOUs) signed by each countries national fisheries authorities. The MTE recognized that exit strategies had not been prepared as a consequence of the pandemic but qualified that this was perhaps fortuitous as any strategy prepared earlier in the WPEA-ITM would then require significant review. The MTE was also formulated to assess the level of country ownership and progress the development of an exit strategy. It recommended that each participating country prepare a transition/exit strategy before the 2022 Steering Committee meeting that would describe on-going support to WPEA – ITM activities once project funding terminates and that each National Coordinator should draft a transition or ‘exit’ strategy that describes roles, responsibilities and needs as the WPEA-ITM approaches its conclusion, as well as proposed arrangements to support WPEA-ITM-related activities beyond its conclusion. The strategies are expected to include resourcing

¹⁴ Output 1 b) Memoranda of Understanding (MOU) developed with the national fisheries authority of each country. These MOUs will define the respective participant's roles and responsibilities and an appropriate exit strategy which gradually transfers responsibility for funding national activities to the national government. Specific targets for transferring funding responsibility are incorporated into the Results Framework. The mid-term review will also enable assessment of level of country ownership and progress with the exit strategy.

options for addressing those priorities and the MTE recommended that proposed arrangements should be tabled at the 2022 Steering Committee meeting, for information.

Another source of information for the discussion of exit or transition strategies in this gap analysis, is drawn from the comments provided by countries when asked about the relevance of the MTE recommended activities¹⁵. These have been collated into a combined table appended at **APPENDIX D**, titled “Combined WPEA Country Responses to MTE Activity”. The priority rankings in this table are colour coded. Suggestions of new activities for inclusion of a possible future phase of the Activity are also based on consultations with WPEA countries, the MTE suggested activities; and from individuals currently involved in coordinating and assisting in the delivery of the WPEA-ITM.

The following information and analysis is expected to contribute to the development of transition/exit strategies by the participating countries.

Indonesia

Willingness

Indonesia is a member of three different tuna regional fisheries management organisations (RFMOs) which requires the capacity to participate effectively at all meetings threefold. The Government funding allocation is for all fisheries and getting adequate funding for all capture fisheries and RFMO participation is challenging. Further, the obligations and requirements to reflect compatibility between the management of their zones, with conservation and management measures (CMMs) adopted at these organisations, is burdensome and challenging at best.

Indonesia is an emerging market economy; the largest in Southeast Asia, and is classified as a newly industrialized country¹⁶. In this context, Indonesia is currently applying a transition of organizational reform to increase its efficiency and transparency for good governance. This extends to recent changes of national structural organization for research and the newly formed, National Research and Innovation Agency, BRIN¹⁷ which is in progress. The effects of this flux, is such that Indonesia requires time to harmonize the coordination of the relevant institutions, including in terms of national budget allocation to support monitoring of tuna fisheries. The disruption to the ability to transfer WPEA-ITM funds provided for the implementation of the activities that supports enumerators, was a direct result of the current situation, and has left a data gap which will need to be countered by increasing coverage at some point. Broadly, the issue was expressed by the WPEA ITM National Coordinator as ‘institutional restructuring is occurring and while research responsibilities and mandates have shifted, operational budgets have not.

¹⁵ See following section on Mid Term Evaluation Candidate Activity Recommendations.

¹⁶ The category of newly industrialized country (NIC), newly industrialized economy (NIE) or middle income country is a socioeconomic classification. They represent a subset of developing countries whose economic growth is much higher than other developing countries; and where the social consequences of industrialization, such as urbanization, are reorganizing society.

¹⁷ Indonesian, *Badan Riset dan Inovasi Nasional*

Directors at the Directorate General Capture Fisheries, Ministry of Maritime Affairs and Fisheries (DJPT KKP) acknowledge the importance of Indonesia meeting their obligations at WCPFC. They noted the short-term challenges that Indonesia faces with the near conclusion of the WPEA-ITM, and the impending withdrawal in 2024 of some of the non-governmental organization (NGO) sponsored data collection programmes; stating their concerns for continuity in the short term for supporting fisheries monitoring and science. In this regard, they welcomed a future phase of the WPEA-ITM. The Directors indicated that they intend to establish a task force to investigate the anomalies in catch estimates; particularly with regards to the large handline fishery, noting that pressure to verify catches from the tuna fishery in their archipelagic waters, emanates not just from the WCPFC, but also from IOTC whose interests lie in other Indonesian FMAs.

Ability to self-fund

The same Directors at DJPT KKP Indonesia, have also made assurances that the funding issue¹⁸ for capture fisheries data monitoring and analysis will be addressed as a matter of priority. Indonesia acknowledged the increased capacity since 2010 attributed to the WPEA projects and the substantial improvements achieved in the provision of fundamental data and information; including national catch estimates, size data and operational data. Credit is also attributed for other outputs such as the establishment of a national tuna management plan and harvest strategy in the archipelagic waters that need to be compatible with WCPFC's CMMs, and the support for participation at the WCPFC regular meetings for Indonesia.

While Indonesia expects to be able to undertake the work that is required to meet the WCPFC obligations independently eventually; including making improvements to address data gaps in the tuna fishery, the current organizational changes, the need for a transition period, and the budget allocations, are presently limiting in the short to medium term, presenting challenges. The national budget for fisheries monitoring allocated to DGCF is not only for tuna, but for all fisheries across eleven FMAs. At the time of writing research funds for fisheries had not yet been allocated for 2023; and is waiting for the completion of the 2024 National Plan, contributing to uncertainty of available funds for data collection work in 2024. It is anticipated the budget allocation is not expected to be sufficient overall and for research related to tuna data collection. The situation given the limited funding is to adopt an approach that will retain and continue activities that are considered high priority.

Capacity Building

Indonesia identifies and recognizes the ongoing need for capacity building for all areas of work relating to tuna monitoring and data collection (port sampling, logbook and observer) and analysis. Specifically, the capacity for modelling (analysis) skills for stock assessment, harvest strategies and analysis on big tuna fisheries data and well as strengthening policies, governance and coordination arrangements requires on-going attention. Indonesia has successfully developed, reviewed and is implementing a national tuna management plan (NTMP). Furthermore, of significant relevance, a

¹⁸ Suggestions that this may be sourced by securing 10% of the non-tax revenue.

tropical tuna's harvest strategy has been developed and implemented for the Indonesia Archipelagic waters. It requires monitoring and evaluation, and in this regard, there needs to be adequate capacity for data collection and scientific analysis to ensure that the harvest strategy is compatible with the WCPFC tropical tuna harvest strategy.

Focus on climate change impacts on tuna resources is emerging at the Commission. It is also a national concern for Indonesia but there is limited national capacity to understand adaptation and mitigation responses to climate change impacts.

The effort to maintain databases is particularly vulnerable presently in terms of funding the costs of maintaining systems. This requires an urgent and immediate budget solution which is now a priority particularly during the transition period of responsibility to BRIN which is expected to take at least 18 months.

Philippines

Willingness

The Philippines remains committed to the long term goal of having sustainable management of their tuna fisheries; recognizing that it is a highly migratory fish stock and that they have shared obligations in managing them. They acknowledge that the goal is not without its challenges, particularly in terms of resourcing activities that contribute to achieving that goal. They state that they remain committed to monitoring their progress, and transitioning to fully absorbing and adequately resourcing the respective prioritized activities and work plans.

Ability to self-fund

The Philippines are considerably more evolved and less dependent on external funding for the implementation of tuna fishery monitoring and data analysis, than are Indonesia and Vietnam. They have successfully established and are operating port sampling and observer programmes, and are adopting emerging technology that will continue to improve and contribute to addressing the need to increase data coverage; in order to strengthen the reliability of catch estimates. The magnitude of landing sites, gear types involved over an expansive area, and the more recent resource impacts on national budgets due to pandemic continues to present challenges which the MTE acknowledges. This means that there remains a dependency on external funding source for improving and implementing activities to meet budgetary shortfalls, at least for the immediate and medium term. The Philippines indicate that their focus for continued support would be largely for capacity building.

Awareness raising

Given the importance of the tuna fishery to the Philippines, there remains a need to raise the profile of tuna catch reporting obligations to the WCPFC at two levels consecutively. The first, being the higher Government levels where priorities and national budget decisions are made and approved; and secondly, at the provincial level to strengthen and improve operational data collection. Additionally, the Philippines Statistical Authority (PSA) has responsibility for producing the official fisheries catch

statistics and don't have fisheries background. BFAR-NFRDI do have fisheries background and produce independent estimates, but these aren't the 'official' Philippines government statistics.

Capacity building

The Philippines identifies and recognizes the ongoing need for capacity building across most, if not all areas of work relating to tuna monitoring and data collection and analysis, specifically for stock assessment, harvest strategies; strengthening policies, governance and coordination arrangements. While they have successfully redeveloped and are using a National Stock Assessment Project (NSAP) database, they are vulnerable in terms of maintaining the system including covering costs for data cloud storage; something for which the need to find a budget solution becomes a priority. This is because if the WPEA-ITM ends without a follow-up phase, SPC have indicated that they have limited capacity to assist country specific database needs, other than to continue to support Tufman2 since the system is based on standard data collection forms (for logsheets and observer data aligning to WCPFC data field requirements), and used by all SPC members (P. Williams per. comments).

The Philippines to a large extent, have clearly demonstrated the willingness and ability to mainstream the costs of establishing and maintaining programmes of work and activities into national budgets where possible. An assessment to address the question of if, when, and how, countries can mainstream the costs of activities into national budgets; is an exercise that needs to consider many variables, including government priorities, the fluid nature of fishing influenced by fuel prices, market movements and climate change impacts, to name some. The importance and benefits of accurately assessing the status of the key species of tuna stocks within national waters, do not only accrue to the Philippines in terms of meeting its WCPFC reporting obligations, but there is also a more pressing need to remove all levels of uncertainty for stock assessment across the WCPFC convention area as discussions and decisions of allocation rise in prominence.

Vietnam

Willingness

The emerging tuna fisheries in Vietnam has a number of drivers for making improvements to the way in which they manage the fisheries in their waters, such as sustainable fisheries or the European Union yellow cards in 2017, and the need to address illegal, unreported and unregulated (IUU) fishing by upgrading their data management systems; and as a consequence, the need to strengthen their engagement at the WCPFC¹⁹. They have according to annual APRs, the MTE and questions posed to them, made steady progress in strengthening their tuna fisheries data collection regime for management, with the exception of the development of an observer programme which does not seem to have gained traction yet. They have given priority in the End of Project Gap Analysis to undertaking a pilot observer programme project with the Vietnam Tuna Association (Vinatuna), over the MTE suggestions to work on the development of a strategy to establish a national observer programme.

¹⁹ Vietnam did not participate during the 19 years of negotiations of the WCPF Convention, but were accepted as a Cooperating Non Member in 2010 after first formally observer in 2005.

This might reflect the order of focus rather than a value judgement of the activity itself, which is consistent with the advice provided by the Observer Coordinators at WCPFC and SPC to concentrate on establishing a programme in a few key ports, including Na Trang, and to focus on the collection of the minimum WCPFC data fields. There is also a need to consider cost recovery or an allocation of national budget, if a national observer programme is to be sustainable.

Vietnam has reported to the WCPFC that it continues in its efforts to improve its tuna fisheries management systems, fisheries data collection supported by not only WPEA-ITM but other stakeholders.

Ability to self-fund

Vietnam faces challenges with broadening and applying its national requirements across numerous provinces and multi-gear fisheries for oceanic tunas and there does not appear to be a system of differentiating the application of support across provinces. There are other stakeholders involved in supporting Vietnam in their efforts to increase monitoring at ports and at sea past and present, such as the World Bank's pipeline Sustainable Fisheries Programmes and WWF's Fisheries Improvement Project (FIP).

Vietnam has indicated that they remain committed to funding over 90 enumerators in more than 26 ports but that the additional assistance under WPEA-ITM (currently covering 12 provinces) was still required for port sampling. As previously mentioned, cost recovery to ensure that a national observer programme is sustainable is something that remains to be addressed.

Capacity building

Responses to the survey on MTE candidate activities by Vietnam highlighted a need to improve communication and outreach initiatives to standardize data collection protocols in ports and improve the quality of the data provided by fishers. The level of awareness of Vietnam's obligations to WCPFC at higher levels and provincial levels are expected to contribute to national budgetary priorities eventually. While this might not have immediate effect, improved communications would expect to contribute to systematic change over time.

The development of a national observer programme in Vietnam has yet to take real traction and a pilot programme is proposed to build capacity for wider application. An observer programme strategy needs to be adopted as well as supporting legislation and regulations and cost recovery needs to be considered. Any further assistance would focus on train-the-trainer approach. WCPFC and SPC Observer Coordinators noted that previous training provided to Vietnam has been to government workers which is not the case in Observer Programmes in the rest of the Pacific.

Transition/Exit Strategies

The purpose of developing exit strategies when they were intended in the second year of the Activity would have provided for a road map and incentive for progressing participating countries towards self-funding and the removal of dependency on external donors to support the work to improve tuna

data collection. If not for the pandemic, some WPEA-ITM activities may possibly have transitioned to national budgets had strategies been in place. Developing exit strategies at near end of the project life then asks, what will happen to activities if there is no more external funds and no funding provisions have been possible under national budgets? Using either current project activities or anticipated activities, participating countries should be able determine realistic time frames towards a reduced dependency on donor funding to help the participating countries sustainably achieve the short and medium term WPEA-ITM outcomes.

The medium- and short-term outcomes described in the WPEA-ITM GFA are:

Medium Term:

- Integrated fishery monitoring programmes for tuna species implemented by Philippines, Indonesia and Vietnam which are compliant with WCPFC requirements.
- Uncertainties in WCPO catch and stock estimates reduced.
- Improved national catch estimates and stock assessments inform national fisheries management and harvest strategies, and

Short-term:

- Vietnam, Philippines and Indonesia governments provide adequate resources for tuna monitoring and assessments within coordinated and supportive, policy and legal frameworks.
- Strengthened national capacities in fishery monitoring and catch estimation.
- Improved national data and knowledge management systems and processes for catch estimation and stock assessment.

During consultation for the end of project gap analysis, WPEA countries, participating countries were asked directly what they thought a likely scenario would be with regards to activities supported by the WPEA-ITM project IF support is not secured for a further phase; or the process to secure donor funding for further support is delayed (significantly or slightly). Responses to the survey were completed by all three national coordinators, but for the large part they addressed on-going needs based on gaps in data collection without any significant detail as to what would happen in the event that no further external funding was available.

The WPEA-ITM does not make budgetary contributions to support national coordinators for the coordination of project activities and the preparation of exit strategies would need to be assumed in conjunction with their full-time roles and responsibilities in their respective fisheries administrations. The preparation of the exit strategies appears to present some challenges for the coordinators and the production of the strategies may require assistance. The expectation that the strategies would be prepared within the scope of the gap analysis exercise also proved unrealistic given that country visits coincided with annual catch estimate workshops for which the national coordinators were fully occupied and the level of information provided in survey responses.

The MTE recommends that exit strategies describe:

- proposed arrangements to support WPEA-ITM-related activities beyond its conclusion,
- on-going support to WPEA – ITM activities once project funding terminates, and
- roles, responsibilities, needs and resourcing options.

When asked about the transition of activities supported by the project to core national budgets, not unexpectedly Indonesia and Vietnam indicated that there remained a great deal of uncertainty due to restructuring, residual effects of the pandemic on diverted government budgets, and in Indonesia's case the absence of an approved operating budget for 2024²⁰ contributed to the reluctance to make immediate or longer-term predictions as to how activities would be supported in after 2024.

Based on comments from senior officials in Indonesia, there is resolve to ensure that the tuna data collection programmes are supported to meet their reporting obligations to RFMOs. The impacts of restructuring and responsibilities for research are not expected to be fully resolved, at least where budget allocations are concerned for the at least 18 months.

The Philippines' focus remains on ongoing support for capacity building and some aspects of database management and the impacts of no further funding support for data collection is not expected to be the same as for Indonesia and Vietnam.

In summary, responses to questions and information provided on exit strategies from the countries indicated that they regard all project activities high priority and remain committed to continuing supporting them as funding and capacity allows regardless of current national budgeting challenges.

Drafting Transition/Exit Strategies

There is still considerable value in developing exit strategies before the conclusion of the current Activity, as it may well be a condition of future funding, and the fact that they will be an invaluable contribution to the design of a future phase. To assist countries with their preparation before the end of 2024 and to provide uniformity, a template for the exit strategies should be developed. The effort to populate these can commence immediately with some assistance with a target deadline to have the strategies fully endorsed by the countries during the process to develop a further phase.

Mid Term Evaluation Candidate Activity Recommendations

The MTE was conducted in 2021 and a comprehensive report was produced that included a list of candidate activities made as recommendations for support under the remainder of the WPEA-ITM, or the design of a future phase of the WPEA project. These recommendations were made based on the Activity's experiences from the commencement of the project up until December

²⁰ For BRIN

2020 when the MTE was conducted. The list of activities is considered indicative, and the End of Project Gap Analysis was required to verify which were relevant, and which were not with the stakeholders.

The Sydney WPEA Stock Assessment workshop presented an opportunity to commence and socialize the End of the Project Gap work face to face with the stakeholder officials directly involved with the project from all three countries, simultaneously. National WPEA Coordinators and other members of their delegations at the tri-country stock assessment workshop were introduced to the survey templates and their intent was explained.

The survey matrix was designed to generate discussion and capture stakeholder responses to contribute to the assessment of progress at the activity level, develop country exit strategies and to design a framework for a future project. The matrix comprised recommended candidate activities in the MTE and information captured at the WPEA-ITM Tri-Country Workshop, held from 29-30 June, 2022 at Brisbane.

The survey asked the countries to rank each of the items using a very simple priority ranking system of high (H), medium (M) or redundant (R) for each of the activities. Countries were instructed that if the activity was considered a high priority, both in the current project, and as an on-going need, then it should be rated 'H'. 'M' denoted a slightly lower priority, and R would indicate that the activity is redundant or, was of low priority to the countries. The countries were also asked to rank the level of difficulty they thought it be, to successfully achieve the activity. Countries were told it was possible for an activity to be high priority, but for some reason it may be very difficult to implement. They were asked to rate the activity based on whether they considered it was 'very difficult' to achieve, 'moderately difficult' to achieve or, achievable. Very difficult to achieve was denoted by the letter 'V', moderately difficult by an 'M'; and achievable by an 'A'.

Overall, the majority of the activities identified as requiring ongoing project support and consideration for a future phase by the MTE, were considered to be either high or moderate priority by all three countries. There were only two instances in which the activity was considered redundant. For the most part the activities were all viewed as achievable, although some activities remain challenging to implement. While the survey did not directly differentiate between what was achievable within the context of the current project, and what would be included or progressed in a further project phase, the relevant information in the country comments section makes the distinct. Those comments are compiled in **Attachment D**.

The following are brief survey summaries of how the WPEA countries generally rated the MTE recommended activities.

Indonesia

All activities with the exception of four remain a high priority for Indonesia. Of the four not ranked high priority, 3 were considered of moderate priority and one redundant²¹. For the most part most activities were considered achievable, or could be achieved with a moderate degree of difficulty. The activities that remain a challenge for Indonesia relate to the annual fluctuations of catch in the handline fishery and also the separation of large fish in that fishery.

The activity considered redundant relates to improving coverage of port landings and operational level of reporting for LL fishery. The progress made to engage with a company in Ambon with approximately 26 LL vessels may be the reason that this activity was now considered unnecessary, However, there is still no port sampling data or logbook data provided for these fleets. The MTE candidate activity calls for strengthening representativeness of port landings, and while Ambon can be considered progress, the suggestion was for the increase in monitoring sites needing to occur at a number of other sites where port sampling has not yet commenced.

Philippines

Similar to Indonesia, the Philippines ranked all but four of the candidate activities designated to them as high priority. Three activities were considered of moderate priority and the need to generate raised aggregated catch and effort data by fishery management areas, was ranked redundant, qualified by a progress report that there were ongoing efforts to comply. For the most part the Philippines considered all the activities achievable, some with a moderate degree of difficulty and none were considered very difficult to implement.

Vietnam

None of the activities were considered redundant and Vietnam, rated them all as high and medium priority. Vietnam singled out as having significant ongoing challenges - the overall the establishment and implementation of an at-sea observer programme, the building and support for national harvest strategy capacity; and the integration of WCPFC related tuna fisheries databases in their national database system.

Developing a Future Phase

Identified activity priorities

Consultation with stakeholders on the candidate recommendations made by the MTE was the starting point with which to identify priority activities for a future phase of the Activity. The process to validate the recommendations is discussed in the previous section and **APPENDIX D**. should also be referred to. In summary, the vast majority of the activities identified in the MTE

²¹ Redundant scores referred to another activity, so it is assumed the redundancy implied duplication or could be covered by another activity description. This may have arisen because the information is taken from two different events discussing the same matter, the MTE and the Brisbane workshop.

recommendations remain important to WPEA countries, for which further assistance to maintain momentum in improvements that have been made over time remain imperative.

As with the WPEA-ITM, continued support to enable further progress for improvements in fisheries data monitoring, developing observer programmes, fisheries data systems and analysis, fisheries management and communication and capacity building would continue to be the focus of a further phase of support. A number of new activities have been identified that would add value to achieving the overarching objectives and these are assimilated into the project framework for a further phase.

New activities

During consultations and drawing from project experience, stakeholders identified a number of new ideas that would add value and efficiency to making further progress towards fishery monitoring and data systems and analysis objectives. The new activities/task suggestions assimilated with the MTE recommendations, provides a full suite of activities/tasks for the purposes designing a new project and estimating costs. The new activities suggested include:

- The formation of a data collection coordinating task force, or the establishment of a Data Collection Coordinator in all three WPEA countries;
- A feasibility study in Vietnam to assist Dfish develop protocols and coverage targets to satisfy WCPFC size data collection requirements;
- Support for data collection including species ID in key ports by implementing train the trainer course in Vietnam and Indonesia;
- Continue to support the development of an observer programme in Vietnam including a pilot project with Vinatuna;
- Harmonise existing national data collection systems and develop the 'Data Warehouse' concept in all three countries which would connect data silos and address the need to provide aggregate data to the WCPFC, in the absence of 100% coverage of operational data. However, it is important to note that in the absence of 100% coverage of operational data (which the Pacific Island countries have, for example), then aggregate data are fundamental for national and regional work;
- Continue to support the annual catch estimate workshop as an invaluable way in which to assist countries coordinate both internally and sub regional (sub-regional annual pre national catch estimated workshop) for efficiencies in estimating tuna catches;
- Sub-regional shared training opportunities focusing on stock assessments and harvest strategy;
- Dedicated technical and scientific support for WPEA countries;
- Various targeted technical assistance supporting studies such as how to better understand and compare the accuracy and coverage of port sampling vs. non port sampling data; stock assessment - determining reference points; or studies looking at Region 5 compared to stock in the rest of the WCPO and whether there mixing is happening or if it is a substock; and

- Communication and outreach to raise awareness of obligations to WCPFC

Cost estimates

In the context of considering a further phase, the End of Project Gap Analysis was tasked with providing ‘costs estimates’ for a period of 3 to 5 years commencing in 2025. The cost estimates would need to take into consideration the level and cost of technical assistance and expertise required to support stakeholder priority activities; and including communications. In contemplating a series of cost estimate options, consideration was given to budget allocations in the approved 2023 WPEA-ITM work plan and budget, experience with similar multi-country project design and project implementation, and allowance for anticipated costs if the project was to commence in 2025.

The exercise has resulted in the presentation of three cost estimate options for a potential project that would:

1. encapsulate all suggested activities, continued and new, for a 5-year period of implementation;
2. only cover a 3-year period of implementation of all activities; and
3. a project design that would include priority activities but only some select new activities over a 3- year implementation period.

Method

To be able to arrive at cost estimates it was necessary to arrange the activities in the project design framework by components, activities, outputs and tasks that would allow for not only estimating costs but to collate the work into areas with similar focus and deliverables for individual, combination of countries, or all WPEA countries. **Table 1.** shows a project design by component, output and broad activity level. The MTE suggested activities and the new activities become specific tasks under each of the Activities and are not shown in **Table 1.** for brevity but are displayed in **Appendix E.**

Table 1

Component ONE	
Output: Increased Port Catch Measurement & Sampling	
Activity	IMPROVE operational level catch and effort (logbook) data collection
Activity	MAINTAIN key port based data collection for fish size and landing data
Activity	IMPROVE port sampling and unloadings data collection from landing sites
Activity	Removing specific data gaps in collection (aggregate data) and coverage of size data
Activity	Enhancing capacity of data collection
Output: Expanded Observer Programmes	
Activity	Provide support for At-Sea Observer Programmes

Component: TWO	
Output: National databases developed, functional & utilised	
Activity	Data management systems
Activity	Develop strategies, and provide support, for the continued integration of WCPFC-related tuna fisheries databases
Activity	Electronic Monitoring /Explore Low cost technical data collection solutions
Output: Data analysis and capacity development	
Activity	Data analysis
Activity	National Sampling Plans, Data Analysis, Catch Estimates & Reporting Implemented
Activity	Catch Estimates
Component: THREE	
Output: National policy, institutional, governance & coordination arrangements implemented	
Output: Support national level harvest strategy	
Component: FOUR	
Output: Increased awareness of national and regional reporting obligations	
Activity	WCPFC Obligations - awareness raising
Output: Technical Assistance	
Activity	Studies for specific scientific analysis
Component: FIVE	
Output: Project Coordination	
Activity	Management and Administration

The Costs

With the guidance and advice of the SPC and the WPEA Project Manager, the grouping and sequence of activities represents a programme of work that allows the calculation of costs estimates for specific tasks and those that are common needs across all three countries and can be delivered sub regionally. To provide flexibility and comparison more than one cost estimate has been calculated. **Tables 2, 3 & 4** show the indicative cost estimates in US dollars for each of the three options by total budget and at output levels. The cost estimates are described as follows:

Cost Estimate – Option 1

The first cost estimate encapsulates the full suite of activities and all the new activities that have been identified through consultation. It is set out over a period of five years. The total budget is estimated to be nearly USD 7 million over five years.

Table 2. Cost Estimate for Option One

OPTION ONE		USD	Y1	Y2	Y3	Y4	Y5
TOTALS		6,860,597	1,512,919	1,759,919	1,450,419	1,088,669	1,048,669
Component ONE							
Output: Increased Port Catch Measurement & Sampling	2,619,000	555,000	855,000	461,500	406,750	340,750	
Output: Expanded Observer Programmes	415,000	111,000	96,000	112,000	50,000	46,000	
Component: TWO							
Output: National databases developed, functional & utilised	230,500	46,500	46,500	76,500	30,500	30,500	
Output: Data analysis and capacity development	1,122,000	232,000	226,000	252,000	206,000	206,000	
Component: THREE							
Output: National policy, institutional, governance & coordination arrangements implemented	276,000	153,000	0	123,000	0	0	
Output: Support national level harvest strategy	41,000	0	41,000	0	0	0	
Component: FOUR							
Output: Increased awareness of national and regional reporting obligations	210,000	50,000	30,000	50,000	30,000	50,000	
Output: Technical Assistance	1,060,000	200,000	300,000	180,000	200,000	180,000	
Component: FIVE							
Output: Project Coordination	88,7097	165,419	165,419	195,419	165,419	195,419	

Cost Estimate – Option 2

The second option will retain all the same activities as Option 1, but for a shorter duration. It sets out a programme of costed work over three years, meaning that these costs would not allow targets that would be achievable over the longer five-year period of work to be met, but it would still provide for significant contribution to the overarching objective to improve tuna data collection and analysis in the WPEA countries.

Table 3. Cost Estimate for Option Two

OPTION TWO

	USD	Y1	Y2	Y3
TOTALS	4,427,228	1,495,909	1,497,909	1,433,409
Component ONE				
Output: Increased Port Catch Measurement & Sampling	1,601,500	555,000	585,000	461,500
Output: Expanded Observer Programmes	319,000	111,000	96,000	112,000
Component: TWO				
Output: National databases developed, functional & utilised	169,500	46,500	46,500	76,500
Output: Data analysis and capacity development	735,000	232,000	251,000	252,000
Component: THREE				
Output: National policy, institutional, governance & coordination arrangements implemented	276,000	153,000	0	123,000
Output: Support national level harvest strategy	41,000	0	41,000	0
Component: FOUR				
Output: Increased awareness of national and regional reporting obligations	130,000	50,000	30,000	50,000
Output: Technical Assistance	680,000	200,000	300,000	180,000
Component: FIVE				
Output: Project Coordination	475,228	148,409	148,409	178,409

Cost Estimate – Option 3

Lastly, the third option sets out costs based on the removal of significant new activity suggestions include the elevated levels of scientific and technical assistance that the first two options would provide. However, it does keep the costs that will allow countries to form data collection teams or a national data collection coordinator to address the gaps in tuna data collection to meet WCPFC requirements. Less than ideal, this would be a programme of work delivered over a three-year period.

Table 4. Cost Estimate for Option Three

OPTION THREE

	USD	Y1	Y2	Y3
TOTALS	3,544,618	1,220,039	1,147,039	1,177,539
Component ONE				
Output: Increased Port Catch Measurement & Sampling	1,571,500	555,000	555,000	461,500
Output: Expanded Observer Programmes	319,000	111,000	96,000	112,000
Component: TWO				
Output: National databases developed, functional & utilised	169,500	46,500	46,500	76,500
Output: Data analysis and capacity development	521,000	169,000	163,000	189,000
Component: THREE				
Output: National policy, institutional, governance & coordination arrangements implemented	276,000	153,000	0	123,000
Output: Support national level harvest strategy	41,000	0	41,000	0
Component: FOUR				
Output: Increased awareness of national and regional reporting obligations	130,000	50,000	30,000	50,000
Output: Technical Assistance	80,000	0	80,000	0
Component: FIVE				
Output: Project Coordination	436,618	135,539	135,539	165,539

Cost estimate summary

The costs estimates are best guess based on consultations and advice, regional knowledge, extensive large project design and management experience; and the budget information for the current WPEA-ITM. The figures are indicative and should be revisited during a project design phase more specifically against targets and timelines. There is some expectation that there will be adjustments. This may result in the distribution of allocations and timing for various activities to change, and the annual budget allocations to shift across the duration of the project. For the most part the estimates are considered to be realistic for the delivery of a work programme commencing in 2025.

In summary the total budgets for each option are:

	Option 1	Option 2	Option 3
Duration (years)	5	3	3
Total Budgets	6,860,597	4,427,228	3,544,618

The End of the Project Gap Analysis makes specific reference to inclusion of technical assistance and communication and outreach, and in this regard Option 3 fails to take that into account, unlike the first two options.

RECOMMENDATIONS

The End of Project Gap Analysis determined that the WPEA-ITM **progress remains on track** and that the continued commitment to improve tuna data collection and analysis by the participating countries remains constant even with varying progress between countries.

Information relating to the development of **transition/exit strategies** has been collected during the gaps analysis but this falls short of the details required to articulate strategies themselves. Participating countries were able to identify well the gaps and on-going needs but in the case of Indonesia and Vietnam there remains a significant level of uncertainty with regards to institutional responsibilities and budget allocations. It is recommended that there is still considerable value in **developing exit strategies** which may well be a condition of future funding, in any case. It is further recommended that some assistance should be provided to national coordinators to complete strategies. A standardized format for the strategies may assist National Coordinators to coordinate the development of transition/exit strategies. Using either current project activities or anticipated activities, participating countries should be able determine realistic time frames towards a reduced dependency on donor funding to support data collection programmes to help the participating countries sustainably achieve the short and medium term WPEA-ITM outcomes.

It is recommended that every effort should be made to **identify and secure donor commitment** in the first instance to support a further 5-year programme of assistance. This will provide WPEA countries with continued support to improve the collection of tuna related data and information to meet their data obligations, that in turn will continue to contribute to the wider assessments of tunas across the WCPFC Convention area. A further two estimates for reduced amounts are provided for comparison recognising that one shortens the project timeframe from 5 years to 3 years but retains the full suite of recommended activities identified, while the second also for 3 years does not include the all the recommended activities.

Technical assistance for WPEA-ITM and previous projects have relied on the ability of WCPFC regional service providers such as the SPC to resource assistance to the project's needs on an activity-by-activity basis. It is recommended that a further phase of assistance would benefit greatly from the availability of a level of technical assistance that is dedicated and coordinated to help countries to continue to close their data gaps and meet their WCPFC obligations.

The focus on **communication and outreach** will also be important for the sustainability, including self-funding, of WPEA countries data collection programmes by raising the profile of WCPFC obligations and reaching standardized protocols for collecting data to obtain adequate data collection coverage and data quality in the participating countries. It is recommended that assistance targeting communication and outreach remain a feature of any further phase. Gains from closer sub-regional coordination building on common challenges across the participating countries is also expected to be a way to strengthen participation at WCPFC and exchanges between the countries in terms of shared training and experiences.

The proposed funding options for further assistance are not insignificant amounts and it is anticipated that the scope of assistance may be subject to negotiation if donor commitment can be found which should take into account the impacts of agreed outcomes. Funding negotiations for substantial programme funding takes time, For this reason, the process to secure donor commitment to design a further phase of assistance should commence as soon as possible given end of the WPEA-ITM in late 2024. This will allow an uninterrupted transition and the maintenance of the progress and momentum of improvement gains to date.

APPENDICES

APPENDIX A

Appendix A List of Consultations

CONSULTATIONS	
INDONESIA	
Trian Yunanda	Secretary of Directorate General Capture Fisheries Ministry of Maritime Affairs and Fisheries (DGCF -MMAF)
Dr. Fayakun Satria	Director Research Centre for fishery (RCF-BRIN), Cibinong Science Centre (CSC) Bogor, WPEA National Coordinator
Dr. Lilis Sadiyah	Senior Scientist Research Centre for fishery (RCF-BRIN),
Dr Ridwan Mulyana	Director, Directorate of Fish Resource Management, DGCF -MMAF
Tri Aris Wibowo	Director, Fishing Ports, DGCF -MMAF
Putuh Suadela	Coordinator for Indonesia EEZ and high seas Directorate of PSDI, DGCF -MMAF Sub-Coordinator for Utilization of Inland Marine Fish Resources, Territorial and Archipelagic Waters, Directorate of PSDI, DGCF -MMAF
Aris Budiarto	Sub-Coordinator for National Capture Fisheries , DGCF -MMAF
Muhammas Anas	Sub-Coordinator for Indonesia EEZ, DGCF -MMAF
Mumpuni Cynthia Pratiwi	WPEA Data base MMAF
I Gede Bayu Sedana	Senior Scientist Research Centre for fishery (RCF-BRIN),
Dr Ir Wudianto	
Representative YKAN	
Representative MDPI	
PHILIPPINES	
Suzette Barcoma	Senior Science Research Specialist, NFRDI, WPEA National Coordinator
Isidro Tananganin	Aquaculturist II, BFAR
Lilian Garcia	Executive Director, CESO V/NFRDI
Rafael Ramiscal	Chief, CFTD, BFAR
Angelica Villafuerte	Senior Regulatory Officer, BFAR
Severino Escobar	Supervising Aquaculturist, Regulatory & Licensing Division, BFAR
Alma Dickson	Consultant, BFAR
Rosanna Bernadette Contreras	Executive Director, SFFAI
Lunesa A. Mojica	Statistical Specialist II, PSA
Jelany A. Manoday	Statistical Specialist II, PSA
Rosario Segundina P. Gaerlan	Regional Director, BFAR-Region 1
Dr. Maribeth H. Ramos	Training Division Chief/NSAP Project Leader, Region IV-A
Romina V. Yutuc	Chief of training Division/NSAP Project Leader, Region III
Emmanuel Asis	Regional Director, BFAR-MIMAR
Peter Cadapan	Supervising Aquaculturist, BFAR
Marlo Demo-os	FOP National Coordinator

VIETNAM

Vũ Duyên Hải	Deputy director of Capture Fisheries Department (DFISH), WPEA National Coordinator
Nguyen Quy Duong	DFISH
Trần Văn Hào	Nha Trang University
Feedback from VTFACE-14	

OTHERS

Lars Olsen	WPEA-ITM Project Manager
Peter Williams	SPC Principal Fisheries Scientist (Data Management)
Sifa Fukofuka	SPC Observer Training Coordinator
Elaine Garvilles	WCPFC
Karl Staisch	WCPFC Regional Observer Coordinator

Appendix B Information Paper to WPEA Country Consultations, Sydney Australia, May 2023

WPEA-ITM End of Project Gap Analysis Discussions

Sydney, Australia, Friday 31 March 2023

Time has been allowed on Friday March 30th for WPEA-ITM End of Project Gap Analysis discussions at the end of the SPC WPEA Stock Assessment Workshop being held at the Metro Hotel Marlow in Sydney. This will involve participants attending from Indonesia, the Philippines and Vietnam, the WPEA-ITM Project Manager, SPC staff and the consultant engaged to conduct the WPEA-ITM End of Project Gap Analysis. The principal country participants will be the WPEA-ITM National Coordinators.

The information provided in this document is to facilitate the discussions in Sydney and has been sourced from the mid-term review (MTE) of the WPEA-ITM project, annual reports and other relevant project documents.

WPEA-ITM End of Project Gap Analysis Objective

The key objective of the End of Project Gap and Transition/Exit Analysis is to assist with the development of transition/exit strategies by each participating country and to inform the design and implementation of a possible future phase of the project and.

It will consider the progress of the WPEA-ITM activities, recommendations from the Mid-Term Evaluation and consultations with relevant stakeholders to recommend, cost and assess activities that should continue after the WPEA-ITM project concludes. These recommendations will be assessed by the WCPFC Scientific Committee.

Summary - commencing the Gap Analysis

Discussions are best focused in two areas, firstly an analysis of project progress and what has worked well, and what plans there are to absorb sustainably the cost of those activities in part, or in their entirety into national fisheries management budgets.

Secondly, discussions should focus on the ongoing needs, specifically the data collection needs for each of the participating countries with which to build and design a next phase of the data collection work.

Assessing progress and absorbing work into national budgets

The MTE is the principal report card for the project and the annual reports are also particularly useful references. As an example, the MTE in particular does make reference to 50 % of the cost of the enumerators supported by the project becoming the responsibility of the participating countries at project end. Data collection and management capacity gains over the course of this project, and previous projects since the mid 2000s, are quantifiable in reports and by data submitted to the Commission. This should be recognized as the countries commitment to achieving the overall objective to address the data gaps in relation to the estimated 30% of the WCPFC tuna stocks.

Developing a future phase of the Project

Discussions for the purpose of addressing the objectives of the WPEA-ITM End of Project Gap Analysis commenced at the WPEA-ITM Tri-Country Workshop held 29-30 June 2022 at the Grand Chancellor Hotel in Brisbane, Australia. So, it would be useful to first revisit those agreed fisheries data needs and the notes from that workshop are appended at **Attachment A**.

With some slight variation between countries, those needs¹ can be summarised as:

- **An increase in coverage of data collection;**
- **Ensuring key monitoring/data collection is sustained (for example, sustainable port sampling for size data in Indonesia)**
- **Generation of raised aggregated catch/effort data for regional and national science and fisheries management;**
- **Integration of national fisheries databases;**
- **Facilitation of data flow; and**
- **Development of technical guidelines.**

A more detailed collection of project information is the list of candidate activities for support under the WPEA-ITM, or a future phase of the WPEA drawn from the MTE recommendations. These are appended at **ATTACHMENT B**.

It is also anticipated that the outcomes of the WPEA Stock Assessment Workshop in Sydney prior to the gap analysis discussion could potentially identify additional areas of need or information relevant for the gap analysis.

Discussions

Time available will prevent extensive detailed discussion in Sydney, so a series of broad questions listed below are proposed to commence and generate discussions.

After some initial general discussion, a closer look at the outcomes of the Brisbane workshop and list of candidate activities taken from the recommendations of the MTE will be made.

To conclude the discussion, more general questions can be raised and then some time should be devoted a planning and “what to do next”.

Discussion questions –

- What parts of the project do you consider very successful and vice versa?
 - Fishery monitoring
 - Data quality control
 - Fishery analysis
 - Fishery management support
 - At-sea observer programme

Data systems

Communications and outreach

General capacity building

- Can you identify areas under the current project which are unlikely to be support by countries at project end?
- Can you identify areas under the current project which have the most likely chance of being absorbed by core national budgets?
- Have any of the recommendations from the MTE been implemented or given consideration internally?
- How relevant are the financial impacts of the pandemic and are there signs of diverted budgets being returned to ministries?
- How familiar are your more senior management officials with the obligations to WCPFC and the progress being made by the WPEA projects? What can the WPEA project do to improve this?

Indicative future activities for consideration

The following matrix is a working document to led detailed discussions, and with which to capture country comments and priorities. This information will contribute to the development of country exit strategies from the current project and the design of the framework for a future project.

The information in the matrix has been sourced from the Western Pacific East Asia Improved Tuna Monitoring Activity Mid-term Evaluation, and integrated the notes taken at the WPEA-ITM Tri-Country Workshop, 29-30 June 2022, Grand Chancellor Hotel, Brisbane indicated by green coloured text and the bracketed (BW) suffix.

Space is provided for comments during discussions, which participants might like to make notes in advance. A third column provides for a very simple priority ranking system of high (H), medium (M) or redundant (R). If the activity is considered a high priority both in the current project and as an on-going need, 'H' should be entered. 'M' categorises a slightly lower priority, and R denotes that the activity is redundant or, of low priority.

The last column provides space to rank the level of difficulty to achieve the activity. An activity may well be a high priority but for some reason it may be very difficult to implement. The activity can be considered 'very difficult' to achieve, 'moderately difficult' to achieve or, achievable. Very difficult to achieve is denoted by the letter 'V', moderately difficult by an 'M'; and achievable by an 'A'.

WPEA-ITM Discussions, 31 March 2023, Sydney, Australia

Candidate activities²² for support under the WPEA-ITM, the development of exit strategies and a future phase of the WPEA by country.

Activities	Comments (Sydney or prior)	Priority ²³ (H, M or R)	Degree of Difficulty to Achieve ²⁴ (V, M or A)
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.			
Increase data collection coverage from landings and logbooks for larger (LL,PS,PL,HL) vessels (BW)			
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,			

²² Sourced from the Western Pacific East Asia Improved Tuna Monitoring Activity Mid-term Evaluation and notes taken at the WPEA-ITM Tri-Country Workshop, 29-30 June 2022, Grand Chancellor Hotel, Brisbane indicated by green coloured text and the bracketed (BW)

²³ Priority ranking system of high (H), medium (M) or redundant (R).

²⁴ . Very difficult is denoted by the letter 'V', moderately difficult by an 'M'; and achievable by an 'A'.

Activities	Comments (Sydney or prior)	Priority ²³ (H, M or R)	Degree of Difficulty to Achieve ²⁴ (V, M or A)
Develop sustainable port sampling size data collection with separate estimates from large fish HL fishery (BW)			
Continue efforts to increase coverage for weight frequency data,			
Generate raised aggregated catch/effort data by FMA (BW)			
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			
Develop an integrated tuna data warehouse approach including standards for validating logbook data (BW)			
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			

Activities	Comments (Sydney or prior)	Priority ²³ (H, M or R)	Degree of Difficulty to Achieve ²⁴ (V, M or A)
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 utilize 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 gap 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			

Activities	Comments (Sydney or prior)	Priority ²³ (H, M or R)	Degree of Difficulty to Achieve ²⁴ (V, M or A)
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.			

Activities	Comments (Sydney or prior)	Priority ²⁵ (H, M or R)	Degree of Difficulty to Achieve ²⁶ (V, M or A)
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 standardization 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.			
Increase data collection coverage from PS,RN,HL logbooks in EEZ (BW)			
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.			
Generate raised aggregated catch/effort data by FMA (BW)			
Continue to support efforts to fully characterise Philippines “other commercial” fisheries.			

²⁵ Priority ranking system of high (H), medium (M) or redundant (R).

²⁶ . Very difficult is denoted by the letter ‘V’, moderately difficult by an ‘M’; and achievable by an ‘A’.

Activities	Comments (Sydney or prior)	Priority ²⁵ (H, M or R)	Degree of Difficulty to Achieve ²⁶ (V, M or A)
Increase coverage of VMS on small scale fisheries (BW)			
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			
Promote the sustainability of NSAP (BW)			
Facilitate data flow between IMEMs and Tufman 2 databases and investigate the establishment of an integrated tuna data warehouse approach (BW)			
General capacity building			
Continue to support project-related attachments at SPC for up to 4 weeks (rather than 5 days), sponsored by the Activity.			

Activities	Comments (Sydney or prior)	Priority ²⁷ (H, M or R)	Degree of Difficulty to Achieve ²⁸ (V, M or A)
Vietnam			
Fishery monitoring and analysis			
Continue to increase data collection coverage from logbooks, ports and landings (BW)			
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.			

²⁷ Priority ranking system of high (H), medium (M) or redundant (R).

²⁸ . Very difficult is denoted by the letter ‘V’, moderately difficult by an ‘M’; and achievable by an ‘A’.

Activities	Comments (Sydney or prior)	Priority ²⁷ (H, M or R)	Degree of Difficulty to Achieve ²⁸ (V, M or A)
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.			
Generate raised aggregated catch/effort data by FMA (BW)			
Develop technical guidelines for port data collection protocols for all provinces (BW)			
Enhance capacity of data collection for staffs working at local ports.			
Fishery management support			
Tailor stock assessment capacity building to utilize 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 finalization 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.			

Activities	Comments (Sydney or prior)	Priority ²⁷ (H, M or R)	Degree of Difficulty to Achieve ²⁸ (V, M or A)
Integrate national fisheries databases so all relevant users have access (BW)			
Consider supporting a formal training gap and needs analysis (fisheries data and fisheries data management)			
Facilitate data flow between national and regional databases including the development of an integrated tuna data warehouse (BW)			
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.			

Next steps

Wrap up questions

- Having reviewed the identified list of activities for a future project do you consider them inclusive or is there information that is missing?
- Are there other areas related to data collection not previously covered by WPEA projects that should be introduced in the next project?
- Should cross-cutting areas include climate change (potential to target climate change funding sources) i.e., expand the project objective?
- others

What are the next steps in end of project gap analysis process? Preliminary strategy for the conduct of the end of project gap analysis provides for in-country visits to allow for wider consultation and information collection.

(Attachment A) **WPEA-ITM Tri-Country Workshop, 29-30 June 2022**

Grand Chancellor Hotel, Brisbane

Fisheries Data Needs/Notes (from whiteboard)

Vietnam

- Continue to increase data collection coverage from logbooks, ports and landings
- Generate raised aggregated catch/effort data by FMA
- Integrate national fisheries databases so all relevant users have access
- Facilitate data flow between national and regional databases including the development of an integrated tuna data warehouse
- Develop technical guidelines for port data collection protocols for all provinces

Indonesia

- Increase data collection coverage from landings and logbooks for larger (LL,PS,PL,HL) vessels
- Generate raised aggregated catch/effort data by FMA
- Develop sustainable port sampling size data collection with separate estimates from large fish HL fishery
- Develop an integrated tuna data warehouse approach including standards for validating logbook data

Philippines

- Increase data collection coverage from PS,RN,HL logbooks in EEZ
- Generate raised aggregated catch/effort data by FMA
- Facilitate data flow between IMEMs and Tufman 2 databases and investigate the establishment of an integrated tuna data warehouse approach
- Promote the sustainability of NSAP
- Increase coverage of VMS on small scale fisheries

Summary for SC18

Vietnam	Indonesia	Philippines
Continue to increase data collection coverage from logbooks, ports and landings	Increase data collection coverage from landings and logbooks for larger (LL,PS,PL,HL) vessels	Increase data collection coverage from PS,RN,HL logbooks in EEZ
Generate raised aggregated catch/effort data by FMA	Generate raised aggregated catch/effort data by FMA	Generate raised aggregated catch/effort data by FMA
Integrate national fisheries databases so all relevant users have access	Develop sustainable port sampling size data collection with separate estimates from large fish HL fishery	Facilitate data flow between IMEMs and Tufman 2 databases and investigate the establishment of an integrated tuna data warehouse approach
Facilitate data flow between national and regional databases including the development of an integrated tuna data warehouse	Develop an integrated tuna data warehouse approach including standards for validating logbook data	Promote the sustainability of NSAP
Develop technical guidelines for port data collection protocols for all provinces		Increase coverage of VMS on small scale fisheries

(Attachment B) Indicative future activities for consideration from the Mid-Term Evaluation

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 utilize 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 gap 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 standardization 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 utilize 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 finalization 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 gap 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.

Appendix C Results Framework for Progress of Activities

This table is a modified version of the Activity Results Framework adjusted based on recommendations from the MTE (September 2019 ADD Variation). It details progress against some outcomes and outputs based on information gathered for the End of Project Gap Analysis

	Indicator(s)	Baseline Information and Targets	End of Project Gap Analysis Progress
Medium term outcomes			
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>Target: 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[2] are systematically addressed.</p> <p>Baseline: The three participating countries met submission deadlines in both 2019 and 2020. The data gaps reported to the WCPFC Scientific Committee in 2021² serve as the baseline.</p>	<p>Vietnam has submitted Part 1 Report to WCPFC (no data on sharks), with the Philippines and Indonesia submitting on 17 July, 1 month prior to the Aug SC.</p> <p>The "large-fish" handline fishery inside the archipelagic waters of Indonesia presents challenges for Indonesia largely stemming from coverage, which is being addressed. This also presents issues with reporting requirements in their eastern boundaries and IOTC.</p> <p>Reporting requirements for key WCPFC shark species CMM 2022-04 remains a data gap for VN who report a general 'others' category for Part 1 Reports, and the PH who do provide a narrative derived from their update National Action Plan for Sharks. Workshop on shark data planned in 2023 for ID -</p>

<p>Uncertainties in WCPO catch and stock estimates reduced.</p>	<p>Regional tuna stock assessment results presented to annual Scientific Committee and independent peer reviews of those.</p>	<p>Target: Assessment results accepted by the annual Scientific Committee of WCPFC, and independent peer reviews are favourable.</p> <p>Baseline: 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>The uncertainty in the annual catch estimates from Indonesia, especially from minor gears and for yellowfin tuna remains, and continues to drive the focus of the annual catch estimate workshop in Indonesia and other issue specific workshops. Some eNGOs working in the data collection for the artisanal tuna fisheries are indicating withdrawal in 2024 exacerbating efforts for adequate data collection coverage.</p>
<p>Improved national catch estimates and stock assessments inform national fisheries management and harvest strategies</p> <p>Short term outcomes</p>	<p>Convergence of national data collection and stock estimate methodologies with the WCPFC management and harvest strategy recommendations and standards.</p>	<p>Target: National catch estimates and regional stock assessments inform national fisheries management and harvest strategies.</p> <p>Baseline: 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>The tri-country stock assessment workshop was successfully held at Sydney from 27 - 30 March 2023.</p>

<p>For Vietnam, Philippines & 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>Baseline [[check country profiles]]:</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>Target: 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>The Activity has contributed to an increase in port sampling in Indonesia and Vietnam and data acquisition in all 3 countries. The activity has supported the cost of additional enumerators in VN and ID to increase the data coverage. Restructuring in Indonesia resulted in the delays in putting in place the transfer of funding resulting in the lack of funding for enumerators at Bitung. ID were able to source and make payments to enumerators for some months after WPEA funds stopped but this was not sustainable. 4 enumerators have been re-engaged since funding resumed.</p> <p>The PN Observer programme remains self sustaining and does not draw from the Activity. As a catalytic impact sub regional cooperation in the hosting of ID and VN at their regular annual observer training workshop in 2023 with project support. ID unable to undertake observer training 2022 due to lack of funds (restructuring impact). Also, PN cost recovery tour by ID and VN to observe how the PN manage their extensive observer programme.</p>
--	--	---	---

	<p>Status of NTMPs, associated harvest strategies and related legislation and regulations.</p>	<p>Baseline:</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>Target: <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>The disruption to funding to ID due to restructuring has had wider impact on the delivery of activities slated 2022 with flow on effects into 2023. National Tuna Management Plan is expected to be addressed in 2023.</p> <p>The National Tuna Management Plan in Vietnam was used to develop a Provincial Tuna Management Plan to help enable better sampling and data collection. The 2023 annual ACE workshop made a number of recommendations relating to the need to resolve ongoing issues with species ID, port sampling and data report and the need to develop a strategy for long term sustainable port sampling</p>
--	--	---	--

<p>Strengthened national capacities in fishery monitoring and catch estimation</p>	<p>National vessel logbook, observer and port monitoring programmes meet WCPFC standards.</p>	<p>Baseline:</p> <p><i>Operational level data:</i> PHI (2020): 100% IND (2020): <10% VN (2020): <10%</p> <p><i>Port landings:</i> 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.</p> <p><i>Observer programmes:</i> IND (2020): FMAs 714-717/1,201 sea days PHI (2020): 584 observers/90 de-briefers/Trips PS (66) RN (22) VN: Draft Planning document (Workshop report, March 2019)</p> <p>Target:</p> <p><i>Operational level data:</i></p>	<p>SPC still highlights uncertainty in the annual catch estimates from Indonesia, especially in relation to yellowfin tuna and catches from the small-scale gears, however specific workshops are being held (and planned) to analyse these issues and develop actions to address them, noting Indonesia's inability to access WPEA project support in 2022.</p> <p>Other than measuring success for this outcome by funding towards monitoring and the general quality of monitoring and catch estimation outputs, there may be value in conducting follow up training surveys to gain additional insight into the impacts of training (2024)</p>
---	---	---	--

		<p>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 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).</p>	
	<p>Number and percent of people showing improvements in knowledge, attitude, or practice after receiving training/support.</p>	<p>Baseline: 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>Target: 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 [3].</p> <p>At the end of training programs, enumerators, port monitoring personnel, observer trainers, observer briefers and debriefers, are assessed as qualified.</p>	<p>The scope of the End of Project Gap Analysis does provide for comment on this indicator other than to note the comments for the 2022 APR that "No follow up surveys for training occurred in 2022 and none are planned for 2023, however this would be a good activity to target for 2024 across the history of the WPEA-ITM project."</p>

		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.	
Outputs			
1. National policy, institutional, governance and coordination arrangements implemented.	1.1. Activity Results Framework and Implementation Schedule (timeline) confirmed/updated with country stakeholders, complementary to WPEA project.	1.1. Baseline = none. Target: Y1 first Steering Committee meeting approves Activity Results Framework, budgets and workplans	The 2023 virtual steering committee meeting for the WPEA-ITM endorsed the 2023 work plan and budget based on the no cost extension. The work plan for 2023 is thought to be ambitious in which priorities and budget may roll over to 2024.
	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.	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 2022.	MOU with ID resolved with additional administrative costs with the restructure. Preliminary exit strategy discussions in June 2022 contributed to the 2023 exit strategy work in the gap analysis
	1.3 WCPFC-SPC Service provider MOU updated to incorporate this new Activity	1.3 Baseline = existing MOU Target= MOU amended in Y1, Q1 and periodically reviewed to service the WPEA-ITM through to project completion.	WCPFC - SPC MOU completed (2023 invoices)
	1.4 Reviews of supportive policy/legal frameworks in Indonesia, Philippines, and Vietnam (Number)	1.4 Country specific policy/legal framework reviews conducted in Vietnam, Philippines, and Indonesia. Baseline: In relation to NTMPs, the Philippines NTMP services the period 2019 to 2023. Indonesia is developing interim harvest strategies for tropical tuna in archipelagic waters under its 2015 NTMP (2015-2019). Vietnam's revised Fisheries Law entered into force in 2019. It is supplemented by decrees and administrative orders that are periodically issued.	Stakeholder consultations for the revised fisheries regulations in VN focusing on the operationalisation of the QMS is scheduled for 2023 ID TMP revision and consultation with stakeholders to raise awareness of the alignment of the TMP and the WCPFC obligations budgeted and schedule for 2023.

		<p>Target: 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 [4].</p>	
	<p>1.5 Technical meetings conducted demonstrating good participation and exchange of knowledge between countries (number of meetings, number and type of participants, M/F).</p>	<p>1.5 Baseline (qualitative) and target: Technical exchanges and collaborations: Two technical meetings (in Years 4 and 5)</p>	<p>No activity defined in the 2023 work plan and budget.</p>
	<p>1.6 Outreach and Communications</p>	<p>The MTE report suggested that some awareness raising and public relations support could be beneficial for the Activity in general. Benefits could include increasing awareness of project activities and the importance of fishery monitoring to support effective fisheries management, and increasing understanding of fisheries monitoring and reporting obligations among vessels operators. Educational workshops could be run by NGOs for example. This was supported in principle by the Steering Committee and a nominal budget of \$10,000 has been assigned, pending more detailed activity proposals.</p>	<p>No activity defined in the 2023 work plan and budget.</p>

	1.7 Stock Assessment and Harvest Strategy capacity building	The MTE report suggested that the Activity support capacity building in stock assessments and harvest strategies in the participating countries. This would enable countries to effectively participate in the WCPFC Stock Assessment and Harvest Strategy processes and to inform National Management decisions. This was supported in principle by the Steering Committee and SPC advised that they could assist with the harvest strategy capacity building as part of their ongoing harvest strategy outreach work in the region.	The WPEA Stock Assessment and Harvest Strategies Workshop was held at Sydney from 27 - 30 June 2023. The workshop was stock assessment focused and also CPUE indices, project concept - Connectivity of tunas between WPEA waters and the broader western Pacific, data improvements and data uncertainty, harvest strategies and a final day set aside for the WPEA end of Project Gap Analysis. The gap analysis workshop day was attended by countries, SPC technical staff, the WPEA-ITM project manager and the consultant commenced the work to collect information and data for the gap analysis and exit strategy.
2 Increased port catch measurement and sampling	2.1. Number and location of landing sites consistently providing port catch measurement and sampling data	<p>2.1. Baseline: Number of landing sites and sampling data provided to WCPFC</p> <p><i>Port landings:</i></p> <p>IND (2020): 6 FMAs (713-718)/14 sites/83,804 length-weight measurements.</p> <p>VN (2020): 12 Provinces/26 landing sites/sampling data =0.</p> <p>PHI (2020): 14 regions/41,566 landings/362,923 length measurements</p>	<p>The re-employment of 4 of the 12 Bitung enumerators in ID was possible with the completion of the implementing arrangement in 2023 (WEPA funding support ended in May and BRIN coverage of costs for a further 2 months left enumerator costs unsupported and work ceased)</p> <p>The restructure impacts continue to affect the operational budgets to support data collection in ID in the immediate future and the reducing numbers of enumerators (12 at May 2022 from 32 in earlier projects). Some ENGOs working on handline data collection are signalling the withdrawal of funding for data collection which their donors now argue is a government responsibility.</p> <p>Supplementary Enumerators in VN continued to be supported by WPEA-ITM due to a decrease in government budgets</p> <p>PH - transfer of funding from BFAR and NFRDI to support for PSA enumerators (non fisheries) collecting tuna data</p>

	<p>2.2 Change in number of enumerators(E) and ports sampled(P)</p>	<p>Target: 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.</p> <p>2.2 Baseline: <i>Port landings:</i> IND (2020): 6 FMAs (713-718)/14 sites/28 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>Targets: All principal landing sites for WCPO tuna in Vietnam (26?) and Indonesia (14?) sustain at least two 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>2.3 Trainings, supervisory and technical support arranged by WCPFC for each participating country.</p>	<p>2.3: Baseline: 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>Target: In-person or on-line training and technical support provided to national 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>No specific activities for this output occurred to date in 2023.</p>

	2.4 Tuna monitoring workshops in Indonesia, Vietnam, and Philippines	<p>Baseline: 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>Target: 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 Project Manager visits to each country should coincide with such events.</p>	<p>VN - 12th VTFACE Workshop (3-4 April 2023). PH - 16th PTUNASTAT Workshop (25 - 26 May 2023) ID - 13th ITFACE Workshop (30 May - 1 June 2023)</p>
	2.6 Training workshops for provincial staff in Vietnam and Indonesia covering improved sampling of tuna catch and analysis and interpretation of data.	<p>Baseline: Vietnam: One workshop in 2019 and two in 2020 (TUFMAN2 (x2) and one data collection training workshop). Indonesia: Nil</p> <p>Target: At least one training workshop for provincial staff in Indonesia and Vietnam in each year remaining for the Project (2022 and 2023 if Activity extended)</p>	<p>Training workshop on the data analysis for the tuna fisheries management in Vietnam delivered by SPC and using VN tuna data collected since 2012</p> <p>VN - Port Sampling data collection review workshop?</p>
<p>3 Expanded Observer Programme – Indonesia and Vietnam</p>	3.1. Increases in numbers of observers (N), ports (P) they are stationed at and observer trips days (TD) for Vietnam and Indonesia.	<p>3.1. Baseline:</p> <p><i>IND (2020): Undocumented number of observers/FMAs 714-717/1,201 sea days</i></p> <p><i>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></p>	<p>Combined PH, ID and VN Observer, briefer and debriefer training in the Philippines 10-15 days combine with on board of training vessel. (dates?)</p>

		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. [5]	
	3.2 Training for observer trainers and/or observers in each country. (total participants, M/F)	3.2 Baseline = 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. Target: One training event for at least 15 participants (observers and/or observer trainers) in Vietnam and Indonesia each year.	
	3.3 Observer briefing and debriefing workshops (total participants, M/F)	3.3 Baseline: Vietnam =0 Indonesia=0 Target: one training for 15 participants (both de-briefer and briefers) in Vietnam and Indonesia each year.	
	3.4 Observer programme cost recovery study and associated issues - Indonesia and Vietnam.	3.4 Observer cost recovery study completed by Y5 for Indonesia and Vietnam with recommendations and options provided. [Dependent on COVID situation – difficult to achieve remotely]	
4 National sampling plans, data analysis, catch estimates and reporting implemented.	4.1 Number of participants from each country attending annual regional workshops on tuna data review and stock assessment (total, M/F).	4.1 Baseline: The February 2019 APR reported that one participant from each country attended the annual regional data review workshop. At least two participants from each country participated in the regional SPC TDW in 2019 and the one held online in 2020. Target: 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.	No-one from WPEA countries participated in TDW17, but have participated in previous TDWs

	<p>4.2 Number of participants at in-country national tuna data and catch estimate workshops (total, M/F).</p>	<p>4.2 Baseline: 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>Target: 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>VN - 12th VTFACE Workshop (3-4 April 202). 46 participants PH - 16th PTUNASTAT Workshop (25 - 26 May 2023) 53 Participants ID - 13th ITFACE Workshop (30 - 31 May 2023) - 34 participants</p>
	<p>4.3 SPC participating in annual country catch meetings in each country.</p>	<p>4.3 Baseline: SPC staff remotely participated in all TDW and ACE workshops undertaken in 2020.</p> <p>Target: SPC staff attend, in person or virtually, national tuna data review and catch meetings each year for the duration of the project.</p>	<p>SPC attended all 3 countries ACE workshops and pre-planning workshops prior.</p>
	<p>4.4 WCPFC financial and technical support for participation at meetings</p>	<p>4.4 Baseline: 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>Commission meetings commence with the Science Committee meeting scheduled for August 2023, Technical and Compliance meeting in September and the Annual meeting of the Commission in December. Currently not budgeted in 2023.</p>

		<p>Target: 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 will support 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>4.7 Number of staff from the 3 countries completed training attachments with SPC. (total, M/F).</p>	<p>4.7 Baseline: 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>Target: To be discussed with SPC and dependent of SPC capacity. [3] people from each country annually once workshops resume.</p>	<p>No attachments in 2023.</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 Baseline: 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>Target: 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>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 Baseline: 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>Target: At least one data management training workshop annually on a common platform for national and provincial staff in each participating country.</p>	<p>A TUFMAN 2 training workshop was held in Vietnam in June 2022 with more than 60 participants. Virtual training sessions were provided to Vietnam in 2020, 2021 and in 2023.</p> <p>Training for the new NSAP databases system and NSAP eDGES mobile app was provided in January 2023.</p> <p>Comprehensive ongoing support to users of the TUFMAN 2 system in PN and VN, and the NSAP system on PN is provided through helpdesks such as SLACK.</p>
---	--	---	--

	<p>5.2 additional custom development of database systems to satisfy WPEA countries requirements:</p>	<p>5.1. Baseline: 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>SPC continues to maintain TUFMAN2 as the database for WCPFC data standards and requirements. Without funding support any requests to customised T2 or work on aligning T2 with national fisheries databases beyond the life of the WPEA-ITM is unlikely to be supported.</p>
--	--	---	---

		<p>Target: (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 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.</p>	
--	--	---	--

Appendix D WPEA Country Responses to MTE Candidate Activities

HIGH PRIORITY		MODERATE PRIORITY		REDUNDANT			
Indonesia activities		Country comments		Philippines activities		Country comments	
Fishery monitoring and analysis							
<p>Improve operational level catch and effort data reporting by gear type including raising awareness among vessel operators regarding logsheet data fields and their completion.</p>		<p>Logbook data (vessel >30 GT) in general available; logbook data vessel < 30 GT still need to improve in term of quality and coverage;</p> <p>effort data need to improve and observer data need to improve in particular for LL and PS; E-logbook program has been undertaken since 2018</p> <p>In order to improve the quality of logbook data. It requires to supervise the program and review the logbook data at regular basis by scientific standard.</p>		<p>Support detailed analysis of size, catch and effort data maintained by NSAP (for example, coverage by month and size class distributions, potential of standardization of effort for each gear) to support national stock assessments and harvest strategy work.</p> <p>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).</p> <p>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.</p>		<p>Capacity building/Mentoring with SPC</p> <p>Capacity building (SAW, TDW and Meeting to WCPFC</p> <p>Continuous support to the observers' onboard vessels to improve coverage particularly vessels operating in territorial seas and archipelagic waters</p>	

Increase data collection coverage from landings and logbooks for larger (LL,PS,PL,HL) vessels

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.
N.b Budget preparation, this is included in the activity to increase data collection but not explicit

In addition, it is also needed to improve capacity to analyse catch and effort data in order to provide estimation and generating the aggregate catch and effort.

R with row 3 (support for enumerators below)

Data collection supported by past WPEA (OFM and SM) been conducted in Bitung, Kendari since 2010 and Sorong since 2013 by total of 32 enumerators. Under WPEA-ITM in the 2021 the number of enumerators down to 12 persons in Bitung only. Data collection from landing has been expanded by NGOs and Industry (i.e., MDPI (HL), YKAN (PS and HL), AP2HI /YII (PL), SFP-LINI (LL) since 2014 to date. WPEA landing data is temporarily stopped since June 2022 due to organizational transition from RCF-MMAF to BRIN. To date still a process to established new implementing arrangement and no register for bank account that making WPEA-IMT able to transfer the fund. The process of establishing IA is longer than expected due transition process (hopefully April 2023 the new IA could be established).

Increase data collection coverage from PS,RN,HL logbooks in EEZ

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.

Capacity- building for vessel crew

Capacity- building for vessel crew

Covered by NSAP and observer

	<p>To date it is challenging for ID to cover 100% of enumerators for port sampling, Still require support from external funding for experienced enumerators to conduct sampling.</p>	<p>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 standardization 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.</p>	<p>Capacity- building</p>
<p>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. N.b Budget preparation - merged with increase data collection)</p>	<p>Data collection for LL fishery needs to be improved through:</p>	<p>Generate raised aggregated catch/effort data by FMA</p>	<p>On-going efforts to comply</p>
	<ol style="list-style-type: none"> 1. Conduct Port Sampling in Ambon and Bitung 2. Increase Observer deployment to LL Vessel 3. Improve quality of Log-book LL (Log book Data for LL are available since 2017 but better temporal coverage since 2019 and still need to improve the coverage and quality) 	<p>Continue to support efforts to fully characterize Philippines “other commercial” fisheries.</p> <p>Increase coverage of VMS on small scale fisheries</p>	<p>Capacity- building</p> <p>Continuous effort</p>

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,

This maybe only Bitung for PS data that is submitted under WPEA database.

Investigate apparent annual fluctuations in HL samples from Sorong over the past 2 years,

It needs additional data to Include samples from other data provider i.e., YKAN, to entry in the WPEA database, but need to see their compatibility with WPEA data.

Develop sustainable port sampling size data collection with separate estimates from large fish HL fishery

HL Sorong sampling activities quite challenging due to the lack capacity of enumerator in the sampling sites. Need more effort to train the enumerators and increase the supervision to this landing site

Continue efforts to increase coverage for weight frequency data,

Separation estimates of large HL been undertake during HL Other commercial WS in 2019; as a result, the sampling of HL since then continued by MDPI and YKAN with separation of large Hand line. Need to train new enumerators that funded by DGCF to be able to conduct fish measurement (size data), challenges for this are that the work of measuring fish is not under DGCF protocol. It is proposed to still support some enumerators under this work by the WPEA ITM.

Generate raised aggregated catch/effort data by FMA

There is a discussion to identify potential sources for aggregated catch and effort data. The Log book, observer data as well as ports sampling with grid info are potential to produce this. An additional training and WS are required to do this

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>

The observer deployment to fishing vessel need to be focused to PS,LL and PL operating in the EEZ (716 and 717),

need to improve the protocol of observer deployment and briefing and debriefing practices.

A capacity building is required in the form trainer of trainer (ToT)

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.

A visit to the owner/operator of LL vessels i.e., Ambon that has +/-26 LL is required (possible error in rating as redundant and this work is ongoing - need to verify)

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).

Annual catch estimate is fundamental, usually there will be several meetings required to meet all data providers (DGCF, Pusdatin, RCF) prior the main ACES that usually conducted each June/year.

<p>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).</p>	<p>Communication and collaboration with Kendari PPS is done but need continues supervision. Need continues collaboration with NFI</p>
<p>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</p>	<p>WPEA data base has been developed by Bayu, it is required to integrate the data form other data provider (MDPI, YKAN, AP2HI, DGCF, pusdatin) in an automatic system</p>
<p>Develop an integrated tuna data warehouse approach including standards for validating logbook data</p>	<p>Idem as row 16</p>
<p>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.</p>	<p>Indonesia's tuna fisheries are complex and still need to improve its characteristic and data by species/gear including its by-catches (in particular shark) in particular to satisfy the requirement of scientific data requirement for shark.</p>
<p>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.).</p>	<p>Continue the investigation of species composition for different size</p>

Continue to support efforts to fully characterize Indonesia’s “other commercial” fisheries.

A report of other commercial fisheries is available (see activity on characterising Indonesia tuna fisheries)

Explore possibilities for providing dedicated support for a pilot program for EM in Indonesia.

Still remain outstanding activity (did not rank)

Fishery management support

Tailor stock assessment capacity building to utilize 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.

This capacity needs to be improved, such that the results of the assessment will suitable with the international standards

Tailor stock assessment capacity building to utilize 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.

Capacity- building

Support Harvest strategy capacity building for Indonesia to effectively participate in the WCPFC Harvest Strategy process and to inform National Managements decisions.

There are some activities been undertaken to understand of HS process in the WCPFC, but need further and continues detail and update since the HS process still on going in the WCPFC

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 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.

Will do TOT in the Philippines this 2023 (After the SC meeting)

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

<p>Develop a strategy, and provide support, for the continued integration of WCPFC-related tuna fisheries databases (e.g., TUFMAN2) to Pusdatin.</p>	<p>PUSDATIN take the national responsibility for catch data since 2017 to 2021, it is back again to DGCF by 2022</p>	<p>Maintain support, including capacity building, for the on-going integration of SPC data systems into NSAP programmes</p>
<p>Consider supporting a formal training gap and needs analysis (fisheries data and fisheries data management)</p>	<p>Outstanding (not ranked)</p>	<p>Promote the sustainability of NSAP</p>
<p>Continue development and associated training for database systems TUFMAN2 and DORADO including, where appropriate, translation of related documentation.</p>	<p>To date Indonesia still uses own data base format for reporting to WCPFC</p>	<p>Facilitate data flow between IMEMs and Tufman 2 databases and investigate the establishment of an integrated tuna data warehouse approach (BW)</p>
<p>Communications and outreach</p>		
<p>Commission an NGO to run a series of educational workshops for fishing vessel owners and captains relating to WCPFC reporting requirements and CMM obligations.</p>	<p>Low awareness of owners/operators/captains to their reporting obligation both for national and regional measures.</p>	
<p>General capacity building</p>		
<p>Continue to support project-related attachments at SPC for up to 4 weeks (rather than 5 days), sponsored by the Activity.</p>	<p>Capacity building for data processing, analysis and maintenance.</p>	<p>Continue to support project-related attachments at SPC for up to 4 weeks (rather than 5 days), sponsored by the Activity.</p>
<p>An Offline Preparation meeting to have more understanding to the materials for three countries prior to the SC meeting</p>	<p>Sydney SAW highlighted the need of this offline prep meeting prior the SC</p>	
<p>Vietnam activities</p>	<p>Country comments</p>	
<p>Fishery monitoring and analysis</p>		

<p>Continue to increase data collection coverage from logbooks, ports and landings</p>	<p>100% for logbook and landings at ports and >30% outside of ports; Port-sampling at below</p>
<p>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.</p>	<p>Review data forms attached to Circular 01 to meet all requirements of WCPFC</p>
<p>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.</p>	<p>GN: ĐN, QNg, BĐ, KH, NT, BV. PS: TTH, QNg, BĐ, NT, BTh, BV. LL/HL: ĐN, QNg, BĐ, PY, KH</p>
<p>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. N.b Budget preparation, this is included in the activity to increase data collection but not explicit</p>	<p>WPEA will pay 12 staff for 12 provinces to take port-sampling. Government will pay for the remaining 90 enumerators in more than 26 tuna ports</p>
<p>Continue to revise national logbooks to incorporate WCPFC data requirements for operational data.</p>	<p>Review Circular 01</p>

Continue work to characterize Vietnam’s tuna fisheries including improved data on species composition by gear type thereby reducing the “other species” component.	Focus on some targeting species and endangered species
Improve operational level catch and effort data by gear type including raising awareness among vessel operators regarding logsheet data fields and their completion.	Improve reliability of logsheet
Strengthen processes and systems to increase the scope and quality of operational level data from Vietnamese PS, LL/HL and GN	Improve entering data into databases
Support efforts to achieve 50% coverage for operational level catch and effort data from PS, HL/LL and GN fleets by 2025.	More than 90%
Support efforts to achieve 50% coverage for sampling of port landings from PS, HL/LL and GN fleets by 2025.	More than 90%
Generate raised aggregated catch/effort data by FMA	
Develop technical guidelines for port data collection protocols for all provinces (BW)	Develop the cost norms to collect data for the provincial government to decide and allocate budgets for collecting data
Enhance capacity of data collection for staffs working at local ports.	Identification of species and collecting correct information
Fishery management support	

<p>Tailor stock assessment capacity building to utilize 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.</p>	<p>Analyse data and interpret information into management measures</p>
<p>Support Harvest strategy capacity building for Vietnam to effectively participate in the WCPFC Harvest Strategy process and to inform National Managements decisions.</p>	
<p>At-sea observer programme</p>	
<p>Renew efforts to establish a national observer programme for Vietnamese tuna fleets. Support the finalization of an Observer Program Development Strategy and operational plan inclusive of capacity building needs.</p>	
<p>Explore possibilities for providing dedicated support for a pilot program for observers in association with Vinatuna.</p>	
<p>Data systems</p>	
<p>Develop and strategy, and provide support, for the integration of WCPFC-related tuna fisheries databases (e.g., TUFMAN2) to VNFishBase.</p>	<p>Security of data</p>
<p>Integrate national fisheries databases so all relevant users have access</p>	

Consider supporting a formal training gap and needs analysis (fisheries data and fisheries data management)	
Facilitate data flow between national and regional databases including the development of an integrated tuna data warehouse	Security of data
Continue development and associated training for database systems TUFMAN2 and DORADO including, where appropriate, translation of related documentation.	Include projection scenarios models
E-logbooks and e-monitoring	To improve reliability of data and improve the data coverage
Apps to ad-hoc fill in the information to data forms	To improve reliability of data and improve the data coverage
Port State controls	
Build capacity and develop tools for implementing PSMA to monitor tuna imported to Vietnam.	To explore the volume of tunas and tuna like species imported into VN
Communications and outreach	
For Vietnam, provide support to the National Coordinator to raise awareness about the WCPFC and advertise WPEA-ITM fishery monitoring activities.	Encourage fishers provide correct data and raise awareness about WCPFC and roles of aggregate data for fisheries management

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

Not just NGOs, but also government agencies

General capacity building

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

Focus on data analysis to understand quality/quantity of data for SA and provide management advice

Appendix E Project Design Framework for a Future Phase of 5 Year Duration

PROJECT FRAMEWORK AND INDICATIVE BUDGET

Proposed

Title WPEA Sustainable Tuna Data Monitoring

Component ONE

Output: Increased Port Catch Measurement & Sampling

Activity IMPROVE operational level catch and effort (logbook) data collection

Improve operational level catch and effort data reporting by gear type including **raising awareness among vessel operators** regarding logsheet data fields and their completion.

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**>

Increase focus of data collection coverage from logbooks for larger (LL,PS,PL,HL) vessels.

Increase data collection coverage from PS,RN,HL logbooks in EEZ

Support efforts to **increase the coverage of logsheet or operational data for other fisheries** (including HL, HK, and troll).

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**

Activity MAINTAIN key port based data collection for fish size and landing data

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).

Activity IMPROVE port sampling and unloadings data collection from landing sites

National WCPFC/**WPEA Data Collection Coordinator** or team/task force

This should include where applicable **support for engaging enumerators, either full costs per enumerator or partial**. This may be particularly necessary for ID, less so for VN and probably unnecessary for PH)

Increase focus of data collection coverage from landings for larger (LL,PS,PL,HL) vessels.

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.

Support efforts to **achieve 10(20) % coverage for sampling of port landings from PS, HL/LL and GN fleets by 2025.**

Continue to **increase data collection coverage from logbooks, ports and landings.**

Increase coverage of VMS on small scale fisheries

Port sampling equipment/index Dfish support to landings to level of ability to satisfy WCPFC size data requirements

Species ID training

Technical Costs

Support **WPEA data collection trainer in keys ports**

Activity **Resolving specific data gaps in collection (aggregate data) and coverage of size data)**

Strengthen efforts to **maintain species composition and species size distribution data collection by gear type and region, from archipelagic waters, the EEZ and HSP1.**

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.**

Continue to **revise national logbooks to incorporate WCPFC data requirements for operational data** (Vietnam - review Circular 01)

Develop sustainable port sampling size data collection with separate estimates from large fish HL fishery.

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.

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,

Activity **Enhancing capacity of data collection**

Enhance **capacity of data collection for staffs working at local ports.**

Support Dfish to have a **WPEA data collection, entry and training person** in each of the key provinces

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 to support efforts to **fully characterize Indonesia’s “other commercial” fisheries.**

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.).

Output: Expanded Observer Programmes

Activity	Provide support for At-Sea Observer Programmes
	Review and improve Indonesia observer data collection to satisfy WCPFC ROP minimum data requirements and impediments that prevent Indonesia submitting observer data to the WCPFC
	Explore possibilities for providing dedicated support for a pilot program for EM in Indonesia.
	Develop a strategy and operational plan inclusive of capacity building needs.
	Provide annual capacity building (briefing and de-briefing training, data processing and analytics) and on-going mentoring support to the FOP to maintain accreditation to the WCPFC ROP.
0.5	<i>SPC & WCPFC debriefer trainer costs</i>
	Renew efforts to establish a national observer programme for Vietnamese tuna fleets. <i>Suggestion is to concentrate on a few ports, incl Na Trang and collect min WCPFC data fields</i>
	Support the finalization 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.
0.5	<i>SPC & WCPFC Observer Coordinator costs</i>

Component: TWO

Output: National databases developed, functional & utilised

Activity	Data management systems
	Data warehouse concept (connecting data silos) Investigate the establishment of an integrated tuna data warehouse approach (including standards for validating logbook data)
	Strengthen processes and systems to increase the scope and quality of operational level data from Vietnamese PS, LL/HL and GN

Integrate national fisheries databases so all relevant users have access

Harmonised data collection systems between PSA, NSAP, Industry and BFAR FOP

Generate raised aggregated catch/effort data by FMA.

Activity **Develop strategies, and provide support, for the continued integration of WCPFC-related tuna fisheries databases**

Indonesia - TUFMAN2 to One Data and DGCF data collection

Vietnam - TUFMAN2 to VNFishBase

Support sustainability of **NSAP Database system and maintain support**, including capacity building

Facilitate **data flow between** national and regional databases **(PH) IMEMS and TUFMAN2**

Build **capacity and develop tools for PSMA** for the importation of tuna

Data and reporting gaps dashboard

Activity **Electronic Monitoring /Explore Low cost technical data collection solutions**

E-logbooks & E-monitoring

Apps to ad-hoc fill in the information to data forms

Output: Data analysis and capacity development

Activity **Data analysis**

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 **detailed analysis of size, catch and effort data maintained by NSAP** (for example, coverage by month and size class distributions, potential of standardization of effort for each gear) to support national stock assessments and harvest strategy work.

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 standardization 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 work to **characterize Vietnam's tuna fisheries** including improved data on species composition by gear type thereby reducing the "other species" component.

Activity **National Sampling Plans, Data Analysis, Catch Estimates & Reporting Implemented**

4 weeks attachments at SPC - Focus on data processing, analysis and maintenance to understand quality/quantity of data for SA and provide management advice

Technical Costs

Activity **Catch Estimates**

Sub Regional ACE meeting pre national workshops

Technical Costs

Preplanning **preliminary national data analysis**

Annual Catch Estimate workshop support

Technical Costs

Support for a **formal training gap and needs analysis** (fisheries data and fisheries data management

Development and associated **training for database systems TUFMAN2 and DORADO**, including where appropriate, translation of related documentation

Technical Costs

Component: THREE

Output: National policy, institutional, governance & coordination arrangements implemented

Tailor **stock assessment capacity building to utilize data** generated from the national fishery, including from the WPEA, to inform national decisions regarding the conservation and management of tuna resources within countries' **EEZ (Indonesia** - including in relation to on-going work associated **with harvest strategies**)

Technical Costs

Ad hoc policy advice as needed

Support legislation and regulation for establishment of an observer programme

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.

Develop **technical guidelines for SPC tuna data collection protocols** for all provinces

Output: Support national level harvest strategy

Support **Harvest strategy capacity building** to effectively participate in the WCPFC Harvest Strategy process and to inform National Managements decisions.

Technical Costs

Component: FOUR

Output: Increased awareness of national and regional reporting obligations

Activity **WCPFC Obligations - awareness raising**

Series of outsourced (eNGOs) workshops to **raise awareness of WCPFC obligations**

Support for **National Coordinator to raise awareness** of WCPFC and fisheries monitoring activities

Support **attendance and exposure to WCPFC meetings**

Output: Technical Assistance

Activity

WPEA Regional Technical Advisor

WPEA Regional Scientific Advisor FTE @ SPC

Stock assessment support- determine reference points

Study - to better understand and compare the accuracy and coverage of port sampling vs. non port sampling data.

Additional consultancies for studies relative to region 5 stocks

Component: FIVE

Output: Project Coordination

Activity **Management and Administration**