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**WPEA-ITM Project Update**

**WCPFC-SC17-2021/RP-WPEA-01 [\(Rev.02\)](#)**

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**PURPOSE**

1. The purpose of this paper is to provide a brief update on activities under the Western Pacific East Asia Improved Tuna Monitoring Activity (WPEA-ITM project) over the past 12 months, for the information and noting of the Scientific Committee (SC18).

**BACKGROUND**

2. The tuna fisheries in the Pacific Ocean waters of Indonesia, the Philippines and Vietnam represent around 30% of the annual catches of key tuna species in the WCPO, including a significant proportion (40%) of the total yellowfin tuna catch in the WCPO. The lack of accurate data on catch, effort and the composition of catches in these waters has been highlighted as a key uncertainty in WCPO stock assessments at WCPFC for a number of years.

3. In an effort to improve understanding of these fisheries and increase the accuracy of data available for stock assessments, a series of projects have been implemented since 2005 to support data collection in Indonesia and the Philippines, and later in Vietnam. These projects have included the Indonesia and Philippines Data Collection Project (IPDCP), the West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFM), and the Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (WPEA-SM). The last WPEA-SM project, implemented by the WCPFC Secretariat and the three countries, terminated on 27 April 2019.

4. Since these projects were first instituted in 2005, significant progress has been made on data collection, data analysis and verification, and the provision of catch estimates. Consequentially, the uncertainty in WCPO tuna stock assessments associated with tuna data in these three countries has been reduced. More detail on the activities and achievements of these projects can be found in WPEA updates to previous Scientific Committee meetings.

5. Recognising the importance to the WCPFC of continuing to improve tuna data from these three countries, the Government of New Zealand provided NZD 4.91 million over the period 2017-2023 for the

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Western Pacific East Asia Improved Tuna Monitoring Project (WPEA-ITM). The goal of the WPEA-ITM is to improve monitoring and management of tuna catches in Indonesia, Philippines and Vietnam and contribute to reduced Illegal, Unreported and Unregulated (IUU) fishing.

6. The WPEA-ITM project is being managed by the WCPFC Secretariat, working closely with the national fisheries authorities in the three countries, and with SPC FAME playing a critical implementation role. Project components include expanding the capacity of enumerator programs to gather tuna landings and port sampling data, building the capacities and sustainability of fisheries observer programs, supporting additional national policy and legal reviews to improve catch monitoring and governance, and building the capacity of national fisheries data management and analysis efforts.

## **SUMMARY OF WPEA-ITM ACTIVITIES IN 2021-22**

7. The WPEA-ITM Steering Committee met virtually in November 2021 to review activities in 2021 and develop a work plan and budget for 2022. Until June 2022, the COVID pandemic has significantly disrupted implementation of planned WPEA-ITM activities in 2021 and 2022. With many activities in the Work Plan involving domestic and/or international travel, COVID-related travel restrictions have meant that many activities have been delayed or where possible, held online. As things are opening back up, it is hoped more face-to-face activities can be implemented in the last half of the year up to March 2023 when the project is due to conclude.

8. Importantly, critical national tuna data collection programs have continued despite the disruptions, with enumerators and port sampling continuing in all three countries with support of the project. Other critical activities, such as the Annual Catch Estimates workshops have also been able to progress either remotely, in-person or using a combination of both. All three countries have also met their WCPFC reporting obligations, with the submission of their provisional data to WCPFC on time. Given the office closures, travel restrictions, health concerns and other complications, maintaining these core data collection activities throughout 2021 and 2022 is a significant achievement.

9. A Mid-Term Evaluation was completed in November 2021 and presented to the Steering Committee by Mr Andrew Wright to review the effectiveness of the Activity to date and strengthen implementation of the remainder of the Activity.

- a. Key findings included a strong level of national ownership and direct relevance of the Activity to national initiatives, the NZ international engagement strategy, and the work of the WCPFC. It was recognised that the Activity had experienced a stuttered start, but the choice of the WCPFC Secretariat as the implementing agency and SPC as a partner, had benefited the efficiency of the Activity's implementation.
- b. The evaluation found that the Activity had supported the three participating countries to improve their national systems and processes, to meet their data obligations and to improve the quality and scope of data provided to the Commission. These, together with a number of additional impacts, had built national capacity, improved the data available to the Commission, and reduced uncertainties in the data available for WCPFC stock assessments.
- c. Given that the project end was nearing, the evaluation recommended that an extension beyond March 2023 be considered, and recommended the preparation of exit strategies for each country and planning for support of critical activities beyond the WPEA-ITM.

10. The WPEA-ITM Activity supports the development of catch estimates for the three project countries. The three countries have reported the following total tuna catches for all gears in the WCPFC Statistical area over the past 6 years:

| Annual catch estimates as submitted to the WCPFC by each WPEA country <sup>2</sup> |                |                |                |                |                |                |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
|  | 2016           | 2017           | 2018           | 2019           | 2020           | 2021           |
| <b>Indonesia</b>   |                |                |                |                |                |                |
| SKJ  | 336,455        | 332,628        | 291,442        | 296,743        | 258,169        | 272,193        |
| YFT  | 160,092        | 134,290        | 215,460        | 219,178        | 233,451        | 252,049        |
| BET  | 28,344         | 12,095         | 19,573         | 19,163         | 22,899         | 22,618         |
| <b>Total</b>   | <b>524,891</b> | <b>479,013</b> | <b>526,475</b> | <b>535,084</b> | <b>514,519</b> | <b>546,860</b> |
| <b>Philippines<sup>3</sup></b>   |                |                |                |                |                |                |
| SKJ  | 82,127         | 95,331         | 73,376         | 88,159         | 109,154        | 90,286         |
| YFT  | 58,584         | 70,001         | 66,599         | 59,846         | 74,618         | 83,799         |
| BET  | 2,845          | 4,454          | 2,364          | 4,464          | 4,035          | 2,653          |
| <b>Total</b>   | <b>143,556</b> | <b>169,786</b> | <b>142,339</b> | <b>152,469</b> | <b>187,807</b> | <b>176,738</b> |
| <b>Vietnam</b>   |                |                |                |                |                |                |
| SKJ  | 93,561         | 86,295         | 91,528         | 87,357         | 81,009         | 68,822         |
| YFT  | 21,811         | 22,407         | 24,704         | 19,499         | 17,587         | 17,020         |
| BET  | 5,704          | 3,923          | 4,301          | 2,458          | 3,730          | 3,175          |
| <b>Total</b>   | <b>121,076</b> | <b>112,625</b> | <b>120,533</b> | <b>109,314</b> | <b>102,326</b> | <b>89,017</b>  |

11. Since the last update to the Scientific Committee, key activities of the WPEA-ITM have included:

Data collection and catch estimates

- a. All three countries submitted their provisional 2021 catch estimates to WCPFC.
- b. Enumerators have been supported in Indonesia and Vietnam in 2021, with enumerators in 12 provinces supported in Vietnam and 15 officers (including enumerators, supervisors and data entry staff) supported in Indonesia. Port sampling monitoring and a science research specialist were supported in the Philippines to provide oversight and coordination of tuna data collection and capacity building.
- c. Annual Data Review Workshops and Catch Estimation Meetings were supported in all three countries, with final catch estimates produced from each workshop and submitted to the WCPFC. The workshops demonstrated continued improvements in the collection and analysis of data on the total oceanic tuna catches that the countries and the Commission need to ensure sustainable management of tuna stocks and species. They also identified key issues compromising further improvements in the data, with recommendations made across all three countries for further action in 2022.
  - *Indonesia*: The 12<sup>th</sup> Tuna Fisheries Annual Catch Estimates Review Workshop (ITFACE-11) was conducted online in July 2021, with remote support from SPC.
  - *Philippines*: The 15<sup>th</sup> Annual Tuna Fisheries Catch Estimates Review Workshop was held in hybrid format (online and in-person) in May 2021 with BFAR, NFRDI, and national tuna industry, as well as WCPFC and SPC participation.
  - *Vietnam*: The 10<sup>th</sup> Annual Catch Estimates workshop was held in April 2021, with national participants (including government, researchers, industry and NGOs) convening in-person and remote support from SPC.

Capacity building in IT area

- a. *Philippines*: The development of the Philippines National Stock Assessment Project (NSAP) database system was completed in June 2021 and the initial roll-out was conducted by SPC in March 2022 which was attended by NFRDI and BFAR-12 personnel. This new system has been developed on a web-browser/cloud hosted platform and will facilitate the entry and management of Philippines landings and port sampling data collected from hundreds of landing

<sup>2</sup> 2021 estimates are provisional.

<sup>3</sup> Philippine catch figures do not include catches of Philippine flagged distant-water purse seine vessels.

- sites in Philippines provinces.
- b. *Vietnam*: Vietnam purchased and delivered 26 laptops for 23 local ports and fisheries departments to strengthen their capacity in entering tuna data and reports.

Capacity building in fishery monitoring

- a. Indonesia held an online workshop in November to discuss estimates of tuna catch in the “large-fish” handline fishery sector and consider potential improvements and refinements to data collection and analysis.
- b. Vietnam progressed in their endeavour to establish a national observer program, with the further development of the legal framework to support a professional observer program in Vietnam. In addition, a data collection manual on tuna data collection was published and printed in Vietnam. SPC Observer Guidelines, technical handbooks on fishery surveys and SPC Species ID Guide were translated into Vietnamese for distribution to observer training institutions, observers, fishing ports, fishing authorities and research institutions.

WPEA support by the SPC-OFP

- a. The contract for SPC’s continued support under the project was maintained in 2021, allowing SPC to provide a range of forms of assistance in 2021, including:
- Participation, provision of technical advice and presentations provided during online Data Review and Annual catch estimates workshops conducted in all three WPEA countries during 2021;
  - SPC staff time to support the WPEA country participants during the 15<sup>th</sup> Tuna Data Workshop (TDW15) and Stock Assessment Workshop (SAW-2021);
  - Continued technical support for observer and logbook data management using the TUFMAN 2 database system, including SLACK helpdesk support; 10<sup>th</sup> Vietnam Tuna Fishery Annual Catch Estimates Workshop (VTFACE-10)
  - Continued development and implementation of specific components of TUFMAN 2 to support Vietnam's customised logbook, port sampling and unloadings data;
  - Completed and demonstrated the Philippines National Stock Assessment Project (NSAP) database system (installation and training to occur in 2022);
  - Conducted online TUFMAN2 and data collection workshop for Vietnam (May 2021), and supported Vietnam in the entry of 3,300 logbooks in 2020-21;
  - Conducted observer training workshop in Vietnam (September 2021);
  - Supported the Indonesia “large-fish” handline workshop in November and the preparation of the resulting paper for WCPFC18;
  - Continued technical advice provided to Indonesia fisheries data manager;
  - Technical advice/assistance contributed to refine meeting papers related to other commercial fisheries of Philippines and Indonesia, including recommendations regarding applicability of WCPFC CMMs to these fisheries;
  - Facilitated submission of 2021 scientific data submissions from three countries into WCPFC databases;
  - conducted a hybrid Advanced Stock Assessment Training Workshop in Noumea from 4-8 July 2022 that WPEA countries were able to attend virtually.
  - Continued ad hoc remote support/advice regarding reporting from database systems and preparation of annual national catch estimates.

12. Specific progresses of the WPEA-ITM Activity for 2022 up to date are listed below.

Indonesia

- Supported 12 enumerators at Bitung, a key landing sites in Indonesia

- Supported SPC to participate remotely in a Indonesia Handline Workshop (13-14 June 2022) to respond to a WCPFC18 recommendation on large-fish Handline catch limit under the tropical tuna CMM and to continue work in producing estimates for the large-fish Handline fishery.

Philippines

- Supported hiring and training 8 Observers to collect fisheries catch and by-catch data with focus on Species of Special Interest in the Philippine EEZ.
- Procurement of IT equipment (software/hardware) for more organized, systematic and accurate implementation of the NSAP T2 Database System compliant to the WCPFC reporting obligations in the Philippines.
- The WPEA Project Manager with WCPFC Secretariat and SPC y attended the Philippines 13<sup>th</sup> WPEA – NSAP Tuna Data Review Workshop from 23-24 May and the 15<sup>th</sup> PTUNASTAT Annual Catch Estimates Review Workshop from 26-27 May.

Vietnam

- Supported 16 enumerators in 12 Vietnamese provinces.
- Supported SPC to conduct Tufman2 training in person Hue, Vietnam 6-8 June for 65 enumerators and participants from 12 provinces.
- Supported the eleventh Vietnam Tuna Fishery Data Collection and Annual catch estimation Workshop (VTFACE-11) in April.
- Started the development of a National Tuna Management Plan for Vietnam. Due to be completed in August 2022.
- Started planning for the development of 10 Provincial Tuna Management Plans based on the completed NTMP. Due to be completed in December 2022.

Three-country workshop

- The first in person WPEA workshops since the pandemic held between 27-30 June in Brisbane, Australia. The first two days were run by SPC and focussed on the Harvest Strategy approach. The last two days were focussed on the WPEA-ITM 2022 workplan and post WPEA-ITM planning. They were run by the WPEA-ITM Project Manager and supported by SPC and WCPFC.

13. The COVID-19 pandemic continued to disrupt the work program of the three countries and the project more broadly, but with the recent relaxation of some travel restrictions, it is hoped more face-to-face activities can be implemented in the last half of the year up to March 2023 when the project is due to conclude. The WPEA Project Manager is working with national project coordinators to consider where online or virtual alternatives will be appropriate.

14. However, it needs to be highlighted that the WPEA-ITM activities may not be completed due to disruptions caused by the pandemic or others. As of writing this paper in July 2022, a number of WPEA-ITM activities look like they will not be able to be completed by the end of the project in March 2023. These are:

| <b>Indonesia</b>  | <b>Philippines</b>  | <b>Vietnam</b>   |
|---|---|--|
| National Tuna Management Plan workshop  | Complete the roll-out of the new database system (with mobile app) for the National Stock Assessment Project (NSAP) | Stakeholder workshop on the revised legal regulations in tuna fisheries in Vietnam             |
| Support pilot programs for the implementation of electronic monitoring (EM) and electronic reporting (ER) |   | Workshop on introduction of a quota-based management approach to the Vietnamese tuna fisheries |
| Observer cost recovery evaluation   |   | Training workshop on data analysis   |

|       |  |   |
|-------|--|---|
| study |  | for the tuna fisheries management in Vietnam  |
|       |  | Support pilot programs for the implementation of electronic monitoring (EM) and electronic reporting (ER)         |
|       |  | Observer cost recovery evaluation study   |
|       |  | Initiation of a National Fisheries Observer Program with training of trainers, observers, briefers and debriefers |

## OPTIONS FOR WPEA-ITM ACTIVITIES GOING FORWARD

15. Due to the importance of the WPEA project in regional stock assessment, it is proposed that the Scientific Committee consider the following options moving forward:

- a. Recommend to extend the initiative into 2024 at “no cost” due to current allocated budget underspend. This will mean most, if not all, of the WPEA-ITM activities will be completed.
- b. Recommend development of a new project proposal for the next phase of WPEA work that is relevant to the WCPFC to begin immediately after the current WPEA-ITM project expires.

16. A formal mid-term evaluation of the WPEA-ITM project was completed in November of 2021. Three of the key recommendations from this report are:

- a. The Activity be extended, at no-cost, to March 2024.
- b. Each participating country to prepare a transition or ‘exit’ strategy that will describe on-going support to WPEA-ITM activities once project funding terminates.
- c. Start preparations for a possible follow-up project at the conclusion of the WPEA-ITM.

17. Key ongoing WPEA-ITM activities considered to need ongoing support are:

| <b>Indonesia</b>  | <b>Philippines</b>  | <b>Vietnam</b>  |
|---|---|---|
| Support for enumerators and data collection   |   | Support for enumerators and data collection                             |
| Improved data collection, coverage, validation, and integration                                 | Improved data collection, coverage, validation, and integration         | Improved data collection, coverage, validation, and integration         |
| Support for data management System (Databases) and its equipment (procurement Laptop, Computer) | Support for data management systems (databases)                         | Support for data management systems (databases)                         |
| Observer Program Development and Training   | Observer Program Development and Training                               | Observer Program Development and Training                               |
| Briefer/debriefer training  | Briefer/debriefer training  | Briefer/debriefer training  |
| Stock assessment and fisheries data analysis (e.g., Harvest strategies)                         | Stock assessment and fisheries data analysis (e.g., Harvest strategies) | Stock assessment and fisheries data analysis (e.g., Harvest strategies) |

18. Potential future activities for consideration related to fisheries data collection needs are listed below.

| <b>Indonesia</b>  | <b>Philippines</b>  | <b>Vietnam</b>  |
|---|---|---|
| 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                         | Continue to increase data collection coverage from logbooks, ports and landings         |
| Generate raised aggregated catch/effort data by FMA (using data warehouse concepts) for       | Generate raised aggregated catch/effort data by FMA (using data warehouse concepts) for | Generate raised aggregated catch/effort data by FMA (using data warehouse concepts) for |

|   |   |  |
|---|---|--|
| national and regional scientific use.   | national and regional scientific use.   | national and regional scientific use.  |
| Develop sustainable port sampling size data collection with separate estimates from large fish HL fishery   | Promote the sustainability of NSAP  | Develop technical guidelines for port data collection protocols for all provinces  |
| Develop an integrated tuna data warehouse approach including standards for validating logbook data  | 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    |
|   | Increase coverage of VMS on small scale fisheries   | Integrate national fisheries databases so all relevant users have access. Facilitate data flow between VN Fishbase and Tufman2 |
| Request capacity building activities to participate in SPC's Tuna Data Workshop, Stock Assessment Workshop and other capacity building opportunities.<br>Request the engagement of scientists/technical specialists from other WCPFC countries (where applicable) to learn from others with similar experiences |   |  |

19. Potential future activities for consideration related to observer programme needs are listed below.

| <b>Indonesia</b>   | <b>Philippines</b>  | <b>Vietnam</b>  |
|--|---|---|
| Improve National Fisheries Observer Programme observer data collection to be compatible with regional standards  | Increase the number of trained observers in the National Fisheries Observer Programme | Develop a National Fisheries Observer Programme compatible with regional standards                            |
| Improve the national observer data collection database integration with other national and regional applications                                       | Implement electronic observer forms for use in international and domestic waters      | Develop a national observer data collection database integrated with other national and regional applications |
| Improve data collection at sea on catch, bycatch and species composition   |   | Improve data collection at sea on catch, bycatch and species composition                                      |
| Request the engagement of scientists/technical specialists from other WCPFC countries (where applicable) to learn from others with similar experiences |   |   |

## RECOMMENDATIONS

20. SC18 will review and endorse the following recommendations:

- a. Recommend to extend the initiative into 2024 at “no cost” due to current allocated budget underspend. This will mean most, if not all, of the WPEA-ITM activities will be completed.
- b. Recommend development of a new project proposal for the next phase of WPEA work that is relevant to the WCPFC to begin immediately after the current WPEA-ITM project expires.