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UPDATE ON WPEA PROJECT

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Secretariat, Indonesia, Philippines and Vietnam

I. BACKGROUND

Indonesia and Philippines Data Collection Project (IPDCP)

1. In early 2000, while annual catches of key tuna species in the Philippines and the Pacific Ocean waters of Indonesia were estimated in a range of 20-30% of the total catch of WCPO, little or no information was available for WCPO tuna stock assessment. The lack of accurate catch statistics, effort data, and species composition and size composition data for the Philippines and Indonesia has been highlighted at meetings of the Standing Committee on Tuna and Billfish for many years and responsible for much of the uncertainty in the MULTIFAN–CL stock assessments for bigeye and yellowfin tuna.

2. After years of effort, strong support has also been expressed by agencies of Indonesia and Philippines. Since then, the data collection project started to take a concrete form through several meetings, working with IOTC, CSIRO, ACIAR, and Japan-OFCF. Throughout the PrepCon period, the discussion evolved and fund raising was based on voluntary contributions from the PrepCon participating countries. The activities of the proposed project include, for each country,

a) a review of the tuna fisheries and the current monitoring systems;
b) the compilation of historical catch and effort data;
c) a workshop to formulate recommendations for the improvement of the monitoring system and to plan the sampling programmes;
d) the establishment of a port sampling programme;
e) the establishment of an observer programme;
f) the analysis of data collected and compiled during the project; and
g) a workshop to review the achievements of the project and to plan for future monitoring.

3. The budget for the activities at that time was about USD 184,000 for the Philippines and USD 229,000 for Indonesia, for a total cost of USD 413,000. This project was called IPDCP.

West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFM)

4. Funding support was the greatest issue for the continuity of the IPDCP project. The Secretariat

advised the third IPDCP Steering Committee that GEF had expressed interest in funding a project in Indonesia, Philippines and Vietnam. The objectives of the project were (i) to establish or improve the collection of tuna fishery data and (ii) to promote good governance with regard to the management of tuna fisheries. The Steering Committee recommended that the Executive Director continue to liaise with GEF, Indonesia, the Philippines and Vietnam to develop a data collection and governance project for those countries. The Committee recommended that, noting that GEF funding would not be available for another 18–24 months, CCMs continue to be invited to contribute to implement port sampling in Indonesia and Philippines, and that the Commission consider funding data collection in this area through its core budget.

5. Project Implementation Form, National Project Preparation Reports and Project Document were coordinated and prepared by the Secretariat, working with each country's focal point. The Secretariat was advised that its medium size project was accepted by the GEF in May 2009.

Improvements

6. Since the commencement of the data collection project starting in Philippines in 2005, there have been improvements in 2011 assessments of the WCPO tuna stocks by reducing uncertainty of input data and information. Especially, the WPEA-OFM project has greatly enhanced the quality of Indonesian and Philippine fishery data that are applied to regional tuna stock assessments conducted for the WCPFC. During the project period, the following improvements have been noted:

- More accurate estimates of total annual tuna catch by species
- More accurate estimates of species-specific catches by major fishing gear types
- The first size composition data from Indonesian tuna fisheries in more than two decades
- The establishment of operational-level data collection programmes (logsheets) for the industrial tuna fisheries
- The initiation of an observer programme in Philippines

These enhanced data were used for the first time in the skipjack, yellowfin and bigeye stock assessments conducted in 2011 by SPC. It is expected that similar progress in data collection will occur in Viet Nam, and that these data will also be incorporated into future regional stock assessments.

7. In addition, there have been significant improvements in the awareness of WCPFC requirements by the three countries through several consultancies, workshops, and capacity-building arrangements. At the end of 2012, a terminal evaluation was conducted for the WPEA-OFM project by a United Nations Development Programme (UNDP) designated independent evaluator. The rating of the achievement of the project's stated outcomes is extracted from the *Final Independent Evaluation Report (January 2013)* below:

> Using relevance, effectiveness, and efficiency as criteria, each of the seven outcomes established for the WPEA Project were rated on a scale given in the evaluation's terms of reference. The results of this rating are:
>
> ① Improved knowledge of oceanic fish stocks and related ecosystems: "highly satisfactory".
> ② Reduced uncertainty in stock assessments: "highly satisfactory".
> ③ National capacities in oceanic fishery monitoring and assessment strengthened: "highly satisfactory".
> ④ Participant countries contributing to management of shared migratory stocks: "highly satisfactory".

⑤ National laws, policies and institutions strengthened to implement applicable global and regional instruments: "highly satisfactory" for the Philippines, and "satisfactory" for Indonesia and Vietnam.
⑥ Key stakeholders participating in the project: "highly satisfactory".
⑦ National capacities in oceanic fisheries management strengthened: "highly satisfactory".

Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (WPEA-SM)

8. UNDP and WCPFC Secretariat have been preparing a new full size project since 2011 and the following process details the development of this project since 2011.

Project Framework Document (PFD)

1) Project title: Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments
2) The UNDP started preparing a PFD from mid-2011, which was submitted to the Global Environment Facility (GEF) on 29 March 2012, and a revision submitted on 12 April 2012. The PFD was endorsed by the GEF Secretariat in June 2012.
3) List of projects under the project framework include:
    a) YS LME Project: Implementation of the Yellow Sea Large Marine Ecosystem Strategic Action Program for Adaptive Management (USD 7,562,430)
    b) WPEA: Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (USD 2,293,578)
    c) PEMSEA[1]: Scaling up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (USD 10,143,992)
4) Participating countries: Cambodia, China, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste, Vietnam

Project Identification Form (PIF) for the WPEA Project

1) Project title: Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (WPEA-SM)
    - Name of parent program: (PFD) Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments
2) UNDP and WCPFC started developing a new WPEA project PIF since from 2012 and the final PIF was submitted to GEF on 5 April 2013. The PIF was approved by the GEF Council on 1 May 2013.
3) Total project cost is USD 2,233,578, a 3-year full size project, with the three participating countries (Indonesia, Philippines, Vietnam).
4) PIF includes i) Indicative Project Framework, ii) Indicative co-financing, iii) Project Preparation Grant, iv) Project Justification, and v) Approval/Endorsement by GEF Focal Points of each country.

Project Document

1) Drs Tony Lewis and Anna Tengberg developed the Project Document with UNDP, WCPFC Secretariat and the three participating countries from mid-2013.

[1] PEMSEA: Partnerships in Environmental Management for the Seas of East Asia, Manila, Philippines (http://www.pemsea.org),

2) After several reviews and revisions, the Project Document was endorsed by the GEF Secretariat on 12 May 2014, the final version was submitted to the GEF Council on 17 September 2014, and received their approval on 30 September 2014.

Commencement of WPEA-SM

1) Project Appraisal Committee Meeting
   - The *Project Appraisal Committee*, met in Manila on 28 May 2014, agreed that all three project partner countries (Indonesia, Philippines and Vietnam) accepted WCPFC as the Project Implementing Partner. They also agreed that the Science Manager of the Commission should continue managing the WPEA Project.
2) A Project Cooperation Agreement between UNDP and WCPFC was made on 14 October 2014, and the WPEA-SM officially commenced on 28 October 2014.
3) The Project Inception Workshop was held in Da Nang, Vietnam, 4-5 November 2014, and the Inception Workshop Report was adopted as a legal document, which was submitted to the UNDP (**Attachment W12-A**)

II. SUMMARY OF KEY WPEA ACTIVITIES IN 2014-2015

9. One of the biggest risks identified for the proper implementation of this project was the comprehensive scope of work to reach the target comparing to the level of GEF grant. As a consequence, the Inception Workshop reviewed and modified targets in the Project Results Framework to develop a more realistic version of 2015 WPEA-SM Annual Work Plan and Budget, which was finalized and submitted to the UNDP on 2 March 2015. The title of each project activity and related budget for 2015 is in the **Attachment W12-B**.

10. The WPEA Project Manager submits project progress report (PPR) to UNDP on a quarterly basis. Details of project activities for the previous quarters in 2015 are summarized in the three PPRs, the 1st, 2nd and 3rd quarter PPR as shown in **Attachment W12-C, W12-D and W12-E**.

11. During the 4th quarter this year, four project activities have been implemented as follows:
   a) The three-country workshop on the stock assessment in the WPEA area, Hai Phong, Viet Nam, 3-6 November
   b) Viet Nam's annual total tuna catch estimates workshop, Da Nang, Viet Nam, 10-12 November
   c) UNDP-GEF/PEMSEA hosted East Asian Seas Congress, Da Nang, Viet Nam, 16-20 November
   d) The Third Indonesian harvest strategy workshop, Bali, Indonesia, 19-20 November

12. The purpose of the Three-country workshop for the WPEA stock assessment was to facilitate partner country understanding of data requirements, the stock structure of the Pacific tunas, modeling complexity, and to consider the feasibility of conducting an independent stock assessment in the WPEA area at national-level, based on which each country can manage their tuna resources and fisheries in their waters. Dr John Hampton was invited as a workshop resource person and UNDP-Philippines and SEAFDEC also attended the workshop. Details of presentations, discussions, and workshop recommendations are found in **Attachment W12-F**.

13. The outputs of the 4th Viet Nam annual tuna catch estimates workshop includes provisional catch estimates, workshop recommendations to be completed by next year workshop and workshop report. The 2014 provisional annual total tuna catch estimates of oceanic tunas at the workshop was about 86,000mt. This annual catch level will be confirmed by the government before officially submitted to WCPFC. The workshop recommendations are listed in **Attachment W12-G**.

Table. The 2014 provisional annual tuna catch estimates in Viet Nam (mt)

Gear	Bigeye	Yellowfin	Skipjack	Sum
Gillnet	1,641	173	32,789	34,603
Purse seine	3,832	4,229	28,585	36,646
Longline/Handline	2,648	12,003	-	14,650
Sum	8,121	16,404	61,374	85,899

14. The Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) convenes East Asia Seas (EAS) Congress every three years. It includes various EAS related seminars and exhibitions. The WPEA and PEMSEA are required to collaborate together for the establishment of a regional governance mechanism in the EAS during their project period. The Viet Nam national tuna coordinator Dr Pham Viet Anh attended the EAS Congress and produced a brief trip report (**Attachment W12-H**).

15. Discussion on the development of a harvest strategy framework was initiated by the Directorate General for Capture Fisheries (DGCF) in Indonesia, and the first workshop was held in October 2014. The third Indonesian harvest strategy workshop reviewed various data and data requirements that will be used for the development of harvest strategy framework. The WPEA Project Manager proposed that a two-year work plan be developed with a target of developing a case study harvest strategy framework in the first year. The workshop reviewed a two-year draft schedule prepared by Dr Campbell Davies (CSIRO) and the reviewed draft schedule (**Attachment W12-I**) will be refined as needed in the future.

16. The second WPEA-SM Project Board (PB) meeting will be held in Bali, Indonesia, 11-12 December 2015. The PB will review the progress of 2015 project activities and review/endorse 2016 annual work plan. Provisional agenda for the PB is in **Attachment W12-J**. Because of domestic delays in endorsing the WPEA-SM project in Indonesia and Viet Nam, several activates will be commenced in early 2016.

Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (WPEA SM Project)

PROJECT INCEPTION WORKSHOP AND FIRST PROJECT STEERING COMMITTEE MEETING
4-5 November 2014, Da Nang, Vietnam

INCEPTION WORKSHOP REPORT

05 November 2014

1. OPENING OF THE MEETING

1. The WPEA Project Manager (Dr SungKwon Soh) formally opened the WPEA-SM Inception Workshop at 08:30am on 04 November 2014, and was appointed as Chair. Participants were welcomed and introduced. Following some minor rescheduling of the Introduction Section, the provisional agenda (WPEA-2014/IW-01 Rev 1) was adopted (**Attachment A**). A list of participants is attached (**Attachment B**).

2. INTRODUCTION

2. UNDP Regional Technical Advisor (Dr. Jose Padilla) briefly reviewed the background of the project, noting that this is a 'Full Size Project (over USD 2 million)' and explained how this designation affected GEF processes. For WPEA-SM, WCPFC is directly engaged to implement the project on behalf of UNDP and the Countries, instead of operating through the UNOPS. The Inception Workshop runs back to back with the first annual Steering Committee Meeting. The project document has been signed by the national implementing partners for Indonesia, the Philippines and Vietnam. Indonesia as the final signatory signed the project document on 28 Oct 2014, which is the official date for the commencement of this project.

3. Dr Lewis presented background on the development of the project proposal from conception to date, and the principal factors affecting its final design. It was recognized that funding is less than anticipated and the partner countries should give consideration to prioritizing the scale and timing of activities to best meet their national needs. He highlighted two areas that should be further considered by this group: climate change and regional stock assessments. Synergies with existing and proposed projects should be sought to maximize outputs, avoiding duplication and some cost saving. PEMSEA's existing capacity in knowledge management may well be useful, given that this was an area which was found, by the terminal evaluation, to be wanting in the previous WPEA project.

3. LOGFRAME, BUDGET AND ANNUAL WORK PLAN

4. The Project Manager explained the key sections of the project document, including the project log-frames, annual work plans for each partner country, budget notes and project activities. UNDP

reminded the workshop that the maximum change that could be applied to budget was 10%, and any budget changes approved by the Project Steering Committee should include references to the precise UNDP budget codes. It was further noted that the PEMSEA Inception Workshop was scheduled for April 2015 and that a representative from WCPFC should attend the PEMSEA Steering Committee meeting in Da Nang scheduled for October 2015.

5. The Project Manager reviewed each of the following Components and Project Outcomes, detailing issues and proposed actions/activities for discussion amongst project countries, UNDP and the Project Technical Advisor, Dr Tony Lewis.

Component 1: Regional Governance for building regional and national adaptive capacity of Indonesia, Philippines and Vietnam in the management of highly migratory fish stocks

Outcome 1.1: Improved regional mechanisms for monitoring and assessment of highly migratory fish stocks and IUU fishing in the Pacific Ocean Warm Pool Large Marine Ecosystem (POWP LME) and the EAS LMEs

6. UNDP indicated that the total budget of USD 160,000 for the establishment of Joint WCPFC/PEMSEA Consultative Forum may be excessive. All that is required is a link to advise PEMSEA of WPEA developments. The issue will be put on hold until UNDP, WCPFC and PEMSEA have an opportunity to meet and discuss collaboration. Dr Lewis explained that this element of the Project Document was intended to raise the profile within the WCPFC of the three partner countries who take more than 30% of WCPFC tuna catch. Establishment of a sub-regional database (see later) might be associated with this initiative as well as other consultative activities

7. Indonesia raised a potential political complication. PEMSEA falls under the Ministry of Environment, not Fisheries, and so it would be difficult for Fisheries to interact directly with PEMSEA, an organisation which focuses on coastal issues. Vietnam reminded members that SEAFDEC had created a working group for tuna, which will meet for the first time in November 2014, although neritic tuna are now the main focus of SEAFDEC tuna activities

8. The Steering Committee agreed that WPEA/WCPFC/UNDP will liaise with PEMSEA and SEAFDEC as soon as mutually convenient, to agree an optimal level of cooperation.

Outcome 1.2: Enhanced capacity of technical staff, policy and decision makers in Indonesia, Philippines and Vietnam to integrate climate change impacts on highly migratory stocks into management regimes.

9. Responding to an expression of uncertainty regarding the anticipated outcomes, Dr Lewis explained that existing models could be reviewed, and SPC may contribute to an initial information workshop using the Spatial ecosystem and Population dynamics model (SEAPODYM), with the only cost to participants being for travel. It was noted that there was existing climate change architecture within countries, i.e. organisations and projects etc.

10. The workshop was advised that Dr Patrick Lehodey, the lead researcher on SEAPODYM, would be attending the SPC Pre-Stock Assessment Workshop in Noumea in April 2015. WPEA country participants of the Tuna Data Workshop may stay on for a few extra days if Drs Lehodey and Simon Nicol (SPC) might be persuaded to hold a small meeting/workshop. Dr Lewis indicated that the SEAPODYM model is already being applied sub-regionally, and Dr Nicol would be prepared to attend a three country workshop to present and demonstrate SEAPODYM, as noted above. Dr Lewis further suggested that the CLS Argos project should be contacted to see if they would attend .the same workshop,

as they are currently supporting projects in Indonesia and Vietnam. It was noted however that climate change modelling is not currently sufficiently advanced to directly inform stock assessments, but is used primarily to indicate potential risks and uncertainty associated with those stock assessments, especially with longer term projections.

11. The Steering Committee agreed that to comply with the project document the following activities will be conducted:

- **SEAPODYM – an existing model for the Pacific could be extended to include the WPEA area.**
- **Climate Change considerations may need to be included in the country's National Tuna Management Plan (NTMP).**
- **SPC should be invited to contribute to a sub-regional training workshop on climate change impacts on oceanic tuna fisheries.**
- **WCPFC will update and confirm availability of SEAPODYM specialist availability to meet with WPEA participants in Noumea around the time of the SPC Tuna Data Workshop, then to liaise with and assist country representative participation.**
- **WCPFC to contact existing regional CLS Argos (Patrick Lehodey) and determine if they are prepared to support the WPEA regional climate change workshop.**

Outcome 1.3: Climate change concerns mainstreamed into national fishery sector policy in Indonesia, Philippines and Vietnam.

12. In response to the leading question on how climate change is to be incorporated into national tuna management plans, Indonesia revealed that during the Tuna Conference in Bali from 19-21 November, the National Tuna Management Plan would be launched, and the Minister would expound upon the relationship between tuna fisheries and climate change.

13. Vietnam suggested that Outcome 1.2 should feed into 1.3. The National Assembly will in 2016, with the support of contracted experts, pass a revision of fishery law. The WPEA and other budgets may support this process. The Vietnamese NTMP is not yet approved, but it should be in place next year, once the current restructuring of the Ministry of Agriculture and Rural Development (MARD) is completed.

14. In the Philippines, fisheries adaptation to climate change already exists, and the current focus is on data collection. There exists a Climate Change Commission which fisheries report to; however if technical gaps are identified, external expertise may be requested under WPEA.

15. In summary, there isn't sufficient information available currently to develop climate change policy; however actions may be developed during the life of the project.

Component 2: Implementation of policy, institutional and fishery management reform

Outcome 2.1: Enhanced compliance of existing legal instruments at national, regional and international levels

16. In his presentation, the Project Manager identified a relatively small budget shortfall in the proposed Indonesian budget for the national tuna coordinators (NTC) which may be recovered by reallocation.

17. Indonesia made the point that changes in national legislation took so long to complete that there would always be a lag behind organisations such as WCPFC who were able to modify or create new regulations annually. Dr Lewis appreciated the point made, and indicated that if support was needed to accelerate changes in legislation, then funding would be available, but only if required and requested.

Outcome 2.2: Adoption of market-based approaches to sustainable harvest of tunas

18. Dr Lewis explained the importance of documenting supply chains in relation to traceability and other issues, and detailed some examples in the WPEA area. Data would likely exist with other agencies outside fisheries, for example veterinary, customs etc. Data to be collected would be at a high level to provide an overview on general flow of tuna chain processes and corroborate catch statistics and landings data.

19. The Philippines clarified an item in the logframe, confirming that there were ongoing workshops working towards MSC certification in Mindoro. This is currently supported by industry, but extra funding assistance would be needed, which might be provided under WPEA.

20. Indonesia would be better positioned to identify fisheries that would be suitable for MSC certification once the NTMP was adopted.

21. Dr Lewis pointed out that the Vietnamese handline and longline fisheries for yellowfin are under a FIP (Fisheries Improvement Plan) now, and this was heavily reliant on outputs from the previous WPEA project. Vietnam indicated that the FIP for tuna caught by longline and handline fisheries may be a candidate for MSC certification, noting that a supply chain study is underway. The WPEA project may contribute, perhaps via a joint venture workshop with the FIP process and include more participants and for supply chain and certification. Furthermore, in several provinces in Vietnam, there is a restructuring of production, processing, consumer and export chains which is closely related to this WPEA outcome.

22. Philippines suggested that prior research to inform the partner countries of the current status of tuna fishery supply chains and related issues should be a priority.

23. UNDP referred the workshop to a UNDP project on sustainable supply chains, which may also support this WPEA objective, and Indonesia indicated that they were already communicating with the relevant agencies in this project. It needed to be confirmed whether this project would include tuna fisheries.

24. The workshop was advised that for Vietnam information packaging is more important than data collection which is ongoing.

25. The Steering Committee agreed the following actions:

- **The hiring of a national consultant to collate all supply chain related issues and provide a country report/available data summary (Terms of Reference to be developed in line with the needs of each country].**
- **UNDP will provide the fishery focus for the global project on sustainable supply chains with a view to obtaining additional support to achieve these WPEA outcomes.**
- **It is recommended that prior research on supply chains/traceability etc. should be conducted, by a consultant within a budget of USD 2,000 per country. Individual ToRs for reports will be agreed with each project country.**

Outcome 2.3: Reduced uncertainty in stock assessment of POWP LME and EAS LMEs highly migratory fish stocks, and improved understanding of associated ecosystems and their biodiversity

26. UNDP noted that data collection is the most important component, and should be fully supported. Where additional funding might be required, this may be done via reallocation between different project components and/or future co-financing grants, noting that care should be taken since this could affect the budget codes

27. Vietnam concurred indicating that data collection is their priority activity. All three partner countries would support reallocation of their budgets to support data collection.

28. The Project Manager gave an overview of the WCPFC SPC stock assessment process and proposed a three country workshop with the following implications:

- Three country stock assessment scientists and data managers will have a meeting to consider the possibility of conducting a sub-regional stock assessment with any applicable model to EAS area only, and conduct a trial assessment;
- Invite SPC staff to a stock assessment training workshop for presentation on the results of sub-regional stock assessment (from 2014 onwards) after changes to MF-CL model structure, and try to develop a sub-regional stock assessment framework;
- A suggested process throughout the project period will be:
  a) Step 1: Consultation meeting among stock assessment scientists and conduct a trial sub-regional stock assessment;
  b) Step 2: Conduct a sub-regional stock assessment training workshop;
  c) Step 3: Develop a sub-regional stock assessment framework.

29. Dr Lewis offered guidance indicating that the stock assessment was just that, an assessment of the stock – through its range. Where relatively small areas within the range are assessed, variability and uncertainty increases, and such assessments may not be appropriate analyses on which to base reference points (RPs) or harvest control rules (HCRs). Other options to conduct assessments at a national level are less reliable than those across the range of the stock. Regarding the development of a sub-regional database to support the proposed Consultative Forum with e.g. SEAFDEC and PEMSEA, it will require extensive consultation and should initially be kept simple, e.g. for catch and effort data which is already collected, and an online database is probably ambitious – but ultimately the individual countries should decide how much and what type of data should be provided.

30. The issue of data sharing between the three partner countries was raised, querying the current policies which should be worked through before a joint stock assessment could be considered. Another early action would be for a national consultant to review what data are available and which models should be used in country. It was suggested that all stock assessment training could be combined into a single three-country workshop with international expert advice as required. There would likely be a need to define the type of data to be collected and shared, and ultimately the partner countries would want a web based system that could be accessed on line.

31. There followed discussion on the potential for SPC to conduct stock assessments in model region 7 in detail. The member countries were encouraged to request through their country delegates at WCPFC and SC meetings that SPC conduct stock assessments on EAS on their behalf.

32. In recognition that the fisheries in question are for highly migratory species (HMS), the question of distinguishing local catches from those outside of the WPEA region was raised. However it was pointed out that VMS and logbooks indicate where fishing has occurred, and there may be historical data by country, for example landed catches have been monitored for more than 10 years in the Philippines, where a stock assessment is currently being conducted for straddling stocks of small pelagics. In addition,

research vessels are conducting studies on larvae and spawning ground; hence there is a need to catalogue existing data by country before considering work on a sub-regional level.

33. The workshop noted that participants who had attended stock assessment workshops at SPC, found them useful to understand the WCPFC regional stock assessments, but the partner countries could not use MF-CL. It was noted that there will be other options which might be appropriate for the partner countries. The workshop also noted the wording in the logframe target: "Tuna management strengthened through applying scientific procedure using RPs and HCRs at national level once applied at regional level".

34. Regarding the biodiversity element in the logframe, outcomes can be addressed through increased information from observer programs and bycatch sampling, leading to reductions of bycatch and especially a range of conservation measures for endangered, threatened and protected (ETP) species.

35. The Steering Committee agreed the following actions:

- **Catalogue existing data by country before considering work on a sub-regional level stock assessment.**
- **Hold a meeting of sub-regional stock assessment scientists (and data manager) in year 1 to discuss available data, appropriate models and cooperation with the aim of conducting sub-regional stock assessments, and to finalise the details of preparing the sub-regional stock assessment training workshop.**

Outcome 2.4: Ecosystem Approach to Fisheries Management (EAFM) guiding sustainable harvest of the oceanic tuna stock and reduced by-catch of sea turtles, sharks and seabirds

36. Dr Lewis noted that without observer data collection (and bycatch sampling) this outcome isn't possible. Furthermore, bait used to catch tuna should be considered along with bycatch. The ecological risk assessment (ERA, also known as productivity and susceptibility analysis, PSA) is for bycatch only. The review of the NTMPs is included because there is reference in each of them to EAFM, and recommendations may be made for the NTMPs. PSA work to date indicates that there is generally a low risk for most bycatch species, but there may be a need to consider in greater detail threatened or endangered species where extensive CMMs are already in place at regional level. The information gathered could be reviewed at a workshop in year 2 and the outputs from that workshop could then be applied to policy and NTMPs in year 3.

37. In Vietnam, all data including bycatch is captured, which is sufficient for a risk assessment that could be conducted in year 1 or 2.

38. The Philippines suggested that the existing NTMP should be reviewed in the first year. EAFM WS planning and EAFM WS Policy would be in year 2 and then the risk assessment and EAFM application could be in year 3, although it may be useful earlier to inform planning for EAFM activities. UNDP supported this approach, but noted that there may be an issue in terms of funding to complete the outputs and recommended reviewing the output to be more realistic in light of available resources.

39. It was noted that the Vietnam handline fishery may have much of the information needed for an EAFM pilot study, and suggested that selecting several appropriate target fisheries would be a good option, a suggestion which UNDP supported.

40. It was recognised by the Philippines that there was a need to train planners and fishers in EAFM; and UNDP noted that after some training the project countries would be better placed to know what was required to deliver EAFM.

41. In response to Dr Lewis's query as to whether the application of an EAFM would be the responsibility of Ministry of Fisheries or Environment, in the Philippines there would be an overlap, whereas in Vietnam and Indonesia the responsibility would fall to the Fisheries.

Component 3 Knowledge sharing on highly migratory fish stocks

Outcome 3.1 Knowledge sharing on highly migratory fish stocks in the POWP and EAS LMEs.

42. UNDP drew the participants' attention to the International Waters Conference in 2015 in Da Nang; the project should support the attendance of one representative per country and from WCPFC. WCPFC should prepare experience notes for IW Learn.

43. UNDP suggested consideration should be given to having a dedicated project website for better visibility. An example of an appropriate page was given: www.pacific.iwrm.org, although for this relatively small project, the website may have smaller scope content.

44. Following the suggestion that the specialist knowledge manager would maintain the website, there was considerable discussion about that position and the other contracted post for a project management assistant given the limited budget available.

45. The recommended course of action to meet the WPEA knowledge management needs, is to explore the possibility of a contract with PEMSEA.

46. UNDP presented financial management (**Attachment C**) and M&E procedures of UNDP-GEF projects & Adaptive Management (**Attachment D**).

47. Following a brief discussion regarding future Steering Committee meetings, **the Steering Committee agreed an efficient and economical approach as follows:**

- **The Steering Committee meetings will be held for two days and be scheduled back to back with 3-country project workshops; it was further agreed that the next Steering Committee meeting would be held in November 2015 and will be hosted in the Philippines.**

48. The Project Manager presented the budget for year 1 and noted that detailed annual work plans and budget allocation will be finalized at consultation meetings during December 2014 and January 2015.

49. The Steering Committee endorsed the first year annual work plan and budget (Attachment E) along with the revised Project Results Framework (Attachment F).

50. WCPFC will hire the Finance Associate along with the WCPFC's recruitment policy and the TOR for the position will be prepared by the Project Manager and WCPFC. UNDP emphasized that earlier recruitment of the Associate will facilitate to the smooth commencement of the project.

51. Country representatives, UNDP and WCPFC were congratulated everyone on the fruitful outcomes of the meeting. The Inception Workshop and the first Steering Committee meeting were closed at 1600 hrs, Wednesday, 5 November 2014.

Attachment W12-B

WPEA Project Annual Work Plan 2015

INDONESIA

Outcomes	Activity	period	Budget
1.1	1. Logbook awareness WS	Q1-Q4	3,820
	2. Capacity building of the country science – participating in the WCPFC SC	Q3	6,362
	3. National tuna coordinator's activities	Q1-Q4	12,000
	4. Annual tuna catch estimates workshop	Q2	20,010
1.2	5. Prior study on climate change and fisheries	Q1-Q4	2,500
1.2 and 2.2	6. Review workshop on consultancy outputs related with climate change, supply chain analysis, and sustainability/certification	Q4	18,940
2.1	7. Implementing national compliance review monitoring	Q1-Q4	6,000
2.2	8. Consultancy on supply chain analysis/traceability	Q1-Q4	2,500
	9. Consultancy on sustainability/certification	Q1-Q4	2,500
2.3	10. Research on harvest strategy	Q2-Q4	6,500
	11. Convene a review workshop on harvest strategy (reference points and harvest control rules)	Q4	2,500
	12. Data review workshop on port sampling	Q1-Q4	1,7490
	13. Sub-regional stock assessment workshop	Q4	7,000
	14. Data collection from port sampling	Q1-Q4	85,180
3.1	15. Database review and development	Q1-Q4	4,000
	16. IW Learn activities	Q1-Q4	4,000
GRAND TOTAL FOR YEAR 1			**201,302**

PHILIPPINES

Outcome	Activity	period	Budget
1.1	1. Capacity building in country's science	Q3	4,200
	2. Catch estimation workshop	Q2	3,310
	3. National Tuna Coordinator's activities	Q1-Q4	7,800
1.2	4. Prior study on climate change (consultancy)	Q2	5,000
2.1	5. Update *Operational Guide for Filipino Fishermen*	Q1	2,000
	6. WS on national reference points and harvest control rules	Q4	22,100
2.2	7. Prior study on certification and eco-labeling	Q2	2,000
	8. Consultancy on Philippine tuna supply chain analysis	Q2	2,000
	9. National workshop on three Consultancy Reports from pilot studies a) Consultancy on climate change; b) Consultancy on certification and eco-labeling; and c) Philippine tuna supply chain analysis	Q2	13,600
2.3	10. Sub-regional stock assessment workshop	Q4	7,000
	11. Data review workshop	Q2	19,830
	12. MCS and VMS programs established	Q1-Q4	47,380
	13. Port sampling and field supervision	Q1-Q4	43,818
	14. Training WS on E-logbook	Q3	5,500
2.4	15. WS on EAFM, RPs and HCRs	Q2-Q3	4,000

3.1	16. IW Learn / PEMSEA EAS CONGRESS	Q4	4,000
GRAND TOTAL FOR YEAR 1			**193,538**

VIETNAM

Outcome	Activity	period	Budget
1.1	1. Capacity building in science. Support participation of Vietnam to SC11	Q3	6,496
	2. National tuna coordinator's activities	Q1-Q4	8,400
	3. Data review and catch estimation workshop	Q2	29,660
	4. Reconstruction of catch histories prior to 2000	Q2	2,170
1.2	5. Prior study on climate change	Q3	2,351
2.1	6. Implementing national compliance review monitoring	Q1-Q4	2,400
	7. Consultancy on reference points and harvest control rules	Q4	2,500
	8. WS on consultancies for climate change and reference points	Q4	15,340
	9. Participation in tuna data WS at SPC	Q2	3,600
2.2	10. Consultancy – Tuna supply chain analysis/traceability	Q2	1,500
	11. Consultancy on sustainability/certification	Q2	2,500
2.3	12. WS on Market-based Sustainability Consultancies	Q4	15,600
	13. Sub-regional SA scientists' meeting	Q4	7,000
	14. Port sampling	Q1-Q4	94,010
3.1	15. website		
	16. Participation in the regional knowledge platform	Q1-Q4	6,000
GRAND TOTAL FOR YEAR 1			**199,527**

Attachment W12-C

Sustainable Management of WPEA Tunas

Project Progress Report

1st Quarter 2015

Award Basic Information

Award ID:	00077221
Project ID:	00088145
Award Title:	Regional: Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas
Business Unit:	PHL10
Project Title:	Regional: Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas
PIMS no.	4753
Implementing Partner (Executing Agency)	Western and Central Pacific Fisheries Commission (WCPFC)
Award Start Date & End Date	
Total Award Amount	$2,233,578

Project Progress

1. Since the official commencement of this project on 28 October 2014, the Inception Workshop was held in Da Nang, Vietnam, 4-5 November 2014. The workshop report was finalized and submitted to the UNDP.

2. One of the key activities in the WPEA project is tuna data collection and annual tuna catch estimation at each country from using port sampling data. For the data collection from port sampling, WPEA project hired port sampling enumerators and paid their salaries. Enumerator's salaries for November and December 2014 were covered by WCPFC budget first, and then the amount was requested to be reimbursed by GEF budget when GEF budget transferred from UNDP to WCPFC. Total amount for the 2014 port sampling is $24,201.87 ($7,844 for Indonesia, $3,157.87 for Philippines, and $13,200 for Vietnam).

3. There are some risk and issues to be resolved soon. Both Indonesia and Vietnam have not yet endorsed the WPEA Project internally, and accordingly, no official bank account has been established yet. This means that no activities have been conducted in these two countries so far this year. Especially, there was a reshuffling of the government structure in Vietnam recently, so even port sampling has not been conducted this year. However, Indonesia has been paying their enumerator's salary from their government budget and will be reimbursed from WCPFC once their official bank account is established.

4. Several activities have been prepared in the Philippines since early 2015, as shown in the table below. The following activities were planned and budget transferred to NFRDI official bank account. Some activities were planned to implement in Quarter 2 but budget transfer was required to prepare such activities.

Component	Expected Outcom	Philippine project activity	Activity period	Targets End of Project	Budget	Budget Code	Remarks

	es						
1	1.1	2. Preparation of Catch Estimation Workshop: budget transferred; workshop scheduled and meeting venue surveyed	Q2 (2015.05.21-26)	• Estimates of the Philippine annual total tuna catch produced • Workshop report produced	6,920	72100	
2	2.1	5. Publication of *Operational Guide for Filipino Fishermen*	Q1	Guide published and distributed to fishermen	2,000	72100	
	2.3	11. Tuna Data Review Workshop	Q2 (2015.05.21-26)	Combined with Activity No. 2	6,920	72100	
	2.3	12. Preparation of MCS activities					
		1) Expansion of Observer Data Collection	Q1-Q2	Data summary report produced; fishery observers employed	8,930.40	75700	
		2) Monitoring of observers; Debriefing WS	Q1-Q2 (workshop dates TBD)	Observer data achieved; Debriefing report and guidelines produced	6,104.40	75700	
		3) Observer Handbook and Species ID Guide published	Q1-Q2	Observer Handbook distributed; Species Identification Guide distributed	2,442.00	75700	
	2.3	13. Consultancy on the selection of port sampling sites	Q1-Q2	Consultancy progress report and final report produced	1,000	72100	
	2.3	13. Port Sampling, data compilation and fishery monitoring	Q1-Q2	Data collected from port sampling submitted; field trip report produced	19,410	72100	
PMU		Project Manager: Preparation and convening of the Inception Worksop; develop AWP and Budget; WCPFC-PEMSEA CF	Q1	Inception WS convened; Country's AWP and budget allocation submitted to UNDP; WCPFC-PEMSEA CF held	24,847.29		Travel cost from Oct. 2014 to March 2015

5. During the PEMSEA Inception Workshop, WCPFC and PEMSEA had a meeting in Manila, 25 March 2015, to prepare WCPFC-PEMSEA Consultative Forum and any collaboration between the two project partners. The meeting summary is in **Attachment A**, and two issues are highlighted below:

a) WPEA-PEMSEA Consultative Forum will be held in November at WPEA PSC meeting.
b) WPEA and PEMSEA will work together to recruit a Project Knowledge Management Associate (PKMA).

6. Project Manager is planning to visit three countries to facilitate internal endorsement of the project and committing project activities.

Attachment W12-D

Sustainable Management of WPEA Tunas
Project Progress Report

2nd Quarter 2015

Submitted by the Project Manager SungKwon Soh

11 July 2015

Award Basic Information

Award ID:	00077221
Project ID:	00088145
Award Title:	Regional: Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas
Business Unit:	PHL10
Project Title:	Regional: Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas
PIMS no.	4753
Implementing Partner (Executing Agency)	Western and Central Pacific Fisheries Commission (WCPFC)
Award Start Date & End Date	
Total Award Amount	$2,233,578

Project Progress

1. In the second quarter, several activities have been planned and the following table below shows the plan and the status of the individual project activities by country. Some activities of the Indonesia and Vietnam have been delayed because of the delay of internal approval of the project.

Indonesia

2. Indonesia has approved the project and provided an official bank account on 19 July 2015. Since this date, project funds can be transferred to both DGCF and RCFMC, the two executing agencies in Indonesia. In the monitoring of the project activities in Indonesia, the following points are highlighted:

a) There are two national tuna coordinators (NTC) who are responsible for the execution of each project activity in Indonesia, one at DGCF and the other at RCFMC. NTC allowances will be provided to RCFMC staff but NTC allowances for the DGCF will be paid as honorarium to those who conduct each project activities.
b) RCFMC has been using its own budget for the payment of enumerator's salary since January 2015. As the new bank account was available, WPEA could reimburse such amount.
c) RCFMC agreed that activity numbers 10 and 11 related with harvest strategy (HS) will be merged and WPEA activities for HS will be collaborated with the Indonesian government's initiative in establishing harvest strategy framework through a series of workshops. CSIRO is heavily involved in the development of the HS, and WPEA (DGCF and RCFMC together) will work with CSIRO too.

3. Though the implementation of project activities were delayed, Indonesia conducted the following activities during the 2nd quarter:

a) Tuna catch data collection from port sampling continued since January 2015 and data were submitted to WCPFC and used at the ITFACE-6 WS.

b) As a joint activity, DGCF and RCFMC WPEA team participated in the second Indonesia's Harvest Strategy WS, 18-22 May 2015 and produced a work programme for harvest strategy case study for Indonesian tuna fisheries (WPP 713, 714, 715). To further collaborate with the government, NGOs and CSIRO, WPEA will partially support future organization of the harvest strategy workshop (**Attachment A**).

c) DGCF hosted the Sixth Indonesian (WCPFC Area) Tuna Fisheries Annual Catch Estimates (ITFACE) Workshop in Bogor, 24-26 June 2015. The WS produced 2014 provisional tuna catch estimates by species and by gear. A provisional Indonesian tuna catch estimate for year 2014 was 483,000 mt. A WS report and recommendations were produced for review by the participants (**Attachment B**).

Outcomes	Activity (IDN)	Period scheduled	Q1 and Q2	Q3 and Q4
1.1	1. (DGCF) Logbook awareness WS	Q1-Q4		Will be implemented
1.1	2. (DGCF) Capacity building of the country science	Q3	Preparatory actions taken in Q2	Will be implemented
1.1	3. (DGCF, RCFMC) National tuna coordinator	Q1-Q4	Implemented in Q1 and Q2	Continued
1.1	4. (DGCF) Annual Tuna Catch Estimates Workshop	Q2	Implemented in Q2	
1.2	5. Prior Study on Climate Change	Q1-Q4	Preparatory actions taken in Q2	Will be implemented
1.2 and 2.2	6. Review WS on CC, Supply Chain Analysis, and Sustainability/Certification	Q4	Preparatory actions taken in Q2	Will be implemented
2.1	7. (DGCF) Implementing national compliance review monitoring	Q1-Q4		Will be implemented
2.2	8. Consultancy - Supply chain analysis/traceability	Q1-Q4	Preparatory actions taken in Q2	Will be implemented
2.2	9. Consultancy on sustainability/certification	Q1-Q4	Preparatory actions taken in Q2	Will be implemented
2.3	10. Research on harvest strategy	Q2-Q4	Preparatory actions taken in Q2	Will be implemented
2.3	11. Convene a review WS on harvest strategy (RPs and HCRs)	Q4	Preparatory actions taken in Q2	Will be implemented
2.3	12. (RCFMC) Conduct data review WS	Q1-Q4		Will be implemented
2.3	13. (RCFMC) Sub-regional stock assessment workshop	Q4		Will be implemented
2.3	14. (RCFMC) Data collection from port sampling	Q1-Q4	Implemented in Q1 and Q2	
3.1	15. Database	Q1-Q4		Will be implemented
3.1	16. IW Learn activities	Q1-Q4		Will be implemented

Philippines

4. There have been no problems in implementing WPEA project in the Philippines, though some consultancies have been delayed because of insufficient domestic expertise or limited budget to hire international level experts. The project however tries to hire domestic experts as part of a capacity building, which includes prior studies in the areas of climate change, reference points and harvest control rules, certification and eco-labeling, and supply chain.

5. NFRDI noted that WS for reference points (RPs) and harvest control rules (HCRs) needs to be held in the first quarter of 2016 to meet their government schedule on this issue. So activities 6 and 15 will be delayed but preparatory work will continue during Q3 and Q4.

6. Several activities have been conducted in the second quarter, including:
   a) The sixth WPEA/NSAP Tuna Data Review WS, 21-22 May 2015. Draft report is in the **Attachment C.**
   b) The eighth Philippines/WCPFC Annual Tuna Fisheries Catch Estimates Review WS, 25-26 May 2015. WS recommendations were adopted for future work (**Attachment D**). The following table shows the estimated catches of oceanic tunas for 2014:

Workshop Outcome	
Domestically-based Fleets	2014 total tuna catch
Purse seine	78,153
Ringnet	45,502
Handline (large-fish)	31,444
Hook-and-line	15,356
Gillnet	3,031
Troll	6,125
Tuna LL	465
Others	280
TOTAL ESTIMATES	**180,356**

   c) Expansion of observer data collection: Deployed a total of 6 observers (2 observers in Infanta, 2 observers in Bicol and 2 observers in Surigao); Observers boarded in RingNet/Purse Seine Vessels every month.

d) Observer Handbook and Species ID Guide published: Operation Manuals and Species ID are currently in their final drafts for review prior to printing/publishing. Draft Species ID is attached **(Attachment E)**

e) Consultancy on the selection of proper port sampling sites: consultancy contract was made and proposal was presented at the May Review WS. Presentation is attached in **Attachment F**.

f) Data collection from port sampling: during Jan - June 2015, tuna catch data were collected from 22 landing sites and these data will be encoded in the NSAP Database System upon completion of 2014 data encoding. Port sampling, data encoding, field supervision and other activities are ongoing activities.

Philippines

Outcome	Activity (VNN)	period	Q1 and Q2	Q3 and Q4
1.1	1. Capacity building in country's science	Q3	Preparatory actions taken in Q2	Will be implemented
1.1	2. Catch estimation WS	Q2	Implemented in Q2	
1.1	3. NTC	Q1-Q4	Implemented in Q1 and Q2	Continued
1.2	4. Prior study on CC (consultancy)	Q2	Preparatory actions taken in Q2	Will be implemented
2.1	5. Update *Operational Guide for Filipino Fishermen*	Q1	Implemented in Q1	
2.1	6. WS on national RPs and HCRs	Q4	Preparatory actions taken in Q2	Preparatory actions continued Will be implemented in Q1, 2016
2.2	7. Prior study on certification and eco-labeling	Q2	Preparatory actions taken in Q2	Will be implemented
2.2	8. Consultancy on Philippine Tuna Supply Chain Analysis	Q2	Preparatory actions taken in Q2	Will be implemented
2.2	9. National workshop on three Consultancy Reports from pilot study	Q2	Preparatory actions taken in Q2	Will be implemented
2.3	10. Sub-regional stock assessment workshop	Q4		Will be implemented
2.3	11. Data review WS	Q2	Implemented in Q2	
2.3	12. MCS and VMS programs established	Q1-Q4	Implemented in Q2	Continued
2.3	13. Port sampling	Q1-Q4	Implemented in Q1 and Q2	Continued
2.3	14. Training WS on E-logbook	Q3		Will be implemented
2.4	15. Orientation on EAFM and WS on EAFM (combined with WS on RPs and HCRs)	Q2-Q3		Will be implemented WS will be held in Q1, 2016
3.1	16. IW Learn / PEMSEA EAS Congress	Q4		Will be implemented

Vietnam

7. There was a government reshuffling last November 2014 and the reshuffling will continue in some provinces. Former agency in central government (DECAFIREP) that implemented WPEA project demolished last December 2014. As a consequence, the WPEA official bank account was also closed. So no project fund could be transferred to Vietnam since December 2014. Because of this, most WPEA project activities were stopped.

8. All foreign projects with a certain size should be endorsed by the Prime Minister in Vietnam. As of the 1st July, the Minister of Planning and Investment sent a recommendation letter to the Prime Minister to propose implementing the WPEA project in Vietnam. Now Vietnam is waiting for the final decision by the Prime Minister. Once approved, then a new official bank account for this project will be opened, project funds will be transferred, and all activities will be commenced as planned.

9. The project manager visited Hanoi to facilitate the process of the Prime Minister's endorsement and immediate action plan once the project is approved. The NTC and the project manager traveled to provinces to encourage sub-DECAFIREP staff and enumerators to resume data collection from port sampling ASAP using WCPFC protocol. So far, very limited activities have been conducted in both central government and provinces. The project manager and the NTC consulted with other relevant staff, and prepared a preparatory work plan to facilitate the 2015 activities in the near future. A summary of project activities is noted in the table below.

Vietnam

Outcome	Activity (VNN)	period	Q1 and Q2	Q3 and Q4
1.1	1. Support participation of Vietnam to SC11	Q3	Preparatory actions taken in Q2	Will be implemented

	2. National tuna coordinator	Q1-Q4	Implemented in Q1 and Q2	Continued
1.1	3. Convene A Data Review and catch estimation workshop	Q2	Deferred to Q3	Will be implemented
1.1	4. Reconstruction of catch histories	Q2	Preparatory actions taken in Q2	Will be implemented
1.2	5. Prior study on CC	~~Q4~~ Q3	Preparatory actions taken in Q2	Will be implemented
2.1	6. Implementing national compliance review monitoring	Q1-Q4		Will be implemented
2.1	7. Consultancy on RPs and HCRs	Q4		Will be implemented
2.1	8. WS on Consultancies for CC and RPS	Q4		Will be implemented
2.1	9. Participation in Tuna Data WS at SPC	Q2	Implemented	
2.2	10. Consultancy – TUNA Supply chain analysis/traceability	Q2	Preparatory actions taken in Q2	Will be implemented
2.2	11. Consultancy on sustainability/certification	Q2	Preparatory actions taken in Q2	Will be implemented
2.2	12. WS on Market-based Sustainability Consultancies	Q4		Will be implemented
2.3	13. Sub-regional SA scientists' meeting	Q4		Will be implemented
	14. Port sampling	Q1-Q4	Partially implemented	Will be implemented
3.1	15. website			
3.1	16. Participation in the regional knowledge platform	Q1-Q4		Will be implemented

Attachment W12-E

Sustainable Management of WPEA Tunas
Project Progress Report

3rd Quarter 2015

Submitted by the Project Manager SungKwon Soh

09 October 2015

AWARD BASIC INFORMATION

Award ID:	00077221
Project ID:	00088145
Award Title:	Regional: Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas
Business Unit:	PHL10
Project Title:	Regional: Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas
PIMS no.	4753
Implementing Partner (Executing Agency)	Western and Central Pacific Fisheries Commission (WCPFC)
Award Start Date & End Date	
Total Award Amount	$2,233,578

PROJECT PROGRESS

1. Several activities have been planned for the third quarter but implementation of those activities has been delayed in Indonesia and Vietnam awaiting finalisation of their internal approval process required to action this project, i.e., designating the execution department and finalizing the project activities and related budget. Project activities for these two countries have been deferred to the fourth quarter of 12015 or early 2016. The progress of the WPEA project at each country is annexed below.

Indonesia

2. There are two agencies in Indonesia which implement the WPEA-SM Project: Directorate General for Capture Fisheries (DGCF) and Research Center and Development for Fisheries (RCDF, formerly RCFMC).

3. Though Indonesia has approved the WPEA-SM project and both DGCF and RCDF have provided their official bank accounts, DGCF's internal process for dealing with project activities and budget with their finance office has yet to be cleared (There was a new request from the government in July 2015), hence delays for the project implementation continue in DGCF. In the case of RCDF, there was a re-structuring and the formal institute RCFMC merged with the Aquaculture Center, to become RCDF. However, the implementation of RCDF's project activities have continued to date.

4. Third quarter, WPEA-related activities conduced in Indonesia are listed below:
   a) Collection of tuna catch, effort and biological data from port sampling at these landing sites: Kendari Sodohoa, Bitung, Sorong and Mamuju (Majene). Data summary report - **Attachment A**.
   b) Supervision trip for port sampling conducted during August in Sorong. Trip report - **Attachment B**.
   c) Participation in the 11th regular session of the WCPFC's Scientific Committee as capacity building in fisheries science (5-14 August 2015, Pohnpei, FSM). Trip report - **Attachment C**. The participant described in his report lessons that he learned as follows (extracted from the trip report):
      i) SC11 provided an excellent opportunity for Indonesia to actively participate in the WCPFC, particularly through WPEA project. Indonesia's participation is essential for

maintaining its tuna fishery sustainable development in the long term and active participation in the work of the WCPFC.

ii) It is my first time to attend an SC meeting and I got new knowledge regarding tuna science, particularly in tuna research, since I am currently in charge of tuna management in the ministry of fisheries. This knowledge is quite important for me and for my office to contribute for the better management tuna resources in Indonesia.

iii) By attending the meeting, I fully recognized the importance of the data for research. Therefore, Indonesia should improve collecting data from logbook and observer programme to support tuna research in the WCPFC area.

iv) Another observation is that the research papers during the meeting did not focus much on main tuna species. There are many researches, projects and discussions that were related with bycatch and ecologically related species particularly on shark.

d) Establishment of a new government bank account for WPEA-SM project (in-kind contribution)

e) Development of an academic paper to establish a new research institute for large pelagic fish species in Bitung (In kind Contribution). The report - **Attachment D** (in Bahasa with a cover page in English).

f) Preparation of a prior study for the development of general guidelines on adaptive management and monitoring of highly migratory fish stocks in relation with climate change (on-going).

5. An overview of the project progress is summarized in Table 1.

Table 1. Progress of Indonesia's WPEA-SM project activities. Some activities were deferred to early next year 2016.

Outcomes	Activity (IDN)	Period scheduled	Q1 and Q2	Q3 and Q4
1.1	1. (DGCF) Logbook awareness WS	Q1-Q4		Deferred to early 2016
	2. (DGCF) Capacity building of the country science	Q3	Preparatory actions taken in Q2	Completed in Q3
	3. (DGCF, RCFMC) National tuna coordinator	Q1-Q4	Implemented in Q1 and Q2	Continued
	4. (DGCF) Annual Tuna Catch Estimates Workshop	Q2	Completed in Q2	
1.2	5. Prior Study on Climate Change	Q1-Q4	Preparatory actions taken in Q2	Will be implemented in Q4
1.2 and 2.2	6. Review WS on CC, Supply Chain Analysis, and Sustainability/Certification	Q4	Preparatory actions taken in Q2	Deferred to early 2016
2.1	7. (DGCF) Implementing national compliance review monitoring	Q1-Q4		Continued
2.2	8. Consultancy - Supply chain analysis/traceability	Q1-Q4	Preparatory actions taken in Q2	Will be implemented in Q4
	9. Consultancy on sustainability/certification	Q1-Q4	Preparatory actions taken in Q2	Will be implemented in Q4
2.3	10. Research on harvest strategy	Q2-Q4	Preparatory actions taken in Q2	Continued
	11. Convene a review WS on harvest strategy (RPs and HCRs)	Q4	Preparatory actions taken in Q2	Will be implemented in Q4

	12. (RCFMC) Conduct data review WS	Q1-Q4		Deferred to early 2016
	13. (RCFMC) Sub-regional stock assessment workshop	Q4		Will be implemented in Q4
	14. (RCFMC) Data collection from port sampling	Q1-Q4	Implemented in Q1 and Q2	Continued
3.1	15. Database	Q1-Q4		On-going
	16. IW Learn activities	Q1-Q4		Deferred to 2016

Philippines

6. There have been several activities conducted in the Philippines during the third quarter but some activities scheduled this year will be deferred to early 2016. Key activities include capacity building in science by supporting participation of one BFAR staff in the eleventh session of the WCPFC Scientific Committee and several MCS activities as summarised below.

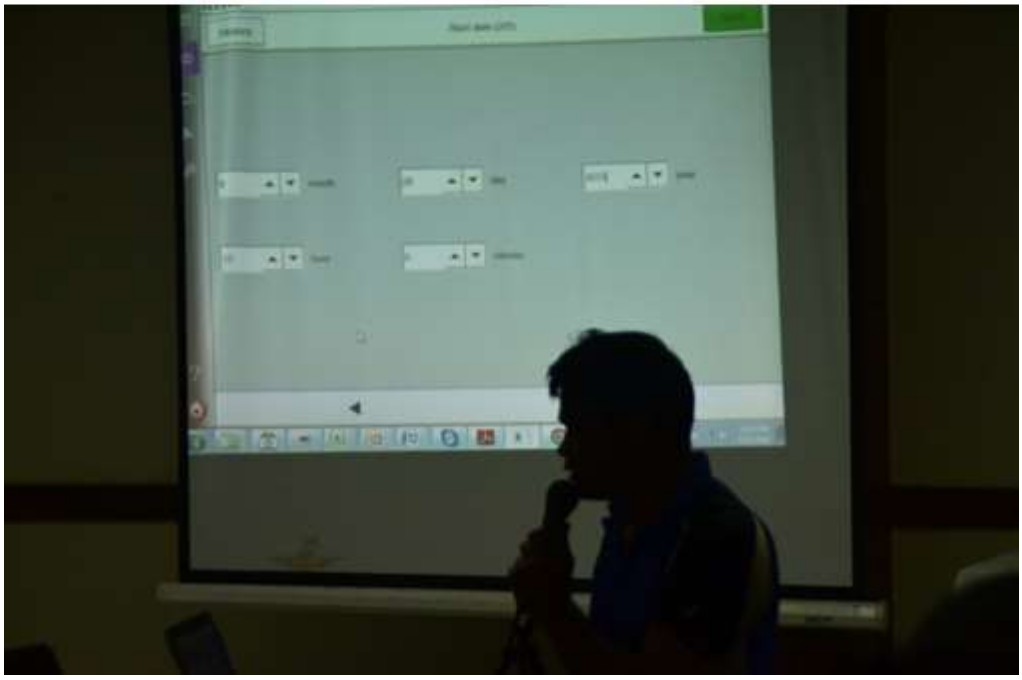
7. Observer Deployment**: A** total of 6 observers in the matrix below were deployed to board commercial fishing vessels (Purse Seine/Ring Net) operating within the Eastern Pacific Seaboard. This was to broaden observer data collection within the Philippine EEZ. Observers are on-board vessels for 10-15 days per month. The observers take on enumerator duties when on shore.

Name of Observer	Region	Area
Ruben Buemia	4-A (Calabarzon)	Infanta, Quezon
Ian Edward Calpe	4-A (Calabarzon)	Infanta, Quezon
Marco Briz	5 (Bicol)	Mercedez, Camarines Norte
Kenneth Molo	5 (Bicol)	Mercedez, Camarines Norte
Oriel Rosero	13 (Caraga)	Surigao
Francisco Piloton Jr.	13 (Caraga)	Surigao

8. Two training workshops were conducted in September.

1) A debriefers Workshop was held on 21-23 September 2015 with 30 participants (Fisheries Observers) at the BFAR MCS Station and the Fishing Technology Laboratory in Navotas City. The workshop aimed for the improvement of debriefing process, and identifying issues and concerns related with observer deployment and observer evaluation.

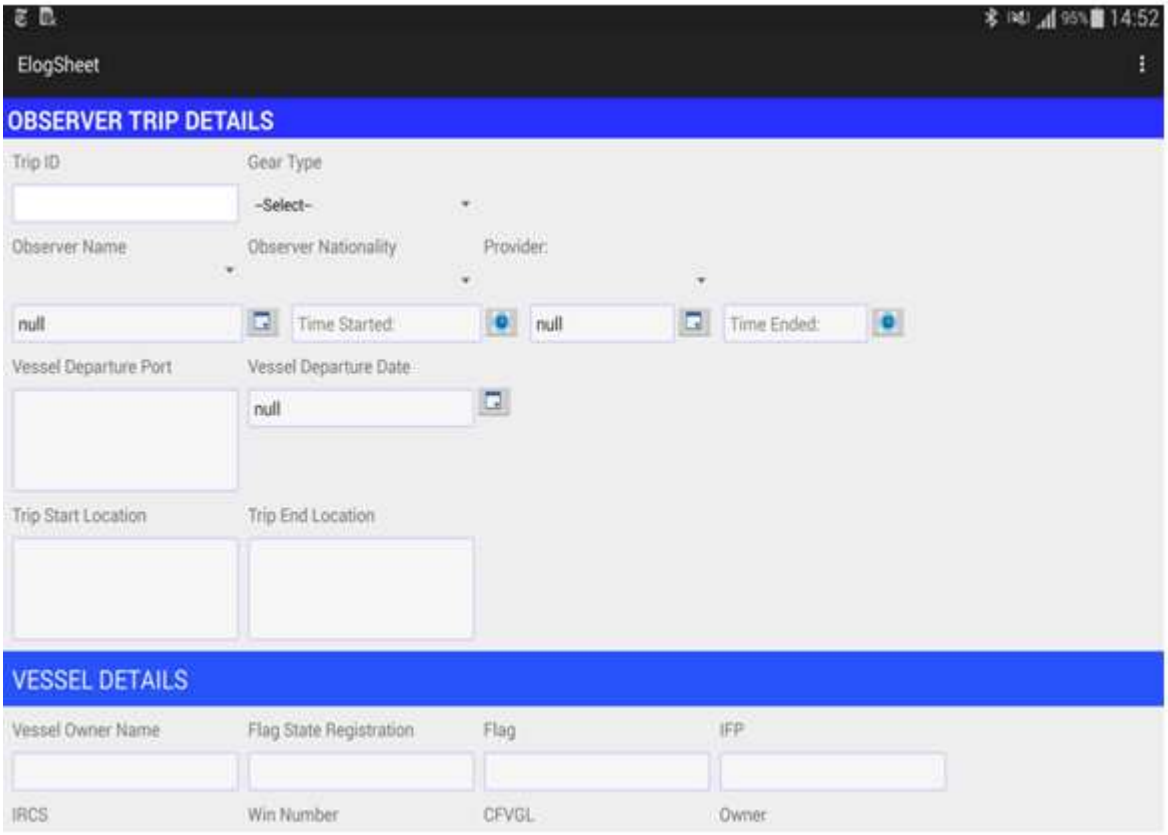
2) A training workshop on E-Logbooks (MARLIN) was held on 28-29 September 2015 in General Santos City with 60 participants (Vessel Captains and Fisheries Observers). Training focused on the operation, use and troubleshooting of the MARLIN unit installed in catcher vessels operating in high seas pockets no.1.



9. WPEA-supported the purchase of required IT equipment.

    1) The Philippine Fisheries Observer Program Management Office (PFOPMO) purchased two desktop units to be used for the Tuna Fisheries Observer System (TUBs) and data encoding of observer forms.
    2) Five Android Tablets for Pilot Testing of Electronic Observer Forms were also purchased..

10. The Development of Electronic Observer Forms. The Program has started to develop Observer Forms in Electronic Format. The Android application is currently undergoing a review and debugging process.



11. Capacity building is one of the main objectives of the WPEA Project. Every year, WPEA supports one scientist per country to attend the WCPFC's Scientific Committee meeting. The 2015 Philippine SC11 trip report is **Attachment E**. The participant described in her report lessons that she learned as follows (extracted from the trip report):

> The attendance on the 11th WCPFC Science Committee meeting in Pohnpei, Federated State of Micronesia, last August 3 to 14, 2015 has been beneficial and useful to the undersigned thus enhanced technical know-how's on various scientific activities contributed/shared by the scientists from other member countries and SPC. Hereunder are the observations and recommendations:
>
> a) The SC has continuously provided a good venue for scientists, fishery managers, compliance managers, regional /national observer coordinators and NGOs to discuss and share each other's works and experiences to upgrade knowledge and competencies on the latest trends and review of various fisheries status with focus on tunas in the WCPO and other species of special interest; issues related with data and statistics; stock assessment; management issues in relation to the implementations of the applicable conservation and management measures; ecosystem and bycatch mitigation and on other research projects including the West Pacific East Asia Project.
>
> b) It was also observed that after each paper presentations, the approach on open discussions to provide comments and observations has encourage the active participation of all member countries thus created a friendly working atmosphere and information sharing. Although there are some debates in the plenary due to different views and opinions, the respect of each other's contribution were deliberated and considered.
>
> c) Regarding the overall management and operation of the SC meeting, I fully support the decision making "Consensus Approach" which resulted in providing a unified scientific outputs.

d) Regarding the conduct of researches, there must be a need to encourage all member countries to conduct their respective compatible researches to validate the overall findings of the WCPFC scientific services provider. In this respect, the Commission must provide the corresponding capacity building training to interested CCMs to standardize the science protocol, methodologies, approaches and funding support in the implementation of the priority studies as well as promote the SPC's collaboration with interested CCMs.

e) In the case of the Philippines, the implementation of the WPEA Project activities and its flexible approach in supporting the country's /CCM's needs has been providing significant benefits. Its support is focused on the diversified requirements of the tuna fishing industry to improve its data collection both at the landing centers and onboard the fishing vessels using various documentation tools such as the NSAP data, logsheets, observers and VMS data. Despite the very limited budget provided by the WPEA Project, the Philippines through our BFAR budget has also provided counterparts in terms of sharing the expertise and/or services of technical and administrative personnel as well as its training and office facilities and other incidentals in order to attain the common objectives on the proper development and management of tuna resources to insure sustainable supply for the regional and national food security.

f) WCPFC Science Committee must develop a comprehensive capacity building programs based on the needs of the respective CCMs.

12. An overview of the project progress is summarized in Table 2.

Table 2. Progress of Philippine WPEA-SM project activities. Some activities were deferred to early 2016.

Outcome	Activity (PHL)	period	Q1 and Q2	Q3 and Q4
1.1	1. Capacity building in country's science	Q3	Preparatory actions taken in Q2	Completed in Q3
	2. Catch estimation WS	Q2	Completed in Q2	
	3. NTC	Q1-Q4	Implemented in Q1 and Q2	Continued
1.2	4. Prior study on CC (consultancy)	Q2	Preparatory actions taken in Q2	On-going
2.1	5. Update *Operational Guide for Filipino Fishermen*	Q1	Implemented in Q1	
	6. WS on national RPs and HCRs	Q4	Preparatory actions taken in Q2	Deferred to early 2016 (Q1)
2.2	7. Prior study on certification and eco-labeling	Q2	Preparatory actions taken in Q2	On-going
	8. Consultancy on Philippine Tuna Supply Chain Analysis	Q2	Preparatory actions taken in Q2	On-going
	9. National workshop on three Consultancy Reports from pilot study	Q2	Preparatory actions taken in Q2	Deferred to early 2016 (Q1)
2.3	10. Sub-regional stock assessment workshop	Q4		Will be implemented in Q4
	11. Data review WS	Q2	Completed in Q2	
	12. MCS and VMS programs established	Q1-Q4	Implemented in Q2	Continued
	13. Port sampling	Q1-Q4	Implemented in Q1 and Q2	Continued
	14. Training WS on E-logbook	Q3		Completed in Q3
2.4	15. Orientation on EAFM and WS on EAFM (combined with WS on RPs and HCRs)	Q2-Q3		Deferred to early 2016 (Q1)
3.1	16. IW Learn / PEMSEA EAS Congress	Q4		Will be implemented in Q4

Vietnam

13. Since a government reshuffling in November 2014, this project has been approved by the Viet Nam Prime Minister, the Minister of the Ministry of Agriculture; and the Rural Department assigned Directorate of Fisheries (D-FISH) as an implementing agency. The D-FISH Director instructed to establish a Project Management Board to facilitate this project. Currently, the Project Board includes four staff: Deputy Director of DECAFISH (which is under D-FISH), the WPEA Project national tuna coordinator (NTC), one staff from finance office, and another from the Science & Technology and International Cooperation Department (Director Nguyen Viet Manh). As of 9 October, Vietnam is in the process of selecting the Project Board member. Once complete, an official government bank account will be established for this project.

14. The NTC provided detailed information on the internal coordination of WPEA-SM project approval process within D-FISH as a record:

a) NTC drafted an official letter for Department of Capture Fisheries (DECAFISH) to submit to D-FISH Director General to assign DECAFISH as a national implementation agency of the project. Based on this proposal, D-FISH Director General has issued a decision No 519/QD-TCTS-KHCN&HTQT dated on 27 October 2015 to allow DECAFISH to propose a National Project Management Board (PMB).

b) Based on the Director Generals Decision, DECAFISH sent an official letter to Administrative Division of D-FISH to send a representative to involve in the project as an accountant. The administrative division assigned Ms. Tran Hai Yen to become involved in the project. Based on this, NTC drafted a proposed list of members for the Project Management Board including the following staff and sent the draft to the Director General of D-FISH:
   - Mr. Nguyen Van Trung, Director of DECAFISH as focal point of Viet Nam with WCPFC.
   - Mr. Pham Ngoc Tuan, Deputy Director of DECAFISH as Director of the project.
   - Mr. Pham Viet Anh, Fisheries Officer of DECAFISG as a NTC.
   - Ms. Tran Hai Yen, Administrative Devision of D-FISH as a project accountant.

c) D-FISH Director has wants an additional member of the PMB to representative of Department of Science and Technology and International Cooperation. Therefore, DECAFISH is preparing another proposal for re-submission to the D-FISH's Director General.

15. Data collection from tuna landing sites is a high priority in the WPEA project, but because of the delay of Vietnam's internal approval of this project, no substantial activities have been conducted including tuna fishery data collection. The Project Manager and NTC visited five key provinces in June 2015 and encouraged each province to resume their port sampling and data collection ASAP, promising that enumerator's salary would be reimbursed once the project approval process is finalized and a bank account is established.

16. During the provincial trip, all provincial Sub-DECAFIREP directors asked an official letter from the central government to resume their port sampling. NTC coordinated the process of sending the official letters. Following receipt of the official letter from D-FISH, all nine provinces have been collecting data since July 2015, using WCPFC sampling protocols.. Some provinces such as Khanh Hoa had already implemented WCPFC-type data collection since January 2015, though logbook data collection was missing. The following table summarizes the progress of port sampling and logbook data collection in the nine provinces during the last three quarters 2015.

Province	Fisheries	Status of data collection
Binh Dinh	Longline	Both port sampling and logbook data collection resumed in July 2015
	Gillnet and purse seine	
Phu Yen	Longline	Both port sampling and logbook data collection resumed in

	Gillnet and purse seine	July 2015
Khanh Hoa	Longline	Port sampling resumed since January and logbook data collection resumed since July 2015
	Gillnet and purse seine	Both port sampling and logbook data collection resumed in July 2015
Da Nang	Gillnet and purse seine	Port sampling resumed in July 2015
Quang Nam		
Quang Ngai		
Ninh Thuan		
Binh Thuan		
Baria-Vung Tau		

17. Capacity building in science in Vietnam was also enhanced by supporting one scientists attendance at the WCPFC's Scientific Committee meeting in August 2015. The trip report to the meeting is in **Attachment F.** The participant described in his report lessons that he learned as follows (extracted from the trip report):

a) SC11 provided much scientific information on the status of tuna stocks and introduced advanced stock assessment methods (e.g. Multifan-CL, Ecopath with Ecosim, SEAPODYM, CPUE standardization methods, etc.).

b) Viet Nam delegation learned the process of tuna management, including data analysis, stock assessment, development of reference points and recommendation of management strategies/measures as being implemented at WCPFC. This was very useful for Viet Nam delegation to understand how to enhance and build capacity on tuna fisheries management and assessment in the future. In addition, lessons learned from the process also emphasized the importance of tuna data collection and obligations of Viet Nam as a cooperating non-Member in complying with WCPFC requirements, especially related with tuna fisheries data collection and provision.

c) SC11 provided a great chance for Viet Nam to gradually approach to the scientific work of WCPFC. Vietnam's participation is very useful in maintaining its tuna fisheries be sustainable in the long term.

d) At the stage, due to the lack of technical expertise, Viet Nam should consider the application of the outcomes of regional stock assessments to its tuna fisheries management at the national level, including application of reference points and management strategies.

e) There is a strong need for Viet Nam to actively participate in the scientific works of the WCPFC and thus Vietnamese Government should consider allocation of a permanent government budget to support its delegation to attend the WCPFC Scientific Committee meetings.

18. An overview of the project progress is summarized in Table 3 below.

Table 3. Progress of the Viet Nam's WPEA-SM project activities. Some activities are deferred to early 2016.

Outcome	Activity (VNN)	period	Q1 and Q2	Q3 and Q4
1.1	1. Support participation of Vietnam to SC11	Q3	Preparatory actions taken in Q2	Completed in Q3
	2. National tuna coordinator	Q1-Q4	Implemented in Q1 and Q2	Continued
	3. Convene a data review and catch estimation workshop	Q2	Deferred to Q4	Will be implemented in Q4
	4. Reconstruction of catch histories	Q2	Preparatory actions taken in Q2	On-going
1.2	5. Prior study on CC	~~Q4~~	Preparatory actions	On-going

		Q3	taken in Q2	
2.1	6. Implementing national compliance review monitoring	Q1-Q4		Continued
	7. Consultancy on RPs and HCRs	Q4		Deferred to 2016
	8. WS on Consultancies for CC and RPs	Q4		Deferred to early 2016
	9. Participation in Tuna Data WS at SPC	Q2	Completed in Q2	
2.2	10. Consultancy – TUNA Supply chain analysis/traceability	Q2	Preparatory actions taken in Q2	On-going
	11. Consultancy on sustainability/certification	Q2	Preparatory actions taken in Q2	On-going
	12. WS on Market-based Sustainability Consultancies	Q4		Deferred to early 2016
2.3	13. Sub-regional SA scientists' meeting	Q4		Will be implemented in Q4
	14. Port sampling	Q1-Q4	Partially implemented	Implemented since July 2015
3.1	15. website			No plan in 2015
	16. Participation in the regional knowledge platform	Q1-Q4		No plan in 2015

Attachment W12-F

Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (WPEA SM Project)

THREE-COUNTRY WORKSHOP ON STOCK ASSESSMENT IN THE WPEA

3-6 November 2015

Research Institute For Marine Fisheries,
Haiphong, Viet Nam

Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (WPEA SM Project)

THREE-COUNTRY STOCK ASSESSMENT WORKSHOP

RIMF Meeting Room, Haiphong, Viet Nam
3-6 November 2015

WORKSHOP SUMMARY REPORT

AGENDA ITEM 1. OPENING

1. The Research Institute for Marine Fisheries (RIMF) vice-Director Mr Nguyen Viet Nghia and Project Manager Dr SungKwon Soh opened the workshop which was hosted by the RIMF. Welcome remarks were made by Mr To Viet Chau and the RIMF Director Dr. Nguyen Quang Hung. All participants representing Indonesia, Philippines, Vietnam and SEAFDEC introduced themselves. Dr John Hampton was introduced as the workshop resource person. The list of participants is in **Attachment A**.

AGENDA ITEM 2. ADOPTION OF AGENDA, CHAIR, RAPPORTEURS

A

2. The Project Manager briefed participants on the objectives and process of the workshop and the provisional agenda was adopted as in **Attachment B**.

3. The Project Manager chaired the workshop. Dr Jose Ingles was selected as a rapporteur.

AGENDA ITEM 3. OVERVIEW OF TUNA STOCKS IN THE WPEA AND WCPFC REGION

4. Dr Hampton presented an *Overview of Stocks and Fisheries in the WPEA and WCPFC Region* (**Attachment C**). In his presentation, he covered WCPO tuna biology, migration and stock structure, fisheries as defined in the WCPFC assessments, tuna catches, size composition and regional stock status of bigeye, yellowfin and skipjack tuna.

5. The following points were highlighted during his presentation and discussion:

a) New geographic regions were designated in the 2014 stock assessment. There are 9 regions for bigeye and yellowfin tuna stock assessment and 5 regions for skipjack tuna assessment.
b) Tagging results analysis covering several decades and incorporated into the assessment model showed that tunas tagged largely stayed in the area where they were released, particularly in the far east and far west Pacific. Those tagged and released in the central Pacific Ocean tend to spread widely towards the east and west, mixing with those from the other regions.
c) Stock composition analysis using the stock assessment models showed some differences between species. For region 7, skipjack and yellowfin tuna are comprised mainly of fish originating in the same area; in contrast, bigeye tuna are comprised also of fish moving from regions 3 and 5.

d) Archival tagging data indicate that bigeye tuna do not to maintain an association with individual FADs for extended periods of time (more than a week). In addition, tagging data suggests bigeye move predominantly eastward in the WPO despite the fact that currents (and drifting FADs) move westwards with the counter equatorial current.
e) There is little concrete evidence of significant movement of WCPO tuna into the Indian Ocean.
f) The period before tagged fish are recaptured (duration) is dependent on dynamics and distribution of fishing effort.
g) The stock structure graphs for SKJ and YFT indicate that effective management can be undertaken within the WPEA region.

AGENDA ITEM 4. THE STATUS OF STOCK ASSESSMENTS OF THE PARTICIPATING COUNTRIES AND AGENCIES

4.1 Indonesia

6. Mr Anung Widodo introduced *Fishery Profile of Indonesian WCPFC Statistical Area* (**Attachment D**), covering five fishery management areas (FMA), fleets, catch levels of oceanic tunas in the archipelagic waters and Pacific side EEZs, and national fishery data collection system.

7. Mr Widodo noted that Banda Sea was closed to fishing because of its spawning and nursery characteristics for tunas. It was also noted that anywhere is suitable for spawning where the temperature is about 26 degrees and productivity conditions are suitable for tunas. Spawning is a broad scale; central Pacific around upwelling areas and an area in the northern Philippines for the Pacific bluefin tuna.

8. Dr Fayakun Satria presented an *Update on Development of Tuna Data Collection and its Support for NTMP- Indonesia FMAs (713 to 717)* (**Attachment E)**. He noted that his center is now called the Center for Fisheries Research and Development (CFRD). He described the structure of the institute, data collection from port sampling, estimated tuna catches by gear, the newly approved National Tuna Management Plan and related researches. Regarding tuna management, there is a total allowable catch (TAC) for southern bluefin tuna only and no TACs are yet set for other tunas.

9. Dr Lilis Sadiyah presented a *Preliminary Length-based Spawning Potential Ratio Analysis on Skipjack in the Indonesia's FMAs 713-717* as in **Attachment F**. She showed the application of spawning potential ratio (SPR) on skipjack to estimate biomass and noted that it is used mainly for data poor fisheries. Results presented from analysis suggested very low estimated SPR of 0.02 and high fishing mortality values.

10. The length-based SPR analysis assumed large fish that are missing in the catch if all fish have been caught. Within the length data used in the analysis large fish were not included. Based on the selectivity analysis by WCPFC for skipjack tuna however, it was revealed that large size of skipjack tuna were caught by longline in Region 4, WPEA area. The low estimated SPR and high estimated fishing mortality from the analysis presented a pessimistic scenario. However, Dr Hampton suggested that this may be due to the use of asymptotic selectivity and suggested to use a dome-shape selectivity as a sensitivity analysis.

4.2 Philippines

11. Mr Noel Barut and Ms Elaine Garvilles presented an *Overview of the Philippine Tuna Fisheries* as in **Attachment G**, covering gear types, data collection, stock assessment related researches and fishery management.

12. The Philippines provided the history of data collection in the Philippines, starting with the FAO funded Tuna Research Project under the South China Sea Fisheries Development and Coordinating Programme. The data collection sites were implemented in Southern Philippines namely: Zamboanga City, Misamis Oriental, Davao Del Sur and Gen Santos City. The project started in 1979 and continued until 1987. From then on the Bureau of Fisheries continued the data collection until 1997. In 1998 the National Stock Assessment Program (NSAP) was launched to collect catch and effort data, length and weight measurements and other biological data for selected commercially important fish species including tuna and tuna-like species. In 2005, the WCPFC funded the Indonesia-Philippines Data Collection Project (IPDCP). This project expanded the collection of oceanic tuna data in other known landing centers where the tuna are landed in commercial quantities. Following IPDCP, the WPEA project was implemented to cover more landing centers in major as well as minor tuna landing centers of the Country. In 2014, the number of NSAP landings sites was increased from 159 to 556 landing centers monitored from 1998 to 2013. The expansion of the NSAP landing centers also expanded the collection of the different tuna species data in major and minor landing centers where the WPEA project did not assign tuna data enumerators.

13. It was noted that the sources of data collected for stock assessment include port sampling at landing area, logbooks, and observer program. Results of a preliminary analysis include estimation of yellowfin and skipjack tuna CPUE for handline and purse seine; and calculation of ring net effort for yellowfin and skipjack tuna, using data up to 2014.

- CPUE analysis showed that there was a reduction in effort resulting in decreased catch rates;
- Ring net catches showed pulses, which can be potentially used as an index of recruitment, considering that ring net targets juvenile tunas only.

4.3 Viet Nam

14. Dr Pham Viet Ahn presented an *Overview of the WPEA Project and WCPFC-related Reporting Requirements* as shown in **Attachment H.** He covered the tuna catch data collection system, required reporting to WCPFC, length-frequency analysis, and the ministerial approval of the National Tuna Management Plan.

15. Mr Nguyen Viet Nghia presented *Stock Assessment of the Oceanic Tuna in Vietnam Waters* as per **Attachment I**. It covers the elaborate survey design with longline and gillnet and data collection for fishery and oceanographic parameters from 60 stations along the waters of Vietnam. He showed initial results on species composition by fishing gear, number of species, and catch rates for longline and gillnet sampling gears. Catch and length frequency data were collected from WPEA-1 project in 2012, and a length based cohort analysis (LCA) was conducted to estimate growth, mortality, exploitation ratio, biomass, etc.

16. Issues and comments highlighted during the presentation and discussion are summarized below.

a) It was noted that the survey undertaken by Viet Nam was good as it is done over a long period of time (since 2000) and provided useful information. However, more thought should be undertaken to refine the survey design and analysis prior to conducting the survey.
b) The time period for this length based analysis was very short and this analysis may not be applicable for bigeye tuna which is longed-lived species. Longer time series data are needed to conduct length-frequency analysis for bigeye tuna.
c) The WS noted that tagging experiments are crucial in the WPEA area to identify stock structure and the feasibility of an independent stock assessment. Regarding tagging experiment in the WPEA region, it was also noted that around $5mil over 3 years may be

required to undertake a meaningful tagging activity and an elaborate preparatory work for the tag recovery, including awareness raising for the fishermen about the tagging program.

d) Dr Hampton suggested that Viet Nam contact Australia (Dr Robert Campbell) on their use of methods on harvest strategy evaluation using regional assessment results which is similar with that of Viet Nam's desire to use WCPFC results with the use of local data application.
e) Cost issues were raised related with tuna surveys. The WS suggested that it would be useful to use observer data, logbook data, catch documentation systems technology, etc., as an option rather than conducting surveys.

4.4 Southeast Asian Fisheries Development Center (SEAFDEC)

17. The SEAFDEC presented *Tuna Stock Assessment Program for SEAFDEC member countries* as attached in **Attachment J**. Recently, SEAFDEC established the Scientific Working Group (SWG) for neritic tuna with a main focus on strengthening data collection and analysis to formulate sustainable management of neritic tuna resources in the region. This working group will also consider including oceanic tunas in the future.

18. The SEAFDEC had conducted a neritic tuna tagging program before, however, the recovery rate was very small and not much information was generated to determine the stock and migration pattern of neritic tuna species. SEAFDEC have carried out two survey cruises in the Sulu Sulawesi Sea targeting for oceanic tuna species. At the same time, a genetic study was carried out to determine population structure. If the tuna stock in Sulu Sulawesi Sea is the same stock in WCPO, assessments should be carried out within one ecosystem, rather than in separate by areas. SEAFDEC looks forward to collaborating with other regional bodies including WCPFC in the future in order to provide greater benefit for the member countries.

4.5 World Wildlife Fund (WWF)

19. Ms Nguyen Dieu Thuy introduced the *Fishery Improvement Project (FIP) of WWF Vietnam on the Longline and Handline Fishery* as attached in **Attachment K**.

20. It was noted that:

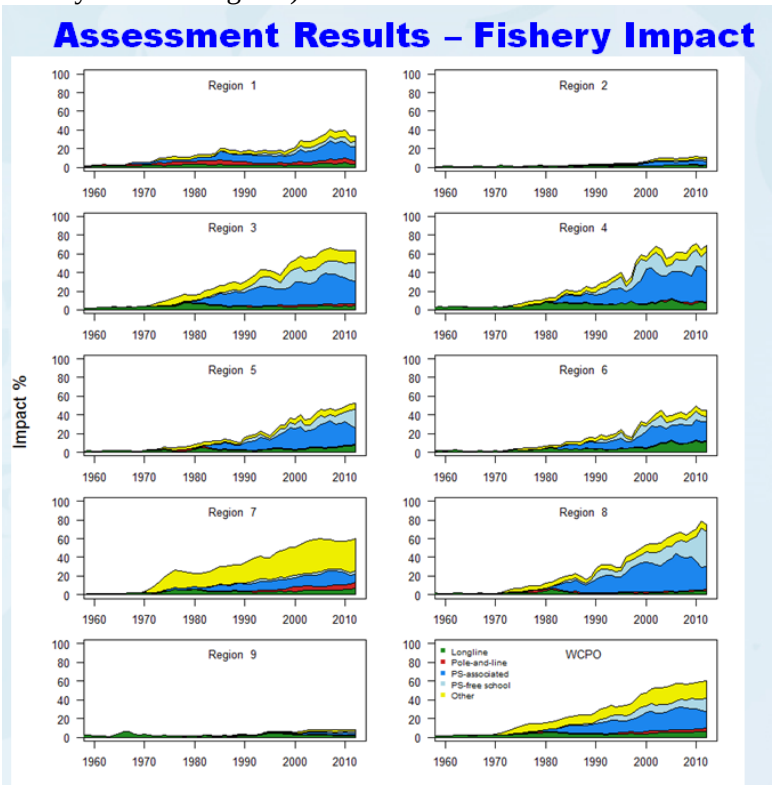
a) the FIP is a market based approach funded by the private sector where activities to improve the management of the fisheries were identified from a pre-assessment of the fishery using the MSC standards.
b) one of the FIP's objectives is to provide the stakeholders with WCPFC information on the different conservation and management efforts at the local level. WWF works as a conduit, to bring a government and the private sector into the table to discuss how to improve the governance and the management of the resources.

21. It was also noted that much information needs to be translated into the local language. The WPEA Project Manager advised that this work can be supported to provide relevant stakeholders with collated information and translation.

AGENDA ITEM 6. INTRODUCTION OF WCPFC-STYLE MFCL-BASED TUNA STOCK ASSESSMENT AND PROJECTIONS

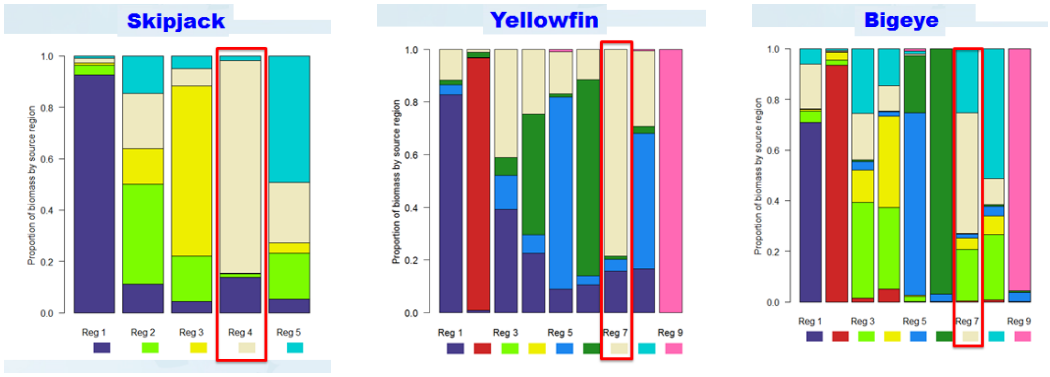
22. Dr Hampton presented *Tuna Stock Assessments – WCPFC Style* (**Attachment L**). He covered an introduction to stock assessment and use of MULTIFAN CL, management evaluations, and management frameworks that include management objectives, reference points, harvest control rules and performance indicators. The following points were noted:

- Movement coefficients were estimated mainly through tagging data and other indices such as CPUE but no information on oceanographic influences was incorporated in estimating the movement parameters.
- The influence of fishery impact in Region 7 extended to other Regions. For example, the impact of "Other" fishery in Region 7 (yellow portion) appears in other Regions (there is no "Other" fishery in other Regions).

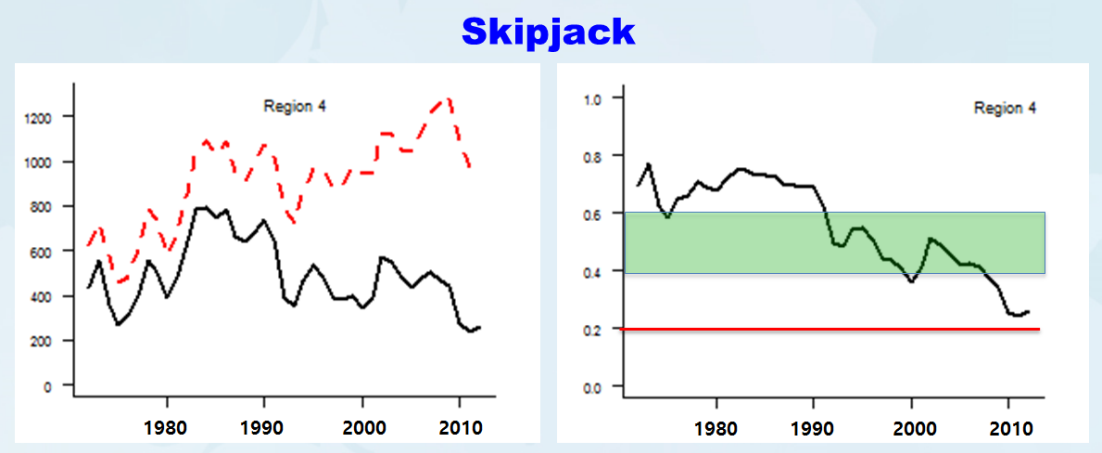


23. Dr Hampton presented *Information on Tropical Tuna Stocks in the WPEA Region (Region 7) based on SPC Stock Assessments* (**Attachment M)**. Key highlights include:

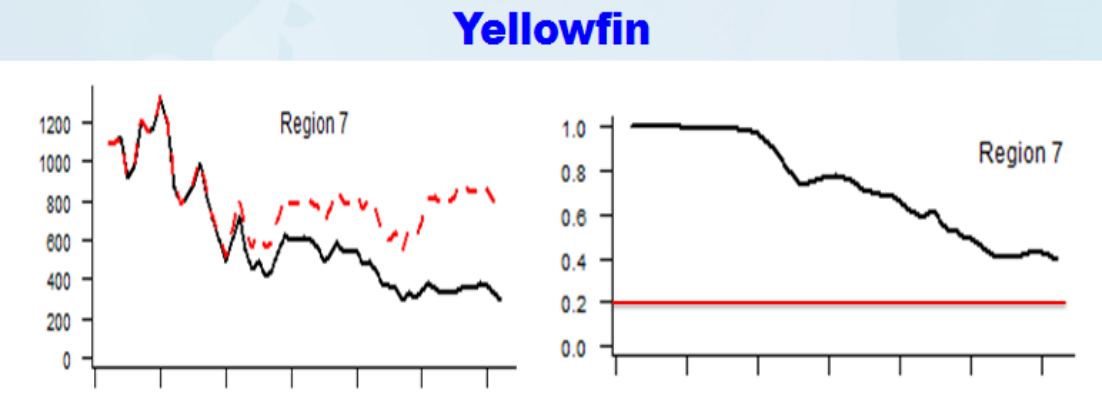
- the stock structure of Region 4 for skipjack and Region 7 for yellowfin showed that the biomass are sourced from within the region and influenced on a minor scale by biomass from Region 1 (Japan). Stock structure of bigeye on the other hand comes from nearby Regions.



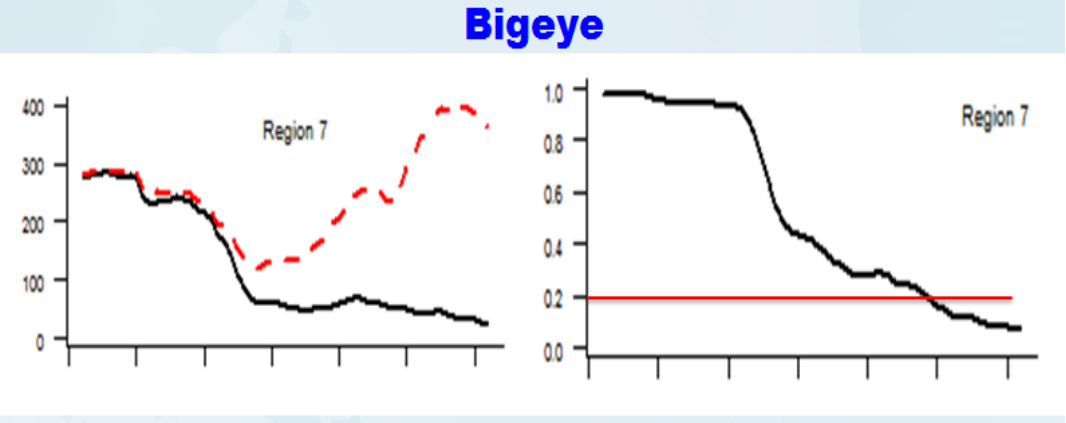
- Spawning biomass of skipjack is on downward trend despite high levels of recruitment. Depletion rate of skipjack is low and is approaching the limit reference point of $0.2SB_{F=0}$.



- Yellowfin recruitment and spawning biomass remain constant over the last several years, and depletion rate is still above the limit reference point.



- Bigeye recruitment remains high (disregarding the last two years) but spawning stock biomass remains on a downward trajectory. Depletion rate has breached the limit reference point of $0.2SB_{F=0}$.



- The biggest fishery impact on the skipjack biomass in Region 4 is caused by gears classified as “Others”. These include small handline targeting the surface tunas, the drift gillnet, troll

lines and handline. Similarly, for yellowfin, the biggest fishery impact on the biomass is caused by these same gears.

- For bigeye, however, it is the longline and the purse seine fishery that causes the biggest impact on the biomass for Region 7.

24. Dr Hampton asked the following questions in his presentation, which were discussed under Agenda Item 8.

- Do the WCPFC-wide assessments provide sufficient information to potentially support sub-regional management in the WPEA area?
- If not, what more would be required?
- What additional data would be required to support WPEA stand-alone assessments?

AGENDA ITEM 7. COMPONENTS OF HARVEST STRATEGY

25. Dr Hampton presented *Management Strategies (objectives, indicators, reference points and harvest control rules): the Equatorial Skipjack Purse Seine Fishery as an Example* (**Attachment N**). The WS considered a harvest strategy as a newly developed fishery management framework available to the current fishery managers and understood the concept of harvest strategy elements.

26. The presentation was an introduction of how fisheries management decisions in support of achieving target reference points can be put into practice using harvest control rule(s). It covered the objective of management decisions depending on tradeoffs between maximizing catch (and revenue) versus minimizing variability of catches (which translates to stability of the resources). Examples were provided to explain the HCR concept, the design of HCR with alternative options, and testing the robustness of two scenarios.

27. The workshop was informed that harvest strategies will be considered in greater detail at the next three-country workshop in 2016.

AGENDA ITEM 8. DEVELOPMENT OF WPEA STOCK ASSESSMENT GUIDELINES

28. The Project Manager reminded participants of the purpose of this stock assessment workshop: firstly, capacity building in understanding the requirements (biological information and input data) and scope (modeling process and interpretation) of work for the Pacific tuna stock assessment, and secondly, the feasibility of conducting a national-level tuna stock assessment within their waters of national jurisdiction. He noted that individual governments would like to take the initiative to manage their fishery resources based on their assessment but stock assessment of the highly migratory fish stocks such as tunas should be conducted with a special consideration, especially related with the stock structure and migration patterns.

29. Through the four stock assessment related presentations by Dr Hampton and comprehensive questions and answers, the WS participants understood the complexity and scope of tuna stock assessments. Following lengthy discussions among the participants, the three members prepared their position regarding national-level stock assessments and their expectations, entitled the *WPEA Stock Assessment Workshop Recommendations for the Guidance of National-level Tuna Stock Assessment* (**Attachment O**).

30. In summary, Indonesia wishes to conduct an independent assessment for tuna resources in its archipelagic waters (FMA 713-715); and they may use the results of WCPFC's stock assessments for tuna management in the Pacific side (FMA 716 and 717). The Philippines generally utilizes the outcomes of

WCPFC's stock assessments but they will continue to conduct CPUE analysis to monitor the tuna fisheries in their waters. Vietnam intends to conduct a separate assessment in the South China Sea (which is also called the East Sea in Viet Nam). However, they also accepted the difficulties of the independent assessment because of insufficient fishery data and biological information.

AGENDA ITEM 9. OTHER MATTERS

9.1 Other stock assessment tools and issues related with climate change

31. Dr Hampton briefly mentioned SEAPODYM as an independent tool to estimate the status of tuna stocks.

9.2 Adoption of the workshop report

32. The participants reviewed the draft workshop minutes, which will be developed as a meeting report and finalized in the near future through inputs by the participant in the relevant sections.

33. The next three-country workshop is scheduled to be convened in May or June 2016, focusing on issues related to harvest strategy framework.

AGENDA ITEM 10. CLOSE OF MEETING

34. There were brief closing remarks on the process of the WS and its outcomes from each delegation. All appreciated the host agency RIMF and the invited scientist Dr John Hampton, stating that the workshop was very useful in terms of understanding tuna stock assessment and drafting future work plans.

35. The workshop closed at 5pm on 5 November and prepared a field trip on 6 November.

ATTACHMENTS

Attachment O

Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (WPEA SM Project)

THREE-COUNTRYSTOCK ASSESSMENT WORKSHOP

RIMF Meeting Room, Haiphong, Viet Nam
3-6 November 2015

WPEA STOCK ASSESSMENT WORKSHOP RECOMMENDATIONS FOR THE GUIDANCE OF NATIONAL-LEVEL TUNA STOCK ASSESSMENT

REQUIREMENTS FOR TUNA STOCK ASSESSMENT

1. For tuna stock assessments, the following data and information may be required subject to the population dynamics model under consideration.

- Stock structure
- Life history characteristics
- Fisheries
- Data compilation
  - catch and effort data by species and gear
  - size data
  - tagging data
- Model
  - Population dynamics models
  - Recruitment
  - Initial population
  - Growth
  - Movement
  - Natural mortality
  - Sexual maturity
  - Fishery dynamics
  - Selectivity
  - Catchability

RECOMMENDATIONS ON WPEA TUNA STOCK ASSESSMENT

INDONESIA

2. National Constitution: Article 33 in the Indonesian Constitution 1945 states that earth, waters and all resources contained therein shall be fully controlled by the State and be used for the welfare of the Indonesian people. Tuna, skipjack tuna, and neritic tuna in Indonesia Waters shall be fully controlled by Indonesia as a State. As a State, Indonesia shall develop regulations in relation to the exploitation of Tuna, Skipjack Tuna, and Neritic Tuna in Indonesia waters to ensure the sustainable use of the resources.

3. National ratification

a. Act No. 17 /1985 concerning Ratification of UNCLOS, 1982
b. Act No. 21 /2009 concerning ratification *Agreement for the implementation of the provisions of the UNCLOS of 10 Desember 1982 relating to the Conservation and Management of Straddling Fish Stock and Highly Migratory Fish Stock* as mention with*United Nations Implementing Agreement (UNIA) 1995.*
c. Act No. 31/2004 concerning Fisheries as amanded with Act No. 45/2009 :
   - Article 10 (2) : Government should actively participate in the Regional and International agency/bureau/organization for the purpose of regional and international tuna management cooperation.

4. National-level legislation for presidential regulation

a. Presidential Regulation No. 9/2007 of 5 March 2007 concerning the approval of Indonesian membership to IOTC
   a. Presidential Regulation No.109/2007 of 6 December 2007 concerning the Ratification of Convention for the Conservation of SBT
   b. Presidential Regulation No. 61/2013 of 28 August 2013 concerning the Ratification of WCPF Convention
   c. In-progress: IATTC Commission Meeting concerning the approval of Indonesia as an CNM since June 2013, and should be extend every year.

5. Indonesian National tuna management plan (NTMP no 107/KEPMEN/2015) has concern particularly in conducting assessment and management of tuna resources, especially in the archipelagic waters (FMAs 713,714,715), with the best scientific evidence available. According to the Ministerial regulation no per.16/men/2012, Indonesia has the National Stock assessment Commission (KOMNAS KAJISKAN) that mandates to conduct fish stock assessment for all fish species in all Indonesian waters of national jurisdiction, including oceanic tunas in the AW. However, the KOMNAS KAJISKAN considered that the management of oceanic tunas in FMA 716 and 717 could be managed along with the RFMO's regulations.

6. Catch and effort data have been collected through Logbook and national observer program. These data require verification and validation. Currently KOMNAS KAJISKAN determines TAC for some fish species and by some fish group (not tuna yet) using surplus production model based on the National fisheries statistic data. For oceanic tuna analysis, relevant stakeholders such as universities, research institutes and KOMNAS KAJISKAN will conduct the stock assessment and determine TAC in AW.

7. Since 2010 under WPEA Project, Indonesia has been conducting a port sampling program which collects biological data by species and by gear. Indonesia fishery is very complex characterized by multi-gears and multi-species with poor data situation with only port based data with length data are available. One Possible analysis under this condition will be a length based analysis approach (e.g. LB SPR) to develop reference points (e.g. target reference points SPR X %, limit reference point SPR Y%) for oceanic tunas in the AW, which will be presented at KOMNAS KAJISKAN for their consideration.

8. Indonesia government will work together with NGO, Private sector and international experts to implement NTMP.

PHILIPPINES

9. Philippines believes that the regional level tuna stock assessment such as the WCPFC tuna stock assessment using the MULTIFAN-CL model is the most robust approach, noting that

oceanic tunas are highly migratory species. Philippines intends to continue conducting CPUE analysis to monitor what is happening within the Philippine waters but it considers that the WCPFC stock assessments and WCPFC Conservation and Management Measures (CMMs) in managing tuna fisheries are the most appropriate approach for stock assessment and tuna management. Philippines will also continue to strengthen its data collection systems through better port sampling coverage, increase of logsheets data collection, continuation of conducting annual tuna catch estimates review workshops, cannery data collection, increase of observer data coverage and other ways that would improve quality and timely provision of data that would help reducing uncertainty in stock assessment/s.

10. Philippines will continue to review its legislation including its National Tuna Management Plan to mainstream our country's obligation to WCPFC as a member country. Philippines has recently passed Republic Act 10654 (RA 10654) "An act to prevent, deter and eliminate illegal, unreported and unregulated fishing, amending Republic Act 8550, otherwise known as " The Philippine Fisheries Code of 1998", and for other purpose. This requires Philippines to establish Reference Points and harvest control rules, which will be considered in the near future, 2016. Fisheries Administrative Orders (FAO) are also aligned to address Philippine compliance with WCPFC Conservation and Management Measures (CMMs) and this may include but not limited to the following:

Fisheries Administrative Orders:

- FAO No. 240: Rules and Regulations in the Implementation of Fisheries Observer Program in the High Seas
  - *100% observer coverage for Philippine fishing operation in HSP1*
- FAO No. 241: Regulations and Implementation of the Vessel Monitoring System in the High Seas
- FAO No. 244: FAD Management Policy that limits the number of FADs per catcher vessel (PS/RN = 40; Handline = 2)
- FAO 245-3: Regulation and Implementing Guidelines on Group Tuna Purse Seine Operations in High Seas Pocket Number 1 as a Special Management Area
- FAO 236-4: Extension of FAO 236 series of 2010 or the Rules and Regulations on the Operations of Purse Seine and Ring Net Vessels Using Fish Aggregating Devices (FADs) locally known as *Payaos* during the FAD Closure Period, and other FAOs

VIETNAM

11. The tuna fisheries have been developed since 1990s. Recently, tuna fisheries become more and more important, contributing a significant portion of total exported value of fisheries. Recognizing the importance of the tuna fisheries since 1996, Vietnam has been conducting a stock assessment of fisheries resources in general, especially for tuna resources. During 1996-2005, the data collection programme, including the port sampling, unloading and resources surveys of tuna fisheries were conducted under the ALMRV project, following the FAO guidelines.

Unfortunately, after ALMRV project terminated, data collection was interrupted due to the budget constraints. Since 2010, WPEA project has been implemented to collect tuna fisheries data following the WCPFC protocol to submit to WCPFC for stock assessments. Since 2011, the government approved a project on marine fisheries resources assessments, including tunas. This project conducted the

independent fisheries resources surveys, as well as the commercial fisheries data collection for stock assessment and management purposes. The project has been revised and will be continued until 2020.

Under Viet Nam Fishery Law (2003), the stock assessments are required as a scientific basis for sustainable fisheries management. These also has been reflect in numbers of decrees and decision, such as, the Decree No. 33 (2010), Decision 3465/QD-BNN-TCTS, 6Aug2014 on restructuring the tuna fisheries; the NTMP which was adopted by MARD in 1 September 2015 (Decision No 3562/ QD-BNN-TCTS).

12. Based on the outputs of previous SA study, we recognize that, there is lack of information on tuna resources and its fisheries (migration pattern, recruitment, etc.). Therefore, it does not seem appropriate and realistic to conduct a precise stock assessment at national level, because it may not reflect the whole stock. However, Viet Nam requires a good stock assessment results for sustainable management of tuna fisheries. We consider that SA conducted at regional (Region7) and sub-regional East Sea (South China Sea) level could be adopted together to harmonize tuna fishery management at national and regional level, which can be reflected in the NTMP. In this respect, we wish to conduct stock assessment both at Region 7 and sub-regional East Sea (SCS) separately. For the regional and sub-regional level SA, there is a need to collaborate among the relevant stakeholders to share data and information for such SA for the consideration of national-level tuna management.

ADDITIONAL QUESTIONS

Dr John Hampton responded to the following additional questions for the tuna stock assessment in the WPEA region.

1. Currently Region 7 is a part of the WCPO regional stock assessment. Can Region 7 be separated for an independent stock assessment, considering the complicated fisheries and its geographic environment?

Response: This might be feasible if there was good data support, including tagging data, for the various parts of R7. Currently, estimates of the dynamics of stocks in this region are available from the regional assessments. These estimates benefit from what in effect is information sharing from the totality of data in the assessments, e.g. growth, selectivity, etc. Also, the estimated population sizes in R7 are scaled against other regions of the assessment model. These linkages would be potentially lost in a stand-alone assessment for R7. Given the current state of data in R7, it is likely that using the assessment model will provide more reliable estimates. The countries in R7 should continue to strive to improve fisheries data, conduct standardized CPUE analysis and ideally implement tagging programmes (although the latter is expensive and logistically difficult).

2. Can SPC provide more detailed information from the results of the WCPO stock assessment including more detailed management implications on Region 7?

Response: It may be possible to run the assessment models to test harvest strategies in R7. This would necessarily be using the fisheries as currently defined in the assessment models. However, SPC does not currently have the resources to conduct such work. SPC can provide the model outputs in their detailed form, and these are available on the SPC website (http://www.spc.int/oceanfish/en/ofpsection/sam/sam).

3. Region 7 is still a vast area and can be separable into three sub-regions such as South China Sea, archipelago, and east Philippine Sea by geographic boundaries. Especially S. China Sea for example seems to be a closed area surrounded by a series of islands where tunas in the water seems to constitute a

separate stock. Can SPC conduct an independent stock assessment for tuna species in the South China Seas?

Response: It would not appear to be straightforward to conduct assessments of tuna stocks in the SCS. There is a long history of longline fishing in particular in the SCS, but currently this data is not available in a form that would support detailed analysis of standardized CPUE as a key input for YFT and BET assessments. Skipjack would likely be even more problematic. There are no tagging data available to provide information on exploitation rates or to indicate the degree of separateness of this area from the adjacent Pacific. The SEAPODYM model may offer some potential however, and this could be investigated with Patrick Lehodey at CLS.

Attachment W12-G

FOURTH VIETNAM ANNUAL TUNA CATCH ESTIMATES WORKSHOP

(VTFACE-4)

Da Nang, Vietnam

10–12 November 2015

RECOMMENDATIONS

DFISH will arrange for a translation of the final version of the Recommendations into Vietnamese and then dissemination to Sub-DFISH offices and other important stakeholders of the WPEA project in Vietnam. Responsibility for undertaking the work involved in each recommendation has been highlighted (bold/underlined).

1. **Revisions to Vietnam Tuna Fishery Data Collection forms**

   The Workshop noted several issues in the collection data under the WPEA project and recommended the following modifications to the data collection forms:

   a. **DFISH and WCPFC** include the WCPFC key shark species in WPEA logsheets for each gear type and investigate funding sources to support the printing and distribution of the new forms, and consideration for shark species identification guides;
   b. **DFISH and WCPFC** update the WPEA Longline/Handline Port sampling and Landings data collection forms to include new fields to distinguish whether a trip was either LONGLINE or HANDLINE.
   c. **DFISH and WCPFC** consider producing separate WPEA Longline and Handline logsheets to better cater for certain fields specific to each gear.

2. **Historic Annual catch estimates**

   The Workshop recommended the Vietnam Tuna Fisheries Catch estimates by GEAR and SPECIES for years prior to 2000, as provided in the relevant VTFACE-4 paper, should be submitted to **DFISH** for approval to submit to the **WCPFC**.

3. **Improving Species Identification**

   The Workshop recommended **WCPFC and DFISH** organize and fund species identification workshops as required, with a particular focus on distinguishing between juvenile yellowfin and bigeye tuna. This work will include the preparation and distribution of species identification resource materials. These workshops should be designed to be repeated as often as required in the future.

4. **Information on Vietnam tuna fishery**

   The workshop recommended **RIMF and DFISH**, with assistance from **WCPFC**, include an agenda item and a working paper on various INDICATORS of each Vietnam tuna fishery (e.g. CPUE trends from each GEAR TYPE). It was acknowledged that the initial paper prepared for VTFACE-5 would provide only basic indicators but would hopefully expand over the following years.

5. WPEA Tuna Data Management

a. The workshop recommended that **DFISH**, with assistance from **WCPFC**, consider upgrading to TUFMAN2 which will then satisfy the long-term objective for sub-DECAFIREP offices to enter, manage and report on the data that they are responsible for collecting.
b. The workshop recommended that **WCPFC/SPC**, update TUFMAN/TUFMAN2 to support the recent changes to the WPEA data collection forms, for example, distinguishing between longline and handline trips and the addition of WCPFC key shark species on WPEA logbooks.

6. Resolving major issues of uncertainty in Provincial estimates

The workshop recommended **DFISH** and **RIMF** undertake an investigation of the extent of oceanic tuna landings in Ba Ria-Vung Tau by GEAR (which is currently the main source of uncertainty in the catch estimates), including a review of the supply chain, and report the findings to the next workshop (VTFACE-5).

7. National stock assessment

The workshop recommended **DFISH** and **RIMF**, with assistance from **WCPFC/SPC**, consider the application of the SEAPODYM model for national stock assessment.

8. Administration issues

The workshop recommended **leaders of sub-DECAFIREP** should allocate suitable human resources to implement tuna data collection (e.g. Sub-DECAFIREP Phu Yen).

Attachment W12-H

Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (WPEA SM Project)

TRIP REPORT
EAS CONGRESS 2015 16-21 NOVEMBER 2015

Da Nang city, Viet Nam

I. Introduction

The six Large Marine Ecosystems (LMEs) and sub-regional seas of East Asian region are experiencing physical, ecological and socio-economic changes associated with infrastructure development, urbanization, extreme climate events, land and sea-based activities, and population increase. International cooperation at regional and LME levels has facilitated in many ways collaborative responses among countries to the challenges and uncertainties with countries' adoption of ocean policies and measures in alignment with the regional action programs such as the strategic action programme (SAP) and regional sustainable development strategy.

Questions that the EAS Congress intended to address include:

- What are the drivers that have shaped the regional coast and ocean governance?
- What achievements and impact have these regional governance mechanisms made in addressing overfishing, eutrophication, loss of coastal and marine biodiversity and other transboundary issues in the last decade?
- What are the gaps in our understanding of the coasts and oceans?
- What are the innovative implementation and governance mechanisms for SAPs and the regional strategy?
- What should the collaborating countries do in terms of policy and regulatory framework and institutional arrangements to make these regional mechanisms and initiatives work more effectively?

East Asian Sea (EAS) Congress in 2015 is designed to facilitate regional and national initiatives to respond to the ocean agenda enshrined in the future ocean management.

The GEF-funded WPEA-SM Project is connected with the PEMSEA's Sustainable Development Strategy for the Seas of East Asia programme under the umbrella of Project Framework Document sharing EAS regional governance on marine resources. Therefore, this is a very good chance to share experiences with other stakeholders in order to better manage marine resources in the future.

The main objective of the participating this congress is:

1. To showcase the progress, achievements, impacts and lessons learnt from transboundary management of LMEs and regional seas governance in the EAS region and globally;
2. To learn from national initiatives in institutional, policy and legal reforms in support of implementation of LME SAPs and regional sustainable development strategies;
3. To better understand the challenges and gaps in research and education, implementation and reporting, and transboundary partnerships within the seas of East Asia and identify solutions

and respond to challenges, and opportunities for collaboration among regional mechanisms, national and local governments and donor agencies; and

4. To facilitate exchanges in regional and national policies and initiatives for coastal and ocean governance reflected in the future.

II. Congress schedules

The Congress were divided into three Workshops following:

i) Workshop 1: Managing Risks in Climate Change and Disasters in the Seas of East Asia;
ii) Workshop 2: Maritime Sector Contributions to a Blue Economy for the Seas of East Asia, and
iii) Workshop 3: Coastal and Ocean Governance in the Seas of East Asia: from Nation to Region.

Each workshop was also split into three Sections. The WPEA participant attended Section 1 of the Workshop 1 (Managing risks in climate change and disasters in the Seas of East Asia) and Section 1 of the Workshop 3 (Coastal and Ocean Governance in the Seas of East Asia: from Nation to Region).

III. Managing risks in climate change and disasters in the Seas of East Asia:

Asia is home to half of the world's urban population, with nearly 50 per cent of the region's total population currently residing in cities. Much of the urbanization that occurs is unplanned and continues to be a prime issue in many countries, as this trend will continue throughout the 21st century. Among the urban areas, there is significant growth recorded in and around the coastal zone of Asia, a considerable amount of which occurs in areas prone to natural hazards. As this growth occurs at a rapid rate and despite the fact that cities are highly vulnerable to hazards, there remains little consideration of taking efforts in mitigating the impact of coastal hazards, in particular those influenced by a changing climate.

The government of regional countries, at the same time, recognizes the potential threats to the ecological balance of its coastal areas, as a result of pollution, habitat degradation, coastal erosion and sedimentation, and Natural Disaster Risk (such as: floods, landslide, earthquake, tsunami, high tide) as environmental challenges in addition to the number of management issues such as multiple-use conflicts and the lack of integrated planning. The Workshop recommended three approaches to managing disaster, including: mitigation aspect, adaptation aspect and disaster reduction aspect.

Mitigation Aspect:

- Studies and Planning Documents
- Study of Tsunami Disaster Risk Impact
- Development of Hazard/vulnerability maps; identification of highly vulnerable coastal and watershed areas, resources, habitats, coastal communities and sectors of coastal communities
- Green City Development Program and other conservation programs
- Public Awareness

Adaptation Aspect:

- Inventory of data for traditional /local wisdom (for supporting national climate change programme);
- Development of resilience coastal village.

Disaster Risk Reduction Aspect:

- Establish evacuation zone
- Evacuation route and signs
- Simulations of Preparedness Tsunami Risk Disaster

IV. Coastal and ocean governance in the Seas of East Asia: from Nation to Region

There are several presentations in Section 1 of the Workshop 3. These consisted:

1. The CTI-CFF Regional Secretariat Executive Director presented an overview on how one regional 'Coral Triangle Initiative' has been interacting with several challenges, suggesting that to synergize multi-stakeholders cooperation is a more complex effort, therefore requires strategic approaches to address. The presentation focuses on how CTI-CFF leads the role to coordinate efforts in safeguarding the region's water through provision of 10-year Regional Plan of Action (RPOA) and how to implement the proposed framework at each national level.

2. The WCPFC Science Manager (WPEA Project Manager) presented Capacity Building in Monitoring and Assisting Management of Tuna Fisheries in the East Asian Seas. The purpose of the presentation is to share how national capacity has improved to cope with international and regional requirements in collaboratively reducing threats and stress that may impact shared fishery resources in the East Asian Seas, which is connected to the Western and Central Pacific Ocean. The WPEA project continues port sampling and data collection activities, building on the previous project that targeted two areas: i) data collection and ii) capacity building through government's awareness of the three project participating countries, Indonesia, Philippines and Viet Nam.

3. The Northwest Pacific Action Plan (NOWPAP) introduced its programme. The NOWPAP member states include China, Japan, Korea and Russia. The decision-making body of NOWPAP is an Intergovernmental Meeting (IGM) held every year, rotating among four countries. Most of NOWPAP projects are implemented by four Regional Activity Centers (RACs) and coordinated by the Regional Coordinating Unit (RCU) with two offices in Toyama (Japan) and Busan (Korea).

V. Lesson learnt from the EAS Congress 2015

- Needs to strengthen vertical integration of actions at regional, national and local levels, by incorporating local actions into national and regional management frameworks, and developing and implementing local actions in alignment with regional and national priorities and considerations.
- Policy and strategy at regional should be reflected and implemented into national legal and policy frameworks.
- Monitoring and implementation the national legislation and enforcement should consider livelihoods and economic development.
- Institutional, technical and financial sustainability must be taken into consideration in any cooperation and collaboration.

Attachment W12-I

THE 3RD WORKSHOP FOR THE DEVELOPMENT OF INDONESIA'S HARVEST STRATEGY ON TUNA FISHERIES MANAGEMENT
Bali, Indonesia
19-20 November 2015

DRAFT SCHEDULE
Overview of process and activities for tuna Harvest Strategy case study for Indonesian tuna fisheries (WPP 713,714,715)

General comments

1. WS will be hosted by the DGCF
2. Travel cost of the CSIRO experts to HS WS and Technical WS, if required, shall be supported by the WCPFC-WPEA project, the MDPI and other donors.
3. The level of budget for the development of HS software (for both case study and updated one) needs to be identified.
4. The previous workplan developed at the 2nd HS workshop is in **Attachment A**.

Date	Stakeholder's Engagement	Technical support	Targeted R&M
Oct-2014	**1st Harvest Strategy (HS) workshop** • HS text for national tuna management plan (NTMP)	National and international expertise in HS	
May 2015	**2nd HS Workshop** • adoption of LRP for HS planned but not adopted yet • 6 months work plan developed – most activities delayed • appointment of HS Steering Committee and Technical Working Group (TWG)	National and international expertise in HS	
Jun-Oct 2015	• Report on 2nd HS WS produced • Government support for HS case study process planned • Inter-departmental, NGO WG • Dr Dale Kolody was	Inter-sessional work • Several meetings between DGCF and CFRD during June-October • Data collation and preliminary analysis for use in HS framework –	• Biological data for target species for SRP ref points. - No biological data such as age, sex, maturity, etc. - Length frequency data available from port

	nominated for technical assistance	no data validation yet for the HS • Preliminary report on available data and monitoring for HS case study areas - Meta data inventory was documented (*Baseline data to develop HCR for developing NTMP in the A/W*) for HS framework but not professionally reviewed yet • Informal review by international experts – not happened yet	sampling
Nov-2015	**3rd HS Workshop** ▪ Stakeholder's perceptions of fisheries and HS process ▪ Increased understanding of HS process ▪ Review and update of schedule and work plan	• National and international experts on HS and tuna fisheries • Overview of HS development process • Questionnaire on stakeholder perception on data and understanding of case study fisheries • Review and advice on process and workplan	• Availability of social and economic data? None • Input from regional development? To be identified from SPC • Increase data on vessels – not really
Dec 2015-Feb 2016	• Report on 3rd HS WS – will be produced • Secure funding for advisory and technical support - WCPFC/WPEA Project and MDPI will support – details will be discussed among WCPFC, CSIRO, DGCF, CFRD in due course • Cost for the development of case study HS software (for education)	• Analysis of questionnaire • Review of monitoring and info requirements for HS options • Review of available modeling platforms • Initiate development of HS scenario model	
March 2016		**Technical WS-1** (Need CSIRO expert's input – funding support will be	

		made) • Review updated data and analysis for case study area (may recommend to use existing data and choose one species for example yellowfin or skipjack and one fishery (group), for example, PS or LL or PL, etc for simplification and educational purpose in the first year (PL Association expressed that skipjack and PL is preferred) • Specify scenario modeling requirements	
Mar-May 2016		**CSIRO development:** • Capacity development for HS and MSE modeling • Complete prototype HS scenario modeling platform • Preliminary analysis of WCPFC stock assessments for 713,714,715	
May 2016	**4th HS workshop** • Summary of stakeholder perceptions from 3rd WS • Initial objective elicitation from stakeholders • Initial review of feasible management measures • Preliminary consideration of HS options and performance measures for case study	• Summary of updated data and assessment of requirements for HS case study • Initial demonstration of HS scenario model • Preliminary summary of analysis of WCPFC assessments • Iillustration of example performance measures for case study area.	
Oct 2016		**Technical WS-2** (Need CSIRO expert's input – funding support will be made) • Updated of analysis of WCPFC assessments	

		• Initial review of potential HS for case study • Final review and recommendation of required monitoring series for case study HS • Summary of likely range of status and productivity of stocks in case study area from WCPFC stock assessments • Review and summary of appropriate performance measures for HS	
Nov/Dec 2016	**5th HS workshop** • Focus on a) reviewing and finalising quantitative objectives and performance measures, b) selecting small number of feasible HS for further evaluation, c) identifying key uncertainties[1] for implementing them. • An outcome will be a set of alternative, practically feasible HS for further evaluation		
March 2017		**Technical WS-3** (Need CSIRO input – funding support will be made) • Review evaluations of candidate HS • Summarise performance for presentation to 6th HS WS • Identify technical and implementation issues for further work	Identify important information gaps/ requirements
May 2017	**6th HS workshop**		Identify important

[1] These may relate to the monitoring, stock, fishery dynamics, implementation/compliance/effectiveness of the management measure.

	• Review initial evaluation of performance • Identify potential issues for implementation • Clarify/refine performance measures for HS and any necessary operational constraints • Reduce number of candidate HS based on performance (if appropriate)		information gaps/ requirements
July 2017		**Technical WS-4** (Need CSIRO input – funding support will be made) • Review most recent information and stock assessments from WCPFC • Review update evaluation of candidate HS • Summarise performance and make recommendation for HS selection for HS WS	• Identify key monitoring and information needs from evaluation that need to be addressed to improve HS performance and robustness to uncertainty • Design monitoring and/or research projects required to address key uncertainties
Nov 2017	**7th HS workshop** • Review performance of final candidates • Select preferred candidate • Identify any outstanding implementation issues • Recommendations for implementation • Agree annual and 5 year monitoring and review of HS implementation and performance		Fund and initiate required targeted research and monitoring projects

Attachment W12-J

WPEA-SM Project Board Meeting
11-12 December 2015
Bali, Indonesia

WPEA-SM/PB-2015-02

PROVISIONAL AGENDA

1. **OPENING OF MEETING**
   UNDP and WCPFC will provide brief opening remarks.
2. **APPOINTMENT OF CHAIRMAN AND RAPPORTEURS**
   The Executive Director will chair the meeting with one Co-chair from the project participating countries.
3. **INTRODUCTION OF WPEA PROJECT BOARD MEMBERS/PARTICIPANTS**
4. **ADOPTION OF AGENDA**
5. **FINANCE AND ADMINISTRATION**
   5.1. Review the financial arrangement between UNDP and WCPFC
   UNDP-Philippines will briefly introduce financial arrangements for this project.
   5.2. Financial status of WPEA-SM and audit requirements
   WCPFC will briefly introduce the current financial status of WPEA-SM Project.
   5.3. Mid-term project evaluation
   UNDP will introduce the process and schedule of the mid-term evaluation.
6. **REVIEW OF PROJECT MANAGEMENT**
   The WPEA Project Manager will briefly introduce any issues related with the project management, including an overview of the project progress.
7. **REVIEW OF THE FIRST YEAR ANNUAL WORK PLAN AND ACTIVITIES**
   Each country will introduce the progress of their activities and any challenges in implementing the 2015 Annual Work Plan. The Project Board will review the member's progress and provide advice and comments for future implementation.
   7.1. Indonesia
   7.2. Philippines
   7.3. Vietnam
8. **WORK PLAN AND BUDGET FOR 2016**
   The Project Board will review and endorse 2016 Annual Work Plan and budget allocation.
9. **OTHER MATTERS**
10. **ADOPTION OF REPORT**
    The Project Board will adopt any decision points and the meeting reports will be adopted in due course.
11. **CLOSE OF MEETING**