



WPEA-SM PROJECT
WORKSHOP ON ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT
Binh Thuan, Viet Nam
29-31 March 2017

SUMMARY REPORT OF THE WORKSHOP

AGENDA ITEM 1. OPENING OF THE WORKSHOP

1. The first meeting of EAFM was held in Binh Thuan province (Vietnam) through WPEA project, 29-31 March 2017. There were 20 participants from D-FISH, Sub-DECAFISH, WWF-Vietnam, VINATUNA, Nha Trang University, Vietnam National University-Hanoi, Research Institute for Marine Fisheries (RIMF), Institute of Tropical Biology (ITB), JICA, WCPFC, and Sustainable Fisheries Partnership (SFP). The list of participants is in Attachment A.
2. Dr. Sung Kwon Soh was selected as the workshop Chair, Dr. Bui Dai Dung was nominated as the main workshop rapporteur, supported by Dr Thanh and Mr Thong. The workshop adopted the provisional agenda which is in Attachment B.
3. Mr. Huynh Quang Huy, Director of Sub-DECAFIREP in Binh Thuan province, made his opening remarks. He expressed his acknowledgement to WCPFC via WPEA-SM project providing an opportunity to Binh Thuan for hosting this workshop, providing useful knowledge, and a broad range of experiences that may benefit for the management of capture fisheries sectors in the province.
4. Mr. Nguyen Phu Quoc, the Deputy Director of DECAFISH, D-FISH, provided a short speech to the workshop. He thanked WCPFC and the workshop participants, expressing that D-FISH/MARD well recognized the importance of the EAFM in sustainable development of the capture fisheries in the country. The capture fisheries in Vietnam have been managed by several different approaches, however, the EAFM has not officially been introduced to management practices. Tuna fishery is considered as one of the most important fishery sectors, and he expected that this workshop would contribute significantly to achieve the objectives of sustainable tuna fisheries.
5. Dr. SungKwon Soh delivered a short introduction to the WCPFC and WPEA-SM project. He noted that Vietnam is currently a Cooperative Non-Member of WCPFC and WCPFC has been supporting Vietnam in terms of capacity building to comply with the requirements of the WCPFC. He provided key information about WPEA-SM project with regards to project activities, participating countries and operations conducted, and advised that the purpose of this workshop is to build capacity in understanding

the EAFM and to develop “A plan to trial EAFM at one selected site/fishery,” which is one of the project targets.

AGENDA ITEM 2. IMPLEMENTATION OF AN EAFM IN BINH THUAN – CASE STUDY

6. Mr. Huynh Quang Huy introduced a fisheries co-management model applied to scallop fishery in the province. He emphasized the open access fishery and illegal fishery led to overfishing of not only the scallop stock but also other fisheries resources in the coastal areas of the province. Therefore, fisheries co-management regime was selected as a pilot solution to address the above issue. The detailed information about operational mechanism of the model, including a dual management system – a “Local Authority/Government” and a “Managing Body (private sector)”, was explained. After two years of application, visible evidences of the effectiveness of the model (recovery of fishery stocks and reduction of violation made by trawlers by 90%) were presented. One of the important lessons learned was good cooperation and collaboration among fishing community (the private sector) and the related authorities (Sub-DECAFIREP, coastguard, surveillance agency, maritime police). He also noted that there are some inappropriate regulations that need to be addressed for the development and implementation of fisheries co-management in the coastal areas. His presentation is in Attachment C.

Discussion

7. In response to a question about the inappropriate regulations, Mr. Huy responded that no guidelines/regulations on the implementation of co-management were available from the central government, which made it hard for local governments to develop and implement. Particularly, the fishing rights have not been introduced yet. Thus, the pilot model for scallop fishery in the Binh Thuan province provided the case for the need of amending the existing legal framework. He also added that the central government should recognize the successful outputs of this model and the local community’s willingness of their additional contribution for the recovery of fishery resources, including cash contribution to construct artificial reefs, setting navigation buoys, and buying scallop seeds to develop and maintain the model.

8. Mr. Watanabe, Fisheries Management Policy Advisor to D-FISH (JICA), supplemented that application of artificial reefs had greatly succeeded in Japan, and he may provide support to Binh Thuan to build up community-based resource management. Moreover, he also noted some experiences of community-based resource management with fishing rights in Japan.

AGENDA ITEM 3. CONCEPTS AND PRINCIPALS OF EAFM

9. Dr. Nguyen Viet Thanh (Vietnam National University) and Dr. Pham Viet Anh (D-FISH) introduced concepts and principles of the EAFM. Especially, failures of previous approaches in fisheries management and the needs to apply the EAFM in capture fisheries were emphasized. They also introduced the difference between the EAFM and single species management as well as existing management approaches applied to Vietnam fisheries. Their presentation is in Attachment D.

Discussion

10. In response to a question about the linkage among components of a marine ecosystem and the starting point of the interactions of the components in the EAFM overview diagram, Dr Thanh responded that the starting point could be the reduction of fishery resources.

11. Dr Kim Anh (Nha Trang University) requested to clarify the concepts of Ecosystem-based Fisheries Management (EBFM) and EAFM. Agreeing with Dr Kim Anh’s understanding, Dr Thanh

added that EBFM and EAFM have been used interchangeably because we could not fully understand about the ecosystem. Mr. Watanabe added that in the concept of the EAFM, ecosystem approach is a factor for consideration in terms of planning fisheries resource management.

12. Dr. Vu Viet Ha (RIMF) mentioned that the RIMF is conducting a study on application of the EAFM to Vietnam's capture fisheries. One of the objectives of this study is to identify fisheries refugia and spatial/seasonal distribution of fish eggs and larvae that may help to manage the specific species and fisheries. This study aims to provide advices to policy makers.

13. Mr. Nguyen Ba Thong (SFP) added that the EAFM is not new to Vietnam. Actually, this approach has been applied in some fisheries under the Fisheries Improvement Projects (FIP) led by WWF-Vietnam such as tuna handline FIP in central Vietnam and blue swimming crab FIP (in Kien Giang). These are comprehensive FIPs targeting to achieve MSC certification. Therefore, these FIPs must be followed by three principles guided by MSC concerning about fish stock, ecosystem and good governance.

14. Dr Soh noted that the reason of applying the EAFM is to support sustainability of other ecosystem components that are not supported under any current fishery management system. Mr. Watanabe highlighted that it is important to identify the sources of threats whether they come from the fishery itself or from outside factors such as climate change or pollutions by human activities.

AGENDA ITEM 4. APPLICATION OF EAFM TO TUNA FISHERY IN VIETNAM-ISSUES

15. Dr. Pham Viet Anh continued his presentation, which covered: (i) overview of tuna fishery in Vietnam, (ii) issues and threats; (iii) overview of management options; and (iv) recommendations. His presentation is in Attachment E.

Discussion

16. Dr. Soh asked about the significant increase in number of fishing boats by over 500 boats per year. Dr Anh responded that it may be due to improvement of official statistic data and registration on multiple gear regulation. Dr Soh noted that a reliable of number of fishing vessels will be required if it is used as effort for the calculation of CPUE. Mr Watanabe noted the need of reliable data (fishing effort, catches by species and by fishing gear) for the analysis of CPUE.

AGENDA ITEM 5. SCOPE OF THE WPEA-SM PROJECT RELATED TO THE EAFM

A. Analysis of Vietnam fishing and recommendations on control of fishing

17. Mr. Watanabe presented his analysis of Vietnam fishery situation and his recommendations on improvement of resource management. He pointed out that Vietnam fisheries have been putting into serious overfishing situation. Fisheries resources are in critically dangerous situation and business situation of fishermen become worse. His presentation is in Attachment F.

Discussion

18. Mr. Watanabe suggested that the Vietnam government should consider creating some incentive measure to fishermen to reduce total power of fishing vessels. Dr. Thanh added, however, that it may not be easy to implement such subsidy because the central government had already taken the policy to promote their fishing vessels toward modernization including review of the size of fishing vessels.

B. RIMF's research on the EAFM

19. Dr. Vu Viet Ha (RIMF) briefed his study on the application of the EAFM to Vietnam capture fisheries. The aim of this study is to provide theory and potential application of the EAFM to capture fisheries. He noted that the outputs of his case study will be a benchmark of the EAFM application in Vietnam. His presentation is in Attachment G.

Discussion

20. Mr. Nguyen Ba Thong commented that this sort of study should have been conducted earlier to provide helpful advices to the policy makers in fishery sector. Currently, the amended version of fisheries law is under submission to Vietnam Assembly, waiting for its final approval, whilst this study has not been completed yet. It just started in 2016.

21. Dr. Thanh asked if the study was conducted with participation of relevant stakeholders. Dr. Kim Anh also suggested that this study should focus on a specific area and specific fishery rather than the whole country. Dr Ha responded that the study is an initial stage as a trial, and once the project has some progress, then it can be shared with relevant stakeholders.

C. Risk assessment

22. Dr. Vu Viet Ha also presented a study on ecological risk assessment of tuna longline and handline fisheries to the secondary species in Vietnam under the collaboration between RIMF and tuna FIP project. The study pointed out that most species (both target and non-target species) caught were at a level of medium and low risk. This is a new approach to risk analysis in tuna fishery in Vietnam. His presentation is in Attachment H.

23. Mrs. Nguyen Thi Dieu Thuy (WWF Vietnam) introduced a WWF's study on sea turtle bycatch by longline/handline tuna fishery. She presented the results of sea turtle bycatch from the observer program conducted by WWF and partners during 2008-2016. The experiment was to compare effectiveness of circle hooks and J hooks that were conducted during 2010-2011. The study reflected significant difference in bycatch rate of sea turtle between two hook types – higher bycatch rate by J-hook. The C-hook have been introduced and widely applied in handline fishery in Binh Dinh. However, the “copied hook” is not the same as the “original C-hook,” which raised a concern on its effectiveness of reducing sea turtle bycatch. Her presentation is in Attachment I.

Discussion

24. Ms. Thuy added that Vietnam has not promulgated specific regulations/measures to protect bycatch of sharks and rays. Under the tuna FIP project, WWF-Vietnam has conducted risk assessments for a number of species encountered by tuna handline and longline fisheries. Nevertheless, risk assessments for habitats have not been conducted so far. She also expected that D-FISH should speed up the development of sharks-NPOA.

AGENDA ITEM 6. DEVELOPMENT OF AN EAFM APPLICATION PLAN

25. Mr. Nguyen Ba Thong presented the potential impacts of tuna gillnet fishery to marine ecosystem in Vietnam. He identified three key potential impacts that could occur in this fishery: (i) bycatch of juvenile bigeye and yellowfin tuna; (ii) Gear loss and ghost fishing and (iii) Biodiversity (species/size selectivity).

Discussion

26. After discussion, it was concluded that:

- (1) Regarding the bycatch of juvenile BE/YF, it was noted that the RIMF has already conducted comparison of the catch rates for some dominant species including skipjack in terms of the depth of gillnet setting. The RIMF agreed to investigate the difference in bycatch rates by depth.
- (2) Regarding the gear loss and biodiversity impacts, it was noted that these two items were beyond the scope of this project.

27. Mrs. Thuy presented the potential impacts of tuna longline fishery to the ecosystem. She pointed out that the main impacts should be the capture of sea turtles and sharks. In addition, she provided some evidences on sea turtle bycatch caught/encountered by the longline/handline, and emphasized that the use of circle hook should be the most appropriate solution to address the bycatch of sea turtle. She also highlighted that the poor compliance of fishermen in deploying circle hooks should result in a considerable concern/issue/threat to ecosystem. Mr Hao provided additional information that local HL fishers in Binh Dinh have been using “modified/copied” hooks, so-called “circular” hooks.

28. Dr. Vu Viet Ha presented potential impacts of tuna purse seine fishery on marine ecosystem. He noted that there are two main impacts: (i) bycatch of juvenile YF/BE tuna, shark, dolphin, sea turtle, sea snake, etc., and (ii) disturbance of the ecosystem community structure. The meeting agreed that these two impacts are also beyond the scope of this project to be further considered for the application of EAFM in this workshop.

29. Dr. Soh guided the workshop to develop a plan to trial EAFM in tuna fisheries in Vietnam, under the framework of WPEA-SM project. He emphasized that the workshop should develop a simple and realistic plan that can be applicable to a selected fishery as a trial before and after the project is terminated. The workshop agreed to select a tuna handline fishery in Binh Dinh as a case study area. The agreed plan is in Attachment J.

Discussion

30. The WCPFC Executive Director. Feleti P Teo asked whether Vietnam purse seine fishery use FADs or not. He mentioned that FADs may attract juvenile bigeye and yellow fin tuna. Mr Hao responded that FADs are not used in this fishery and fishermen normally fish based on their own experiences. He also mentioned that data of BE/YF juvenile bycatch in purse seine fishery is currently unavailable, and also it is difficult to collect. However, Dr Anh clarified that most of the BE/YF tuna catch from PS and GN are small size fish. It was also noted that BE/YF juveniles may be caught by purse seine, however, it is difficult to distinguish BE from YF when they are small.

AGENDA ITEM 7. ADOPTION OF WORKSHOP REPORT, RECOMMENDATIONS AND GUIDELINES

31. The workshop developed the following recommendations and adopted them with the report.

Recommendations

The workshop recommended that:

1. The workshop recognized that there are a diverse range of definitions regarding EAFM, EBFM, EAF, and EBM. It will be useful, however, to promote a common understanding on

- what EAFM entails. An application of EAFM should be considered as a tool to fisheries management, focusing on addressing the impacts of tuna fisheries on ecosystem within the scope of the WPEA-SM project.
2. There is a need to conduct a baseline survey on the threats before implementing pilot application of the EAFM to tuna fisheries.
 3. EAFM-related research work should be shared and cooperated with related stakeholders and institutes to enhance their involvements and efficiency.
 4. Technical assistance should be the highest priority to address bycatch issues in Vietnam tuna fisheries. For example, mitigation of juvenile bigeye and yellowfin bycatch in tuna fisheries should be considered as a priority in applying the EAFM in Vietnam, and collection of reliable fishery data should be technically assisted in this regard.
 5. The application of an EAFM should be reflected into Vietnam's fishery policy.

AGEDNA ITEM 8. CLOSE OF THE MEETING

32. Workshop participants provided comments on the process and the conclusions of the workshop. Mr. Watanabe noted that the more involvement of private sector should be considered in future workshops. Dr Ha appreciated invitation to this workshop and noted that RIMF will continue to participate in the work of the WPEA project. Ms Nhung agreed with Mr Watanabe's comments in relation to private sector's participation and emphasized that under limited budget at least tuna processing companies should be invited in the workshop. Mr. Binh thanked the workshop and hoped that the outcome of this workshop can be soon applied to the fisheries management at a local level in order to see effectiveness of the EAFM in practice. The Executive Director thanked all participants, and noted that this is a new area to tuna fisheries, and through this workshop, we can try to develop a common understanding in EAFM in order to apply it for the sustainable development of tuna fisheries. He also hoped that all recommendations can be considered by national and local policy makers.

33. The workshop closed at 1300 on Friday, 31 March 2017.

Attachments

Attachment A – List of participants

Attachment B – Agenda

Attachment C – EAFM application in Binh Thuan (Case Study)

Attachment D – Overview of the EAFM – concepts and principles

Attachment E – Threats and application of EAFM in Vietnam tuna fisheries

Attachment F – JICA's recommendation on Vietnam's capture fisheries

Attachment G – RIMF's research on EAFM application

Attachment H – RIMF's risk assessment

Attachment I – Bycatch issues in tuna longline/handline fishery in Vietnam

Attachment J – A plan for the pilot application of EAFM to handline fishery in Vietnam