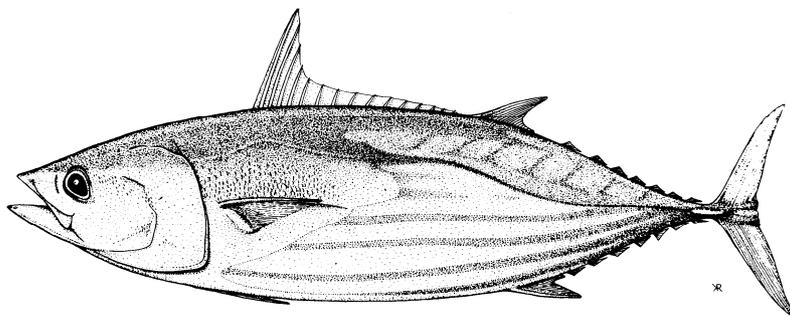




REPORT OF THE THIRD VIETNAM TUNA FISHERY DATA COLLECTION WORKSHOP (VTFDC-3)

22-24 November 2011

Nha Trang, Khanh Hoa, Viet Nam



Western and Central Pacific Fisheries Commission
Pohnpei, Federated States of Micronesia
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1. OPENING

1.1 Introduction

For a number of years, the evolving tuna fisheries in Vietnam have been of interest to the Western and Central Pacific Fisheries Commission (WCPFC) given that the Vietnam tuna fisheries exploit the same tuna stocks as the other member countries of the WCPFC. The importance of the Vietnam tuna fisheries to the WCPFC and the involvement of Vietnam in the WCPFC process has been acknowledged with their inclusion in the a new project offered by the Global Environment Facility (GEF) - *West Pacific East Asia Oceanic Fisheries Management (WPEA OFM)* project, which began in 2010 (see <http://www.wcpfc.int/doc/2009/wpea-ofm-project-document>). The activities to be carried out under this project contribute towards the following objective:

“To strengthen national capacities and international cooperation on priority transboundary concerns relating to the conservation and management of highly migratory fish stocks in the west Pacific Ocean and east Asia (Indonesia, Philippines and Vietnam)”

The WPEA OFM project will cover, *inter alia*, the following key areas

- (i) strengthen national capacities in fishery monitoring and assessment,
- (ii) improve knowledge of oceanic fish stocks and reduce uncertainties in stock assessments,
- (iii) strengthen national capacities in oceanic fishery management, with participant countries contributing to the management of shared migratory fish stocks,
- (iv) strengthen national laws, policies and institutions, to implement applicable global and regional instruments.

The first Tuna Data Workshop (VTFDC-1) was held in March 2010 and reviewed existing information and established a plan for the immediate implementation of data collection systems in the Vietnam tuna fisheries. The second Tuna Data Workshop (VTFDC-2) was held in November 2010 and primarily reviewed progress in establishing data collection in the longline fishery and discussed the protocols and data collection forms to be established in the purse seine and gillnet fisheries (see <http://www.wcpfc.int/west-pacific-east-asia-oceanic-fisheries-management-project>).

The aims of this third workshop (VTFDC-3) were to mainly (i) review progress in port-based data collection in the longline fishery since the second workshop, (ii) review progress in implementing port-based data collection in the gillnet and purse seine fishery, and (iii) review progress in implementing observer activity in the longline fishery. Activities on the margins of the third workshop included a Khanh Hoa Provincial Stakeholders Meeting, held in Hon Ro port on 24 November 2011, and early morning port visits to Ho Ron to observe offloadings from gillnet vessels.

This report contains a summary of presentations and discussions held during in VTFDC-3 workshop plenary, which was conducted over three days (22-24 November 2011), and includes specific recommendations as key outputs from the workshop.

Mr Pham Trong Yen, Deputy Director of DECAFIREP, provided an opening address highlighting the importance of the work involved in the development of a National Tuna Management Plan for Vietnam in the longer term. He urged participants to take advantage of the participation of the two WCPFC advisors during the workshop which would look at the current status of data collection in the longline fishery and plans to implement data collection in the purse seine/gillnet fisheries. He is personally taking a leading role in pursuing a formal request to GEF to secure funding for a 2nd phase of the WPEA project, highlighting the good performance with the 1st phase of the WPEA, but stressing the need to consolidate the work under Phase 1 given that 3 years is too short.

Mr Peter Williams provided an opening statement on behalf of the WCPFC. He noted that the long-term maintenance of national tuna fisheries data collection systems is an important commitment by WCPFC members and that the WCPFC is encouraged by the progress and motivation in establishing data collection systems in Vietnam over the past two years. However, there remains considerable work to do, with the main focus of this workshop covering the review and implementation of port sampling of the purse seine and gillnet vessels. Vietnam has certain obligations as a Cooperating non-member of the WCPFC (CNM) with respect to the collection and provision of data to the WCPFC and the WCPFC looks forward to continued development and interaction in this area in the coming years.

1.2 Appointment of Chair and Rapporteurs

Dr Antony Lewis was appointed chairman and Mr Peter Williams was appointed rapporteur.

1.3 Adoption of the Agenda

The agenda proposed for the workshop was adopted as presented in APPENDIX I, which was different from the provisional agenda with the inclusion of (i) progress on recommendations from VTFDC-2 and (ii) Preparations for the First Vietnam Annual Catch Estimates (VTFACE) Workshop. The list of the participants can be found in APPENDIX II and a list of the presentations made during the workshop can be found in APPENDIX III.

2. Review of progress on recommendations from VTFDC-2 workshop

The workshop initially considered the implementation of recommendations from VTFDC-2 workshop. The workshop acknowledged the good progress made with data collection in the tuna fishery over the previous year with an update on progress on each recommendation available in Appendix 4.

3. Recent WCPFC fisheries trends and WCPFC data obligations

The WCPFC representative, Mr Williams, provided an introductory presentation on the WCPFC requirements for scientific data, covering the following areas:

- Brief overview of WCPO fisheries by gear type and summary of tuna stocks status
- The WCPFC member country data-reporting obligations (refer to <http://www.wcpfc.int/doc/data-01/scientific-data-be-provided-commission-revised-wcpfc4-wcpfc6>)
- Vietnam – data provisions and gaps
- Future prospects for data collection

The purpose of this introductory session was to inform participants of their role and the importance in collecting and providing scientific data to the WCPFC, but also how these data can be important to Vietnam. It was noted that the importance of the data collected by Sub-DECAFIREP enumerators to the WCPFC covers the following main areas:

- Provides essential tuna species composition data for determining annual catch estimates by GEAR,
- Provides essential TUNA SIZE DATA for the regional stock assessments,

In the coming years, it was noted that the WPEA-OFM would serve to assist improvements in the coverage and quality of tuna data collection in Vietnam. WCFPC members have a common goals in regards to maximizing catches while conserving tuna stocks (sustainable exploitation). Some important factors affecting the tuna fishery in the future include the need for food security and economic welfare (at the national level), and the increasing scrutiny by the external markets with more demands on demonstrating responsible fishing practices. In this respect, it was noted that the WPEA countries need a better understanding/knowledge of

their important tuna resources, through appropriate Data Collection Systems, and appropriate Data Management Systems.

4. Review of recent data collection in Vietnam

The workshop proceeded to review the progress in data collection in the longline fishery of each Province over the past year with a presentation from a representative from each province. The following summarises the information in each presentation and ensuing discussion. The information compiled in these agenda items was discussed further in the planning of port sampling data collection for the next year (see Sections 6 and 7).

4.1 Data collection in Binh Dinh Province

Mr An provided a presentation of data collection in Binh Dinh Province over the past year. The following are the key points of his presentation:

- There are four enumerators operating in Binh Dinh landings sites (2 at Tam Quan district for longline and 2 at Quy Nhon for purse seine and gillnet (PS/GN) at the moment, with one supervisor.
- The data collected over the past 12 months are summarized in a table in APPENDIX 8. Coverage of length sampling and logsheets has been very good (~ 60%).
- However, there have been a number of problems, including:
 - There are no agreements amongst parties (buyers, fishers, vessel owners) and no legal policy to encourage them to comply with the data collection;
 - The catch of a vessel may be sold to several buyers so the landings data are not easy to trace;
 - It is difficult to distinguish between juvenile yellowfin tuna and bigeye tuna (in PS and GN, these species may be captured with the other small tuna species : skipjack, frigate and bullet tuna);
 - Purse seine vessel owners refuse to cooperate due to the traditional reasons (i.e. fishers do not want the others to touch the fish);
 - The Landing site at Quy Nhon is too crowded and it is difficult to conduct the length sampling;
 - All vessels arrive and leave the fishing port at the same time (within one or two days) and there are not enough staff to collect the required samples.
 - Most of the captains were not ready to fill in the logbook and there were no incentives or apparent obligations to fill in the logbook. They were not familiar with the tasks in filling logbooks, so erroneous data often resulted;

The ensuing discussion was used to formulate a plan for future data collection in the longline, gillnet and purse seine fisheries (see Section 6 and 7). Key points raised in discussion are as follows:

- The catch from the gillnet vessels are sorted by species (i.e. SKJ and YFT+BET) at sea, but the sampling protocol appears to be appropriate for collecting appropriate data.
- Some GN vessels operate inshore and catch small pelagic and coastal tuna species. The workshop noted that these vessels do not need to be sampled, but their landings by species should be collected.
- The longline vessels in Binh Dinh were hesitant to use the WPEA logsheet at the start, but now favour this logbook over the national logbook. Initially, the quality of data from the logbook was poor but has improved significantly with a better understanding of what is required.
- PS/GN sampling began in August 2011 and data have yet to be processed.
- Binh Dinh indicated that there were insufficient resources to achieve the target sampling of PS/GN vessels and suggested to (i) revise the target sampling downwards and/or (ii) provide more enumerators.

4.2 *Data collection in Phu Yen Province*

Mr Tuong provided a presentation of data collection in Phu Yen Province over the past year. The following are the key points of his presentation:

- There are four enumerators operating in Phu Yen landings sites, two cover the longline landings and 2 cover the PS/GN landings;
- The data collected over the past 12 months are summarized in APPENDIX 8.
- There have been a number of problems in Phu Yen sampling over the past year; those that are not common to Binh Dinh (i.e. the previous presentation) are:
 - Various problems with buyers, for example, some buyers refused to provide information on catches, and they leave the port quickly after landings so they can't be interviewed;
 - After initial cooperation with Sea Border Guard Stations to have logbooks sent to all the vessels, very few if any logbooks were subsequently returned. It has been difficult to implement the logbook into the longline fishery in Phu Yen over the past year. The main reasons have been the extra effort taken by fishers to fill in two logbooks (i.e. the WPEA and the national logbook), it is difficult to enforce the submission of logbooks and that the WPEA logbook is cramped for space. There is also no real compliance in place that obliges the submission of the logbooks;

The ensuing discussion was used to formulate a plan for future data collection in the longline, gillnet and purse seine fisheries (see Section 6 and 7). Key points raised in discussion that are not common to the points raised for the previous session (i.e. Binh Dinh) are as follows:

- Specific recommendations were developed which will hopefully resolve these issues in the future and Phu Yen will proceed to implement the logbook throughout 2012.
- As in Binh Dinh, the lack of staff was a problem. For longline, 2 enumerators is sufficient, but more staff are required to sample the purse seine and gillnet vessels.
- Sampling of PS/GN had not started in Phu Yen as yet, but given the exposure at this workshop, they are now more confident of proceeding with the implementation of sampling in these fisheries; It was noted that a new port will possibly be opening up in Vung Ro which will cater for all major unloading in Phu Yen and therefore simplify the sampling procedures, but this may not happen for several years

4.3 *Data collection in Khanh Hoa Province*

Mr En provided a presentation of data collection in Khanh Hoa Province over the past year. The following are the key points of his presentation:

- There are four enumerators operating in Khanh Hoa landings sites, two cover the longline landings and 2 cover the PS/GN landings;
- The data collected over the past 12 months are summarized in a table in APPENDIX 8.
- There have been a number of problems over the past year and those that are not common to Binh Dinh and Phu Yen (i.e. the previous presentations) are:
 - Fish is sold at the sea and therefore not accessible for sampling;
 - Staffs have to work very early in the morning (2AM) to sample the landings;

The ensuing discussion was used to formulate a plan for future data collection in the longline, gillnet and purse seine fisheries (see Section 6 and 7). Key points raised in discussion that are not common to the points raised for the previous sessions (i.e. Binh Dinh and Phu Yen) are as follows:

- It was noted that Hon Ro receives catches from trucks loaded in other ports (Phu Yen and Cam Ranh), so enumerators need to be wary of potential double-counting;

- The number of (tuna) purse seiners has dropped from 20 to one due to low economic efficiency.
- They have recently provided some training to vessels to correctly fill in the logbooks;
- Night-time sampling appears to be unique to Khanh Hoa (but needs to be confirmed) and requires more effort, so perhaps can be compensated for the additional work at odd hours;
- Khanh Hoa had to pay fishers to complete logbooks in some cases. While this initiative resulted in data provision, it was agreed that it should be avoided since it can't be sustained;
- On review of the sampling data collected in the gillnet fishery, there appeared to be a higher percentage of juvenile bigeye tuna sampled than expected, so attention to species identification is recommended in the future;
- The workshop noted that measuring tapes should not be used and where enumerators were not allowed to touch the fish, sampling of that vessel should not occur. However, buyers should be made aware of the objectives and obligations for sampling the catch. The construction and use of small 70cm wooden calipers was recommended.
- It was noted that landing at private wharves was not permitted under the law in Khanh Hoa.

4.4 *Examples of Vietnam tuna fishery data summaries*

The WCPFC representative provided a presentation on examples of data summaries that can be produced from the Vietnam tuna fishery data already processed, as an indication of the potential value of the data collection/management system to national scientists and fisheries managers. The examples included a map showing the distribution of longline species catch from logsheet and observer data, a summary report of longline species catch, effort and CPUE and graphs showing the size composition of longline yellowfin and bigeye tuna source from port enumerators and observers.

It was noted that data entry had been hampered by the theft of the laptop with the database system on it but that plans to purchase a network server were well underway. In the ensuing discussion, The workshop also noted the importance of having summarized data sent back to the Sub-DECAFIREP offices on a regular basis for their review and use. Over the longer term, the Sub-DECAFIREP offices have expressed a desire to enter the data themselves

5. **An overview of Vietnam Tuna stocks**

Mr Huy from the Vietnam Research Institute of Marine Fisheries (RIMF) provided a presentation on tuna stocks available to Vietnam fisheries based on data and research conducted by his agency over the past decade. Tuna are accessible in the seas off the central and south eastern coast Vietnam. There are about 14 species and can be divided into offshore tuna (yellowfin and bigeye tuna taken by longline fisheries) and small tuna (bullet, skipjack, frigate tuna, etc. taken by the purse seine and gillnet fisheries). Based on outcomes from research trips conducted over the period 2000-2009, scombrids make up most of the catch from the gillnet fishery (72% in the SW monsoon and 81% in the NE monsoon) and most of the catch from the longline fishery (59% in the SW monsoon and 57% in the NE monsoon). The presentation included graphs showing trends in the catch per unit for the gillnet and longline fisheries and maps off catch distributions from each gear in the SW and NE Monsoon periods. Standing stock estimates of tuna species in the waters accessible to Vietnam fisheries were provided: 618,000 t. for skipjack, 45,000 t. for yellowfin and 28,000 t. for bigeye. RIMF activities related to tuna fisheries management, include using a longline vessel to collect data and using different mesh sizes in the gillnet fishery. RIMF also conduct at-sea observer programmes in conjunction with WWF.

RIMF are also about to commence a new data collection project in 2012 which will run for three years and cover all fisheries/species (and not just tuna) in 21 coastal provinces. The workshop encouraged collaboration between this new RIMF project and the WPEA project for the tuna catch by various gears.

In response to a question by the Chair, Mr. Huy indicated that work on the tuna fishery provincial profiles would accelerate over the coming months with a date for release towards the end of February 2012. It was noted that the tuna provincial profiles would, inter alia, provide very important information for the First Vietnam Annual Catch Estimates workshop.

6. Future plans for data collection in the LONGLINE fishery

The workshop considered the presentations of the past year's data collection in each province and the plan for future data collection in the longline fishery. There were noted improvements in the past year and there would not be any new initiatives in data collection in the longline fishery but a consolidation of what had been achieved to date, in particular, improving the coverage and quality in the logbook data collection. The outcomes of discussions under this agenda item were reflected in specific recommendations from the workshop which appear in APPENDIX 5.

7. Future plans for data collection in the GILLNET and PURSE-SEINE fisheries

The workshop considered the presentations and discussion on the past year's data collection in each province and the plan for future data collection in the gillnet and purse seine fisheries. There has not been sufficient data collection in the purse seine and gillnet fisheries at this stage, so a review of the success of these systems was not yet possible. The main issues to concentrate in the coming year in these fisheries were as follows:

- The development of a purse seine and gillnet logbook form, for later implementation (possibly 2013);
- Expand port sampling of purse seine and gillnet vessels, while ensuring quality control;
- Ensure sufficient resources for sampling target coverage are provided for (i.e. an increase in the number of enumerators that sample these gears);
- Attention to species identification of juvenile yellowfin and bigeye tuna, with assistance from WCPFC

The outcomes of discussions under this agenda item were reflected in specific recommendations from the workshop which appear in APPENDIX 5.

8. Future Observer activities

Mr Anh (DECAFIREP) provided a presentation on recent observer activities in Vietnam. The objectives for observer activities in Vietnam are to collect scientific data, provide evidence on the fishers' compliance on national regulations, and provide evidence on the fishers' compliance on international regulations which Vietnam has adopted. Over the past year, Vietnam (with support from the WPEA project and WWF) has conducted 15 observer trips mainly on longline vessels (14 trips). It was noted that WWF support was used to originally establish at-sea observation in Vietnam. The observer activities have had many difficulties to resolve, including (i) there are no legal documents related to at sea observations (ii) the allowance for observer is low (iii) the problem of where to source observers (government staff or from private organizations) (iv) occupational hazards onboard (v) the size of the vessel is limited, with little space for observers, no toilet and the lack of equipment and space to store the biological samples. Responsibilities for all parties (vessel owners, captains and observers) need to be clearly stated. Providing training courses and the provision of an adequate salary for observers were identified as key issues to resolve, but cost recovery was acknowledged to be a problem with all observer programmes.

The workshop noted the difficulties faced by implementing an observer programme and agreed that if priorities need to be decided with respect to funding, observer activities should be lower priority than the port sampling and logbook data collection. However, if resources are available, a target of 5 trips for 2012 should be set.

The workshop commended DECAFIREP, RIMF and other relevant agencies for the work involved in conducting 15 observer trips in 2012, which exceeded expectations (the target was 5 trips).

With respect to the approach to establishing a permanent observer programme, it was suggested the following important criteria had to be dealt with :

- Review and resolve the lessons learnt from the pilot observer trips, possibly establishing a minimum vessel size on which observers should be deployed
- Ensure secure, permanent funding for all activities - sustainability (observers, training, coordination)
- Ensure a legal basis with all parties aware of their obligations.

9. Future Integration into the National Data Collection System

The workshop acknowledged the long-term objective of the WPEA project of having the data collection system established for the tuna fisheries integrated permanently into the National Data Collection System, which will be of significant benefit to Vietnam in establishing a sound National Tuna Management Plan and satisfying its obligations to the WCPFC. The decision to pursue changes to the legislation to have the WPEA-designed logbooks adopted as the national logbook data collection forms was a positive step in this direction. A specific recommendation was formulated that recommends that DECAFIREP begin plans for the long-term support of the tuna fishery monitoring system (data collection and management) established under the WPEA project, under the national data collection system, ideally as a policy decision and with data collection as a permanent activity. As noted, there will also likely be a role for RIMF in the national system

10. Preparations for 2012 Annual catch estimates workshop

The WCPFC/SPC representative presented a list of information (and responsible agencies/individuals) that needs to be prepared as working papers for the First Vietnam Annual Catch Estimates workshop tentatively scheduled for March/April 2012. The list was discussed and refined by the workshop and the final version appears in Appendix 7.

11. Other matters

11.1 Tuna Tag recoveries

Dr. Lewis briefly summarized the current status of tagging field work and the situation with tag recoveries. Over 315,000 fish have now been tagged and released in the WCPO since 2006, for nearly 47,000 recoveries (15%). No tag recoveries had been reported in Vietnam ports over the past year, despite increased publicity. There are still only a few earlier verbal reports of recaptures by Vietnamese vessels which were however not recovered. Numerous recoveries have been reported in the South China Sea from mostly Indonesian and Philippines releases. While tagging field work continues in Papua New Guinea waters, there is less likelihood of tag recaptures in the Vietnamese tuna fisheries than in previous years, when tagging was conducted in the adjacent waters of Philippines and Indonesia. Staff should nonetheless remain vigilant, especially for possible longline recaptures.

11.2 Financial issues

There was no specific directive on how to deal with this agenda item other than to note the following :

- i. The WCPFC Science Manager visited DECAFIREP offices the week before the workshop to establish the draft Annual Work Plan (AWP) for 2012. The current budget for AWP 2012 is set at USD 116,000;
- ii. There were several recommendations during this workshop that have implications for the AWP 2012 budget. For example, the workshop recommends the addition of 6 more enumerators, the

- funding of the annual catch estimates workshop and the potential dedicated visit of a species identification expert to conduct audits and workshops.
- iii. The WCPFC-administered Japanese Trust Fund was mentioned as a possible funding source for some of the work not included in the AWP 2012 and which would meet criteria for JTF funding.
 - iv. Over the longer term, the workshop noted that there were some positive signs for a 3-year extension of the GEF project (a 2nd phase) but the preparation of critical proposal documents in 2012 and a positive outcome reported for the 1st phase will be important in the decision to extend the WPEA project.

11.3 Manpower and other resources

The issue of manpower, particularly with respect to enumerators in ports, has been discussed during other agenda items and a specific recommendation formulated to deal with supporting the additional human resources required to cover the purse-seine and gillnet sampling. The work of the enumerators for the longline fishery has proven successful so far, so additional resources would ensure a positive outcome for the purse seine and gillnet fisheries.

The purchase of a network server to store the tuna fishery database has been included in the AWP 2012 budget, but there are other critical computer hardware required to satisfy requirements, for example, a suitable backup power supply (UPS) and workstation for the data entry.

12. Recommendations from the workshop

Based on discussions during the workshop, ten (10) recommendations were developed and agreed by participants to guide the work required in the coming year (see APPENDIX 5). In drafting the recommendations for WPEA OFM data collection activities, the workshop recognized that the project needs to continue to take steps during the course of the project to ensure its sustainability, to build capacity at all levels of planned activity, to disseminate information and outcomes from the project and maximize collaboration and cooperation with all relevant Government and industry agencies. A specific recommendation was formulated with respect to starting work on future plans for integration of the data collection system established by the WPEA into the national data collection system.

13. CLOSE

The next WPEA workshop will be the first Vietnam Annual Catch estimates workshop (VTFACE-1) to be held in March/April 2012, and the next Tuna Data Review workshop, tentatively set for November 2012, or to another appropriate date to correspond to the peak fishing season.

Dr Lewis thanked the organizers of the workshop, the Deputy Director and staff of DECAFIREP and the Director and staff of the Khanh Hoa SUB-DECAFIREP office for hosting the workshop. He also thanked the participants from the three SUB-DECAFIREP provincial offices (Khaoh Hoa, Phu Yen, Binh Dinh) for the encouraging data collection work conducted over the past year and their input into the workshop. Appreciation was extended to the WCPFC and the funding agency for the WPEA OFM project – GEF. The meeting was closed with a round of applause, group photos and followed by a very pleasant dinner hosted by DECAFIREP.

APPENDIX 1. VTFDC-3 Agenda



**West Pacific East Asia Oceanic Fisheries
Management
Third Vietnam Tuna Fisheries Data
Collection Workshop (VTFDC-2)**

22 – 24 November , 2011
Nha Trang, Khanh Hoa, Vietnam



AGENDA

TIME	CONTENTS	FACILITATOR / PRESENTER
DAY 1	1. OPENING 1.1. Registration 1.2. Introduction of participants 1.3. Election of Chairman and Rapporteurs 1.4. Adoption of the Agenda 1.5. Opening addresses and objectives of the workshop	DECAFIREP WCPFC/SPC
	2. REVIEW OF PROGRESS WITH RECOMMENDATIONS FROM VTFDC-2	WCPFC/SPC
	3. RECENT TRENDS IN WCPFC TUNA FISHERIES AND WCPFC'S DATA OBLIGATIONS	WCPFC/SPC
	4. REVIEW OF RECENT VIETNAM TUNA DATA COLLECTION 2. 3. 4. 4.1. Data Collection in Binh Dinh 4.2. Data Collection in Phu Yen 4.3. Data Collection in Khanh Hoa 4.4. Examples of Vietnam Tuna Fishery Data Summaries	Sub-DECAFIREP – Binh Dinh Phu Yen Khanh Hoa WCPFC/SPC
	5. VIETNAM TUNA STOCKS AND PROVINCIAL TUNA FISHERY PROFILES	RIMF
DAY 2	6. REVIEW AND FUTURE PLAN FOR DATA COLLECTION IN THE LONGLINE FISHERY 5. 6.	CHAIR
	7. REVIEW AND FUTURE PLAN FOR DATA COLLECTION IN THE PURSE SEINE AND GILLNET FISHERIES	CHAIR
	8. REVIEW OF OBSERVER ACTIVITIES IN VIETNAM	DECAFIREP
	9. FUTURE INTEGRATION WITH NATIONAL DATA COLLECTION PROGRAM	CHAIR
	10. PREPARATION FOR ANNUAL CATCH ESTIMATES WORKSHOP (MARCH/APRIL 2012)	CHAIR
	11. OTHER MATTERS 11.1. Tagging recovery 11.2. Financial issues 11.3. Manpower and other resources	CHAIR

TIME	CONTENTS	FACILITATOR / PRESENTER
DAY 3	12. RECOMMENDATIONS AND CLOSE OF WORKSHOP	CHAIR

APPENDIX 2. List of Participants

**West Pacific East Asia
Oceanic Fisheries Management**

**THIRD VIETNAM TUNA FISHERIES
DATA WORKSHOP**

**22 – 24 November , 2011
Nha Trang, Khanh Hoa, Vietnam**



LIST OF PARTICIPANTS

No	Name	Organisation	Position
1	Antony Lewis	WCPFC	Consultant/Advisor
2	Peter Williams	WCPFC/SPC	Data Manager
3	Pham Trong Yen	Decafirep	Deputy Director
4	Nguyen Quoc Anh	Decafirep	Deputy Director of Fisheries Management Division
5	Pham Hung	Decafirep	Staff of Fisheries management Division
6	Pham Ngoc Tuan	Decafirep	Director of Logistic and Services Division
7	Nguyen Thi Bich Ngoc	Decafirep	Director of Account Division
8	Nguyen Van Chiem	Decafirep	Staff
9	Pham Quoc Huy	RIMF	Resources Division
10	Nguyen Ly An	Sub Decafirep Binh Dinh	Enumerator
11	Le Duc Tuong	Sub Decafirep Phu Yen	Enumerator
12	Ha Ngoc Tien	Sub Decafirep Phu Yen	Enumerator
13	Pham Ngoc Sau	Sub Decafirep Phu Yen	Enumerator
14	Vo Khac En	Sub Decafirep Khanh Hoa	Director of Fisheries management Division
15	Vu Duy Duong	Sub Decafirep Khanh Hoa	Enumerator
16	Nguyen Van Dau	Deputy Director - Sub Decafirep Khanh Hoa	Deputy Director
17	Lu Thanh Phong	Sub Decafirep Khanh Hoa	Enumerator
18	Vu Ba Duy	Sub Decafirep Khanh Hoa	Enumerator
19	Nguyen Phong Hai	Nha Trang University	Interpreter

APPENDIX 3. List of VTFDC-3 Presentations

1	Progress with recommendations from VTFDC-2	WCPFC/SPC
2	Recent information from WCPFC Fisheries, WCPFC Data reporting obligations and Vietnam data submissions	WCPFC/SPC
3	Recent collection of tuna fishery data in Binh Dinh Province	Sub-DECAFIREP – Binh Dinh
4	Recent collection of tuna fishery data in Phu Yen Province	Sub-DECAFIREP – Phu Yen
5	Recent collection of tuna fishery data in Khanh Hoa Province	Sub-DECAFIREP – Khanh Hoa
6	Overview of tuna stock in Vietnam	RIMF
7	Examples of Vietnam tuna fishery data summaries	WCPFC/SPC
8	Vietnam Observer activities	DECAFIREP
9	Preparation for Annual Catch estimates Workshop	WCPFC/SPC

APPENDIX 4. Progress on Recommendations from VTFDC-2

SECOND VIETNAM TUNA FISHERY DATA COLLECTION WORKSHOP (VTFDC-2)

Quy Nhon, Vietnam
15–16 November 2010

RECOMMENDATIONS

PROGRESS AS AT NOVEMBER 2011

1. Provisional annual tuna catch estimates

The provision of annual catch estimates is a fundamental reporting obligation for members, cooperating non-members and participating countries and territories (CCMs) of the WCPFC. The workshop identified information that might be used to compile annual tuna catch estimates in Viet Nam. The workshop recommended that provisional historical annual oceanic tuna¹ catch estimates for the Vietnam longline, purse seine and gillnet fisheries be determined by **DECAFIREP** and submitted by the WPEA Project National Tuna Coordinator (NTC) to the WCPFC Secretariat prior to April 30 2011.

Annual catch estimates for the LONGLINE FISHERY for 2010 were submitted to the WCPFC prior to 30th April 2010. However, the provision of historical annual catch estimates for all gears remains an outstanding data gap and will be considered by a dedicated annual catch estimates workshop to be held in 2012. This recommendation is carried over to the annual catch estimates workshop.

2. Estimation of coverage rate and annual catch

The Workshop acknowledged the information made available on annual catch estimates and coverage rates and recommended that **DECAFIREP** continue to provide updates of the following information on an **annual basis**:

- (i) A register of active vessels targeting oceanic tuna (longline, large-mesh purse-seine and gillnet vessels²) for each of the three central Provinces.
- (ii) Summary of the extent and patterns of activity (number of trips) of multi-gear vessels, and investigation of the extent of reliance on carrier vessels by gear, and
- (iii) Tabulation of the monthly frequency of landings by port and gear (for the longline, large-mesh purse-seine and large-mesh gillnet vessels only).

Covered by the presentations in VTFDC-3 workshop.

¹ Skipjack, yellowfin and bigeye tuna

² Distinction should be made to only those vessels catching oceanic tuna (skipjack, yellowfin and bigeye tuna) as target catch

3. Provincial profiles

The Workshop noted that the oceanic tuna fishery profiles for each of the three Central provinces (Khanh Hoa, Phu Yen and Binh Dinh) have yet to be provided, but are expected to be completed by **RIMF** according to the agreed template by **January 2011**. Subject to additional funding, stakeholder workshops will be conducted at all three provinces to verify, complete and share the information compiled in the profiles.

The provincial profiles will now be ready in late February 2012. The recommendation has been carried over.

4. Data inventory

The workshop noted the progress in developing the Data Inventory, coordinated by **DECAFIREP**. The completed inventory should be provided to the WCPFC Secretariat by the WPEA Project NTC prior to **June 2011** for consideration at the WPEA Project Steering Committee during the 7th Scientific Committee. The key elements of the inventory will be (i) source of data, (ii) type of data, (iii) temporal and spatial resolution, (iv) time periods covered, (v) availability and (vi) media (e.g. electronic, hard-copy). This work would eventually consider available oceanic tuna fishery data from all coastal provinces taking oceanic tunas, but initially from the three central provinces and building from the provincial profiles.

The data inventory was provided in the WPEA Project Steering Committee report by Vietnam which was prepared for SC7 and will be a part of future WPEA reports by Vietnam.

5. LONGLINE Landings Data Collection

The workshop noted the good progress made in implementing data collection in the longline fishery, but acknowledged the need for further improvements. The workshop noted that data collection systems continually evolve, requiring review and subsequent modification due to changing circumstances in the fishery and the available resources to collect data.

In regards to the protocols for longline landings data collection, the following specific issues were identified for further work in the coming year:

- Due to limited resources, the workshop agreed to modify the protocols for longline landings data collection, to be implemented by **DECAFIREP** and **SUB-DECAFIREP** offices:
 - Total number of landings per month (100%)
 - Total landings data collection form (**150 landings/month**)
 - Enumerators size/species composition sampling (**30 landings/month**)
 - All tuna to be measured, including small-sized tuna where possible
 - Other species may also be measured, if this is possible and resources and access permit
 - The modification in the protocols acknowledges the current resources are lacking and that the coverage would normally be increased if more resources became available.
- Refer to Table 5 in the VTFDC-2 workshop report which provides more information on the breakdown of target coverage by Province and landing site.
- **DECAFIREP**, with assistance from **WCPFC/SPC**, will make the necessary changes to the manuals for data collection forms, protocols, implementation strategies resulting from the decisions of the workshop and distribute to workshop participants prior to **January 31st 2011**.

- **DECAFIREP** will arrange any supplementary training of enumerators, enumerator supervisors and stakeholder awareness that may be necessary as a result of changes in the protocol.
- **DECAFIREP** to make available calipers (and measuring boards, where applicable) to all enumerators.

Covered by the presentations in VTFDC-3 workshop.

6. GILLNET and PURSE-SEINE Data Collection

The workshop noted the information provided for on-board storage and the unloading procedures from gillnet and purse seine vessels which was used to prepare a draft protocol for sampling these gear types. The draft protocols would be implemented in the coming year, noting that they would evolve after continual review as a result of changing circumstances in the fishery and the available resources to collect data.

In regards to the protocols for purse seine and gillnet landings data collection, the following specific issues were identified for further work in the coming year:

- Due to limited resources, the workshop agreed to modify the protocols for purse-seine and gillnet landings data collection, to be implemented by **DECAFIREP** and **SUB-DECAFIREP** offices:
 - Total number of landings per month (**100%**)
 - Total landings data collection form (**150 PS and GN landings/month**)
 - Enumerators size/species composition sampling (**30 landings/month**)
 - GN : a target of at least 100 SKJ per landing, and any YFT and BET
 - PS : a target of at least 100 tuna [SKJ, YFT, BET]
 - 2 enumerators per province responsible for covering PS and GN landings in that province.
 - The modification in the protocols acknowledges the current resources are lacking and that the coverage would normally be increased if more resources became available.
- Refer to Table 5 in the VTFDC-2 workshop report which provides more information on the breakdown of target coverage by Province and landing site.
- **DECAFIREP**, with assistance from **WCPFC/SPC**, will make the necessary changes to the manuals for data collection forms, protocols, implementation strategies resulting from the decisions of the workshop and distribute to workshop participants prior to **January 31st 2011**.
- **DECAFIREP** will arrange a workshop to train enumerators, enumerator supervisors and stakeholder awareness that may be necessary as a result of changes in the protocol. **WCPFC** will identify and provide the funding required to conduct this workshop which is planned for early 2011. It was noted that total landings data collection from the buyers can commence as soon as the data collection forms have been reviewed and made available, but sampling will not be able to start until the training workshop was undertaken.
- **DECAFIREP** to make available calipers and measuring boards to all enumerators.

Covered by the presentations in VTFDC-3 workshop.

7. Information available from BUYERS

The Workshop acknowledged the important information collected by BUYERS at the point of landing the catch.

- (i) The cooperation of the buyers in providing species catch data for the Total landings form is critical. **SUB-DECAFIREP** should continue to request that **BUYERS** provide complete information, and provide a better breakdown of catch by species.

- (ii) **DECAFIREP and SUB-DECAFIREP** should investigate the current legal framework (that requires buyers to cooperate) to determine how to better enforce the collection of information from buyers.
- (iii) In the longer term, **DECAFIREP and SUB-DECAFIREP** should work towards obtaining data through buyers using MOUs, incentives, and the legal framework, with an ideal target of 100% coverage.
- (iv) **SUB-DECAFIREP Enumerators** will liaise with **CAPTAINS** and **BUYERS** to have access to measure the undersize tunas from the longline landings only, but where this is not possible then the numbers of small-sized tuna by species should be taken.
- (v) **DECAFIREP and Sub-DECAFIREP** will continue to investigate potential sources of information collected by port authorities, buyers, processors and other stakeholders involved in the unloading process in order to enhance the total landings data collection.

Covered by the presentations in VTFDC-3 workshop.

8. SPECIES IDENTIFICATION

The workshop noted that some improvements in species identification may be necessary. **WCPFC/SPC** will provide enumerators with more information that will allow easier distinction of yellowfin and bigeye tuna, billfish, shark and other species in the **LONGLINE, PURSE-SEINE and GILLNET** fisheries. **SUB-DECAFIREP Enumerators** will use all means available to them for identifying the longline tuna catch (e.g. notch in caudal fork, general body shape, black lines on finlets, relative size of eye, appearance of liver, etc.).

Over the past year, WCPFC/SPC has provided SPECIES IDENTIFICATION GUIDES to enable better species identification. Species identification has improved in the LONGLINE fishery, but there are still some concerns expressed by Enumerators on distinguishing juvenile yellowfin and bigeye tuna. This recommendation has been modified and carried over.

9. Logbook data collection system

The workshop noted the importance of recent initiatives in establishing a logbook data collection system in Vietnam, in particular the increased incentives for logbook reporting in response to measures introduced by EU to address IUU fishing.

The workshop noted the problems in implementing the tuna fishery logbooks during 2010. Logbooks had been distributed to vessels, but only a few logsheets had been submitted to the **SUB-DECAFIREP** offices to date. It was noted that logbook implementation is a long-term process and that gradual improvement in the provision of logsheets should be expected. The workshop recommended that **DECAFIREP and SUB-DECAFIREP** offices continue their efforts to implement logsheets, which in the short term should concentrate on,

- (i) Priority implementation of logsheets for vessels more than 90 HP/CV;
- (ii) Raising awareness with stakeholders through dedicated meetings/training sessions and provision of guides/instructions describing how to complete the logbook.

As reported in several VTFDC-3 presentations, there has been mixed success in the implementation of logbooks in the LONGLINE fishery. In Binh Dinh, coverage of logbooks is as high as 60%, which is a very encouraging start, but there were problems experienced in Phu Yen and Khanh Hoa provinces. The VTFDC-3 discussed potential solutions to the logbook implementation problems and recommendations provided in the VTFDC-3 report.

10. Vietnam tuna fisheries Observer Programme

The workshop acknowledged the difficulties in conducting any observer activity during 2010 due to the late provision of GEF WPEA funds. The Workshop recommended that **DECAFIREP** conduct the six observer trips,

originally planned for 2010, during 2011 (i.e. carry over these trips to 2011). However, it was noted that the available funds will only cover 5 observer trips for 2011.

WCPFC/SPC has received and processed the data for 15 observer trips conducted over the past 12 months, which is very encouraging.

11. Tuna tagging

The Workshop acknowledged the work DECAFRIREP and Sub-DECAFRIREP had done in awareness-raising and publicity on Pacific Tuna Tagging Project (PTTP) over the past six months. The workshop noted the need for **DECAFRIREP and Sub-DECAFRIREP** offices to continue the process of raising awareness of the PTTP in Vietnam and encouraged the return of tags at the Provincial level.

The three provincial offices are aware of the tagging project.

12. Project Information dissemination

The workshop noted the progress made to date and encouraged **DECAFIREP and Sub-DECAFIREP** offices to continue dissemination of information from the project to the general public (particularly at the provincial level) using various media, dedicated web pages and through community-based communication, and make available all information in Vietnamese.

Work in this area will continue to the extent that available funds and human resources permit.

APPENDIX 5. Recommendations from VTFDC-3

THIRD VIETNAM TUNA FISHERY DATA COLLECTION WORKSHOP (VTFDC-3)

Nha Trang Vietnam
22–24 November 2011

Draft RECOMMENDATIONS

DECAFIREP will arrange for a translation of the final version of the Recommendations into Vietnamese and then dissemination to Sub-DECAFIREP offices, RIMF 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. LONGLINE DATA COLLECTION

The workshop noted the good progress made in implementing data collection in the LONGLINE fishery, noting that many problems highlighted last year had been resolved. The workshop noted that data collection systems continually evolve, requiring review and subsequent modification due to changing circumstances in the fishery and the available resources to collect data.

The workshop discussed the problems encountered in the data collection over the past year and agreed on the following advice to remedy these problems. The problems are noted under each type of data collection and the **red text** indicates the suggested and agreed action. The agency responsible for the action is noted in bold/underline.

LONGLINE LOGBOOK

- Problems in implementing LONGLINE LOGBOOKS
 - **DECAFIREP** will proceed to modify legislation to use the WPEA logsheet as the standard in the LONGLINE FISHERY
 - **DECAFIREP** will assist **Sub-DECAFIREP** offices to request the Sea Border Control Guard to enforce the submission of logbooks
 - **DECAFIREP** and **WCPFC/SPC** will verify that WPEA Logbook satisfies EU catch documentation requirements.
 - **WCPFC/SPC** and **DECAFIREP** will investigate the design of the WPEA logbooks to see where it can be improved, for example, increase the field spacing
 - **Sub-DECAFIREP** offices will inform vessels that only one LOGBOOK needs to be completed (after the legislation change, then this is expected to be the WPEA logbook for LONGLINE fishery). This may take several months, during which time provinces will make their own arrangements for implementation (some have largely implemented already).
 - **Sub-DECAFIREP** will continue to target 100% coverage of logbooks acknowledging this may take some time to achieve.

LONGLINE LANDINGS

- Target coverage (maximum number of landings per Province per month) for Longline fishery
 - **Sub-DECAFIREP** will continue to collect data according to target coverage reviewed and updated during the VTFDC-3 (see Appendix 6)
- Not all bycatch (non-tuna) species are covered in Landings data collection

- **Sub-DECAFIREP** will aim to collect by-catch landings BY SPECIES wherever possible and attempt to record the landings for the important bycatch (non-tuna) species only – e.g. billfish, wahoo and mahi mahi. If this is not possible, then record all other bycatch in one category – “OTHERS”

2. GILLNET AND PURSE-SEINE DATA COLLECTION ISSUES

The workshop noted that data collection in the GILLNET and PURSE SEINE fisheries had commenced in some provinces, but it was too early to undertake a comprehensive review of the data collected.

The workshop discussed the problems encountered in the GILLNET/PURSE SEINE data collection over the past year and agreed on the following advice to remedy these problems. The problems are noted under each type of data collection and the red text indicates the suggested and agreed action. The agency responsible for the action is noted in bold/underline.

PURSE SEINE/GILLNET LONGLINE LOGBOOK

- Implementation.
 - **DECAFIREP** will proceed to obtain approval to use the WPEA-designed purse seine and gillnet logbooks, but will not proceed to implement as yet.

PURSE SEINE/GILLNET LANDINGS

- Unable to attain the target coverage (maximum number of landings per Province per month)
 - **Sub-DECAFIREP** will collect data according to target coverage which was reviewed and adjusted at VTFDC-3 (see Appendix 6)
 - **DECAFIREP** and **WCPFC/SPC** will seek funds to support the additional resources of (**2 enumerators for each province**) to cover the required level of monitoring of the PURSE SEINE and GILLNET fisheries.
- Recording YFT/BET and bycatch (non-tuna) species landings
 - **Sub-DECAFIREP** Enumerators will record total skipjack tuna catch and the combined YFT/BET tuna catch on the forms. **DECAFIREP** and **WCPFC/SPC** will change the WPEA GILLNET and PURSE SEINE Landings data form and protocol instructions accordingly.
 - **Sub-DECAFIREP** will aim to collect by-catch landings BY SPECIES wherever possible and attempt to record the landings for the important bycatch (non-tuna) species only – e.g. billfish, wahoo and mahi mahi. If this is not possible, then record all other bycatch in one category – “OTHERS”
- Gear type missing on the data collection form
 - **DECAFIREP** will modify to the data collection form to add the GEAR TYPE

PURSE SEINE/GILLNET BIOLOGICAL SAMPLING (PORT)

- Suitable measuring equipment not used
 - **Sub-DECAFIREP** enumerators should not use measuring tapes under any circumstances
 - **DECAFIREP** will construct wooden calipers of 70 cm which will be used to measure most small fish from the PURSE SEINE and GILLNET landings.
- Difficulties getting access to fish / Buyers don't allow Enumerators to handle the fish
 - **DECAFIREP** and **Sub-DECAFIREP** to explain requirements for access to fish (e.g. stakeholders meeting).
 - If **Sub-DECAFIREP** enumerators can't get appropriate access to BOTH (i) SKJ and (ii) YFT/BET to measure, then they should not sample the vessel's catch. **DECAFIREP** will update the protocol instructions accordingly.

- How to select a vessel to be sampled, particularly when not much SKJ/YFT/BET taken ?
 - If **Sub-DECAFIREP** Enumerators note that SKJ/YFT/BET is not significant, or zero in the catch, then they should not sample the selected vessel. **DECAFIREP** will update the protocol instructions accordingly.
- Too much work to do with existing resources
 - (the issue of additional resources required is covered in the PS/GN Landings item above)
 - **Sub-DECAFIREP** will collect data according to target coverage which was reviewed and adjusted at VTFDC-3 (see Appendix 6)
- Sampling occurs at night-time and difficult to get advance warning when unloading occurs
 - **Sub-DECAFIREP** will use a co-operator who lives near the port to inform enumerators of pending unloading.
- Potential species identification problems – juvenile YFT and BET
 - A specific recommendation on resolving species identification problems has been formulated below.
- Gear type missing on the data collection form
 - **DECAFIREP** will modify to the data collection form to add the GEAR TYPE

3. **ANNUAL TUNA CATCH ESTIMATES**

The provision of annual catch estimates is a fundamental reporting obligation for members, cooperating non-members and participating countries and territories (CCMs) of the WCPFC. The workshop noted that the *First Vietnam Tuna Fisheries Annual Catch Estimates Workshop* (VTFACE-1) was scheduled for March/April 2012 and compiled a list of information to be prepared by **DECAFIREP**, **WCPFC/SPC**, **RIMF**, **VASEP** and **other relevant stakeholders** prior to the workshop. The detailed list of information to be prepared for VTFACE-1 is contained in APPENDIX 7 of the VTFDC-3 Workshop Report.

4. **PROVINCIAL PROFILES**

The Workshop noted that the oceanic tuna fishery profiles for each of the three Central provinces (Khanh Hoa, Phu Yen and Binh Dinh) have yet to be provided, but work has been progressing and they are expected to be completed by **RIMF** according to the agreed template by **late February 2012**. Subject to additional funding, stakeholder workshops may be conducted at all three provinces to verify, complete and share the information compiled in the profiles. The workshop noted that the information in the provincial profiles would be very useful for the VTFACE-1, to be held in March/April 2012.

5. **DATA MANAGEMENT AND DISSEMINATION**

The Workshop noted the importance of having the Vietnamese tuna fisheries data checked using quality control procedures, entered into a secure database system (with backups) and disseminated to the authorized users. There were a number of specific recommendations suggested in this area, including:

- **WCPFC/SPC** will conduct an audit of the 2011 Vietnam tuna fisheries data in March/April 2012, prior to the WCPFC Scientific data submission deadline (30th April 2012).
- **DECAFIREP**, with assistance from **WCPFC/SPC**, will make the necessary changes to the manuals for data collection forms, protocols, and implementation strategies resulting from the decisions of the workshop and distribute to workshop participants prior to **January 31st 2012**.

- **DECAFIREP**, with assistance from **WCPFC/SPC**, would pursue the purchase of a dedicated server for the Vietnam tuna fisheries database system (TUFMAN) as a matter of urgency. Funds should also include purchase of a suitable power supply (UPS), an external backup device and a desktop computer.
- **DECAFIREP** will disseminate summarized tuna fishery data to each **Sub-DECAFIREP** office on a six-monthly basis.
- **DECAFIREP** will continue to provide their tuna fishery data to the WCPFC according to their reporting obligations as a cooperating non-member (CNM).
- **WCPFC/SPC** will endeavour to produce new reports in the TUFMAN system to satisfy the requests for DECAFIREP and Sub-DECAFIREP offices. For example, the ability to produce reports by PROVINCE/PORT is a high priority request.

6. **SPECIES IDENTIFICATION**

The workshop noted that continued concern expressed by enumerators with respect to the identification of small yellowfin and bigeye tuna.

- **WCPFC/SPC** will continue to provide enumerators (through DECAFIREP) with information that will allow easier distinction of juvenile yellowfin and bigeye tuna.
- **SUB-DECAFIREP enumerators** will continue use all means available to them for identifying the longline tuna catch (e.g. body stripes, notch in caudal fork, general body shape, black lines on finlets, relative size of eye, appearance of liver [where possible], etc., depending on the situation and size of fish).
- **WCPFC/SPC** and **DECAFIREP** will investigate the availability of funds for a dedicated trip to Vietnam by an expert to conduct a series of species identification workshops at each Province.

7. **VIETNAM TUNA FISHERIES OBSERVER PROGRAMME**

The workshop commended DECAFIREP and RIMF for the work in conducting fifteen (15) LONGLINE observer trips over the past year, which exceeded expectations. However, the workshop noted the problems in establishing and maintaining viable observer programmes, particularly the higher costs involved compared to other types of data collection and the difficulties working onboard small vessels.

The Workshop recommended that **DECAFIREP** continue to deploy observers on LONGLINE vessels in 2012 with a target five (5) observer trips, if funds were available after considering the other additional high priority funding requests. The Workshop considered that deploying observers on purse seine and gillnet vessels required further planning/work and was too early to implement.

The workshop recommended that **DECAFIREP** and **WCPFC/SPC** collaborate to ensure the observers use translated versions of the key WCPFC Regional observer data collection forms, which will provide national scientists with more comprehensive data.

8. **NATIONAL STOCK ASSESSMENT REPORT**

The workshop noted the request for training in understanding the methodologies used in the WCPFC stock assessments. Vietnam has participated in the previous two Regional Stock Assessment Workshops (SAWs) conducted by SPC; there are however many more Vietnamese fisheries scientists that would benefit from the training provided at the SAWs but the lack of funds restricts their

participation. The workshop also acknowledged the expertise available in the Vietnamese Research Institute of Marine Fisheries (**RIMF**) and the technical support they can provide to any proposed workshops.

The workshop recommended that the **WCPFC/SPC**, **DECAFIREP** and **RIMF** investigate available financial and human resource (e.g. trainers) opportunities to organize and conduct a Vietnam National Stock Assessment Workshop, which would be along the lines of the regional SAW format.

9. FUTURE INTEGRATION OF WPEA DATA COLLECTION INTO NATIONAL DATA COLLECTION PROGRAMME

The workshop noted the fundamental objective of the WPEA was to ensure the data collection systems established under the WPEA project are integrated into, and supported under the National data collection programme over the longer term. The workshop recommended the following action:

- Recognising there needs to be a longer-term commitment to data collection beyond the three years of the project, **DECAFIREP**, with assistance from **WCPFC/SPC** and support from **other WPEA countries**, formally requests the relevant funding agencies to proceed to a Phase II of the WPEA project for 2013-2015, as a matter of urgency.
- **DECAFIREP**, in consultation with **RIMF**, begin to plan how the tuna fishery data collection programme can be integrated into the National data collection programme and supported by the government over the long term, and report progress in this area to the next Tuna Data Workshop.

10. WCPFC JAPAN TRUST FUND (JTF) PROPOSALS

The workshop recommended that **DECAFIREP** urgently consider developing proposals from JTF funding to the WCPFC-administered JTF for various qualifying activities not covered under the Annual Work Plan 2012, for example, the Annual Catch Estimates Workshop, the National Stock Assessment Workshop and the Species Identification Workshop. The proposals would generally need to be submitted by 31st December 2011.

APPENDIX 6. Target coverage of tuna fishery data collection, by Province and gear

	LANDINGS (HIGH SEASON)			TOTAL LANDINGS DATA			SIZE/SPECIES SAMPLING			Sampling Resources to be allocated
	LL	PS	GN	LL	PS	GN	LL	PS	GN	
BINH DINH										
QUY NOHN	0	300	50							PS/GN : 4 Enumerators LL : 2 Enumerators
DE GI	0	100	100							
TAM QUAN BAC	300	50	40							
BINH DINH	300	450	190	150	120		30	25		
KHANH HOA										
HON RO	20	4	160							PS/GN : 4 Enumerators LL : 2 Enumerators
DA BACC. RANH	15	0	15							
KHANH HOA	35	4	175	150	100		30	20		
PHU YEN										
PHURONG 6	182	0	0							PS/GN : 4 Enumerators LL : 2 Enumerators
PHURONG PHU DONG	198	1	11							
TIEN CHAU	77	0	0							
THON PHU LURONG	0	25	0							
THON PHU THO 3	0	89	0							
THON PHU THO 2	0	0	115							
THON 5, XA AN NINH DONG	0	0	10							
PHU YEN	457	115	136	150	120		30	25		
All provinces	792	569	501	450	340	0	90	70	0	

Notes

- Two teams of 2 enumerators have been allocated to sampling in each province. One team is responsible for Longline landings and the other team is responsible for PS and GN landings. *The VTFDC-3 recommended additional resources (Enumerators) to ensure the PS/GN fisheries are covered).*
- Based on data collection to date, one team of (two) enumerators can collect data from buyers on total landings (i.e. Catch by species landed) from about 150 vessel landings in one month (this equates to about 50% coverage in Tam Quan high season). Therefore obtaining information on total landings from the buyers has been set a target of 150 landings as a maximum value. At sites where landings are not high, every effort will be made to get as many landings/buyers data as possible up to a
- One team of enumerators will cover the collection of buyers data from up to a maximum combined 120 PS and GN landings for Binh Dinh and Khanh Hoa and 100 for Phu Yen. The estimated proportion of PS and GN landings for buyers total landings data in each province has been included in the Table above and has been determined from
- The target number of LL and PS+GN landings that are to be sampled from species/size composition is 20-25 / month, according to enumerator activities to date and
- Suggestions for how the enumerator teams should be allocated landing sites has been included in Table above, but it is left up to each sub-DECAFIREP office to decide how resources are to be allocated to best cover the work required.
- If more funding/resources become available, then these levels or target coverage will be revised.

APPENDIX 7. Preparations for the First Vietnam Annual Catch estimates Workshop

The Workshop compiled the following list of requirements for the First Vietnam Annual Catch estimates Workshop (VTFACE-1) including responsibilities and expected timelines.

- All 2010 and 2011 data COLLECTED and PROCESSED (by March 2012) [DECAFIREP]
 - Logbook data
 - Landings data
 - Biological sampling data
- Data Audit by WCPFC/SPC (in March 2012) [WCPFC/SPC]
- Data summaries prepared from the TUFMAN database system (by March 2012) -- Workshop Paper [DECAFIREP and WCPFC/SPC]
 - Total landings by [PROVINCE], GEAR and SPECIES
 - Coverage of landings by [PROVINCE], GEAR
 - Total LONGLINE LOGBOOK catch by SPECIES
- Historical RIMF data prepared and made available (March 2012) -- Workshop Paper [RIMF]
 - Total annual TUNA catch volume by GEAR (SKJ+ YFT+BET)
 - Annual tuna species composition BY GEAR (SKJ, YFT, BET)
 - *Including ALMRV project data...*
 - *Include description on how estimates produced...*
 - *(potentially available in the tuna profiles)*
- Historical DECAFIREP data prepared and made available (March 2012) -- Workshop Paper [DECAFIREP]
 - Pre-WPEA data
 - Total annual TUNA catch volume by GEAR (SKJ+ YFT+BET)
 - Annual tuna species composition BY GEAR (SKJ, YFT, BET)
- Compilation of other CURRENT and HISTORICAL TUNA catch estimates available -- Workshop Papers
 - ADL estimates based on industry information and vessel numbers/activity for the other provinces (i.e. provinces other than BD, KH and PY) [ADL]
 - Information from VASEP (MARD – Hanoi/HCM) on Exports / Imports [FICEN → VASEP]
 - Other industry data ?

APPENDIX 8. Summary of data collected in each province over the past year.

BINH DINH

Month- year	Fishing port/ landing site	Fish. method	Σ Landing vessel	Biological data collection	Landing data collection	Logbook	
						Out	Return (trip)
10/2010	Tam Quan	Longline	128	150	128	60	9
11/2010	Tam Quan	Longline	46	10	35	40	30
12/2010	Tam Quan	Longline	42	0	34	219	19
01/2011	Tam Quan	Longline	296	30	169	82	209
02/2011	Tam Quan	Longline	310	30	192	19	251
03/2011	Tam Quan	Longline	256	30	150	5	184
04/2011	Tam Quan	Longline	246	30	150	0	189
05/2011	Tam Quan	Longline	252	30	150	0	162
09/2011	Tam Quan	Longline	123	20	77	68	64
10/2011	Tam Quan	Longline	77	18	55	56	51
	Σ		1776	248	1140	549	1168
09/2011	Quy Nh \ddot{a} n	Purse seine	131	10	68		
10/2011	Quy Nh \ddot{a} n	Purse seine	63	6	38		
	Σ		194	16	106		
09/2011	Tam Quan	Gill net	46	6	24		
10/2011	Tam Quan	Gill net	25	0	19		
	Σ		71	6	43		

PHU YEN

Month, year	Landing sites	Fish. method	Arrival vessels	Collected samples			
				Biological data	Landing data	Logbooks	
						Sending out	Retrieve
7/2010	Ward 6	Longline	159	51	159	159	
7/2010	Phu Dong ward	Longline	120	67	120	120	
10/2010	Phu Dong ward	Longline	11	11	11	11	
10/2010	Ward 6	Longline	39	24	39	39	
11/2010	Ward 6	Longline	06	06	06	03	
12/2010	Ward 6	Longline	06	06	06	06	
1/2011	Ward 6	Longline	92	31	92	92	
2/2011	Phu Dong ward	Longline	73	30	37	73	
2/2011	Ward 6	Longline	69	31	38	69	
3/2011	Phu Dong ward	Longline	197	30	100		
3/2011	Ward 6	Longline	144	30	72		
4/2011	Ward 6	Longline	144	31	72		
9/2011	Phường Phú Đông	Longline	99	10	50		
9/2011	Ward 6	Longline	44	14	22		
10/2011	Phu Dong ward	Longline	34	10	17		
10/2011	Ward 6	Longline	36	10	18		

KHANH HOA

Month	Fishing port	Arrival vessels	DATA COLLECTION			
			Biological samples	Landing samples	Logbook	
					Sent out	Return
9/2011	Hòn Rê	110	25	110		
	Đá Bạc	15	03	10		
10/2011	Hòn Rê	115	22	115		
	Đá Bạc	10	04	10		
11/2011	Hòn Rê	110	21	110		
	Đá Bạc	10	06	10		

