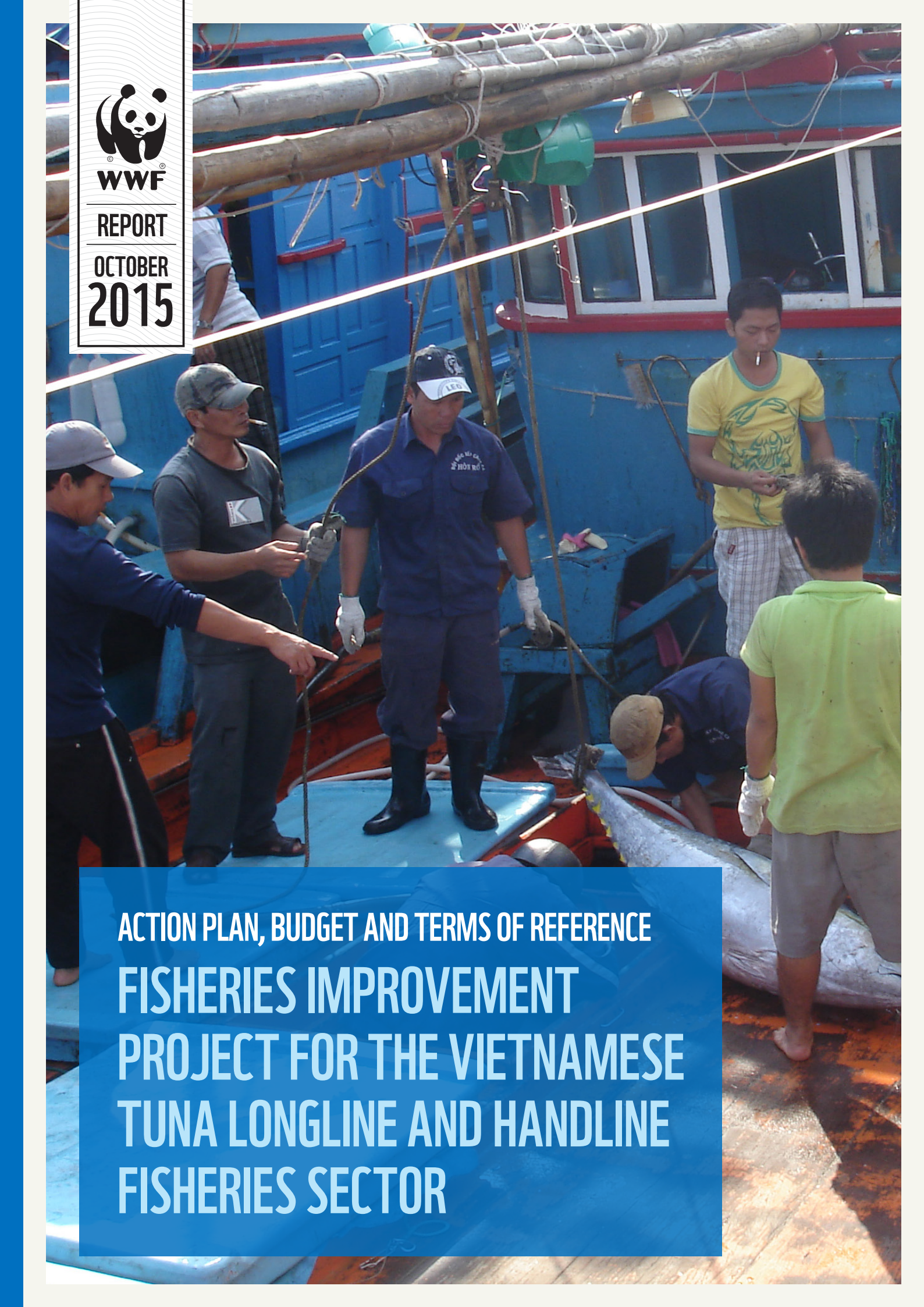




REPORT

OCTOBER
2015



**ACTION PLAN, BUDGET AND TERMS OF REFERENCE
FISHERIES IMPROVEMENT
PROJECT FOR THE VIETNAMESE
TUNA LONGLINE AND HANDLINE
FISHERIES SECTOR**

Fisheries Improvement Project for the Vietnamese Tuna longline and handline Fisheries Sector

Action Plan, Budget and Terms of Reference

FINAL REPORT

By
Poseidon ARM Ltd.

October 2015

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Acronym

Vietnamese Institutions Acronyms

DARD	Department of Agriculture and Resource Development
DECAFIREP	Department of Capture Fisheries & Resource Exploitation and Protection
DECAFSIH	Department of Capture Fisheries, under General Directorate of Fisheries (D-Fish)
DECAP	Department of Conservation and Aquatic Development, under D-Fish
MARD	the Ministry of Agriculture and Resource Development
NIO	Nha Trang Institute of Oceanography
PPC	Provincial People's Committees
RIMF	Research Institute for Fisheries Management
TFMC	Tuna Fisheries Management Council
VASEP	Vietnam Association of Seafood Exporters and Producers
VINATUNA	Vietnamese Tuna Association
WWF	World Wildlife Fund (Vietnam)

Fisheries Management Acronyms

CCM	Cooperating Commission Member
CMM	Conservation and Management Measure
CNM	Cooperating Non Member
EEZ	Exclusive Economic Zone
FMA	Fisheries Management Area
IUU	Illegal, Unreported and Unregulated
MSC	Marine Stewardship Council
MoU	Memorandum of Understanding
NPOA	National Plan of Action
NTMP	National Tuna Management Plan
	Regional Fisheries Management Organisation
RFMO	Scientific Committee
SC	Secretariat of the Pacific Community
SPC	Technical Conservation Committee
TCC	Total Allowable Catch
TAC	Territorial User Rights in Fisheries
TURF	United Nations Fish Stocks Agreement
UNFSA	Vessels Days Scheme
VDS	

UNFSA
VMS

United Nations Fish Stocks Agreement
Vessel Monitoring Scheme
Western Central Pacific Fisheries
Commission
Western Central Pacific Ocean
West Pacific East Asia Oceanic Fisheries
Management Project

WCPFC
WCPO

WPEA OFM

MSC Acronyms

BMT

MSC FIP Benchmarking and Monitoring Tool
Ecosystem Approach to Fisheries
Management
Endangered, Threatened and Protected
Fishery Improvement Project
Marine Stewardship Council
Productivity Sensitivity Analysis
Risk Based Framework
Scale Intensity Consequence Analysis

EAFM
ETP
FIP
MSC
PSA
RBF
SICA

1. INTRODUCTION

The original fisheries improvement project (FIP) Action Plan was developed following a FIP stakeholder meeting held in Qui Nhon, Vietnam in June 2013 and was finalized in November 2013. There was also a Progress Review held in Nha Trang, September, 2013. The purpose of this document is to update the Action Plan for 2016, based on results of the FIP review meeting held in Nha Trang, Vietnam on October 8, 2015, and to provide background information on the number of completed, ongoing and new activities that are underway, reconfirm activities which have not yet been implemented, and revise activities based on new information, which may include revisions to the Marine Stewardship Council (MSC) Fisheries Assessment Methodology (FAM) Version 2. The revisions to the Milestones have been made along with some redefined activities set in response to changes in the MSC assessment methodology. This revised Action Plan includes information on the proposed milestones for each activity, the scoring guideposts met, the stakeholder organization responsible for implementation, the expected timeframe to complete the task and the current status. Work plans for each outcome, activity and milestone had been set in 2013. A project logframe was developed which integrated the milestones set, with the previously defined activities. The milestones and logframe have been adjusted to reflect the changed agreed in the October, 2015 workshop outputs. The document also includes the use of MSCs Benchmark Tracking Tool.

The Units of Certification identified from the 2013 pre-assessment were:

- Yellowfin tuna caught by handline in the Vietnamese EEZ;
- Yellowfin tuna caught by longline in the Vietnamese EEZ.

This document identifies the activities and range of activities required in the Action Plan for the fisheries to meet the Marine Stewardship Council (MSC) standard. The MSC fisheries assessment methodology, Version 2, is used to define the actions. The most important feature to this is that all target species (Principle 1), must focus on the stock status and management activities throughout the range of the stock, whilst ecosystem interactions (for secondary species¹, and Endangered, Threatened, and Protected (ETP) species) relate specifically to the fishery under assessment.

This document serves to improve the guidance for the activities and milestones required in the Action Plan to reach the MSC Standard, integrating changes and clarifying any areas of uncertainty which may have been identified by the stakeholders during the FIP review meeting in October 2015.

The Action Plan itself incorporates reference to Stakeholder Terms of Reference (Section 4), which are revised and developed to include changes to timelines and associated budgets. The results generated from the Action Plan are reviewed by the WWF FIP Coordinator (Thuy Nguyendieu)² and the WWF FIP consultant (Richard Banks, Poseidon)³.

¹ There are no primary species as there are no supporting stock assessments for these species.

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It is anticipated that the VINATUNA will facilitate the development of the FIP Action Plan, supported by WWF Vietnam. The overarching management issues fall to the Ministry of Agriculture and Resource Development (MARD), in association with defined management actions prepared by WCPFC (Western and Central Pacific Fisheries Commission). The associated fisheries management tasks fall to responsibility of Department of Capture Fisheries, under General Directorate of Fisheries (D-Fish) and sub DECAFIREP. Research functions may be supported by the Secretariat of the Pacific Community (SPC), but with a critical role to be played by Research Institute for Fisheries Management (RIMF). The Plan is further developed to include a FIP tracking document with activities linked to the MSC scoring guideposts and more specific milestones. The results generated from the Action Plan should have periodic internal and external reviews to ensure they will meet the MSC standard.

An assessment of current status of the fisheries against the principle guideposts is summarized below.

Table 1: Summary of pre-assessment scoring

Principle	Component	PI number	Performance Indicator	Likely scoring level	
1	Outcome	1.1.1	Stock status – yellowfin tuna	Pass	Status revised because of regional overfishing issues
			Stock status – bigeye tuna	Fail	Fail
		1.1.3	Stock rebuilding – bigeye tuna	Fail	Fail
	Management	1.2.1	Harvest Strategy – yellowfin tuna	Fail	Fail
			Harvest strategy – bigeye tuna	Fail	Fail
		1.2.2	Harvest control rules and tools – yellowfin tuna	Fail	Fail
			Harvest control rules and tools – bigeye tuna	Fail	Fail
		1.2.3	Information and monitoring – yellowfin tuna	Pass with condition	Pass with condition
		1.2.3	Information and monitoring – bigeye tuna	Pass with condition	Pass with condition

		1.2.4	Assessment of stock status - yellowfin tuna	Pass	Pass
		1.2.4	Assessment of stock status - yellowfin tuna	Pass	Pass
2	Primary species	2.1.1	Outcome - handline	Fail	Pass with condition
			Outcome – longline	Fail	Pass with condition
		2.1.2	Management - handline	Fail	Fail
			Management – longline	Fail	Fail
		2.1.3	Information – handline	Fail	Pass with condition
			Information – longline	Pass with condition	Pass with condition
	Secondary	2.2.1	Outcome - handline	Pass	Pass
			Outcome – longline	Pass	Pass
		2.2.2	Management - handline	Pass	Pass
			Management – longline	Pass with condition	Pass with condition
		2.2.3	Information – handline	Pass with condition	Pass with condition
			Information – longline	Pass with condition	Pass with condition
	ETP species	2.3.1	Outcome - handline	Pass with condition	Pass with condition
			Outcome – longline	Pass with condition	Pass with condition
			Management - handline	Pass with condition	Pass with condition
			Management – longline	Pass with condition	Pass with condition
		2.3.3	Information – handline	Pass with condition	Pass with condition
			Information – longline	Pass with condition	Pass with condition
	Habitats	2.4.1	Outcome - handline	Pass	Pass
			Outcome – longline	Pass	Pass
		2.4.2	Management - handline	Pass	Pass
		Management – longline	Pass	Pass	
2.4.3		Information – handline	Pass with condition	Pass with condition	
		Information – longline	Pass with condition	Pass with condition	
Ecosystem	2.5.1	Outcome - handline	Fail	Pass with condition	

			Outcome – longline	Fail	Pass with condition
		2.5.2	Management - handline	Fail	Pass with condition
			Management – longline	Fail	Pass with condition
		2.5.3	Information – handline	Pass with condition	Pass with condition
			Information – longline	Pass with condition	Pass with condition
3	Governance and Policy	3.1.1	Legal and customary framework	Pass with condition	Pass with condition
		3.1.2	Consultation, roles and responsibilities	Pass with condition	Pass
		3.1.3	Long term objectives	Pass with condition	Pass
	Fishery specific management system	3.2.1	Fishery specific objectives – handline	Fail	Pass with condition
		3.2.1	Fishery specific objectives – longline	Pass with condition	Pass with condition
		3.2.2	Decision making processes – handline	Fail	Pass with condition
		3.2.2	Decision making processes – longline	Fail	Pass with condition
		3.2.3	Compliance and enforcement – handline	Fail	Fail
		3.2.3	Compliance and enforcement – longline	Fail	Fail
		3.2.4	Management performance evaluation	Pass with condition	Pass with condition

A summary of the current status (FIMP-BMT⁴ index sheet) is shown in Tables 2 to 4. For the purpose of simplicity, longline and handline are combined. The critical distinction between them is that longline catches some bigeye tuna, and longline may have some interactions with protected species.

⁴ The MSC FIP Benchmarking and Monitoring Tool (BMT) is used to assess the performance of each FIP over its project period. It may also be used by MSC to compare the progress of one FIP against the other.

Table 2: MSC BMT Index summary table for the Vietnam tuna longline fishery

Scoring Level	All PIs	Principle 1 Number of PIs	Principle 2 Number of PIs	Principle 3 Number of PIs
≥80	5	1	2	2
60-79	11	2	5	4
<60	11	2	8	1
BMT Index	0.39	0.40	0.30	0.57

Figure 1: MSC BMT scoring overview Vietnam tuna longline fishery

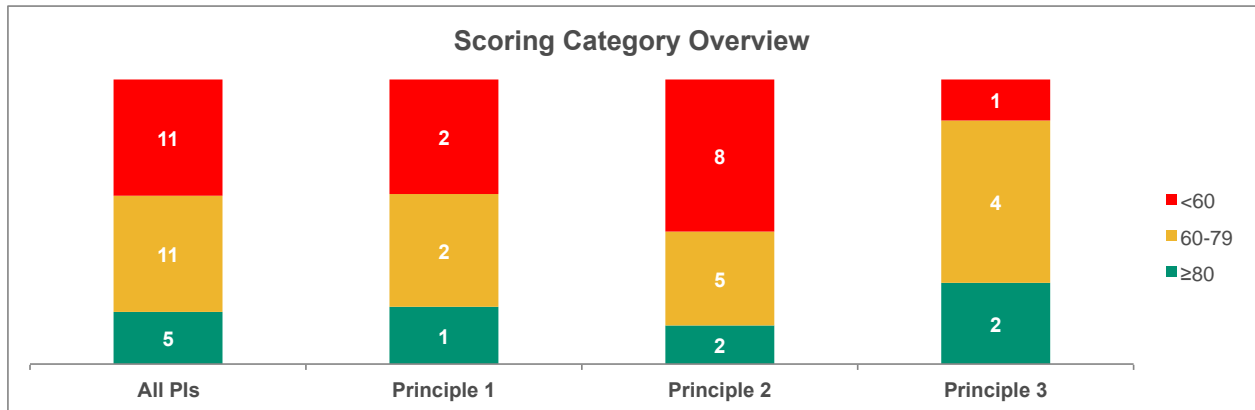


Table 3: Actual Vs Expected BMT index table

	BMT Index					
	Year 1	Year 2	Year 3	Year 4	Year 5	
Principle 1	Actual	0.50	0.50	0.40		
	Expected		0.50	0.70	0.70	1.00
Principle 2	Actual	0.37	0.30	0.30		
	Expected		0.37	0.57	0.90	1.00
Principle 3	Actual	0.36	0.43	0.57		
	Expected		0.36	0.64	0.93	1.00
Overall	Actual	0.39	0.37	0.39		
	Expected		0.39	0.61	0.87	1.00

Figure 2: BMT Progress tracker

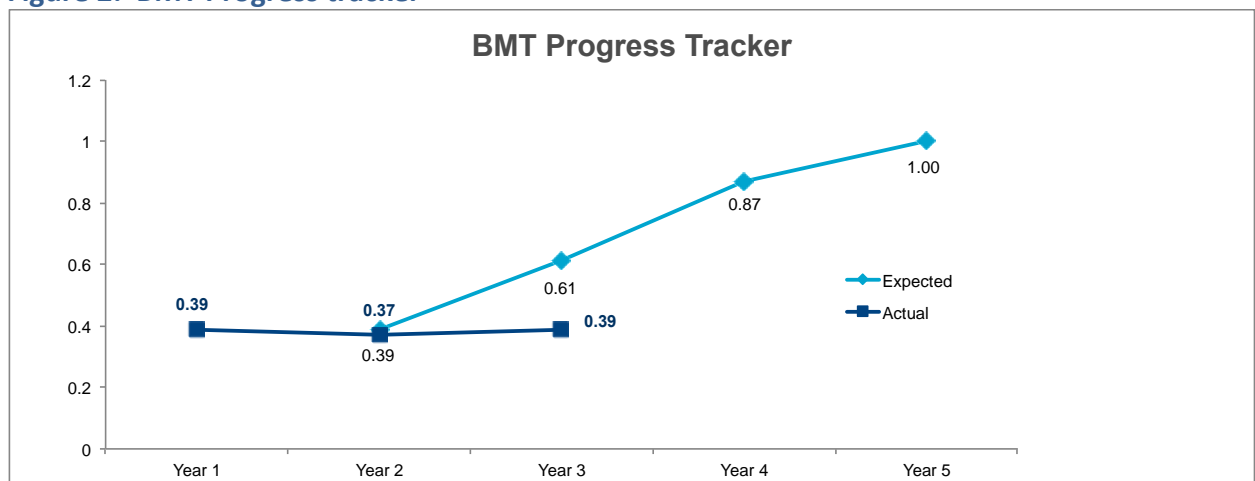


Table: 4 BMT Report sheet

Principle	Component	Performance Indicator	Expected Scoring Category: Year 3	Actual Scoring Category: Year 3	Status
1	Outcome	1.1.1 Stock status	≥80	60-79	Behind
		1.1.2 Reference points	---	---	
	Management	1.2.1 Harvest Strategy	60-79	<60	Behind
		1.2.2 Harvest control rules and tools	60-79	<60	Behind
		1.2.3 Information and monitoring	60-79	60-79	On Target
		1.2.4 Assessment of stock status	≥80	≥80	On Target
2	Primary species	2.1.1 Outcome	60-79	60-79	On Target
		2.1.2 Management	60-79	<60	Behind
		2.1.3 Information	60-79	60-79	On Target
	Secondary species	2.2.1 Outcome	60-79	<60	Behind
		2.2.2 Management	60-79	<60	Behind
		2.2.3 Information	<60	<60	On Target
	ETP species	2.3.1 Outcome	60-79	<60	Behind
		2.3.2 Management	60-79	<60	Behind
		2.3.3 Information	60-79	<60	Behind
	Habitats	2.4.1 Outcome	≥80	≥80	On Target
		2.4.2 Management	≥80	≥80	On Target
		2.4.3 Information	≥80	<60	Behind
	Ecosystem	2.5.1 Outcome	60-79	60-79	On Target
		2.5.2 Management	60-79	60-79	On Target
		2.5.3 Information	60-79	60-79	On Target
3	Governance and Policy	3.1.1 Legal and customary framework	60-79	60-79	On Target
		3.1.2 Consultation, roles and responsibilities	≥80	≥80	On Target
		3.1.3 Long term objectives	≥80	≥80	On Target
	Fishery specific management system	3.2.1 Fishery specific objectives	≥80	60-79	Behind
		3.2.2 Decision making processes	60-79	60-79	On Target
		3.2.3 Compliance and enforcement	<60	<60	On Target
		3.2.4 Management performance evaluation	60-79	60-79	On Target
Total number of PIs equal to or greater than 80			8	5	
Total number of PIs 60-79			17	11	
Total number of PIs less than 60			2	11	
Overall BMT Index			0.61	0.39	

2. THE ACTION PLAN

A summary logframe is provided in Appendix 1. It contains three basic goals, 15 outcomes, 21 activities and 55 milestones.

The project goals are as follows:

- Stock status and fisheries management: *To ensure that the tuna catches do not exceed sustainable levels*
- Ecosystem management: *To promote the ecosystem based approach to fisheries management*
- Governance systems: *To strengthen governance systems in Vietnam's Tuna fishery*

The fifteen outcomes⁵ are as follows:

1. Stock status improved and reference points applied in management
2. Data collection and Information systems strengthened
3. Management strategies applied and supported by tools and the application of strong information and research
4. Retained and bycatch species subject to a management strategy
5. Shark management measures implemented
6. Turtle management strengthened
7. Habitats subject to a management strategy
8. Ecosystems and biodiversity assessments made for the Vietnamese and South China Sea region
9. Fisheries Law effectively implemented
10. Roles and responsibilities and consultation processes fully implemented
11. Positive incentives promoted
12. Fishery specific management objectives applied
13. Decision making process strengthened
14. Effective application of compliance systems
15. Strengthening of national tuna research, guided by a research plan

The specific activities will be addressed in the section below.

This section represents a summary of the current positions on the milestones set to evaluate the achievement of outcomes in the Vietnam Fisheries Improvement Plan facilitated by WWF-VN and WWF-CTP. The Fisheries Improvement activities were agreed at a workshop held in June, 2013 and progress reviewed for those milestones which were to be completed by Q3 2016.

It is important to note that MSC requires vigorous assessment and public consultation processes, with a facility for objections and adjudication. For this reason very specific milestones have been set, which require validation through Means of Verification (MoVs). These will be recorded in a Dropbox, and outputs evaluated by the FIP consultant to test whether these outputs are sufficient, or if not, require strengthening. The Dropbox system will be created following this report, and will be linked to the existing FIP stakeholder

⁵ There is no milestone for Performance evaluation, as performance outcomes are integrated into the Tuna Management Plan

communication channels. Having the specific MoVs in place will allow the MSC assessors to confirm if the MSC scoring guideposts have been met. It also provides clear evidence of outcomes to any prospective challenge to fishery specific certification.

The report concludes that in the FIP's third year, 9 from 55 milestones outcomes were achieved.

The progress of the actions completed in 2014/2015 are as follows:

Goal 1: Stock status improved and reference points applied in management

The status of the Milestones for Goal 1 are listed below:

Blue = Completed

Green = Ongoing

Red = No done

Goal 1: To ensure that the tuna catches do not exceed sustainable levels

Outcome 1.1: Stock status improved and reference points applied in management

Milestone 1: MARD/RIMF participating in SC WGs and WCPFC general session discussions on reference points

Milestone 2: Setting of LRPs and TRPs at WCPFC for all species (YFT, BET)

Milestone 3: MARD/RIMF participating in SC WGs for the revision of the core WCPFC CMM on bigeye and yellowfin strategy

Milestone 4 :Catch and / or effort limits set for bigeye and yellowfin tuna for Vietnam consistent with WCPFC methodology (either 2001-2004 levels or an alternative) and based on an historic reference point

Outcome 1.2: Data collection and Information systems strengthened

Milestone 5: Logbook coverage > 75% for LL and HL, and improved coverage of other fisheries

Milestone 6: Port sampling for key gear types implemented in all main ports/provinces

Milestone 7: Tuna vessel register operational at Provincial level linked to National recording system

Milestone 8: National tuna data collection system implemented and fully effective

Outcome 1.3: Management strategies applied and supported by tools and the application of strong information and research.

Milestone 9: Vietnam compliant with CMM 2014-01 or any subsequent amendment

Milestone 10: Compliance reporting and annual report on the effectiveness of the CMM

Milestone 11: Workshop on exploring options for input (effort) and output (quotas) for longline and handline fisheries based on TRPs and LRPs and CMM 2012-01 (years 2001-2004 levels)

Milestone 12: Establishing a framework within which harvest control rules would be set and delegating appropriate responsibilities to the Provinces

Milestone 13: Introduction Vietnamese management measures for all tuna fisheries in Vietnam

Milestone 14: Fisher awareness programme

Milestone 15: Undertake and assess evidence that the measures established are effective

Goal 2: To promote the ecosystem based approach to fisheries management

Outcome 2.1: Primary and secondary species subject to a management strategy

Milestone 16: Establish an observer scheme to monitor all catches of retained species and document the level of discarding from the handline and longline fisheries

Milestone 17: Extend port sampling procedures to cover primary and secondary species (and informed by the observer scheme)

Milestone 18 Document observer data and port sampling verification, and prepare summary reports of main and vulnerable species (retained) interactions other than bigeye tuna

Milestone 19 Training in risk assessment and the application of EAFM

Milestone 20 Prepare a risk assessment report based on observer data

Milestone 21: Workshop to analyse risk mitigation strategies

Milestone 22 Implement retained species mitigation measures (other than those covered already by CMMs) where necessary

Milestone 23 Evaluate the effectiveness of management mitigation measures for vulnerable primary, secondary, bait and ETP species

Outcome 2.2: Shark management measures implemented

Milestone 24a: Implement shark CMMs 2010-07 and CMM 2011-03/CITES App 2

Milestone 24b: Prohibit shark finning at sea

Milestone 25: Ensure that all shark species are covered under observer reporting above

Milestone 26: Fisher shark awareness programme

Milestone 27: Evaluate the effectiveness of management measures for shark species identified in the CMMs and CITES

Outcome 2.3: Turtle management strengthened

Milestone 28: Ongoing monitoring of turtle bycatch and life status in the handline and longline fisheries (Milestone 13 and 15)

Milestone 29a: Implement effective management mitigation measures for turtles which are as close to zero as possible and Implement an optimum management mitigation strategy with support measures which aim to (a) reduce turtle interactions as close to zero as feasible and (b) are consistent with national and international (WCPFC) obligations and the NPOA-Turtles. consistent with national and international (WCPFC) obligations.

Milestone 29b: Where risks are identified, instigate trials to reduce the interactions

Milestone 30: Fisher awareness programme

Milestone 31: Evaluate the effectiveness of management mitigation measures for turtles based on best practice

Outcome 2.4: Habitats subject to a management strategy

Milestone 32a: Gear losses incorporated into observer reporting

Milestone 32b: Include an assessment of habitat impacts as part of the SICA/PSA assessment

Outcome 2.5: Ecosystems and biodiversity assessments made for the Vietnamese and South China Sea region

Milestone 33: Collection of biological samples to adequately assess Pacific ecosystems

Milestone 34: Training in ecosystem modeling

Milestone 35: Ecosystem analysis and reporting to support adoption of EAFM

Goal 3: To strengthen governance systems in Vietnam Tuna management

Outcome 3.1: Fisheries Law effectively implemented

Milestone 36: Clarification of the application of the Convention (and CMMs) to Vietnam

Milestone 37: Vietnam becomes a WCPFC CCM

Milestone 38: National legal system effective and organised and effective cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2

Milestone 39: Applying relevant tuna regulations/decrees (catch/effort limits etc)

Milestone 40: Tuna Fishery Consultation Council fully operational and all roles & responsibilities defined

Outcome 3.2: Roles and responsibilities and consultation processes fully implemented

Milestone 41: Explicit reference would have to ensure that any change in fleet capacity takes account of the precautionary approach to fisheries management, and adherence to appropriate scientific advice, most specifically adhering to the LRPs set in management

Milestone 42: Evidence would need to show that the Precautionary Approach to Fishery Management (PAFM) is explicitly understood and enacted at both national and provincial level

Milestone 43: Definitions to include handline fisheries and all target species

Milestone 44: Management Plan finalised, complies with MSC principles and contains a consultation process and includes a monitoring & performance component

Milestone 45: Evidence that the management plan is being applied and its effectiveness is assessed by a process of regular internal and external reviews

Outcome 3.3: Decision making process strengthened

Milestone 46: Introduce clear guidelines for taking management decisions, probably as a component of the management plan.

Milestone 47: Evidence is available that explanations to be provided for decisions taken, and should follow the basis of the management plan when introduced, which may include precautionary actions

Outcome 3.4 Effective application of compliance systems

Milestone 48: Risk assessment of enforcement actions following the introduction of P1 and P2 associated management measures

Milestone 49: Review of sanctions for non compliance

Milestone 50: Effective evidence of systematic compliance and an effective system of sanctions

Outcome 3.5: A national research plan is in place

Milestone 51: A research plan prepared publically available

Milestone 52: Research results are disseminated to all interested parties

THE REVISED ACTION PLAN

GOAL 1. STOCK STATUS AND FISHERIES MANAGEMENT: TO ENSURE THAT THE TUNA CATCHES DO NOT EXCEED SUSTAINABLE LEVELS

Outcome 1.1 Stock status improved and reference points applied in management

The 2014 stock assessment for yellowfin (Davies, N, *et al*, 2014) considers the species to be above B_{MSY} at 1.05-1.51, with an overall Western and Central Pacific Ocean (WCPO) Biomass at 744,000 tonnes. The stock is therefore likely to be above the point where recruitment would be impaired (PRI). Limit Reference Points (LRP) have been set for all tuna species at $20\%SB_{recent, F=0}$. (WCPFC 10), but no Target Reference Points (TRP) have been set for any tuna species. The 2014 fishable abundance for yellowfin is estimated to be consistently above the LRP a 95% confidence interval of $\pm 15\%$. Stock assessments have been carried out every 3 years, and abundance trends are showing a decline, but within the LRP set. Therefore, limits have been set prohibiting the catch of yellowfin to 2004 historic levels of fishing.

The stock assessment for bigeye tuna considers the species to be below B_{MSY} at 0.77, with an overall WCPO biomass of 265,000 tonnes. The stock is heavily overfished and is subject to a rebuilding strategy, setting quota limits for national fleets, and seasonal limits for other fishing methods including a four-month period in which purse seiners cannot use Fish Aggregation Devices (FADs). The same LRPs have been set for bigeye tuna as per yellowfin. An analysis of the effectiveness of the rebuilding strategy, using Management Strategy Evaluation (MSE) demonstrates that under current management limits the stock is unlikely to recover within 20 years or in less than 2 times its generation time.

Activity 1.1.1: WCPFC would have to set explicit limit reference points which are consistent with the MSC definition of BLIM (0.2 B0), and for these to be applied to the harvest strategy (1.2.1).

The first component falls to the explicit responsibility WCPFC in setting limit and target reference points. However, the introduction of these reference points will also have to apply as a component of Vietnam's tuna management strategy (Activity 1.3.1).

A Vietnam scientist (Nguyen Viet Nghia, RIME;) and fishery manager (Pham Viet Anh, DEAFISH) engaged in the annual WCPFC Scientific Committee, held in Pohnpei, August 2015⁶.

Limit Reference Points (LRPs) were set for skipjack, yellowfin and bigeye at the WCPFC General Session 2014⁷. The Fishing mortality Rate for (F) for skipjack and yellowfin will be maintained at above 20% S_{B0} for WCPFC. The Fishing mortality rate for bigeye tuna will be reduced to a level no greater than F_{msy} , i.e. $F_{msy} \leq$. This objective will be achieved through a step by step approach through to 2017 in accordance with the WCPFC CMM.

⁶ WCPFC SC (11th Regular Session) (<http://www.int/meetings>)

⁷ WCPFC Report of the Annual Regular Session (9/10th Regular Session) (<http://www.int/meetings>)

A decision to set Target Reference Points (TRP) for Yellowfin and Bigeye tuna is now subject to annual working group (CMM 2015-06) sessions and is unlikely to be established until the WCPFC General meeting scheduled in 2017. MARD officials⁸ usually attend these meetings, when there is a need for stock assessment specialists to attend.

The Government of Vietnam has set a unilateral TRP of 19,000 mt increasing to 21,000 mt by 2020,

A sub regional scientific working group including Indonesia, Philippines and Vietnam is due to hold a meeting to discuss reference points and Yellowfin and Bigeye tuna limits in November 2015.

It is accepted that RIMF has the necessary stock assessment skills, following donor assisted training, to participate in these meetings.

The associated milestones are:

- Milestone 1: MARD/RIMF participating in SC WGs and WCPFC general session discussions on reference points
- Milestone 2: Setting of LRPs and TRPs at WCPFC for all species (YFT, BET).

Assigned stakeholders	WCPFC with MARD and RIMF participation
Priority	High
Status	Expanding on existing activity
Timeframe	2017
MSC Performance Indicator(s)	1.1.1 Stock status and 1.2.3 Stock Assessment.

[Recommendation 1 is for the 2015/2016 year is that Vietnam to ensure that its scientists participate in the WCPFC WGs and provide input into the process.](#)

Activity 1.1.2: An effective rebuilding strategy would have to be implemented for bigeye tuna. This will require CCM and CNMs to implement effective measures, but could only be achieved in the much longer term, i.e. 5-10 years, or greater.

WCPFC 2012-01 has reaffirmed a number of measures and highlights the basis for extending WCPO management actions to include the following relevant actions:

- Management measures for both purse seine and longline fisheries to reduce fishing mortality of bigeye,
- Alternative measures intended to reduce the catch of juvenile tunas, such as a limit on FAD set numbers,
- Management of the fishing capacity of the non-SIDS CCMs

⁸ Pham Anh Tuan (D-Fish, MARD), Nguyen Tien Than (DECAFISH)

These measures will be advanced by a working Group, tasked with responsibility to develop a multi-year management program for 2014-2017.

Vietnam fishery managers, DECAFISH (national) and scientists (RIMF) need to participate at the SC, but also at this specific WG. They will therefore need to participate in any specific WG on bigeye rebuilding. These meetings are held at the annual WCPFC Science Committee meetings.

The associated milestones are:

Milestone 3: MARD/RIMF participating in SC WGs for the revision of the core WCPFC CMM on bigeye and yellowfin strategy

Milestone 4: Catch and / or effort limits set for bigeye and yellowfin tuna for Vietnam consistent with WCPFC methodology (either 2001-2004 levels or an alternative) and based on an historic reference point.

Assigned stakeholders	WCPFC with MARD and RIMF participation;
Priority	High
Status	Expanding on existing activity
Timeframe	Q 3 2016, and annual revisions
MSC Performance Indicator(s)	1.1.3 and 2.1.1 Target species and rebuilding (retained bigeye)

[Recommendation 2](#) is for the 2015/2016 year is that Vietnam to ensure that its scientists participate in the WCPFC WGs on rebuilding and provide input into the process.

Outcome 1.2 Data collection and Information systems strengthened

Activity 1.2.1: Continue to improve national data collection and monitoring at all levels

Collection of catch and landings data for Vietnamese oceanic tuna fisheries is primarily undertaken at provincial level, with provincial fisheries organizations (Sub DECAFIREP) based in the main landing sites. The collection of provincial data has been considerably strengthened with support since 2010 from the [West Pacific East Asia Oceanic Fisheries Management Project](#) (now WPEA OFM II) and covers improved logbook recording, landings records and port sampling. These data are fed from Sub DECAFIREP to DECAFISH, where they are entered and collated, then incorporated in mandatory reporting to WCPFC. The national data collection system (VN-Fishbase) developed for the oceanic tuna fishery by FiCen has been implemented, and the data is set to be integrated into TUFMAN. This integration has been delayed because of concerns about the quality of logbook data submitted. This has been designed and will link provincial data to the national database.

Logbook coverage of the longline/handline fishery in the three main producing provinces (Binh Dinh, Phu Yen, Khanh Hoa) is currently around 50%, catch estimates by species and gear are compiled on an annual basis, and port sampling coverage of the main gear types is

good. However, some of the provinces fell back to a simplified, non species specific logbook prompting MARD to issue Circular 549KTPBVNL, 2013, requiring completion of the SPC catch logsheet. Incomplete data applies more specifically to secondary and ETP species, and to another eight provinces which provide lesser amounts of catch but are not currently monitored in detail. The Biological parameters of tuna stocks such as growth, reproduction, and natural mortality, which are required as inputs for stock assessments, are now collected through the port sampling programme. This data is also entered into TUFMAN.

Logbook training is being applied by DECAFISH/VINTUNA and WWF. Industry companies support the LB programme and promote purchasing policies from those vessels working with the logbook training programme.

This milestone is on track. Full vessel registry is now operational. Central database linked to the Provinces. This is encoded at Provincial level. This is reported to MARD. Provinces also send a copy to RIMF and incorporated into commercial fishery database.

The principal partners for these activities are fishermen Sub DECAFIREP and DECAFISH.

The associated milestones are:

Milestone 5: Logbook coverage > 75% for LL and HL, and improved coverage of other fisheries e.g. purse seine, gillnet

Milestone 6: Port sampling for key gear types implemented in all main ports/provinces

Milestone 7: Tuna vessel register operational at Provincial level linked to National recording system

Milestone 8: National tuna data collection system implemented and fully effective

Assigned stakeholders	WCPFC with MARD and RIMF participation;
Priority	High
Status	Expanding on existing activity, supported by WPEA OFM
Timeframe	Q 4 2016
MSC Performance Indicator(s)	1.2.3 Target species information

[Recommendation 3 for 2015/2016 is for Vietnam to strengthen its data collection process, and explicitly input good quality data into WCPFC TUFMAN](#)

Outcome 1.3 Management strategies applied and supported by tools and the application of strong information and research.

Activity 1.3.1: Implementation of a compatible harvest strategy in Vietnam waters (and compliance with CMMs), which would include longline, purse seine and other gears (including handline and gillnet), and would be consistent with Vietnam’s obligations developed through any future changes to 2012-01.

A significant part of this outcome is to first have clarification of Vietnam’s management obligations to WCPFC (Activity 3.1.1), since WCPFC still perceive Vietnam to fall outside the convention area. Since tuna is a transboundary stock and migrates through Vietnamese waters, this interpretation is inconsistent with reality.

The expectation is that WCPFC CMMs is binding on Vietnam. This includes a number of current obligations relating specifically to yellowfin and bigeye tuna as contained in CMM 2014-01:

Vietnam must implement the specified actions as highlighted in WCPFC and not any alternative measures. This requires implementation of the following CMM paras:

Para 14 (CMM 2014-01): A three (3) months (July, August and September) prohibition of setting on FADs shall be in place for all purse seine vessels fishing in EEZs and high seas (see paragraphs 3 -7 of CMM 2009-02 for the rules for the FAD closure in the high seas).

Para 47 (CMM 2014-01): CCMs shall take necessary measures to ensure that the total effort and capacity of their respective other commercial tuna fisheries for bigeye, yellowfin and skipjack tuna but excluding those fisheries taking less than 2,000 tonnes of bigeye, yellowfin, and skipjack, shall not exceed the average level for the period 2001-2004 or 2004.

Vietnam will also need to demonstrate compliance with Para 28 (CMM 2014-01): CCMs agree to take measures not to increase catches by their vessels of yellowfin tuna. At its 2015 regular session the Commission will formulate and adopt appropriate limits for CCMs, based on recommendations from the Scientific Committee, and taking into account other measures in this CMM. At its 2015 regular session the Commission will also formulate and adopt any in-season reporting requirements needed to support full implementation of these limits.

The following Milestone is in place:

Milestone 9: Vietnam's compliant with CMM 2014-01, or any subsequent amendment

Assigned stakeholders	WCPFC/MARD/DECAFIREP/sub DECAFIREP;
Priority	High
Status	Strengthening existing understanding
Timeframe	Q1 2016
MSC Performance Indicator(s)	1.2.1 Harvest strategy

[Recommendation 4](#) for 2016/2015 is for Vietnam to develop its harvest strategy for all its fleets catching more than 2,000 mt in conformity with Para 28/47. As part of this strategy, Vietnam should work with Indonesia and Philippines to explore an acceptable reference period that is reflective of a realistic level of effort (e.g. 2010 which is consistent with the reference period set for the PNA on the VDS).

[Recommendation 5](#): A technical paper should be submitted to the TFCC on LRPs and TRPs, following the regional exchanges on yellowfin and bigeye tuna management.

Activity 1.3.2: Setting a monitoring system in place (consistent with CMM 2010-03) which evaluates the effectiveness of the management measures

This component falls to the explicit responsibility MARD and DECAFIREP to monitor the application of measures at sub DECAFIREP level. DECAFIREP will have to design, and amend a set of measures that follow the above CMMs, and then monitor compliance. An annual report will be submitted from sub DECAFIREP to DECAFIREP to MARD.

The Confidential Part 2 Compliance report reportedly contains reference to ‘Non Applicable’ for these measures. DECAFISH gave a commitment that the submission from 2015 onwards would state the levels of compliance for the Harvest Strategy CMM.

Milestone 10: Compliance reporting and annual report on the effectiveness of the CMM

Assigned stakeholders	WCPFC/MARD/DECAFIREP/sub DECAFIREP;
Priority	High
Status	Undertaking a new activity
Timeframe	Q 3, 2016 and annual Technical and Compliance Committee sessions
MSC Performance Indicator(s)	1.2.1 Harvest strategy

[Recommendation 6](#) for 2016/2015 is for Vietnam to comply with the WCPFC TCC reporting requirements.

Activity 1.3.3: Establishing national harvest control rules (input and output restrictions) across the range of tuna fisheries which allow for limits to be implemented as reference points are approached. The rules and tools will need to take account of best practice examples to illustrate their appropriateness (e.g. overall capacity limits, quotas and closed seasons).

Once Reference points have been set in management, the Government of Vietnam will need to review its system of effort management (purse seine) and output controls (bigeye and yellowfin tuna) for all of its fisheries. The WPEA work programme includes provision for funding a national workshop of Harvest Strategy development.

The following milestones are in place

Milestone 11: Workshop on exploring/establishing limits based on TRPs and LRPs and CMM 2012-01 (years 2001-2004 levels), and making allowances for uncertainties

Milestone 12: Establishing a framework within which harvest control rules would be set and delegating appropriate responsibilities to the Provinces

Milestone 13: Introduction Vietnamese management measure for the Vietnam tuna fishery

Milestone 14: Fisher awareness programme

Milestone 15: Undertake and assess evidence that the measures established are effective

Assigned stakeholders	MARD/DECAFIREP/sub DECAFIREP/fishers; WWF
Priority	High
Status	Undertaking and new activity
Timeframe	Q 2 2016-Q4 2016
MSC Performance Indicator(s)	1.2.1 Harvest Strategy and 1.2.2 Harvest control rules and tools

[Recommendation 7 for 2016/2015 is for Vietnam to adopt and apply compatible management measures for all its main tuna fisheries as per the WCPFC CMM \(2014-01\) and to ensure that the Provinces implement a monitoring system to ensure compliance.](#)

GOAL 2. ECOSYSTEM MANAGEMENT: TO PROMOTE THE ECOSYSTEM BASED APPROACH TO FISHERIES MANAGEMENT

Outcome 2.1: Primary and secondary species subject to a management strategy

Activity 2.1.1: Document the catch of bigeye tuna, shark, billfish, baitfish and other species in the handline and longline fisheries (See FIP action 2.1.3). Note that there are already WCPFC CMMs in place that require selected pelagic shark species catches to be recorded

Accurate information is required on total removals from the fishery i.e., including for primary and secondary species, bait species and ETP species. This is not currently available and is not known with certainty. The status of baitfish stocks harvested for longline and handline fisheries is also unknown.

This information needs to be gathered and reviewed, to identify gaps in knowledge that would be required for the Risk Based Framework/Ecosystem Approach to Fisheries Management (EAFM) and to determine if management strategies need to be implemented for particular fisheries or species (Activity 2.1.2).

Information on other species catches, other than target species, is typically collected by observer programmes. The observer programmes should build on the experience gained

from the WCPFC observer programmes and the trainings and periodic deployment of observers sponsored by NOAA-WWF and led by RIMF. Observers would initially be scientific observer programmes rather than compliance, and may also involve collection of biological samples, including material for ecosystem studies/modeling. Target coverage levels, reflecting available resources and manpower, would need to be developed but for indicative purposes, might initially be between 5%-10% for EEZ longliners and handliners.

An observer programmes has commenced and is aimed at collecting operational and by-catch/ETP species data. Current deployment is estimated to be less than 1% of the total trips. Much of the early work has been through the support of WWF. The observer training has commenced and follows the SPC training modules. The early work is intended to guide eventual industry-funded larger scale observer placement. Support, notably training of trainers, has been provided by WWF, and will be expanded under WPRA II. VinaTuna is identifying ways to expand the observer scheme and will establish a cost recovery system.

WPEA II is also committed to strengthening the port sampling programme set up under WPEA I This will incorporate identification of secondary species and ETPs species, as well as implement testing of key target species inputs such as weight size and trophic content sampling.

Milestone 16: Establish an observer scheme to monitor all catches of retained species and document the level of discarding from the handline and longline fisheries

Milestone 17: Extend port sampling procedures to cover retained species (and informed by the observer scheme)

Milestone 18: Document observer data and port sampling verification, and prepare summary reports of main and vulnerable species (retained) interactions other than bigeye tuna.

Assigned stakeholders	sub DECAFIREP/RIMF/Fishers/private sector;
Priority	High
Status	Undertaking a new activity and supported by WPEA 2
Timeframe	Q4 2015
MSC Performance Indicator(s)	2.1.3, 2.2.3 and 2.3.3 Retained species (including bait), bycatch and ETP status

[Recommendation 8 for 2016/2015 is for Vietnam to strengthen its data collection systems \(observer/port sampling\) and prepare a summary report to allow the application of the MSC Risk Based Framework.](#)

Activity 2.1.2: Undertake primary species and secondary management strategy for all billfish and bait stocks (e.g. squid and flying fish) and any other retained or bycatch species, if data shows catch rates to be 5% or more.

A Risk-Based Assessment (RBA) needs to be completed for retained, bycatch ETP, and baitfish species as well as habitat impacts. This would draw on the information review as outlined above (Activity 2.1.1), and anticipating data deficiencies, would involve the application of SICA (Scale Intensity Consequence Analysis - qualitative analysis, requiring information from stakeholders) and PSA (Productivity-Susceptibility Analysis, involving semi-quantitative analysis).

The RBA would identify ecological risk from species/fishery interactions, recognizing that risk will vary across species and fisheries, and may result in national limits for ETP (and other interactions) being established and enforced (see Activity 2.1.1 above for the role of observer programmes, which would characterize operational aspects of all tuna fisheries). It would utilize information obtained from the literature and experience with similar or same species elsewhere in the WCPO.

Key requirements would be identification of the SICA⁹ components:

- The main risk bearing activities, which would in this case be fishing;
- The spatial scale of the fishery, i.e., the percentage range of the stock that overlaps with the fishing activity;
- The Temporal Scale, the time spent on the fishing grounds where the interactions will occur;
- The level of fishing intensity, identifies the direct impacts as defined as Negligible, Minor, Moderate, Major, Severe and Catastrophic;
- Consequence of fishing activity on either population size or reproductive capacity.

Key requirements would be identification of PSA components:

- Average age of maturity
- Average size of maturity
- Average maximum age
- Average maximum size
- Fecundity
- Trophic level
- Reproductive capacity
- The overlap of the fishery with the species distribution (Availability)
- Species overlap with the type of gear (Encounterability)
- Gear Selectivity
- Post capture mortality

Training in risk assessment methods and the application of EAFM to Vietnam tuna fisheries has been completed by WWF for Vietnamese scientists and fishery experts in key agencies, Universities and NGOs. Further training is to be implemented with the support of SPC under WPEA II. The work now awaits the result of observer and port sampling information in order to record main (>5% of the catch), vulnerable >2% and <5% of the catch) and minor species. Once done an RBF analysis should be implemented, most

⁹ See pages 86-106 of the MSC FAM version 2.

probably by RIMF, which has undertaken a similar exercise in the WWF funded Kien Giang crab fishery.

Where high risks have been identified, it will be necessary to develop an overall management strategy for management and mitigation of ecosystem impact risks, involving all stakeholders in the development and implementation of the system. The most likely outcome would be identification of some non ETP shark species, ie those not on the Vietnamese Red List, or identified as endangered or critically endangered by IUCN.

The strategy will need to be monitored, and the success of any mitigation measures introduced regularly assessed. Management and mitigation must be incorporated into a strategy, which will be different for each fishery and will likely include, *inter alia*:

- Spatial and seasonal closures;
- Changes to gear configurations, to minimize interactions with juveniles and at-risk species e.g. hook types, minimum mesh sizes, maximum gear dimensions etc.;
- Non-target species catch limits;
- By-catch mitigation policy (where applicable).

These measures will be incorporated into the NTMP or Shark NPOA.

Milestone 19: Training in risk assessment and the application of EAFM

Milestone 20: Prepare a risk assessment report based on observer data (*Revised wording*)

Milestone 21: Workshop to determine management mitigation measures.

Milestone 22: Implement retained species mitigation measures (other than those covered already by CMMs) where necessary

Milestone 23: Evaluate the effectiveness of management mitigation measures for vulnerable retained and bait species.

Assigned stakeholders	RIMF/NIO, DECAFIREP/sub DECAFIREP/fishers & processors
Priority	High
Status	Undertaking a new activity and supported by WPEA 2
Timeframe	Q1 2016-Q4 2017
MSC Performance Indicator(s)	2.1.1, 2.2.1, 2.3.1, 2.1.2, 2.2.2, 2.3.2 Primary and Secondary species.

[Recommendation 9 for 2016/2015 is for RIMF to prepare a Risk Based Assessment covering secondary, ETP, habitat and ecosystems](#)

Outcome 2.2: Shark management measures implemented

Activity 2.2.1: If certain sharks (Oceanic and silky) are proved to be found in the fishery and are retained in the LL and HL fisheries, implement a partial strategy consistent with

CMM 2010-07. Implement full strategy to prevent their retention capture of oceanic whitetip (CMM 2011-03/CITES App 2) and scalloped, great and smooth hammerheads (CITES App 2).

WCPFC has an evolving strategy linked to the status of specific shark species. CMM 2011-03 requires that Oceanic whitetip species cannot be landed, and further protection is likely to be extended to silky shark at the forthcoming WCPFC meeting. Other species (hammerhead, porbeagle, thresher, shortfin and long fin mako and blue sharks may also require specific actions such as recording catch and fins attached to the shark. The risk to these species would also need to be considered (Milestone 18). These actions will be incorporated into a Shark National Plan of action to be prepared by DECAP, in cooperation with WWF.

MSC has also set a scoring requirement allowing all sharks caught to be landed with the fins attached. It is noted that this is already common practice as shark meat is sold on the domestic market.

The WPEA OFM programme will include provision to ensure the accurate recording of shark species in order to determine the numbers caught and to assess potential risks to these species. Observer training will also strengthen the capacity of observers and port samplers to identify shark species. WWF will also apply and educational programme for fishers aimed at identifying shark species and adopting the management controls set.

Milestone 24a: Implement shark CMMs 2010-07 and CMM 2011-03/CITES App 2 including all data collection requirements

Milestone 24b: Prohibit shark finning at sea

Milestone 25: Ensure that all shark species are covered under observer reporting above

Milestone 26: Fisher awareness programme

Milestone 27: Evaluate the effectiveness of management measures for shark species identified in the CMMs and CITES

Assigned stakeholders	DECAFIREP/sub DECFIREP/fishers and processors; WWF
Priority	High
Status	Undertaking a new activity and supported by WPEA 2
Timeframe	Q1 2014-Q1 2015
MSC Performance Indicator(s)	2.1.2, 2.2.2 ETP and secondary (shark) management

[Recommendation 10 for 2016/2015 is DECAP and WWF to prepare the NPOA-sharks, and to implement supporting decrees to \(a\) prohibit the capture of WCPFC protected species \(Whale shark, OWT shark and silky shark\), CITES listed Appendix II species \(Porbeagle,](#)

[Thresher sharks and Manta Rays\) and IUCN EN species, and to implement a supporting decree to prevent finning at sea.](#)

Outcome 2.3 Turtle management strengthened

Activity 2.3.1: Monitor and implement a turtle management mitigation policy.

IUCN/DECAP has prepared a Marine Turtles Action Plan 2015-2020, to be approved by MARD by 2016

There has been some work in measuring the specific impact of the longline fishery and the life status of the turtles when caught, but the reporting is not regular. Nevertheless, observer data do tend to show low levels of interaction, and low mortality rates (1 in 5 dead on capture). Most specifically, whilst Vietnam has not introduced the turtle CMM (2008-03), it has its own prescribed Decree, which prohibits the landing of turtles. Turtle avoidance also forms part of the occasional Sub DECAFIREP educational process at regional level. Evidence from workshops and published work, however, suggests that mitigation measures in the form of circle hooks have not been fully tested scientifically and thus an optimum mitigation strategy has not been developed, nor have circle hooks been adopted widely within the longline fishery.

While there is unlikely to be any interaction between the handline fishery and turtles, but this assumption would have to be assessed.

WWF will also apply and educational programme for fishers aimed at preventing turtle interactions.

Milestone 28: Monitor of turtle bycatch and life status in the handline and longline fisheries (Milestone 13 and 15)

Milestone 29 a: Implement an optimum management mitigation strategy with support measures which aim to (a) reduce turtle interactions as close to zero as feasible and (b) are consistent with national and international (WCPFC) obligations and the NPOA-Turtles (*New wording*)

New Milestone 29 b: Where risks are identified, instigate trials to reduce the interactions

Milestone 30: Fisher awareness programme

Milestone 31: Evaluate the effectiveness of management mitigation measures for turtles based on best practice

Assigned stakeholders	MARD/WWF/VINATUNA/DECAFIREP/sub DECAFIREP; WWF
Priority	High
Status	Undertaking a new activity and supported by WPEA 2
Timeframe	Q1 2014-Q1 2015
MSC Performance Indicator(s)	2.1.3 ETP status

[Recommendation 11](#) for 2016/2015 is DECAP and WWF to strengthen the data collection system on turtles, to implement trials in each fishery where interactions are considered unacceptable and to strengthen the application of measures to protect turtles, consistent with national and WCPFC requirements.

Outcome 2.4. Habitats subject to a management strategy

Activity 2.4.1: Incorporate a requirement to record gear losses into the national observer programme

Recording gear loss has been incorporated into the observer scheme.

Habitat issues will also need to be explored as part of the RBF assessment.

Milestone 32a: Gear losses incorporated into observer reporting

Milestone 32b: Include an assessment of habitat impacts as part of the SICA/PSA assessment

Assigned stakeholders	DECAFIREP/DECAFIREP/sub DECAFIREP/fishers
Priority	Medium
Status	Undertaking a new activity and supported by WPEA 2
Timeframe	Q3 2016
MSC Performance Indicator(s)	2.4.1 Habitat status

Outcome 2.5: Ecosystems and biodiversity assessments made for the Vietnamese and South China Sea region

Activity 2.5.1: Assess the ecosystem impact for the Vietnam EEZ /South China Sea Sub region

Some work has been undertaken by SPC on the ecological effects within the western Pacific as a whole. These indicate a very diverse ecosystem and broad resilience of the ecosystem to high levels of exploitation whilst the biomass remains high. However, if the biomass is reduced for apex predators including yellowfin, bigeye and shark species, the dynamics may well change for the worse. This therefore requires an extension of the trophic ecosystem modeling work to include the South China Sea.

Modeling the impact of fishery removals on the ecosystem has been undertaken as part of the SEAPODYM research provided by CLS. WPEA II also provides for the collection of additional trophic data and biological samples to adequately assess Pacific ecosystems. This can be incorporated into the modeling work undertaken by SPC (ECOPATH).

Milestone 33: Collection of biological samples to adequately assess Pacific ecosystems

Milestone 34: Training in ecosystem modeling

Milestone 35: Ecosystem analysis and reporting to support adoption of EAFM

Assigned stakeholders	DECAFIREP / NIO /WPEA
Priority	Intermediate
Status	Undertaking a new activity
Timeframe	Q4 2016
MSC Performance Indicator(s)	2.5.1, 2.5.2, 2.5.3 Ecosystem status:

3. GOVERNANCE SYSTEMS: TO STRENGTHEN GOVERNANCE SYSTEMS IN VIETNAM'S TUNA FISHERY

Outcome 3.1: Fisheries Law effectively implemented

Activity 3.1.1: Clarification of Vietnam's status within the convention, and extension of the convention area to the Vietnam

There is presently no clarity on how WCPFC CMMs are presently treated in Vietnam. Whilst Vietnam is a CNM, as the convention area does not extend to the South China Sea, the binding nature of the country is uncertain and requires clarification. However, WPEA II accepts that CMMs should be mainstreamed and implemented with the programmes support. The important feature here is that (a) as a Cooperating Non Member, Vietnam is bound to implement the CMMs; and an MSC assessment would expect to see these measures implemented.

Amendments to the current National fisheries law are not likely to be advanced until 2017. The amendments will need to be checked to ensure that the law supports management outcomes consistent with MSC Principles 1 and 2. It is highly probably that legal drafting has taken account of advice (Nguyen, et al).

MARD and the provincial peoples committee should ensure that a number of core principles are applied with its fisheries specific laws:

- Fishing activities are sustainable and effective, in a manner consistent with preserving marine resources;
- Fishing operations must ensure conservation of related marine ecosystems and biodiversity, protecting marine environment and its natural landscapes.
- Fisheries sector development strategies must be planned to be associated with national and local fisheries management plans.

The national legislation or strategy document to include reference to the Precautionary approach to fisheries management.

Milestone 36: Clarification of the application of the Convention (and CMMs) to Vietnam

Milestone 37: Vietnam becomes a WCPFC CM (Contracting Member)

Assigned stakeholders	WCPFC/MARD
Priority	High
Status	Developing existing activity
Timeframe	Q3 2017
MSC Performance Indicator(s)	3.1.1 Legal and customary framework

[Recommendation 12 for 2016 is to clarify with MARD, the status of Vietnam within the Convention area, and the country's position when it becomes a CMM.](#)

Activity 3.1.2: Revise fisheries legislation containing the core elements which prioritise sustainable fisheries, and contain provisions for automatic implementation of international conventions including the WCPFC CMMs

Vietnam should also introduce a number of core principles into its legislation

- *Adherence to WCPFC's regulations and CMMs in order to comply with Article 25 of WCPFC. This includes extension to Decree 31, stipulating regulation on financial penalties with fishing vessels violating WCPFC's regulations.*
- *to ensure fishing operations must be associated with economic efficiency and protecting and restocking marine resources; conserving related marine ecosystems and biodiversity, protecting marine environment and its natural landscapes. Fisheries sector development strategies must be planned to be associated with national and local fisheries management plans.*
- *to encourage offshore fishing activities with a sustainable and effective manner to conserve marine resources*
- *Fishing license should base scientific information on current resource status to issue number of fishing licenses.*

Milestone 38: National legal documentary system, effective and organised and effective cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2

Milestone 39: Applying of relevant tuna regulations/decrees (catch/effort limits etc)

Assigned stakeholders	MARD/DECAFIREP/sub DECAFIREP/fishers
Priority	High
Status	Expansion of existing activities
Timeframe	Q1 2015-Q4 2016
MSC Performance Indicator(s)	3.1.1 Legal and customary framework

[Recommendation 13 for 2016 is to provide the TFCC with the details of changes to the fisheries act, and to clarify any supporting Decrees required.](#)

Outcome 3.2: Roles and responsibilities and consultation processes fully implemented

Activity 3.2.1: Implementation of the Consultation Council through the NTMP process

A Tuna Fisheries Consultation Council (TFCC), created by the Government of Vietnam, under the management of VINATUNA, serves the important purpose of closely re-evaluating current management measures to formulate interim precautionary management measures, as well as long term, management measures. The composition of the TFCC should include: MARD, relevant members of the Peoples Committee, DECAFISH, DECAP, relevant sub DECAFIREP management and compliance officials, RIMF, VINATUNA, nominated industry representatives and WWF.

Milestone 40: Tuna Fishery Consultation Council fully operational and all roles & responsibilities defined

Assigned stakeholders	VINATUNA and all stakeholders
Priority	High
Status	New activity
Timeframe	Q 4 2013
MSC Performance Indicator(s)	3.1.2 Consultation, roles & responsibilities

Activity 3.2.2: Revise the a tuna fisheries strategy so that long term and short term objectives demonstrate effective implementation of sustainable fisheries management systems

MSC scoring requires strategic long-term objectives to guide decision making, consistent with MSC principles 1 and 2, and the precautionary approach. The current national strategy (2010) focuses heavily on growth and objectives, but with one reference to sustainability development. Hence, either there needs to be some provision to revise the strategy, or incorporate changes into law (Activity 3.1.2). Note that assessors will have to satisfy themselves that sustainability objectives are not secondary to growth objectives.

Vietnam must ensure that it conforms to the strategy to reduce effort on bigeye tuna, and not increase effort on yellowfin. Proposals to expand catches to > 20,000 mt are not consistent with the requirements of WCPFC. It is accepted however, that issues such as the 2001-2004 reference years may be inappropriate, and these are issues where Vietnam could work together with Philippines and Indonesia. PNA for example managed to set reference levels for VDS effort at 2010.

Milestone 41: Explicit reference would have to ensure that any change in fleet capacity takes account of the precautionary approach to fisheries management, and adherence to appropriate scientific advice, most specifically adhering to the LRPs set in management

Milestone 42: Evidence would need to show that the Precautionary Approach to Fishery Management (PAFM) is explicitly understood and enacted at both national and provincial level

Assigned stakeholders	VINATUNA and MARD
Priority	High
Status	Currently in process
Timeframe	Q1 2016
MSC Performance Indicator(s)	3.1.3 Short and long term objectives

[Recommendation 14 for 2016 is for the TFCC to fully adhere to the precautionary principle and to stress the need to MARD to avoid expansionist policies.](#)

Outcome 3.3: Fishery specific management objectives applied

Activity 3.3.1: The handline fishery is included along with the other tuna fisheries contained within the management plan

MARD Circular 42 adopts the Tuna Management Plan. This is supported by Decision 3562 (Tuna Management National Action), 10 September 2015, gazetting the Plan into Law. The Plan contains all the appropriate requirements, i.e short and long term objectives, as well as a commitment to ecosystem-based tuna fisheries management. The plan also contains a list of outcomes, activities and measurable indicators. The current TMP does not refer to handline fisheries, and should be incorporated.

The application of the management system, as defined in the Plan, is reviewed internally every year (as per law). However, it is noteworthy that for MSC purposes, an external performance review would be appropriate. The definition of external review includes a government or research department external to the management organisation. External review could therefore include either MARD Policy Unit, or independent qualified consultant.

Milestone 43: Definitions to include handline fisheries and all target species

Milestone 44: Management Plan finalised, complies with MSC principles and contains a consultation process and includes a monitoring & performance component

Milestone 45: Evidence that the management plan is being applied and its effectiveness is assessed by a process of regular internal and external reviews

Assigned stakeholders	MARD/DECAFIREP
Priority	High
Status	Developed from existing activity (currently in draft)
Timeframe	Q4 2016
MSC Performance	3.2.1 Fishery specific objectives

[Recommendation 15](#) is to strengthen the management plan to include the following components:

[Decision-making](#): Disseminate information provided that supports the management plan and ensure that explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring evaluation and review activity.

[Management](#): When discussing tuna management, make reference to ‘and associated ecosystem components’

[Activities and Implementation Plan](#):

- (a) [Stipulate that the harvest strategy and harvest rules and tools \(quota, effort limits etc\) are linked to the RFMO Limit and Target Reference Points; and that actions will be taken by Vietnam if any tuna species reaches the Point of Recruitment Impairment](#)
- (b) [Insert ‘Implement bycatch based risk assessment to determine the impacts of fisheries on the ecosystem’ as a separate action point under II ‘Collecting data to serve for management of the oceanic tuna fisheries’.](#)
- (c) [Insert Implement technical measures to protect any vulnerable bycatch species, especially Endangered, Threatened and Protected sharks and turtle, under III Implementing the management measures](#)

Outcome 3.4: Decision making process strengthened

Activity 3.4.1: Clarify decision making structure which is defined with the NTMP

The MSC requires:

- *There are established decision-making processes that result in measures and strategies to achieve the fishery-specific objectives.(SG 3.2.2 80 (a))*
- *That the decision-making processes respond to **serious and other important issues identified in relevant research, monitoring, evaluation and consultation**, in a transparent, timely and adaptive manner and take account of the wider implications of decisions; (SG 3.2.2 80 (b))*
- *That the decision-making processes use the precautionary approach and are based on best available information. **Information on fishery performance and management action is available on request, and explanations are provided for any***

actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring evaluation and review activity (SG 3.2.2 80 (c)).

- *Explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity ((SG 3.2.2 80 (d)).*

The pre-assessment identified a need to improve the inadequacy of the decision making process at across all level of fishery management. Decisions would have to incorporate binding decisions at EEZ level and compatible measures for territorial waters. The process also requires that stakeholders are informed of decisions with explanations provided and provides information and explanations to stakeholders on request, including when judicial decisions have been implemented. The vehicle to implement the decision makig process would be best placed in the Tuna Management Plan.

Milestone 46: Introduce clear guidelines for taking management decisions, probably as a component of the management plan;

Milestone 47: Evidence is available that explanations to be provided for decisions taken, and should follow the basis of the management plan when introduced, which may include precautionary actions.

Assigned stakeholders	MARD/DECAFISH
Priority	High
Status	Requires implementation into the TMP
Timeframe	Q2 2014-Q4 2016
MSC Performance Indicator(s)	3.2.2 Decision making

Outcome 3.5: Effective application of compliance systems

Activity 3.5.1: Strengthen the compliance monitoring system

Enforcement systems in Vietnam are gradually being strengthened following an emphasis on improved enforcement requirements to satisfy the EU IUU regulation. These include a strengthening of the sanction system. Fishery specific management measures will be applied as part of the target species and ecosystem management strategies, rules and tools. In order to illustrate an effective compliance system, it is important to first establish a process of optimizing control activities through use of risk assessment techniques. The assessors will also need to ensure that the compliance system is effective and that there is no systematic non-compliance.

Evidence of enforcement actions will need to be demonstrated through the application of the harvest control limits and other management measures, and will need to extend to monitoring requirements such as VMS and catch logbook reporting. The compliance system will need to demonstrate that the industry is compliant with the measures.

Milestone 48: Risk assessment of enforcement actions following the introduction of P1 and P2 associated management measures

Milestone 49: Review of sanctions for non-compliance

Milestone 50: Effective evidence of systematic compliance and an effective system of sanctions

Assigned stakeholders	Department of Fishery surveillance/DECAFIREP/Sub DECAFIREP
Priority	High
Status	Improvement from current developments
Timeframe	Q1 2016-Q4 2017
MSC Performance Indicator(s)	3.2.3 Compliance and enforcement

[Recommendation 16](#) is to clarify the main non-compliance issues once the harvest strategies have been formulated. Non-compliance reporting issues will then need to be documented, and a risk assessment and operational plan prepared, probably in 2017.

Outcome 3.5: Research plan is in place

Activity 3.6.1: A national research plan in place which addresses P1 and P2 requirements

A Research Plan needs to be prepared which provides a coherent and strategic approach to research and information needs across all three sustainability principles, in a timely and reliable manner.

This integrated plan needs to take account of national and international requirements and obligations, and be backed by secure funding secured from industry, Government and donors.

The plan should include the following components, in all cases backed by an increased commitment to data collection to fill the considerable existing gaps in knowledge:

- Information gathering, review and interpretation of available information to identify information gaps and guide research planning;
- Input into the development of Target and Limit Reference points in partnership with other WPEA nations, as well as the wider WCPFC
- Tactical focus on critical target and retained species, recognizing that there is currently
Insufficient focus on the regional/migratory nature of these stocks;
- Overall risk assessment, with a strong focus on retained/bycatch and ETP species;
- Application of ecosystem modeling;
- Capacity building to support all activities;
- Raising awareness of research needs, outcomes and application at district, provincial and national level

- Periodic review and assessment of the research plan (and subject to an external review process).

Milestone 51: A research plan prepared publically available

Milestone 52: Research results are disseminated to all interested parties

Assigned stakeholders	DECAFIREP / RIMF and NIO
Priority	Intermediate
Status	New action
Timeframe	Q1 2015-Q4 2016
MSC Performance Indicator(s)	3.2.5 Research Plan

[Recommendation 17: RIMF to develop a research plan to strengthen its knowledge of Region 3 stock status and ecosystem issues.](#)

3. BUDGET

A draft budget has been prepared based on costed activities listed above, but excluding core policy issues and fisheries management requirements, where the costs are expected to be met by MARD and DFISH. The budget estimates are available in *Tab Budget/FIP tracking June workshop.xls*

4. TERMS OF REFERENCE

4.1 DATA COLLECTION FOR TARGET, OTHER RETAINED, BYCATCH, ETP SPECIES

SUB DECAFIREP

BACKGROUND

VINATUNA, supported by the WWF Asia Pacific Seafood Trade Network and national government agencies (MARD and DECAFIREP), industry bodies, VASEP, private sector exporters, are engaged in a Fishery Improvement Project (FIP). This project will be carried out over a period of 5 years, to support the long-term goal of Marine Stewardship Council certification of Pacific Ocean yellowfin tuna in the handline and longline fisheries. To this end, all stakeholders have endorsed an Action Plan which, when implemented, will satisfy the MSC standards, but will also embrace activities required to support WCPFC management measures and are expected to underline the outcomes of the Vietnamese Tuna Management Plan. As part of this process, the Government of Vietnam will support a data collection programme which will produce the required data for input into stock assessments conducted by SPC, but will also link to the work of Research Institute for

Fisheries Management in providing information to the MARD and D-Fish and other stakeholders on tuna stock status and ecosystem and Environmental Risk Assessments (ERA) within the Vietnamese EEZ and will further support the development of a national tuna management strategy consistent with WCPFC requirements.

DESCRIPTION OF the ASSIGNMENT

Global objective

The expected position by year 5 is that:

- Sufficient relevant information related to stock structure, stock productivity and other data available to support the harvest strategy;
- There is good information on all other fishery removals (secondary and ETP species)
- Stock abundance and fishery removals are regularly monitored at a level of accuracy consistent to cover Harvest Control Rules
- Sufficient information is available to allow fishery related mortality and the impact of fishing to be quantitatively estimated for **ETP** species;
- Information is sufficient to measure trends and support a full strategy to manage impacts on **ETP** species.
- Sufficient data are available to allow the nature of **habitat** impacts to be identified
- There is evidence that the fishery is highly unlikely to disrupt the key elements underlying **ecosystem** structure and function to a point where there would be a serious or irreversible harm

Specific objectives

The purpose of the TOR is to set out the requirements for DECAFIREP to implement a data collection system consistent with SPC/WPEA requirements in order to support stock assessments and Environmental Risk Assessment for other retained, ETP species and habitats (ERA) in support of regional and national fishery research management decision making.

Requested Services

Sub DECAFIREP will implement data collection for a period of 5 years and beyond, contributing to assessment of stock status and guiding the implementation of a number of measures that support a regional and national Harvest Control Strategy (HCS) yellowfin (YFT) tuna, other retained, bait species bycatch and ETP species in the Vietnam EEZ. A number of specific outputs need to be introduced along with supporting measures, which require deliberation by sub DECAFIREPs. These are:

- Continue to improve national data collection and monitoring of tunas at all levels and across all fisheries;
- Document the catch of shark, billfish, bait species and other species in the handline and longline fisheries (See FIP action 2.1.3).
- Monitor of turtle bycatch and life status in the handline and longline fisheries

- Support the assess the ecosystem impact for the Vietnam EEZ /South China Sea Sub region by collecting trophic information through port sampling
- Strengthen the system of data collection on tuna to ensure that there is a high confidence that the information is robust for data collected from the full range of national tuna fisheries (handline, longline, purse seine and gill net);

As part of the sub DECAFIREP's undertakings, the team of data collectors will:

- Identify information requirements and gaps which will support knowledge of stock structure, stock productivity, stock abundance, fishery removals and other information such as environmental variables;
- Implement a catch logbook data collection system, following WCPFC and MAR Circulare (549KTPBVNL, 2013) requirements
- Strengthen the data collection and port sampling system on stock structure, stock productivity, stock abundance, trophic data and fishery removals, by preparing a standard sampling protocol,
- Develop a comprehensive observer scheme to international standards (equivalent to established Regional Observer Programme (ROP standards) which will include adoption of observer modules, implement a training programme, and initiate an observer monitoring programme (with established debriefing and verification processes).
- Strengthen the system of data collection for other retained, bycatch, bait species and ETPs to ensure that there is a high confidence that the information is robust for data collected from the handline and longline fisheries;
- Implement a fisheries information system to record, integrate, and analyse the potentially large quantity of data, according to an agreed plan that integrates data collection from across the range of fisheries and allows for access and compatibility with data bases (e.g. TUFMAN) used at regional level.

The available information should be:

- of a standard to quantifiably support the SPC and RIMF stock data and assessment requirements;
- sufficiently accurate to support a comprehensive strategy to manage tuna and to assess whether the strategy is achieving its objective;
- support a comprehensive strategy on managing other retained, bycatch, ETP and bait removals;
- data continually collected to detect any increase in risk to tuna, other retained and bycatch species, bait species and ETP species¹⁰

¹⁰Bullets 3 & 4 are added to ensure that the LogBook system complies with the need to collect sufficient data to detect any increase in risk for bycatch species as part of the Ecosystem Approach.

The outputs that must be achieved are as follows:

- Tuna vessel register operational at Provincial level linked to National recording system (by Q4 2015)
- Logbook coverage > 75% for LL and HL, and improved coverage of other fisheries (by Q4 2015)
- Port sampling implemented in main ports/provinces (by Q4 2015)
- Extend port sampling procedures to cover retained species (and informed by the observer scheme) (by Q4 2015)
- Establish an observer scheme to monitor all catches of retained species and document the level of discarding from the handline and longline fisheries (by Q4 2015)
- Ensure that all shark species are covered under observer reporting (by Q4 2015)
- Monitor of turtle bycatch and life status in the handline and longline fisheries (by Q4 2015)
- Incorporate a requirement to record gear losses into the national observer programme (by Q4 2015)
- Document observer data and port sampling verification, and prepare summary reports of main and vulnerable species (retained) interactions other than bigeye tun

The expectation is that a tuna data collection system implemented and fully effective by Q5 2016

- Sub DECAFIREP collectors engaged in all the main fishing ports
- Port sampling data collection system fully operational in all the main tuna ports
- Observer programme fully operational longline and handline (5% or more)
- Catch and effort database operational and supporting interrogation both at national and RFMO level (e.g. TUFMAN)
- Longer term training needs identified and implemented
- Training a pool of observers and coordinating their deployment, according to the required international standards¹¹

The following funding assumptions are made and are to be explored in more depth

- Enumerators, observers and a data base manager based in each sub DECAFIREP office. Funding will be provided directly from the Donor funds, Provincial Peoples Committee Central Government funds and the private sector.

¹¹ WCPFC CMM 2008-01 requires observer 100% observer coverage for all purse seine vessels fishing in the EEZ. Some countries apply 100% purse seine coverage to archipelagic waters, e.g. Papua New Guinea on the grounds that the WCPFC requires application of equivalent measures. WCPFC presently requires 5% observer coverage for Long Liners. IOTC requires 5% observer coverage for all vessels over 25 metres LOA.

- The observer scheme (observers and debriefers) will be partly private sector funded but will fall under the responsibility of sub DECAFIREP. The number of observers recommended, will conform to international requirements or best practice. Coverage is expected to be 5% for all longline and handline vessels, but may increase if additional funding is available;

EXPERTS' PROFILE

The following experts are expected to be in place. D-Fish and sub DECAFIREP already have assigned managers, statistical officers, enumerators and data collectors in place, and will need to ensure implementation of the appropriate manpower and system support to apply these. The programme will include Binh Dinh, Phu Yen, Khanh Hoa, Quang Nam, Quang Ngai, Da Nang, Ninh Thuan, Binh Thuan, Baria-Vung Tau.

National Tuna coordinator

1. Qualifications and skills

- Masters or Doctorate in biological or social sciences
- A high level of computer literacy with experience in data entry and extraction
- Working experience in dealing with fisheries data
- Familiarity with the WCFPC TUFFMAN data base

2. General professional experiences

- Strong communication skills to support problem solving in data collection

DECAFIREP Technicians

1. Qualification and skills

- A degree in fisheries or agricultural science or engineering
- Training in process or completed at international level

Training of trainers will be provided by SPC under the WPEA Programme

Data base managers (9, 1 per centre)

3. Qualifications and skills

- A high level of computer literacy with experience in data entry and extraction
- Working experience in dealing with fisheries data
- Familiarity with the WCFPC TUFFMAN data base

4. General professional experiences

- Strong communication skills to support problem solving in data collection

Enumerators / data verifiers (3-6 per Province)

5. *Qualifications and skills*

- A bachelors degree in marine science and / or statistics is preferred
- A high level of numeracy with experience in data entry and extraction, preferably from the one of the two externally funded programmes (WPEA or other donor support).

6. *General professional experiences*

- Working knowledge of data collection
- Strong communication skills to support problem solving in data collection

Observer trainers (4)

1. *Qualifications and skills*

- A degree in marine science and / or statistics is preferred
- Experience in training and lecturing to University Standard

Senior observer/debriefers (6)

1. *Qualifications and skills*

- A bachelors degree in marine science and / or statistics is preferred
- A high level of computer literacy with experience in data entry and extraction

2. *General professional experiences*

- Field experience in data collection
- Strong communication skills to support problem solving in data collection

Observers (At a rate of 5% coverage for 700 longliners and 1,500 handliners)

3. *Qualifications and skills*

- A bachelors degree in marine science and / or statistics is preferred
- A high level of computer literacy with experience in data entry and extraction

4. *General professional experiences*

- Successfully completed a training course in observer duties
- Strong communication skills to support problem solving in data collection

DURATION

DECAFIREP are expected to have completed a revised WPEA incorporating the above within 3 years with an initial programme extending for a 5 year period, up to the date of the MSC Assessment.

PLANNING

The assignment comprises a combination of scientific and technical input supported for data collection, sampling.

BUDGET

Annual operational costs to be decided in consultation with DECAFIREP. Broad budget outlines are *provided in the supporting excel sheet (Tab Budget FIP tracking June workshop.xls)*.

EXPECTED MILESTONES AND REPORTING

The required outputs are set out in the table below:

MILESTONES	Timeline	REPORTING MEANS OF VERIFICATION
Logbook coverage > 75% for LL and HL, and improved coverage of other fisheries	Ongoing	WPEA data reports
Port sampling implemented in main ports/provinces	Ongoing	WPEA data reports
Tuna vessel register operational at Provincial level linked to National recording system	Ongoing	MARD statistical tables
National tuna data collection system implemented and fully effective	Ongoing	MARD statistical tables
Establish an observer scheme to monitor all catches of retained species and document the level of discarding from the handline and longline fisheries	Ongoing	Observer deployment and reporting system endorsed by voluntary or statutory agreement
Extend port sampling procedures to cover retained species (and informed by the observer scheme)	Ongoing	Port sampling reports
Document observer data and port sampling verification, and prepare summary reports of main and vulnerable species (retained) interactions other than bigeye tuna	Ongoing	Statistical data and summary reports
Implement shark CMMs 2010-07 and CMM 2011-03/CITES App 2 including all data collection requirements	Q 1 2016	Decree endorses CMM on sharks (and billfish)

Ensure that all shark species are covered under observer reporting above (Milestone 13 and 15)	Q 1 2016	Observer reports and estimate of shark catches by species
Monitor of turtle bycatch and life status in the handline and longline fisheries	Q 1 2016	Observer reports and estimate of turtles catches
Incorporate a requirement to record gear losses into the national observer programme	Implemented	Observer reports on gear loss in longlines
Collection of biological samples to adequately assess Pacific ecosystems	Ongoing	Port sampling reports
<i>Timeline priority</i>		
Immediate: Year 3 (2013-2014)	Medium: Year 3 (2015)	Before FIP completion: Year 3 (2016-2017)

4.2 STOCK ASSESSMENT AND ECOSYSTEM MODELING

VINATUNA, supported by the WWF Asia Pacific Seafood Trade Network and national government agencies (MARD and DECAFIREP), industry bodies, VASEP, private sector exporters, are engaged a Fishery Improvement Project (FIP). This project will be carried out over a period of 5 years, to support the long term goal of Marine Stewardship Council certification of Pacific Ocean yellowfin tuna in the handline and longline fisheries. To this end, all stakeholders have endorsed a an Action Plan which, when implemented, will satisfy the MSC standards, but will also embrace activities required to support WCPFC management measures and are expected to underline the outcomes of the Vietnamese Tuna Management Plan. As part of this process, the Government of Vietnam will provide input into the WCPFC Scientific Committee (SC), as well as undertaking its own research through RIMF to assess the biomass within the Vietnamese EEZ. RIMF will be responsible for interpretation of the national stock assessment results, and MARD responsible for directing activities relating to the adoption of reference points.

DESCRIPTION OF the ASSIGNMENT

Global objective

The expected position by year 5 is that:

- It is **highly likely** that the stock is above the point where recruitment would be impaired;
- The stock is at or fluctuating around its target reference point;

- The assessment is appropriate for the stock and for the harvest control rule;
- The assessment takes uncertainty into account;
- Trophic interactions are fully understood

Specific objectives

The purpose of the TOR is to set out the requirements for RIMF to provide scientific support to stock assessment support, working with the scientists of the Oceanic Fisheries Programme, SPC. The work of RIMF will be to provide scientific advice to MARD for the establishment of catch limits or equivalent catch limits against the Target and Limit Reference Points set by WCPFC.

Requested Services

RIMF will provide services supported by DECAFIREP data (3.1) for a period of 5 years and beyond, contributing to assessment of stock status and guiding the implementation of a number of measures that support a regional and national Harvest Control Strategy (HCS) for skipjack (SKJ), yellowfin (YFT) and bigeye (BET) tuna in the Pacific Ocean including the EEZ and territorial waters of Vietnam. A number of specific outputs need to be introduced along with supporting measures, which will require deliberation by the Tuna Fisheries Management Council in order to set harvest strategies. These are:

- Contributing to the discussion on Limit Reference Points (LRPs) for yellowfin and bigeye, at the relevant WCPFC SC and General Sessions. The LRP would have to be set at a point above the level at which there is an appreciable risk of impairing reproductive capacity; The TRP set such that the stock is maintained at a level consistent with B_{MSY} or some measure or surrogate with similar intent or outcome¹²;

As part of the institution's undertakings, the team of scientists and technicians will:

- Prepare a Research Plan for the tuna and other retained species caught by all fisheries (Which will also includes ecosystem research (section 3.3));
- Identify information requirements and gaps which will support knowledge of stock structure, stock productivity, stock abundance, fishery removals and other information such as environmental variables and ensure that these are incorporated into WPEA support activities;
- Undertake training in stock assessment, ecosystem modelling (MULTIFAN-CL, ECOSIM, ECOPATH, SEAPODYM) and risk assessment to promote a higher level of input from Vietnamese scientists into WCPFC Scientific Committee deliberations;
- Support increasing awareness of research needs, outcomes and application at provincial and national level to all stakeholders;

¹²¹² MSC requires a level set at $0.5 B_{MSY}$. Any variation to this would require justification, but most explicitly must be shown to be sufficiently precautionary.

¹² P4KSDI have had one PhD graduate trained in Hobart (CSIRO) – Lilis Saydeh. Proposed expert for this assignment, with the appropriate expertise, could be Don Bromhead

- Provide technical advice to the TMC and MARD, which will lead to the establishing of a robust and precautionary harvest strategy for Vietnamese fisheries, and will support the extension of WCPFC Commission Management Measures to Vietnamese waters.

The outputs that must be achieved are as follows:

- 5 year RIMF Tuna Research Plan containing the above services (and following international best practice and MSC requirements) established by year 1
- Improving scientists' knowledge in stock assessment techniques completed by OFP, SPC, within 3 years¹³
- Target and limit reference available for Western Central Pacific by the end of year 3.
- An annual review of the research programme, and by year 4 have completed an external review.
- Attending technical committee meetings at WCPFC (dealing with stock assessment and the LRP/ TRP context, and on stock rebuilding)

The following funding assumptions are made and are to be explored in more depth

- A senior scientist and technician are to be employed by RIMF, funded by MARD.

EXPERTS' PROFILE

The following experts are expected to be in place. RIMFP already has an assigned scientist and will need to ensure implementation of the appropriate manpower and system support to apply these)

Senior scientist

1. Qualifications and skills

- A post graduate qualification in stock assessment
- Training in process or completed at a regional or international centre of excellence
- Knowledge of tropical tuna fisheries

2. General professional experiences

- Proven track record in stock assessment from a Vietnamese Research Centre and at least 5 years of professional experience in the provision of advice to fishery managers
- Experience in the application of stock assessment techniques, data requirements and models

¹³ P4KSI have had one PhD graduate trained in Hobart (CSIRO) – Lilis Saydeh. Proposed expert for this assignment, with the appropriate expertise, would be Don Bromhead

Technicians

2. Qualification and skills

- A degree in fisheries or agricultural science or engineering
- Training in process or completed at international level

Stock assessment training will be provided by SPC under the WPEA Programme

DURATION

RIMF is expected to have completed a revised Research Programme incorporating the above within 1 year, with an initial programme extending for a 5 year period, up to the date of the MSC Assessment.

PLANNING

The assignment comprises a combination of scientific and technical input supported by the WPEA data collection (3.1).

BUDGET

Annual operational costs to be determined by MARD. Broad budget outlines are provided in the supporting excel sheet (*Tab Budget FIP tracking June workshop.xls*)

The required outputs are set out in the table below:

EXPECTED MILESTONES AND REPORTING

The required outputs are set out in the table below:

MILESTONES	Timeline	REPORTING MEANS OF VERIFICATION
MARD/RIMF participating in SC WGs and WCPFC general session discussions on reference points	Ongoing	WCPFC SC (11th Regular Session) (http://www.int/meetings)
Setting of LRPs and TRPs at WCPFC for all species (YFT, BET)	Ongoing	Scientific papers on RPs and General Session report
MARD/RIMF participating in SC WGs for the revision of the core WCPFC CMM on bigeye and yellowfin strategy	Ongoing	WCPFC attendance records
Advice provided on catch and / or effort limits set for bigeye and yellowfin tuna for Vietnam consistent with WCPFC methodology (either 2001-2004 levels or	Q3 2016	Technical paper submitted to the Tuna Management Council on LRPs and TRPs to be set for yellowfin and bigeye tuna

an alternative) and based on an historic ref		
Training in ecosystem modeling	Q3 2016	WPEA Reports
Ecosystem analysis and reporting to support adoption of EAFM	Q3 2016	SPC training
A research plan prepared publically available	Q3 2016	Research results are disseminated to all interested parties
Research results are disseminated to all interested parties	Q3 2016	
<i>Timeline priority</i>		
Immediate: Year 3 (2013-2014)	Medium: Year 3 (2015)	Before FIP completion: Year 3 (2016-2017)

4.4 BYCATCH & ECOSYSTEM IMPACT ANALYSIS

RESEARCH INSTITUTION: To be nominated (RIMF)

BACKGROUND

VINATUNA, supported by the WWF Asia Pacific Seafood Trade Network and national government agencies (MARD and DECAFIREP), industry bodies, VASEP, private sector exporters, are engaged a Fishery Improvement Project (FIP). This project will be carried out over a period of 5 years, to support the long term goal of Marine Stewardship Council certification of Pacific Ocean yellowfin tuna in the handline and longline fisheries. To this end, all stakeholders have endorsed a an Action Plan which, when implemented, will satisfy the MSC standards, but will also embrace activities required to support WCPFC management measures and are expected to underline the outcomes of the Vietnamese Tuna Management Plan. As part of this process, RIMF, supported by DECAFISH and the WPEA data collection programme, will set up a Retained Species Assessment Programme (RSAP), which will be responsible for determining risks, and developing management mitigation proposals, that will support the TMC in proposing a management strategy that will meet the MSC standard by year 5.

DESCRIPTION OF the ASSIGNMENT

Global objective

The expected position by year 5 is that:

- The fishery does not pose a risk of serious or irreversible harm to the bait species, retained and ETP species, bycatch or habitats and does not hinder recovery for

managing species associated with the tuna ecosystem ensuring that the fishery does not pose a risk of serious or irreversible harm to retained species;

- There is a strategy in place for managing retained, bait species, bycatch, ETP species or habitats interactions in order to avoid the risk of serious irreversible harm from the fishery;
- Information on the nature and extent of retained species is adequate to determine the risk posed by the fishery and the effectiveness of management mitigation strategy.

Specific objectives

The purpose of the TOR is to set out the requirements for NIO to provide support services for fishery specific support activities at national and provincial level. These services, all of which will relate to:

- Analysing information collected by DECAFIREP on primary and secondary species, bait species, ETPs and on bycatch and ecosystem interactions;
- Exploring management mitigation strategies with stakeholders, including fisher associations, private sector companies and fisher communities;
- Promoting the concept of stakeholder led management actions; and awareness training;
- Advising Government of any required measures that are required in addition to CMM implementation requirements.

Requested Services

Working with fishing companies NIO will provide services to the TFMC. The following outputs must conform to the following principles:

- Ensuring that accurate and verifiable information is available on catches of all retained, bycatch (including bait fish) and ETP species;
- That the information available is sufficient to estimate the risks with respect to productivity and susceptibility limits, including mortalities and injuries to all bycatch species;
- That the distribution of habitat types is known over the range, with particular attention to the occurrence of vulnerable habitat types;
- That changes in habitat distribution over time are recorded;

The tasks to be implemented will include:

- Review bycatch mitigation measures appropriate for each fishery which might include:
 - Longline – use of circle hooks, TORI lines and lures, no catch retention of sharks, seasonal or area closures.
 - Hand-line – FAD management (if required)

- Undertake training in the Risk Based Framework to allow scientists to assess, with stakeholders, the risks posed to ALL retained, bycatch (billfish, sharks, other commercial and bycatch species), bait species and ETP species identified in the national regulations. This will form part of the training process outlined in Section 3.1.
- Undertake, fishery by fishery, bycatch mitigation stakeholder workshop, working from international best practice examples
- Prepare recommendations to the TFMC for a retained species management plan, if required;
- Prepare recommendations to the TFMC for a bait species management plan, if required
- Raise awareness on bycatch avoidance and ecosystem interactions, and developing a system that measures the effectiveness of the strategy.
- Support awareness of research needs, outcomes and application at provincial and national level to all stakeholders;
- Make an annual assessment to detect whether there are changes to risk levels for associated bycatch species

RIMF

Senior Researcher

1. Qualifications and skills

- A post graduate degree in fisheries science or marine studies
- Experience in environmental risk assessment
- At least 10 years research experience
- Strong communication skills

2. General professional experiences

- Knowledge of Vietnamese fisheries
- Demonstrated skills in report dissemination and report writing
- Clear knowledge of suitable bycatch mitigation strategies
- A working knowledge of English

Junior researcher

1, Qualifications and skills

- A graduate qualification in marine sciences

General professional experiences

- Strong communication skills to facilitate problem solving in data collection
- A working knowledge of English

DURATION

The assignment will be for 5 years with a view to establishing long term linkages thereafter based on performance.

PLANNING

The assignment comprises a combination of scientific and technical input supported by a data collection, sampling and marine survey programmes.

BUDGET

Annual operational costs to be decided in consultation with VINATUNA and MARD. Broad budget outlines are provided in the supporting excel sheet (Tab Budget FIP tracking June workshop.xls)

EXPECTED MILESTONES AND REPORTING

The required outputs are set out in the table below:

MILESTONES	Timeline	REPORTING Means of Verification
Training in risk assessment and the application of EAFM	Completed	wwF Training certificates
Workshop to determine risks applying the risk based framework (SICA and PSA)	Q2 2016	Risk assessment workshop report
Workshop to analyse risk mitigation strategies	Q 3 2016	Management mitigation workshop report
Implement retained species mitigation measures (other than those covered already by CMMs) where necessary	Q1 2017	Decrees
Evaluate the effectiveness of management mitigation measures for vulnerable retained and bait species	Q4 2017	Performance Review of measures undertaken
<i>Timeline priority</i>		

Immediate: Year 3 (2013-2014)	Medium: Year 3 (2015)	Before FIP completion: Year 3 (2016-2017)
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4.4 DEVELOPMENT OF HARVEST STRATEGIES RULES AND TOOLS AND BYCATCH MITIGATION MEASURES

VINATUNA, supported by the WWF Asia Pacific Seafood Trade Network and national government agencies (MARD and DECAFIREP), industry bodies, VASEP, private sector exporters, are engaged a Fishery Improvement Project (FIP). This project will be carried out over a period of 5 years, to support the long term goal of Marine Stewardship Council certification of Pacific Ocean yellowfin tuna in the handline and longline fisheries. To this end, all stakeholders have endorsed a an Action Plan which, when implemented, will satisfy the MSC standards, but will also embrace activities required to support WCPFC management measures and are expected to underline the outcomes of the Vietnamese Tuna Management Plan. As part of this process, the Government of Vietnam will provide input into the WCPFC General Sessions, but will also be responsible for ensuring that national and international (WCFC) measures are implemented into a national harvest strategy, with associated harvest rules and tools implemented.

DESCRIPTION OF THE ASSIGNMENT

Global objective

The expected position by year 5 is that:

- There is a robust and precautionary harvest strategy in place in Vietnam which is responsive to the state of the stock, reflects the requirements of WCPFC Conventions and is designed to achieve stock management objectives set as target and limit reference points;
- There are well defined and effective harvest control rules in place that are consistent with International harvest strategies and ensure that the exploitation rate is reduced as the limit reference points are approached, and provide a management mechanism to allow recovery of depleted stocks;
- There is a strategy in place for managing retained, bait species, bycatch, ETP species or habitats interactions in order to avoid the risk of serious irreversible harm from the fishery;

Specific objectives

The purpose of the TOR is to set out the requirements for MARD and DECAFIREP in relation to implementing a harvest strategy, in cooperation with the Tuna Management Council.

Requested Services

MARD and DECAFIREP will appoint two persons, a fisheries management specialist and a bycatch / ecosystems management specialist, and they will undertake the following tasks in response to international requirements to implement WCPFC harvest strategies at national level. The implemented actions will be provided by DECAFIRP and sub DECAFIREP.

Implementation and development of Proposed Strategy:

A. Fisheries management strategy

- Endorse the requirements as laid down in the relevant WCPFC CMMs (WCPFC CMM 2008-2012-01) for EEZ fisheries, including implementation of longline effort limits based on 2001-2004 effort levels, and alternatively setting output controls for bigeye and yellowfin tuna.
- Continually work with WCPFC in the evolution of CMM 2012-01, and linking this to Limit and Target reference points.

B. Ecosystems and bycatch strategy

- If certain sharks (silky, mako and thresher sharks) are proved to be found in the fishery and are retained in the LL and HL fisheries, implement a partial strategy consistent with CMM 2010-07. Implement full strategy to prevent their retention capture of oceanic whitetips (CMM 2011-03/CITES App 2) and scalloped, great and smooth hammerheads (CITES App 2);
- Introduce the Decree/Circular banning finning at sea
- Implement effective management mitigation measures for turtles which are consistent with national and international (WCPFC)
- Undertake trails in sea turtle mitigation if specific and unacceptable turtle bycatch levels are recorded
- Formulate other fishery specific ecosystem management actions formulated in response to the ecosystem risk assessments and ecosystem management mitigation measures.

C. Performance evaluation

- Undertake a review of all management actions – harvest control tools and ecosystem management actions

Review of and adoption of proposed management tools:

- Coordinate a workshop comprising managers and stakeholders, to identify an acceptable system of management controls and to identify the appropriate rules to be applied to each fishery
- Determine the responsibility framework established within which harvest control rules would be set and delegating appropriate responsibilities to the Provinces
- Establishing management measures for all Vietnamese tuna fisheries in accordance with 2012-01
- Establishing bycatch and ecosystem management measures compliant with WCPFC CMMs.

Among the best practice measures to be explored would include:

- Establishing a VDS system for longline vessels; or
- Evaluate the prospects for a species specific quota system to be applied across the various fleets operational in Vietnamese waters
- Assess options for limits to be set on ‘other commercial fisheries’ based on 2001-2004 or 2004 effort levels;
- Prepare National Plans of Action for sharks and turtles

These measures will require monitoring by DECAFIREP, and monitoring of the performance of sub DECAFIREP in implementing these rules and tools.

National Fisheries Management Expert

1. *Qualifications and skills*

- Post-doctoral degree in fisheries sciences, economics or community and social studies
- At least 10 years-experience in fisheries management planning and implementation within Vietnam, with a preference for experience gained in input and output controls.

2. *General professional experiences*

- Knowledge of Vietnamese fisheries
- Working knowledge of English

Ecosystems and bycatch Management Expert

3. *Qualifications and skills*

- Post-doctoral degree in fisheries sciences, economics or community and social studies
- At least 10 years-experience in fisheries management planning and implementation within Vietnam, with a preference for experience gained in input and output controls.

4. *General professional experiences*

- Knowledge of Vietnamese fisheries
- Working knowledge of English

EXPECTED MILESTONES AND REPORTING

The required outputs are set out in the table below:

MILESTONES	Timeline	REPORTING MEANS OF VERIFICATION
Vietnam's compliant with CMM 2015-01, or	Q3 2016	FAD Management Plan and Regulations confirming limits

any subsequent amendment		set for YFT and BET
Workshop on exploring options for input (effort) and output (quotas) for longline and handline fisheries based on TRPs and LRPs and CMM 2012-01 (years 2001-2004 levels)	Q2 2016	Workshop report and recommendations
Responsibility framework established within which harvest control rules would be set and delegating appropriate responsibilities to the Provinces	Q1 2016	Organogram showing delegated responsibilities and reporting functions
Vietnamese management measures introduced for all tuna fisheries in Vietnam	Q1 2017	Regulations and Decrees
Undertake and assess evidence that the measures established are effective	Q4 2017	Performance review report (as per management plan requirement)
Implement shark CMMs 2010-07 and CMM 2011-03/CITES App 2	Q1 2016	Decree endorses CMM on sharks (and billfish)
Implement a decree banning shark finning at sea	Q1 2016	Decree
Ensure that all shark species are covered under observer reporting (3.1)	Ongoing	Observer reports and estimate of shark catches by species
Implement effective management mitigation measures for turtles which are consistent with national and international (WCPFC) obligations	Ongoing	Report demonstrating that requirements for protection and rebuilding are in place - non retention and dehooking; and evidence that the fishery is unlikely to hinder recovery.
Where risks are identified, instigate trials to reduce the interactions	Q3 2016	Report on risks and sea trials
Fisher awareness	Q1 2016	Workshop attendance records
Evaluate the effectiveness of management measures for shark species identified in the	Q4 2016	Evaluation report of the effectiveness to the CMM, also included within Par 2 report to

CMMs and CITES		TCC
<i>Timeline priority</i>		
Immediate: Year 3 (2013-2014)	Medium: Year 3 (2015)	Before FIP completion: Year 3 (2016-2017)

DURATION

The assignment will be for 5 years ending at the end of 2017.

PLANNING

The work output comprises specialist management inputs from two assigned specialists under MARD, but linking to DECAFOREP and sub DECAFIREP.

BUDGET

Annual operational costs to be decided in consultation with VINATUNA and MARD. Proposed budget outlines are provided in the supporting excel sheet (Tab Budget FIP tracking June workshop.xls)

4.5.1 INSTITUTIONAL STRENGTHENING: GOVERNANCE, CONSULTATION AND DECISION MAKING

The Ministry of Agriculture and Resource Development, Department of Capture Fisheries & Resource Exploitation and Protection and the Tuna Fisheries Management Council

BACKGROUND

VINATUNA, supported by the WWF Asia Pacific Seafood Trade Network and national government agencies (MARD and DECAFIREP), industry bodies, VASEP, private sector exporters, are engaged a Fishery Improvement Project (FIP). This project will be carried out over a period of 5 years, to support the long term goal of Marine Stewardship Council certification of Pacific Ocean yellowfin tuna in the handline and longline fisheries. To this end, all stakeholders have endorsed a an Action Plan which, when implemented, will satisfy the MSC standards, but will also embrace activities required to support WCPFC management measures and are expected to underline the outcomes of the Vietnamese Tuna Management Plan. As part of this process, the FIP proposes to strengthen Vietnamese tuna fisheries management processes in accordance with international obligations and will identify institutional strengthening actions which are consistent with MSC principles 1 and 2. This includes a clear understanding of roles and responsibilities by the policy (MARD), management organisations (DECAFIREP) and supporting Tuna Fisheries Management Council.

DESCRIPTION OF THE ASSIGNMENT

Global objective

The expected position by year 5 is that:

- The management system includes consultation processes that regularly seek and accept relevant information, including local knowledge. The management system demonstrates consideration of information and explains how it is used or not used;
- The legal system in place is effective and consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles 1 and 2
- The consultation process provides opportunity and encouragement for all interested affected parties to be involved, and facilitates their effective engagement;
- Clear long and short term objectives are in place that guide decision making are in place, and are explicit within a Fishery Specific Management Plan;
- The national decision making processes responds to all issues identified in relevant research, monitoring, evaluation and consultation, in a transparent , timely and adaptive manner and take account of the wider implications of decisions;

- The national Decision-making processes uses the precautionary approach and are based on best available information. Information on fishery performance and management action is available on request, and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring evaluation and review activity;
- Explanations are provided for any actions taken and recommendations emerging from research, monitoring and evaluation and review activity;
- The management agencies (MARD and DECAFIREP) have in place mechanisms to evaluate all parts of the management system and is subject to internal and external review processes.

A. MARD

Specific objectives

The purpose of the TOR is to set out the requirements for MARD which undertakes responsibility for core governance issues – the implementation of law, creating an appropriate consultative process, the decision making processes, ensuring adherence to long term objectives and compliance with the WCPFC Convention.

Requested Services

As part of the requirement to strengthen governance functions there are some core activities that MARD needs to address, more specifically as a requirement as a Cooperating Commission Member (CCM) or WCPFC. If endorsed these core requirements will also be consistent with the outcomes required of the MSC, which recognizes the achievements made in good governance by countries.

Specific supporting activities have been identified as follows:

- Clarification of Vietnam's status within the convention, and extension of the convention area to the Vietnam
- Implementation of the new Fisheries Law containing the core elements which prioritise sustainable fisheries, and contain provisions for automatic implementation of international conventions including the WCPFC CMMs
- Implementation of the Advisory Board through the NTMP process
- Revise the a tuna fisheries strategy so that long term and short term objectives demonstrate effective implementation of sustainable fisheries management systems
- Implementation of a compatible harvest strategy in Vietnam waters (and compliance with CMMs), which would include longline, purse seine and other gears (including handline and gillnet), and would be consistent with Vietnam’s obligations developed through any future changes to 2012-01

- Establishing national harvest control rules (input and output restrictions) across the range of tuna fisheries which allow for limits to be implemented as reference points are approached. The rules and tools will need to take account of best practice examples to illustrate their appropriateness (e.g. overall capacity limits, quotas and closed seasons)
- Setting a monitoring system in place (consistent with CMM 2010-03) which evaluates the effectiveness of the management measures
- Review negative and positive incentives against the background of stock status for yellowfin and bigeye, as well as the impact on bycatch
- Finalize draft NTMP and add inclusion of the handline fishery to the NTMP
- Clarify decision making structure which is defined with the NTMP

EXPECTED MILESTONES AND REPORTING

The required outputs are set out in the table below:

MILESTONES	Timeline	REPORTING MEANS OF VERIFICATION
MARD/RIMF participating in SC WGs and WCPFC general session discussions on reference points	Ongoing	WCPFC Report of the Annual Regular Session (9/10th Regular Session) (http://www.int/meetings)
Vietnam becomes a WCPFC CM (Contracting Member)	Q4 2016	VNM as an acknowledged CCM as per the General Assembly
National legal system, effective and organised and effective cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2	Q3 2017	Fisheries Law
Tuna Fishery Management Council fully operational and all roles & responsibilities defined	Ongoing	TFMC roles and responsibilities enshrined in Law
Explicit reference would have to ensure that any change in fleet capacity takes account of the precautionary approach to fisheries management, and	Q1 2016	National strategy document

adherence to appropriate scientific advice, most specifically adhering to the LRPs set in management		
Evidence would need to show that the Precautionary Approach to Fishery Management (PAFM) is explicitly understood and enacted at both national and provincial level	Q1 2016	National strategy document
Review the impact of positive (fish quality drivers) and negative incentives	Q1 2016	Report on incentives
Policy focus on positive incentives to promote sustainable fishing in tuna fishing	Q1 2016	Revised national strategy
Management Plan definitions to include handline fisheries and all target species	Completed	NTMP
Management Plan finalised, complies with MSC principles and contains a consultation process and includes a monitoring & performance component	Q4 2016	NTMP
Evidence that the management plan is being applied and its effectiveness is assessed by a process of regular internal and external reviews	Q4 2017	Review of management plan OVIs
Introduce clear guidelines for taking management decisions, probably as a component of the management plan	Q2 2014	Minutes of decisions taken, including use of available information
Evidence is available that explanations to be provided for decisions taken, and should follow the basis of the management plan when introduced, which may include precautionary actions	Q 4 2016	Minutes of decisions taken, including use of available information
<i>Timeline priority</i>		
Immediate: Year 3 (2013-2014)	Medium: Year 3 (2015)	Before FIP completion: Year 3 (2016-2017)

DURATION

The assignment will be for 5 years ending at the end of 2017.

PLANNING

The work output comprises strengthening of law and compliance with management decision making consistent with WCPFC requirements, but also following principles advanced by the Marine Stewardship Council.

Annual operational costs to be decided in consultation with VINATUNA and MARD. Proposed budget outlines are provided in the supporting excel sheet **(Tab Budget/FIP tracking June workshop.xls)**

B. D-Fish

Specific objectives (DECAFIREP)

The purpose of the TOR is to set out the requirements for DECAFIREP which undertakes responsibility for fishery management issues – the implementation of the Tuna Management Plan, following guidance in policy from MARD and the TFMC, Compliance and monitoring performance of these core functions.

- Participate in decision making process in establishing rules and tools
- Implement national harvest control rules (input and output restrictions) across the range of tuna fisheries
- Implement shark CMMs 2010-07 and CMM 2011-03/CITES App 2
- Implement effective management mitigation measures for turtles which are consistent with national and international (WCPFC) obligations.

EXPECTED MILESTONES AND REPORTING

The required outputs are set out in the table below:

MILESTONES	Timeline	REPORTING MEANS OF VERIFICATION
Introduction Vietnamese management measures for all tuna fisheries in Vietnam (with sub DECAFIREP)	Q1 2016	Regulations and Decrees
Undertake and assess evidence that the measures established are effective (with sub DECAFIREP, MARD and VINATUNA)	Q4 2017	Performance review report (as per management plan requirement)

Implement retained species mitigation measures (other than those covered already by CMMs) where necessary (with sub DECAFIREP)	Q1 2017	Decreases
Evaluate the effectiveness of management mitigation measures for vulnerable retained and bait species (with sub DECAFIREP, MARD and VINATUNA)	Q4 2017	Performance Review of measures undertaken
Implement shark CMMs 2010-07 and CMM 2011-03/CITES App 2	Q1 2016	Decree endorses CMM on sharks (and billfish)
Implement a decree banning shark finning at sea	Q1 2016	Decree
Ensure that all shark species are covered under observer reporting above	Q1 2014	Observer reports and estimate of shark catches by species
Ongoing monitoring of turtle bycatch and life status in the handline and longline fisheries (Milestone 13 and 15)	Ongoing	Observer reports and estimate of turtles catches
Implement effective management mitigation measures for turtles which are consistent with national and international (WCPFC) obligations	Ongoing	Report demonstrating that requirements for protection and rebuilding are in place - non retention and dehooking; and evidence that the fishery is unlikely to hinder recovery.
Fisher awareness programme for shark and turtle interactions	Ongoing	Curriculum and fisher attendance records
Evaluate the effectiveness of management mitigation measures for sharks and turtles based on best practice	Q4 2016	Updated evaluation report on the measures applied and evidence that interactions are declining.
<i>Timeline priority</i>		
Immediate: Year 3 (2013-2014)	Medium: Year 3 (2015)	Before FIP completion: Year 3 (2016-2017)

DURATION

The assignment will be for 5 years ending at the end of 2017.

PLANNING

The work output comprises specialist management inputs from two assigned specialists under MARD, but linking to DECAFOREP and sub DECAFIREP.

BUDGET

Annual operational costs to be decided in consultation with VINATUNA and MARD. Broad budget outlines are provided in the supporting excel sheet (*Tab Budget/FIP tracking June workshop.xls*)

C. TUNA FISHERIES MANAGEMENT COUNCIL

Requested Services

As part of the requirement to strengthen consultation and decision making process, MARD are requested to create a Tuna Fishery Management Council, under the management and supervision of VINATUNA.

Specific objectives (TFMC)

The purpose of the TOR is to set out the requirements for the Tuna Fishery Management Council and lay out the basis for the Council's formation and decision making processes in respect to the management of tuna fisheries.

Requested Services

The functioning of TFMC will be strengthened, and its role supported by national law.

MARD/DECAFIREP must seek to use the TFMC structure as a support tool for consultation and decision making processes, and to undertake specific support processes which strengthen national and provincial tuna fisheries management.

MARD should ensure that the membership of the TFMC is inclusive and provides for participation of an appropriate number of organisations engaged in, or with experience in fishery in relation to which the fishery managers are overseeing." These should allow for input or membership from/of the national research organisations (RIMF and NIO), Provincial Government representatives, a MCS manager, VASEP, VINAFAIS, and WWF. The TFMC and VINATUNA will play a central role in helping MARD meet its objectives by acting as key liaison bodies between MARD and those with an interest in a particular fishery. They will also provide direct advice to MARD on fisheries-management policies and compliance with the activities set out in the Tuna Management Plan, and assist in the development of cost-efficient management arrangements.

The role of the TFMC should be defined in National Law and its decisions promulgated into management regulations. The TFMC's duties include:

- a) Support the preparation of the Management Plan including setting of management indicators (catch and effort, stock status, and economic indicators);
- b) Propose a management strategy and harvest rules and tools that ensure that the Plan can be implemented effectively;
- c) Promote the co-management of fisheries for artisanal tuna fisheries;
- d) Promote research, education, and training in relation to fisheries and the management of fisheries, to all stakeholder in district, province and national;
- e) Report on the outcomes of the plan, most specifically on how the management system responds to findings and relevant recommendations emerging from research.
- f) Monitoring and evaluation of the effectiveness of the management system;
- g) Determine the fee structure to pay for a research and development fund, the operating expenses for the Council, and an independent peer review;
- h) Evaluate the performance of the TMFC structure in line with the roles and responsibilities determined by MARD.

The core requirements of the TFMC would be:

- To ensure a coherent decision making process that results in measures and strategies to achieve fishery specific objectives, as laid down in the Tuna Fishery Management Plan (TFMP);
- That the decisions taken respond to all issues identified in relevant research, monitoring and evaluation and consultation in a transparent and timely manner, and take account of the wider implications of decisions;
- That the decision making process use the Precautionary Approach to Fisheries Management (PAFM) and the Ecosystem Approach to Fisheries Management (EAFM), based on best available information;
- That formal reporting systems are implemented to ensure stakeholder awareness of the decisions taken;
- Consultation processes that regularly seek to accept relevant information and encourages all interested and affected parties to participate.

VINATUNA support actions

VINATUNA organisational roles and responsibilities must include the following:

- Coordinating with MARD, DECAFIREP, VASEP, VINAFAIS, WWF and the supporting researchers and fishery managers on inputs from supporting organisations, as required;
- Providing advice on statutory decisions (management measures) following the deliberation of the Council;
- Monitoring the implementation of the Harvest strategy, rules and tools including by Provincial and District levels;
- Organising training and awareness programmes for DECAFIREP fishery managers and fishers;

- Organising stakeholder workshops to optimise the receipt of relevant information, to promote the harvest strategy and explain the decisions taken by the MARD and supported by the TMFC.

The required outputs:

- Precautionary Approach to Fisheries Management and Ecosystem Approach to Fisheries Management incorporated into National and Provincial Law, and prescribed as a component of the TFMP
- Draft Tuna Management Plan endorsed, but updated annually;

BUDGET

Annual operational costs to be decided in consultation with MARD. Proposed budget outlines are provided in the supporting excel sheet (*Tab Budget/FIP tracking June workshop.xls*)

EXPECTED MILESTONES AND REPORTING

The required outputs are set out in the table below:

MILESTONES	Timeline	REPORTING MEANS OF VERIFICATION
Tuna Fishery Management Council fully operational and all roles & responsibilities defined	Q4 2013	Decision making and consultation trees and Statutes of the Advisory Board and meeting minutes
<i>Timeline priority</i>		
Immediate: Year 3 (2013-2014)	Medium: Year 3 (2015)	Before FIP completion: Year 3 (2016-2017)

4.6 COMPLIANCE

JOINT TUNA COMPLIANCE WORKING GROUP

BACKGROUND

VINATUNA, supported by the WWF Asia Pacific Seafood Trade Network and national government agencies (MARD and DECAFIREP), industry bodies, VASEP, private sector exporters, are engaged a Fishery Improvement Project (FIP). This project will be carried out over a period of 5 years, to support the long term goal of Marine Stewardship Council certification of Pacific Ocean yellowfin tuna in the handline and longline fisheries. To this end, all stakeholders have endorsed a an Action Plan which, when implemented, will satisfy the MSC standards, but will also embrace activities required to support WCPFC management measures and are expected to underline the outcomes of the Vietnamese Tuna Management Plan. As part of this process, the FIP proposes to strengthen the fishery compliance system in order to ensure effective enforcement of the fishery management measures. This includes an effective system of compliance resources deployed and sanctions, all of which when introduced will ensure systematic compliance by fishers.

DESCRIPTION OF THE ASSIGNMENT

Global objective

The expected position by year 5 is that:

- A comprehensive monitoring, control and surveillance system has been implemented tin the fishery and has demonstrated a consistent ability to enforce the management measures set by DECAFIREP;
- Sanctions to deal with non-compliance exist, are consistently applied and demonstrably provide an effective deterrent;
- Evidence exists that fishers comply with the management system, including providing information of importance to the effective management of the fishery;
- There is no evidence of systematic non-compliance.

Specific objectives

The purpose of the TOR is to set out the requirements for the Joint Tuna Compliance Working Group and lay out the support requirements and activities required to implement an effective compliance and enforcement system.

Requested Services

The Joint Tuna Compliance Working Group (JTCWG) will be the implementing body to enforce the management measures set by DECAFIREP. An elected officer form the JTCWG will be a member of the TFMC.

The JTCWG's duties include:

1. Following decisions made by the DECAFIREP, and resulting Legal decisions put in place, the JTCWG should prepare, with the support of an international compliance

consultant, a risk assessment, to determine appropriate deployment strategies. This will form part of the National Plan of Action against IUU;

2. The systems of sanctions should be applied appropriate to the levels of risk identified;
3. Organisations and individuals involved in the compliance process should be well understood with a clear hierarchy of decision making and active coordination functioning between the various groups – Department of Fishery surveillance, the Navy and Border Police;
4. Evidence should be in place of deployment actions taken (collection centre checks, boardings at sea), and results (penalties and confiscations). A time series of these activities and results should illustrate a demonstrably effective deterrent;
5. Awareness workshops should be promoted in cooperation with all stakeholder groups to explain the reasons for the measures and drawing on information received from fishers to support the effective implementation of the enforcement system.
6. A continual internal review process of effectiveness of the Compliance system, through upgrading of the annual risk assessment exercise
7. An external review process on the effectiveness of the compliance system

WORKING GROUP MEMBER'S PROFILE

The working group should comprise all those organisations actively engaged in enforcement activities, notably Department of Fishery Surveillance, the Navy and Border Police.

The outputs that must be achieved as follows:

- Evidence that awareness groups are taking place and that these act as a supporting deterrent as well as a source of valuable information to the enforcement organisations by year 2
- Evidence that a risk assessment system is being applied by year 3 and ongoing
- Evidence that inspections are taking place and compliance is increasing by year 3
- Evidence that sanctions are acting as an effective deterrent by year 3

DURATION

Following the adoption of management measures by the TFMC

PLANNING

To be decided by DECAFIREP.

BUDGET

Annual operational costs to be decided in consultation with MARD/DECAFIREP. Proposed budget outlines are provided in the supporting excel sheet (*Tab Budget/FIP tracking June workshop.xls*)

EXPECTED MILESTONES AND REPORTING

The required outputs are set out in the table below:

MILESTONES	Timeline	REPORTING MEANS OF VERIFICATION
Risk assessment of enforcement actions following the introduction of P1 and P2 associated management measures	Q1 2016	Risk assessment Report
Review of sanctions for non compliance	Q1 2016	Sanction schedule
Effective evidence of systematic compliance and an effective system of sanctions	Q 4 2017	Review of infringements
<i>Timeline priority</i>		
Immediate: Year 3 (2013-2014)	Medium: Year 3 (2015)	Before FIP completion: Year 3 (2016-2017)

4.7 PROJECT MANAGEMENT

BACKGROUND

VINATUNA, supported by the WWF Asia Pacific Seafood Trade Network and national government agencies (MARD and DECAFIREP), industry bodies, VASEP, private sector exporters, are engaged a Fishery Improvement Project (FIP). This project will be carried out over a period of 5 years, to support the long term goal of Marine Stewardship Council certification of Pacific Ocean yellowfin tuna in the handline and longline fisheries. To this end, all stakeholders have endorsed a an Action Plan which, when implemented, will satisfy the MSC standards, but will also embrace activities required to support WCPFC management measures and are expected to underline the outcomes of the Vietnamese Tuna Management Plan. As part of this process, WWF will manage this project on behalf of the Asia Pacific Seafood Trade Network secure placement for a Regional Coordinator to supervise the implementation of the project and a National Project Manager, to monitor and support the application of the FIP. The Project will also require the support of an international consultant with specific strengths in Monitoring and Evaluation, facilitation of management processes as well as knowledge of MSC Fisheries Assessment Methodology.

A. WWF REGIONAL COORDINATOR

DESCRIPTION OF THE ASSIGNMENT

Global objective

The expected position by year 5 is that:

- The fishery is suitable for advancement to MSC Full assessment and has met with all the Assessment criteria that link to the outcomes and activities described in the FIP.

Specific objectives

The purpose of the TOR is to set out the requirements for the WWF Regional Coordinator who will be responsible for overall Project coordination, as well as liaising with stakeholders and funders (Industry Government and Donors).

Requested Services

The Coordinator will be appointed by the WWF Asia Pacific Seafood Trade Network and will be based in Vietnam. He/she will be responsible for the overall management of the Project and will act as the contact point for funding contributions, as well as liaison with the importers. The Project Coordinator will work with the National country manager and provide support as and when required.

The following duties are required:

- Coordinate the implementation of the FIP in partnership with the National Manager
- Access funding channels
- Develop, implement and track FIP Partner Agreements with private sector, including developing and monitoring communication protocols and managing of market recognition
- Managing the budget on behalf of WWF , and monitoring programme expenditure
- Liaise with stakeholders, especially the foreign partners and WWF Network
- Liaise with the International M&E consultant in issues relating to project out turns and contractual commitments
- Supporting the Project in a number of duties including preparing support input to reports for funders and the WWF Asia Pacific Seafood Trade Network
- Communicate FIP progress, developments, examples etc. to WWF and broader sustainable seafood community internationally, including managing communications around the FIP in the APSSTN website and other platforms and fora

Expert's profile

WWF Regional Coordinator

1. Qualifications and skills

- A higher degree in social sciences, fisheries science and/or business management
- Experience in Project management

2. General professional experiences

- Extensive knowledge of Vietnamese fisheries and / or Vietnamese rural development
- Knowledge of the WWF network
- Working knowledge of English

DURATION

Following the signature of the contract, the international consultant will be available for mobilisation within 10 working days. The exact date shall be agreed with WWF.

The assignment will be for 5 years with a view to establishing long term linkages thereafter based on performance.

REPORTING

- With the assistance of the National Project manager, prepare a quarterly report for the WWF Asia Pacific Seafood Trade Network which will include summary FIP outcomes and Budget expenditure;
- With the assistance of the National project Manager, prepare a regular newsletter on FIP progress for circulation for all stakeholders

B. WWF NATIONAL MANAGER

DESCRIPTION OF THE ASSIGNMENT

Global objective

The expected position by year 5 is that:

- The fishery is suitable for advancement to MSC Full assessment and has met with all the Assessment criteria that link to the outcomes and activities described in the FIP.

Specific objectives

The purpose of the TOR is to set out the requirements for the National Project Manager to support the implementation and monitoring of the Vietnam Tuna Fisheries Improvement Project.

Requested Services

The Project Manager will be expected to undertake a series of activities during his/her tenure. The national officer will report directly to WWF and the M&E consultant, and will be responsible for coordinating the FIP budget and tracking quarterly progress of the FIP

Requested Services

The following duties are required:

- Monitoring the progress of each Activity as defined in the Programme LogFrame, and the above defined reports as provided in the above TORs
- Communicating with VINATUNA, MARD, DECAFIREP, and other stakeholders, as required
- Participating in workshops, and the activities of the TFMC
- Reporting and liaising with Regional Coordinator and the International M&E consultant
- Mentoring to various stakeholders as required
- Supporting the Project in a number of duties including preparing support input to reports for funders and the WWF Asia Pacific Seafood Trade Network.

Expert's profile

WWF Project Manager

3. Qualifications and skills

- A degree in environmental science
- Experience in Project management
- Knowledge of the Marine Stewardship Council Fisheries Assessment methodology

4. General professional experiences

- Knowledge of Vietnamese fisheries and / or Vietnamese rural development
- Working knowledge of English and Vietnamese

DURATION

Following the signature of the contract, the international consultant will be available for mobilisation within 10 working days. The exact date shall be agreed with WWF.

The assignment will be for 5 years with a view to establishing long term linkages thereafter based on performance.

REPORTING

- Updating the WWF FIP Tracking document
- Collating FIP milestone outturns and proving these to the M&E consultant
- Preparing a quarterly report
- With the assistance of the National project Manager, preparing a regular newsletter on FIP progress for circulation for all stakeholders

C. INTERNATIONAL M&E CONSULTANT

DESCRIPTION OF THE ASSIGNMENT

Global objective

The expected position by year 5 is that:

- The fishery has in place mechanisms to evaluate all parts of the management system and is subject to regular internal and external review;
- The fishery is suitable for advancement to MSC Full assessment and has met with all the Assessment criteria that link to the outcomes and activities described in the FIP;

Specific objectives

The purpose of the TOR is to set out the requirements for an International MSC/FIP specialist to monitor activities and outcomes for the Vietnamese Tuna FIP.

Requested Services

The International consultant will be deployed annually and will review outcomes, with the support of the WWF country manager. The consultant will report directly to WWF Asia Pacific Seafood Trade Network and VIETTUNA.

The following duties are required:

- Create management templates that support the monitoring of the activities described in the FIP;
- Participate in workshops to recommend changes to FIP actions;
- Assist in redrafting Terms of Reference (TORs) for FIP activities, as required;
- Rescore the fishery against the MSC standard and update the FIP action plan accordingly.

Expert's profile

International consultant

5. Qualifications and skills

- Post-doctoral degree in fisheries sciences, economics or community and social studies
- At least 10 years' experience in Programme Planning
- An intricate knowledge of the Marine Stewardship Council Fisheries Assessment methodology
- Experience in Institutional Strengthening and Training Needs analysis in South and South East Asia

6. General professional experiences

- Knowledge of Vietnamese fisheries;
- Knowledge of WCPO tuna fisheries management

DURATION

Following the signature of the contract, the international consultant will be available for mobilisation within 10 working days. The exact date shall be agreed with WWF and VINATUNA.

The assignment will be for 5 years with a view to establishing long term linkages thereafter based on performance.

REPORTING

1. Update Terms of Reference Based on the Revised Logframe
2. Revise FIP budget in coordination with WWF Vietnam on an ongoing basis
3. Review all FIP milestones
4. Assist with FIP deliverables
5. Rescore the fishery against the MSC standard and update the FIP action plan accordingly

The Coral Triangle in numbers

US\$ 1 Billion

Annual tuna trade from Indonesia, Papua New Guinea, Philippines, Solomon Islands, and Fiji

+120 Million

People directly dependent on the Coral Triangle's marine natural resources

6M+ Square KM

Total area of the Coral Triangle

37%

of known reef fish species

6 of 7

of the world's marine turtle species

76%

of known coral reef species on the planet

US\$ 810 Million

Annual regional trade in live reef food fish in Asia-Pacific



Why we are here.

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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