

**Fisheries Improvement Project for the Vietnamese Tuna handline Fisheries
Sector**

Action Plan Review

FINAL REPORT

By

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Glossary

Vietnamese Institutions Acronyms

DARD	Department of Agriculture and Resource Development
DECAFIREF	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
TFCC	Tuna Fisheries Consultation 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	United Nations Fish Stocks Agreement
UNFSA	Vessel Monitoring Scheme
VMS	

WCPFC

Western Central Pacific Fisheries
Commission

WCPO

Western Central Pacific Ocean

WPEA OFM

West Pacific East Asia Oceanic Fisheries
Management Project

MSC Acronyms

BMT

MSC FIP Benchmarking and Monitoring Tool
Ecosystem Approach to Fisheries
Management

EAFM

ETP

Endangered, Threatened and Protected

FIP

Fishery Improvement Project

MSC

Marine Stewardship Council

PSA

Productivity Sensitivity Analysis

RBF

Risk Based Framework

SICA

Scale Intensity Consequence Analysis

1. INTRODUCTION

The Vietnam Longline and Handline Tuna fisheries improvement project (FIP) Action Plan was finalized in November 2013. There have since been four progress reviews, with a revised review in December 2019. This document updates the Action Plan for 2020, taking account of developments between 2016 to 2019, based on results of the FIP review meeting held in Hanoi, 12 December 2019. Aside from any changes to the FIP structure, account is also taken of adjustments to the MSC Process Standard V 2.1. The 2015 Review also took account of changes to MSC Fisheries Assessment Methodology (FCR) (Version 2.1).

The major revision to the FIP is to change the FIP to one Unit of Assessment (UoA): The Handline (HL) Yellowfin tuna FIP, eliminating the longline fishery from the FIP. This is because almost all vessels historically using longline have converted to handline only.

On discussion some minor revisions have been made to the milestones, and milestones requiring specific LL related actions have been removed. This updated 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. The timeframe has been extended from 5 years to 8 years (2021). This takes into account demonstrably steady progress in the FIP¹ as well as the continued commitment from stakeholders and is consistent with the expected outcomes of WCPFC's deadline for an adopted harvest strategy for yellowfin tuna by 2021. Similarly, Vietnam's Tuna Management Plan proposes to implement this strategy, notwithstanding other commercial fisheries measures (Paras 50-51), as stipulated in CMM 2018-01, or changes to the WCPFC tropical tuna measure proposed for 2021 onwards. The project logframe has also been adjusted to reflect any amendments. The document also includes the use of MSCs Benchmark Tracking Tool. This will provide the support required for completing the reporting template in Fisheries Progress.org (<https://fisheryprogress.org/fip-profile/vietnam-yellowfin-tuna-longlinehandline>).

This document identifies the activities and range of activities required in the Action Plan for the fishery to meet the Marine Stewardship Council (MSC) standard. The most important feature to this is that all target species, in this case Yellowfin tuna only (Principle 1), must focus on the stock status and management activities throughout the range of the stock, whilst ecosystem interactions (for secondary species², and Endangered, Threatened, and Protected (ETP) species) relate specifically to the fishery under assessment. P3 components relate to the application of the Vietnamese Governance System, and the application of measures that are compatible with WCPFC.

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 December 2019.

¹ Also considering that funding levels for the FIP since launch have been limited – generally around 50% of original indicative budget as per original Action Plan

² There are no primary species as there are no supporting stock assessments for these species.

The Action Plan changes to timelines. The results generated from the Action Plan are reviewed by the FIP Coordination Unit – consisting of the WWF FIP Manager (Thuy Nguyen Dieu)³, the International FIP Advisor (Keith Symington⁴) and VINATUNA (Tran Van Hao⁵) - and the WWF FIP Assessor (Richard Banks, Poseidon)⁶.

It is anticipated that the FIP Co-ordination unit will facilitate the adoption of the FIP Action Plan, supported by industry partners. The overarching management issues fall to the Ministry of Agriculture and Rural 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 DFISH. Research functions are supported by the Secretariat of the Pacific Community (SPC), but with a critical role to be played by Research Institute for Marine Fisheries (RIMF) as well as FIP industry partners supporting field research and/or data collection activities. 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 are subject to periodic internal and external reviews to ensure they will meet the MSC standard.

The outcome of the review is that some components of P1 are likely to pass without condition (Yellowfin stock status (1.1.1) and Stock Assessment (1.2.4), some components of P1 would pass with a condition (Information (1.2.3) and some should fail (Harvest Strategy and Harvest Control Rules). It should be noted however, that one tuna assessment (<https://cert.msc.org/FileLoader/FileLinkDownload.aspx/GetFile?encryptedKey=vsz1gSrdBjWcAFY0fp3knp9scriQ/mOm/BhISvzXyRTjO4ZcxEdxE1yrpccDa2j4>) has passed without the application of a Harvest Strategy and Harvest Control Rules, but that the consultant and WWF International does not agree with the outcome of this assessment scoring.

For P2, the primary species (P2.1) is bigeye tuna, which now has a favourable stock status, but aspects of the fishery specific strategy have yet to be developed within Vietnam; for secondary species, risks to escolar, sailfish and blue shark need to be assessed under a SAFE review (Zou et al), as well as baitfish (squid and flying fish) to be assessed as an extension to the RIMF Risk Assessment work.

ETP issues (P2.3) have been developed further with the adoption of national measures protecting sea turtles and sharks (Decree 26). The list of species includes two of the three shark species caught by handline: *Sphyrna lewini* (scalloped hammerhead) and *Alopias pelagicus* (Pelagic thresher shark) and not *Prionace glauca* (Blue shark). Shark finning would therefore be an issue if blue sharks are caught and the fins landed detached. The simplest management mitigation strategy would be to add blue sharks (A Near Threatened species under IUCN) to the list of protected species as an appropriate mitigation strategy.

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Information systems require a continued strengthening of observer coverage to 20%. MSC specifies that ‘good external validation’ should be understood to indicate a validation level equivalent to a nominal observer coverage of 20% of effort’ (MSC Fisheries Standard V-01 GSA2.4).

P2 is now highly likely to pass, but with a condition on the strengthening of information on secondary and ET species. There are no associated habitat issues (P 2.4), but the impact of the fishery on ecosystems should be identified (P 2.5), and this has been recommended for a specific activity for South China Sea under the WPEA programme.

Governance issues have been strengthened, following Vietnam’s response to the EU Yellow Card (Directive 45). This includes incorporation of the precautionary and ecosystem approaches to fisheries management into the Legal framework (3.1.1) and fishery management (3.1.3), along fishery specific objectives (3.2.1). The Compliance system (3.2.3) has also been strengthened with a revision to sanctions (Directive 42) and the application of control measures. Inspections on handline vessels are set at 20% (Decree 26) for vessels between 15 to 24 meters, but are also said to include a risk based component. Evidence of systematic compliance with logbook reporting and bycatch reporting and prohibitions would need to be provided for the fishery to demonstrate systematic compliance. Further evidence has been requested for to demonstrate a system of internal and occasional external performance review.

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

Table 1: Summary of pre-assessment scoring for handline

Principle	Component	PI number	Performance Indicator	Likely scoring level	2019
1	Outcome	1.1.1	Stock status – yellowfin tuna	Pass	Pass
	Management	1.2.1	Harvest Strategy – yellowfin tuna	Fail	Fail
		1.2.2	Harvest control rules and tools – yellowfin tuna	Fail	Fail
		1.2.3	Information and monitoring – yellowfin tuna	Pass with condition	Pass with condition
		1.2.4	Assessment of stock status - yellowfin tuna	Pass	Pass
2	Primary species	2.1.1	Outcome - handline	Fail	Pass
		2.1.2	Management - handline	Fail	Pass with condition
		2.1.3	Information – handline	Fail	Pass with condition
	Secondary	2.2.1	Outcome - handline	Fail	Pass with condition
		2.2.2	Management - handline	Fail	Pass with Condition
		2.2.3	Information – handline	Fail	Pass with condition
	ETP species	2.3.1	Outcome - handline	Fail	Pass
			Management - handline	Fail	Pass
		2.3.3	Information – handline	Fail	Pass
	Habitats	2.4.1	Outcome - handline	Pass	Pass

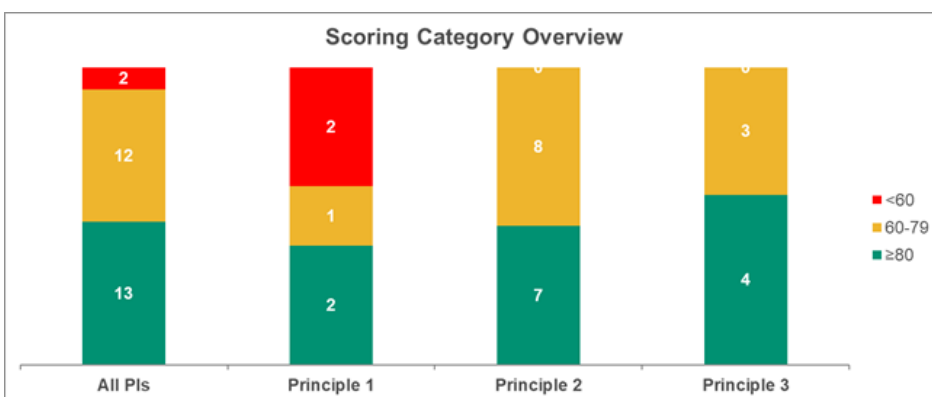
	Ecosystem	2.4.2	Management - handline	Pass	Pass
		2.4.3	Information – handline	Pass with condition	Pass
		2.5.1	Outcome - handline	Fail	Requires collective review of South China Sea under WPEA
		2.5.2	Management - handline	Fail	Requires collective review of South China Sea under WPEA
		2.5.3	Information – handline	Pass with condition	Requires collective review of South China Sea under WPEA
3	Governance and Policy	3.1.1	Legal and customary framework	Pass with condition	Pass
		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
		3.2.2	Decision making processes – handline	Fail	Pass
		3.2.3	Compliance and enforcement – handline	Fail	Pass with condition
		3.2.4	Management performance evaluation	Pass with condition	Pass with condition

A summary of FIMP-BMT⁷ index sheet is shown in Tables 2 to 4.

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

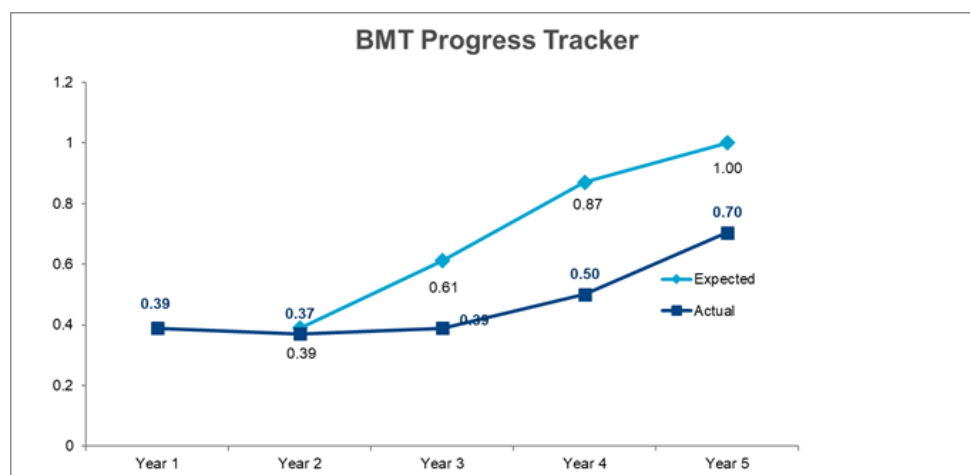
Scoring Level	All PIs	Principle 1 Number of PIs	Principle 2 Number of PIs	Principle 3 Number of PIs
≥80	13	2	7	4
60-79	12	1	8	3
<60	2	2	0	0
BMT Index	0.70	0.50	0.73	0.79

Figure 1: MSC BMT scoring overview Vietnam tuna handline fishery



⁷ 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.

Figure 2: BMT Progress tracker



Note – Year 5 = Year 6 (2014-2019) (6 years)

Table: 3 BMT Report sheet

Principle	Component	Performance Indicator	Expected Scoring Category: Year 5	Actual Scoring Year 7	Status
1	Outcome	1.1.1 Stock status	≥80	≥80	On Target
		1.1.2 Reference points	—	—	
	Management	1.2.1 Harvest Strategy	≥80	<60	Behind
		1.2.2 Harvest control rules and tools	≥80	<60	Behind
		1.2.3 Information and monitoring	≥80	60-79	Behind
		1.2.4 Assessment of stock status	≥80	≥80	On Target
2	Primary species	2.1.1 Outcome	≥80	≥80	On Target
		2.1.2 Management	≥80	60-79	Behind
		2.1.3 Information	≥80	60-79	Behind
	Secondary species	2.2.1 Outcome	≥80	60-79	Behind
		2.2.2 Management	≥80	60-79	Behind
		2.2.3 Information	≥80	60-79	Behind
	ETP species	2.3.1 Outcome	≥80	≥80	On Target
		2.3.2 Management	≥80	≥80	On Target
		2.3.3 Information	≥80	≥80	On Target
	Habitats	2.4.1 Outcome	≥80	≥80	On Target
		2.4.2 Management	≥80	≥80	On Target
		2.4.3 Information	≥80	≥80	On Target
	Ecosystem	2.5.1 Outcome	≥80	60-79	Behind
		2.5.2 Management	≥80	60-79	Behind
		2.5.3 Information	≥80	60-79	Behind
3	Governance and Policy	3.1.1 Legal and customary framework	≥80	≥80	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	≥80	≥80	On Target
		3.2.3 Compliance and enforcement	≥80	60-79	Behind
		3.2.4 Management performance evaluation	≥80	60-79	Behind
Total number of PIs equal to or greater than 80			27	13	
Total number of PIs 60-79			0	12	
Total number of PIs less than 60			0	2	
Overall BMT Index			1.00	0.70	

2. THE ACTION PLAN

A summary logframe is provided in a separate attachment.

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 outcomes 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. Ensuring that a performance review structure is applied to the key fishery management organisations

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-US. The Fisheries Improvement activities were agreed at a workshop held in June, 2013 and progress reviewed for those milestones in Q4 2019. The timelines have been adjusted to reflect outcomes to be achieved by Q4 2019.

The FIP consultant notes that milestone achievement against previously agreed timelines has **improved significantly**. The success has to a large extent been facilitated following pressure from the European Union and ensuing legal and policy reforms⁸. However, it should also be noted that

⁸ Including 2018 revised Fisheries Law, Directive 45 (IUU Action Plan), Decree 26 (Implementation Guidelines), Decree 42 (Sanctions) and Circular 21 (Logbooks)

WWF and VINATUNA played a significant role in supporting the GoV response to the EU and ensuring the FIP requirements were integrated into the management and policy changes made. These include:

1. Vietnam's willingness to develop a harvest strategy that is compatible with that developed by WCPFC
2. Gradual strengthening in the information systems – port sampling, Logbook returns and observer coverage
3. An improvement in the bigeye stock status
4. The categorization of all key shark species at national level as ETPs
5. The strengthening of Vietnam's fishery laws
6. The revision of the Tuna Management Plan incorporating measurable indicators
7. The adoption of the precautionary and ecosystem approach to fisheries management, as specified in the Law on Fisheries and in the Tuna Management Plan
8. The strengthening of the inspection regime and the adoption of new sanction system.

Outstanding issues to be resolved, include:

- Implement Limit and Target Reference points for yellowfin and bigeye tuna based on research undertaken by SPC, and supported by RIMF.
- The development of species specific quota limits for yellowfin and bigeye tuna as national measures
- A review of proposed limits for all fisheries catching more than >2000 MT, as part of the changes to WCPFC's tropical tuna measure
- Identify handline as a specific license category that is distinct from longline
- The strengthening of the logbook data collection system including full integration into SPC's TUFMAN 2
- A review of all fisheries specific secondary species caught
- Identification of the quantities of baitfish caught by the handline fishery as a percentage of total catch, and a Risk Assessment for these species
- A SAFE assessment for escolar (*Lepidocybium flavobrunnium*), sailfish (*I. platypterus*) and blue sharks (*Prionace glauca*)
- A review of fishery ecosystem impacts undertaken collectively for all WPEA countries
- The specific inclusion of a bycatch strategy into the national tuna management plan
- Evidence provided to demonstrate that fishers are systematically complying with the regulations including logbook reporting and following the law prohibiting the landing of sharks, including shark fins
- Evidence of the Vietnam fishery management organisations performance review system in place.

The progress of the actions completed by 2019 are as follows:

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

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

Blue = Completed

Green = Ongoing

Red = Not 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 other commercial fisheries (WCPFC CMM 2018-01, para 50/51) (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 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 2018-01 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 the handline fishery based on TRPs and LRPs and the WCPFC Tropical Tuna measure (Currently 2018-01)

Milestone 12: Establishing a framework within which harvest control rules would be set and delegating appropriate responsibilities for licensing and quota management 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 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 for at risk species defined in the Risk Based Framework (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 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

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 in support of wider SPC Pacific ecosystem work

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 cooperates or joins WCPFC

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

Outcome 3.3: Fishery specific management objectives applied

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 3.4: 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 3.5 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 3.6: 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

Outcome 3.7: Performance review

Milestone 53: Internal and external review procedures in place

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

PI 1.1.1 is likely to achieve higher than a pass score for yellowfin,

A new WCPFC stock assessment for yellowfin, were published in 2017 (Tremblay-Boyeretal.2017)⁹ and bigeye (McKechnie, 2017¹⁰). Yellowfin tuna remains above BMSY. The yellowfin assessment shows that the stock is **highly likely to be above the PRI** (MSC V2, P1.1.1SG 80 a). The problem issues are that: Reportedly large increases in catches of small yellowfin tuna have been occurring in WCPFC Region 3 (Indonesia, Philippines and Papua New Guinea) since 2012; and that the latest catches are close to or exceed MSY. Yellowfin is at SB_{CURR}/SB_{MSY} 0.75-1.13.

WCPFC bigeye tuna has recovered following a rebuilding strategy. In 2017, the median ratio of F_{recent}/F_{MSY} is estimated at 0.83(range: 0.61-1.32), indicating that overfishing is likely not occurring.

This means that for all Vietnamese fishing methods where bigeye features as a catch > 2% of the total – handline, bigeye tuna could be considered as a primary species. However, the stakeholders have opted not to define bigeye tuna as a target species due to a lack in demand for this species. Bigeye is maintained as a primary species.

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 associated milestones are:

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

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).

⁹ Tremblay-Boyer, L., McKechnie, S., Pilling G. and Hampton J. (2017). Stock assessment of yellowfin tuna in the western and central Pacific Ocean Rev 1 (26 July 2017). Available at <https://www.wcpfc.int/node/29519>

¹⁰ McKechnie, S., Pilling, G. and J. Hampton (2017). Stock assessment of bigeye tuna in the western and central Pacific Ocean Rev 1 (23 July 2017). Available at <https://www.wcpfc.int/node/29518>

Limit Reference points were set for all three species at the WCPFC General Session (WCPFC, 10) at $20\%SB_{recent, F=0}$. (WCPFC 10). Target Reference points are under development but yet not full adopted. PNA has been developing Target Reference Point Scenarios that take account of uncertainties in line with their MSC recommendation. WCPFC CMM 2014-06¹¹ has also sought to encourage the development of TRPs for yellowfin and bigeye tuna, but there are no timelines for their adoption.

WCPFC11 agreed to Conservation and Management Measures to develop and implement a harvest strategy approach for key fisheries and stocks in the WCPO. The objective of CMM 2014-06 is "To agree that the Commission shall develop and implement a harvest strategy approach for each of the key fisheries or stocks under the purview of the Commission according to the process set out in CMM 2014-06.

An updated workplan has been agreed annually by the Commission and this records the Harvest Strategy Outcomes. The latest version of the Workplan can be accessed here, copies of past Workplans are provided in the Key Documents table below.

Summary of progress towards implementing the harvest strategy elements for key WCPFC stocks and fisheries

	SKJ	SP-ALB	BET	YFT
	Tropical Purse Seine	Southern Long Line	Tropical Long	
Management Objectives	Noted	Noted	Noted	
Performance Indicators	Identified	Identified	Identified	
Reference Points	LRP Interim TRP	LRP Interim TRP	LRP	LRP
Harvest Control Rules	Candidate HCRs tested	Example HCRs		
Management Strategy Evaluation	Developed	Developing		
Monitoring Strategy	Developing			

(Dark green shading indicates elements for which substantial progress has been made, light green shading indicates elements for which work is currently underway and orange shading indicates elements for which work has not yet begun.)

It is noted that as an outcome of WCPFC 16, the timelines for the finalisation of the strategy has been delayed.

A harvest strategy exists for WCPFC tuna species in WCPFC CMM 2018-01¹². The strategy makes explicit reference to the PNA purse seine VDS scheme, effort controls for other purse seine fisheries and the implementation of limits for other commercial fisheries. If Vietnam wishes to pursue WCPFC membership, as well as MSC Certification, it will have to address the issue of compatible measures and the implementation of input or output controls on its commercial

¹¹ WCPFC CMM 2014-06. Available at <https://www.wcpfc.int/system/files/CMM%202014-06%20Conservation%20and%20Management%20Measures%20to%20develop%20and%20implement%20a%20harvest%20strategy%20approach%20for%20key%20fisheries%20and%20stocks%20in%20the%20WCPO.pdf>

¹² WCPFC CMM 2015-01. Available at <https://www.wcpfc.int/doc/cmm-2015-01/conservation-and-management-measure-bigeye-yellowfin-and-skipjack-tuna-western-and>

fisheries where catches exceed 2,000 metric tonnes (yellowfin, bigeye and skipjack) in any of Vietnam's commercial fisheries¹³. These controls will have to demonstrate that management measures are in place to implement actions, if the stock falls below the Limit Reference point, or approaches the Point of Recruitment Impairment (PRI). Vietnam's National Tuna Management Plan (NTMP, 2018) commits to the adoption of these reference points.

It is accepted that RIMF has the necessary stock assessment skills, following donor assisted training, to participate in these meetings. A three-country stock assessment workshop was held in Haiphong, Vietnam (WPEA, November, 2015).

Assigned stakeholders	WCPFC with MARD and RIMF participation
Priority	High
Status	Priority for implementation
Timeframe	Revised from 2017 to 2021
MSC Performance Indicator(s)	1.1.1 Stock status and 1.2.3 Stock Assessment.

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.

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.

WCPFC 2018-01 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, longline fisheries and other commercial 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,

Vietnam fishery managers, D-FISH (national) and scientists (RIMF) are participating at the SC, but also at any specific WG.

The Government of Vietnam has set a unilateral TRP of 19,900 mt (TMDP). Paras 50-51 of WCPFC require that other commercial fisheries set limits based on catches in reference years 2001-2004, or 2004. Vietnam's handline catch exceeds this level, with 15,677 MT and 1,004 of

¹³ Commercial fisheries are defined as national commercial fisheries as opposed to specific Provinces.

yellowfin and bigeye caught in 2015 (NTMP, 2018). Higher catches are also likely to have occurred in Indonesia and Philippines. It is suggested that Vietnam use the WPEA framework to explore limits that could be advanced in the amendment to the changes to the tropical tuna measure in 2020.

Assigned stakeholders	WCPFC with MARD and RIMF participation;
Priority	High
Status	Priority for implementation
Timeframe	Revised from 2017 to 2021
MSC Performance Indicator(s)	1.1.3 and 2.1.1 Target species and rebuilding (retained bigeye)

Outcome 1.2 Data collection and Information systems strengthened

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

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

Collection of catch and landings data for Vietnamese oceanic tuna fisheries is primarily undertaken at provincial level, with provincial fisheries organizations (Sub D-Fish) 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](#) and covers improved logbook recording, landings records and port sampling. These data are fed from Sub DARD to D-Fish, where they are entered and collated, then incorporated in mandatory reporting to WCPFC, including logbook entries into SPC's TUFMAN 2. Partial data was received by SPC for 2015, and data collection is expected to be improving (Peter Williams, SPC, pers comm. December 2019) but there is no confirmation of complete compilation. The national data collection system (VN-Fishbase) developed for the oceanic tuna fishery by FiCen is also operational. Reports have been requested from D-Fish to demonstrate that the TUFMAN system is operational.

The milestone has arguably achieved its objective, but as yet there is no evidence to suggest that the target of 75% has been achieved. Considerable progress has been made from no data collection to collection of data in each tuna fishery. Logbook coverage of the handline fishery is reported as reasonably strong in the seven main producing provinces, including Binh Dinh, Phu Yen and Khanh Hoa. Coverage of port sampling and landings is reasonable. Data are provided

to SPC. The data is included in the SPC stock assessments and is likely to meet the MSC scoring criteria of 'good information'.

Logbook training has been applied by D-Fish/VINTUNA and WWF. Industry companies support the LB programme and promote purchasing policies from those vessels working with the logbook training programme.

The vessel registry is now fully operational. A central database is 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 DARD and D-FISH.

Assigned stakeholders	WCPFC with MARD and RIMF participation;
Priority	High
Status	Ongoing and subject to continual improvement
Timeframe	2020
MSC Performance Indicator(s)	1.2.3 Target species information

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 handline, and would be consistent with Vietnam's obligations developed through any future changes to 2018-01.

The following Milestone is in place:

Milestone 9: Vietnam's compliant with CMM 2018-01, or any subsequent amendment

Clarification of Vietnam's management obligations to WCPFC (Activity 3.1.1) have been evaluated in a paper submitted by Poseidon on behalf of WWF to the FIP group. The paper concludes that irrespective of the issue of the South China Sea falling outside the Convention Area, if Vietnam is serious about pursuing membership of WCPFC, it must implement the CMMs, and most specifically, must formulate compatible management strategies consistent with those required of 'other commercial fisheries' catching > 2,000 mt of skipjack, yellowfin and bigeye tuna. It is also noteworthy that in order to achieved MSC status, irrespective of the Convention issues, Vietnam must should implement compatible measure as CMM 2018-01 description of other commercial fisheries

The assessor scores the current position for Harvest Strategy at < 60. This is because the 60-80 can only be attained if the harvest strategy is **likely** to work based on prior experience. Vietnam has yet to implement any strategy, hence cannot meet likely, and is not compliant with the current CMM.

Assigned stakeholders	WCPFC/MARD/D-Fish/sub D-Fish/DARD;
Priority	High
Status	Apply a harvest strategy and harvest control tools (licensing and quotas)
Timeframe	Revised from 2018 to 2021
MSC Performance Indicator(s)	1.2.1 Harvest strategy

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

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

This component falls to the explicit responsibility MARD and D-Fish to monitor the application of measures at sub DARD level. D-Fish 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 DARD to D-Fish to MARD.

The Confidential Part 2 Compliance report reportedly contains reference to ‘Non Applicable’ for these measures. D-Fish has indicated a willingness to comply with these standards, but this requires a higher level decision (MARD) to support this initiative.

Assigned stakeholders	WCPFC/MARD/D-Fish/sub D-Fish/DARDP;
Priority	High
Status	Changing status to implementing the measures and having these evaluated
Timeframe	Changed from 2018 to 2021
MSC Performance Indicator(s)	1.2.1 Harvest strategy

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).

The following milestones are in place, but have yet to be implemented:

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.

The Government of Vietnam has reviewed Its System of Management Tools for all Its tuna fisheries and chosen to adopt a system of national quotas for the three species: skipjack, yellowfin and bigeye tuna, which it will in turn allocate to each of the 28 fishery provinces.

Milestone 12 requires that the licensing system separates handline from longline

For this milestone to be advanced there needs to be evidence that actions are to be implemented.

Assigned stakeholders	MARD/D-Fish/sub D-Fish/fishers
Priority	High
Status	Priority for implementation
Timeframe	Changed from 2017 to 2021
MSC Performance Indicator(s)	1.2.1 Harvest Strategy and 1.2.2 Harvest control rules and tools

The following P1 summary actions would therefore need to be implemented:

1. The adoption of a WCPFC harvest strategy for yellowfin tuna by 2021
2. Management quota controls set for Vietnam tuna as part of ‘other commercial’ fisheries, that are responsive to the application of required changes in catch or effort that are set at WCPFC
3. Evidence that these controls are being effectively applied
3. Full application of logbook reporting across the Vietnam fishery provinces and submission to SPC through TUFMAN2

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 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

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

Accurate information has been collated on total removals from the fishery including for primary and secondary species. However, insufficient information remains on bait species. There are no ETP species caught in this fishery, nor oceanic whitetip or silky sharks, which are subject to management and a CMM. The status of baitfish stocks harvested for longline and handline fisheries is also unknown.

An observer programme has commenced and is aimed at collecting operational and by-catch/ETP species data. Current deployment is estimated to around 5% of the total trips (Keith Symington, pers comm, December 2019). However, MSC's standards document specifies 20% (MSC V 2.01 GSA2.4). Much of the early work has been through the support of WWF and FIP industry partners. The observer training has commenced and follows the SPC training modules. The early work is intended to guide industry-funded larger scale observer placement. Support, notably training of trainers, has been provided by WWF, and will be expanded under WPEA III. Under WPEA, in 2019, MARD drafted a plan outlining steps towards a national Observer Program.

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.

Assigned stakeholders	sub DECAFIREP/RIMF/Fishers/private sector/WWF/VINATUNA;
Priority	High
Status	Implemented but to be strengthened
Timeframe	2020
MSC Performance Indicator(s)	2.1.3, 2.2.3 and 2.3.3 Retained species (including bait), bycatch and ETP status

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.
The following milestones are in place.

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

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

Milestone 20b: Conduct a SAFE assessment for at risk species

Milestone 21: Workshop to determine management mitigation measures.

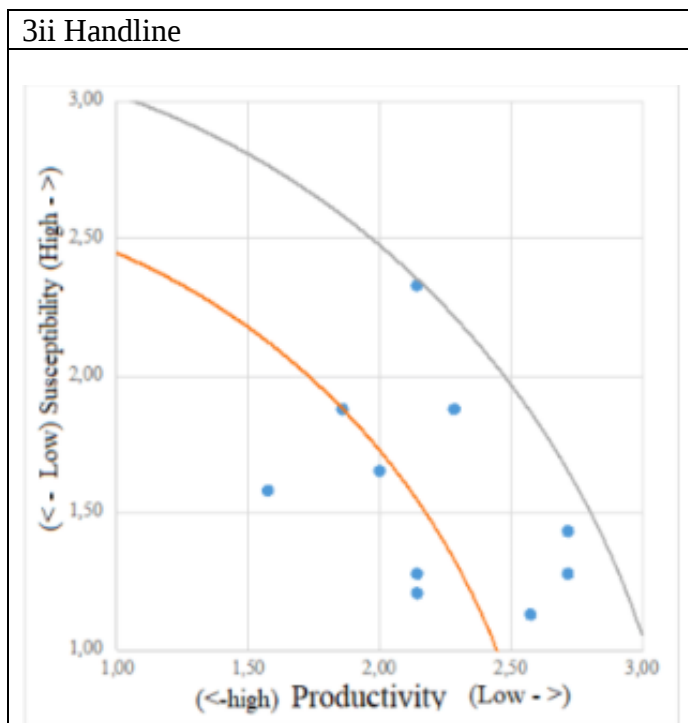
Milestone 22: Implement retained species mitigation measures (other than those covered already by CMMs) where necessary

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

Secondary species information has been reviewed for the handline fishery and subject to a risk assessment by RIMF (Huy et al, RIMF, 2018)). The Risk Based framework for handline (Figure 3), has identified 13 and 6 main species for longline and handline respectively. In respect to longline, 6 species are assessed as medium risk. These include Indo Pacific sailfish and escolar, as well as

a number species of shark, pelagic thresher, scalloped hammerhead and blue shark. Various shark species have been assessed at medium risk for handline fisheries. Among by-catch species of Handline fishery. Other non-shark species identified as medium risk include Escolar (*Lepidocybium flavobrunnium*) (69.12) and Indo Pacific sailfish (*I. platypterus*) (60.7) and Blue shark (74.6).

Figure 3 Risk assessment conducted for the handline fishery



nghe câu vàng cá ngừ đại dương năm 2016 và cập nhật năm 2017-2018

PI	SCIENTIFIC_NAME	COMMON_NAME	Productivity Scores [1-3]									Susceptibility Scores [1-3]					PSA scores (automatic)			
			Average age at maturity	Average max age	Fecundity	Average max size	Average size at Maturity	Reproductive strategy	Trophic level (fishbase)	Density dependence	Total Productivity (average)	Availability	Encounterability	Selectivity	Post-capture mortality	Total (multiplicative)	PSA Score	MSC Score	Risk Category Name	MSC score guidepost
1.1.1	<i>Thunnus albacares</i>	Yellowfin tuna	1	1	1	2	2	1	3		1,57	2	2	2	3	1,58	2,22	90,9	Low	>80
1.1.1	<i>Thunnus obesus</i>	Bigeye tuna	1	1	1	2	2	1	3		1,57	2	2	2	3	1,58	2,22	90,9	Low	>80
2.1.1	<i>Alopias pelagicus</i>	Pelagic thresher	2	3	3	2	3	3	3		2,71	1	2	2	3	1,28	3,00	67,5	Med	60-80
2.1.1	<i>Xiphias gladius</i>	Swordfish	2	2	1	2	2	1	3		1,86	2	2	3	3	1,88	2,64	80,1	Low	>80
2.1.1	<i>Prionace glauca</i>	Blue shark	2	2	3	3	2	3	3		2,57	1	1	2	3	1,13	2,81	74,6	Med	60-80
2.1.1	<i>Gempylus serpens</i>	Snake mackerel	3	3	1	2	2	1	3		2,14	1	2	2	3	1,28	2,49	84,4	Low	>80
2.1.1	<i>Makaira indica</i>	Black marlin	1	3	1	3	3	1	3		2,14	1	1	3	3	1,20	2,46	85,37	Low	>80
2.1.1	<i>Acanthocybium solandri</i>	Wahoo	1	1	1	2	2	1	3		1,57	2	2	2	3	1,58	2,22	90,85	Low	>80
2.1.1	<i>Coryphaena hippurus</i>	Common dolphinfish	1	1	1	2	2	1	3		1,57	2	2	2	3	1,58	2,22	90,85	Low	>80
2.1.1	<i>Makaira mazara</i>	Indo-Pacific blue marlin	1	3	1	3	2	1	3		2,00	1	3	3	3	1,65	2,59	81,52	Low	>80
2.1.1	<i>Lepidocybium flavobrunneum</i>	Escolar	3	3	1	2	3	1	3		2,29	2	2	3	3	1,88	2,96	69,12	Med	60-80
2.1.1	<i>Istiophorus platypterus</i>	Indo-Pacific sailfish	3	2	1	3	2	1	3		2,14	2	3	3	3	2,33	3,16	60,70	Med	60-80
2.1.1	<i>Sphyrna lewini</i>	Scalloped hammerhead	2	3	3	3	2	3	3		2,71	1	2	3	3	1,43	3,07	64,77	Med	60-80

The risk assessments have not been undertaken for baitfish (flying fish and squid). It is recommended that RIMF assesses these medium risk species using the SAFE methodology (Zhou et al¹⁴). The SAFE methodology allows for a more quantitative assessment of individual species risk. For example, using SAFE in the Australian Eastern Tuna and Billfish fishery identified these species of shark as precautionary high risk.

Assigned stakeholders	RIMF, DECAFIREP/sub DECAFIREP/fishers & processors
Priority	High
Status	Implemented as a priority in 2017
Timeframe	Changed from 2017 to 2020
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.

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 HL fishery, 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).

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

¹⁴ <https://www.environment.gov.au/system/files/pages/0c373548-1124-4e99-bda8-5f2bb7e99362/files/sbt-attachmentd-safe.pdf>

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

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 an educational programme for fishers aimed at identifying shark species and adopting the management controls set by the Vietnamese Government.

The Risk Assessment would suggest that shark species are especially vulnerable. However, Vietnam has now defines most key shark species as protected with a prohibition on landings. These do not include blue sharks, but other key shark species (Oceanic white tip and silky sharks, mobular rays. Thresher sharks and mobular and manta rays (Appendix II Article 7, Decree 26).

A SAFE Assessment has been recommended for Blue Shark. If assessed as vulnerable, it is recommended that this species be added to the list of shark species in Appendix II. However, if not, Blue sharks would need to be landed with fins attached.

Circular 21 requires all catches of shark species to be recorded. The SPC logbook is applied as an added requirement for all fishers and includes reference to shark (and turtle) interactions (Evidence to be provided from Mdm Dung).

The assessment of the effectiveness of this measure would need to be evaluated under Compliance, but the law deals with the issue of a shark management mitigation strategy along with the prohibition on finning.

Assigned stakeholders	DECAFIREP/sub DECFIREP/fishers/WWF/VINATUNA
Priority	High
Status	Implemented in 2019
Timeframe	Completed
MSC Performance Indicator(s)	2.1.2, 2.2.2 ETP and secondary (shark) management

Outcome 2.3 Turtle management strengthened

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

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. Once incorporated, this is likely to achieve a pass.

Milestone 30: Fisher awareness programme

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

IUCN/DECAP has prepared a Marine Turtles Action Plan 2015-2020, to be approved by MARD by 2016. Measures are in place to protect sea turtles. Much of the focus for this was to reduce catches in the longline fishery, which has witnessed a significant decline, and now removed from the FIP. Handline vessels use Drop hooks which are deeper than normal swimming level of turtles (deeper 100m) (Ha et al, 2018). Hence there are only limited interactions between the handline fishery and turtles.

Since 2011 WWF and industry partners (particularly Sea Delight) have supported the introduction of Circle Hooks (C-hooks) in the yellowfin fleet including in handline vessels as a means to reduce interactions with sea turtles. The C-hook program has steadily expanded since the launch of the FIP in 2014, linked with ETP awareness activities led by VINATUNA. With support from FIP industry partners, WWF and VINATUNA have implemented C-hook distribution and at-sea monitoring of effectiveness (i.e. comparing C-hook versus traditional “J” hooks for impacts on sea turtles, sharks and target catch) in 2017 and in 2019. Both projects demonstrated the effectiveness of C-hooks in reducing interactions with sea turtles, compared to traditional hooks, while not negatively impacting target catch. A 2018 review by RIMF assessing the impacts of the yellowfin tuna fishery on ETP species (based on summary data from FIP/WWF and RIMF-led at-sea Observer Program) likewise concluded that C-hooks significantly reduce sea turtle encounters, including in handline (where encounters are less common than in longline but not rare)¹⁵. No significant difference has been documented between C-hooks and J hooks in terms of catch rates of sharks. WWF, VINATUNA and industry partners plan to continue the C-hook expansion program, as well as ETP awareness and bycatch Best Practices training. While precise data is not available it is estimated that around 30-50% of the handline fleet are using C-hooks, with this figure expected to continue to grow as further outreach and field activities are implemented.

WWF has also undertaken a series of awareness workshops with fishers to discourage any prospective interaction with turtles.

Assigned stakeholders	MARD/WWF/VINATUNA/D-Fish/sub D-Fish/DARD; WWF
Priority	High
Status	Outcome achieved
Timeframe	Completed
MSC Performance Indicator(s)	2.1.3 ETP status

¹⁵ Vu Viet Ha, Nguyen Van Giang, Nguyen Sy Doan, Dam Tuan Anh, Dao Thi Lien, Vu Thi Hau. Research Institute for Marine Fisheries, 2018. Impacts of Oceanic Tuna Fisheries on Sharks and Sea Turtles

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

Milestone 32a: Gear losses incorporated into observer reporting

Milestone 32b: Include an assessment of habitat impacts as part of the SICA/PSA assessment
Habitat activity and impact has now been removed from the FIP because there are no habitat impacts from handline fisheries.

Assigned stakeholders	D-Fish/sub D-Fish/DARD/fishers
Priority	Medium
Status	Undertaking a new activity and supported by WPEA 2
Timeframe	2017
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

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

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).

It is recommended that WPEA extends its activity to include ecosystem modeling in Vietnam, Indonesia and Philippines.

Assigned stakeholders	D-Fish / WPEA
Priority	Intermediate
Status	Requirement to implement as part of WPEA II
Timeframe	Changed from 2017 to 2021

MSC Performance Indicator(s)	2.5.1, 2.5.2, 2.5.3 Ecosystem status:
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The following P2 summary actions would therefore need to be implemented:

1. Revised risk assessment for secondary species, depending on new information provided
2. A SAFE assessment if any of these species are identified as Medium to High risk
3. Extension of the risk assessment to include baitfish species
4. Integrating ecosystem data collection and analysis as part of the WPEA programme.

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

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

Milestone 37: Vietnam cooperates or joins WCPFC

Vietnam has stated its relevance to implement WCPFC CMMs are presently treated in Vietnam (TMDP, 2018). 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. Whilst Vietnam's status as a CNM is linked to support to data collection, pursuit of full membership is likely to require CMM implementation.

Decision 78 requires Vietnam to ratify the participation in international and regional fisheries management agreements related to IUU fishing prevention: Agreement on migratory fish stocks (UNFSA), Agreement on port national measures (PSMA) and cooperate or join (if possible) with regional fisheries management organizations: CCAMLR, WCPFC, IWC, IOTC, ICCAT.

The Law on Fisheries 2018 now includes specific reference to both the precautionary and ecosystem approaches to fisheries management (Article 5.2):

Fisheries exploitations have to base on the fisheries stock biomass, protection, regeneration and development of the fisheries resources, not to deplete the fisheries resources or impact to the biodiversity; precautionary approach, ecosystem-based and scientific indicator-based fisheries management to ensure the sustainable development.

Assigned stakeholders	WCPFC/MARD
Priority	High
Status	Developing existing activity

Timeframe	Completed
MSC Performance Indicator(s)	3.1.1 Legal and customary framework

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

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)

Vietnam has introduced a number of core principles into its legislation and set up specific actions related to fisheries management in the Tuna Management Plan.

Assigned stakeholders	MARD
Priority	High
Status	Expansion of existing activities
Timeframe	Completed
MSC Performance Indicator(s)	3.1.1 Legal and customary framework

Outcome 3.2: Roles and responsibilities and consultation processes fully implemented

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

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

The Tuna Fisheries Management Advisory Council (TFMAC), created by the Government of Vietnam, under the management of D-Fish, 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 includes: provincial government, scientists, VINATUNA, VINAFIS, VASEP, and other stakeholders such as WWF.

Evidence shows that VINATUNA and WWF have been specifically involved in the development of the NTMP, the Law on Fisheries and the formulation of Decrees.

Assigned stakeholders	D-Fish
Priority	High
Status	Ongoing
Timeframe	Implemented
MSC Performance Indicator(s)	3.1.2 Consultation, roles & responsibilities

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

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

MSC scoring requires strategic long-term objectives to guide decision making, consistent with MSC principles 1 and 2, and the precautionary approach. Article 5 The Law on Fisheries specifies the following core objectives:

- Fisheries exploitations have to be based on the fisheries stock biomass, protection, regeneration and development of the fisheries resources, not to deplete the fisheries resources or impact to the biodiversity; precautionary approach, ecosystem-based and scientific indicator-based fisheries management to ensure the sustainable development.
- Fishery activities shall adapt to climate change, actively prevent and control natural disasters, ensure safety for people and means of fishery activities; prevent and control aquatic epidemics, ensure food safety and environment safety.
- Organizations and individuals that enjoy benefits from catching and use of aquatic resources or are involved in sectors producing direct effects on aquatic resources shall have their interests and responsibilities ensured.
- Fishery activities shall meet requirements of international integration and comply with international treaties to which the Socialist Republic of Vietnam is a signatory.

The NTMP 2018 sets out the following objectives:

To ensure that the exploitation of the tuna resources that are found in and passthrough the Vietnamese waters is compatible with the sustainability of the stocks throughout their range;

To ensure that the harvest is taken in a way that maximises the long-term economic and social benefits received equitably by the Vietnamese people;

To contribute to the food security and national security at seas of Vietnam as well as improve the livelihoods and well-being for the local communities;

To meet regional and international responsibilities for tuna management. Keep on-going improvement of the tuna fisheries to meet full standards of the Marine Stewardship Council (MSC).

Evidence will need to show that these laws are applied by both national government and the provincial peoples committee.

Assigned stakeholders	VINATUNA and MARD
Priority	High
Status	Completed.
Timeframe	Evaluate the effectiveness – 2021
MSC Performance Indicator(s)	3.1.3 Short and long term objectives

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

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

The Tuna Management and Development Plan is now in place, with a timeline 2019-2021. The plan covers the three key offshore tuna species – skipjack, yellowfin and bigeye and specifies all fishing methods, including handline.

The Plan specifies fisheries planning, fisheries management including reference to establishing harvest strategies, institutional arrangements, the data collection system, stock assessment and scientific advice and stakeholder consultation, conservation and management measures and a commitment to supporting the Ecosystem Approach to fisheries management and the application of Monitoring, Control and Surveillance Systems. The Plan also specified a Review and Evaluation Process. The plan also includes a set of Monitoring and Evaluation activities targets and outputs. It does not list the application of bycatch management measures as one of these indicators, nor the application of risk assessment for P2 species – primary, secondary and ETP species. This means that the outcomes on EAFM are not **explicit** within the fishery and associated enhancement management system. For this reason, the assessor does not feel that the fisheries specific management strategy meets SG 80.

Assigned stakeholders	MARD/D-Fish
Priority	High
Status	Completed
Timeframe	Applied, but require an amendment to include the application, and evaluation of ecosystem related management actions.
MSC Performance Indicator(s)	3.2.1 Fishery specific objectives

Outcome 3.4: Decision making process strengthened

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

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.

A decision making process has been clarified as part of the TMP Guidelines have been set out to include due reference to information, stock assessment, conservation measures and controls and a harvest strategy policy. These are expected to 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. The TMP specifically makes reference to the application of the precautionary approach. However, it is not clear whether there is a process to provide *explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.*

Clarification is therefore needed on ensure that there is a process such that when decisions are made, there is a process of providing explanations to justify how the decisions are made. This might include for example responses given to the TFMAC.

Assigned stakeholders	MARD/D-FISH
Priority	High
Status	Implemented into the TMP, but requires clarification on justification of decisions taken.
Timeframe	Completed
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

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

Enforcement systems in Vietnam have been significantly strengthened in response to Vietnams response to the EU Yellow card (directive 45) and the action plan to prevent, reduce and eliminate illegal, unreported and unregulated fishing by 2025 by the prime minister. Government (Decision 78).

The sanction system has been considerably strengthened (Directive 42). This underpins the application of the logbook system along with the application of technical measures. Decree 26 specifies the application of logbook reporting for vessels > 24 metres and 15-24 metres. All vessels over 24 metres are subject to 10% inspection, whilst vessels between 15-24 metres are subject to 20% inspections. The Decree does not specify the application of risk based techniques but D-Fish has indicated that a risk based approach is being considered (Mdm Dung, D-Fish pers.comm. 2019).

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. The assessment is of the view that operators are generally thought to comply with the management system, but there is some evidence of partial compliance with logbook reporting and licensing. SG 80 c is not currently being met.

Assigned stakeholders	Department of Fishery surveillance/DECAFIREP/Sub DECAFIREP
Priority	High
Status	Partially complete. Need to demonstrate that the compliance system is being applied effectively and that handline fishers are compliant.
Timeframe	Amended from 2017 t 2021
MSC Performance Indicator(s)	3.2.3 Compliance and enforcement

Outcome 3.6: Research plan is in place

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

Milestone 51: A research plan prepared publically available

Milestone 52: Research results are disseminated to all interested parties

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).

Assigned stakeholders	RIMF
Priority	Intermediate
Status	Implemented
Timeframe	2017
MSC Performance Indicator(s)	3.2.5 Research Plan (Now no longer a scoring issue)

Outcome 3.7: Performance Review

Performance Review has been added to the FIP. This was partially overlooked with the FIP consultant emphasizing the functionality of the Management Plan. The preassessment also highlighted that there was a review structure in place.

Some key review processes include:

An internal 6 monthly review of Government department performance (Mdm Dung, pers comm. December 2019). This process works to evaluation using a Strengths, Weaknesses, Opportunities and Threats process.

- An external review by the Committee of Science and Technology on the application of national laws at provincial level;
- An internal review of scientific papers by RIMF peers; and
- An external review of Science programmes by the National Science Committee.

Documentary evidence is required to demonstrate that these reviews are undertaken. It is also noteworthy that the TMP includes a review process.

External experts may be hired to support the review process, but there is no indication as to whether this is regular or not. Given that the TMP is to be completed in 2021, it is recommended that the Plan is subject to external review.

Assigned stakeholders	MARD/DFISH/RIMF/PPC
Priority	Intermediate
Status	Implemented
Timeframe	To be confirmed

MSC Performance Indicator(s)	3.2.4 Performance Review
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