Terminal Evaluation Report

Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas

PIMs 4753

GEF Project ID: 5393

December 2019

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Terminal Evaluation:

PROJECT DETAILS:		
Project Name:	Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas	
Project ID:	UNDP PIMS ID: 4753	GEF Project ID: 5393
Region:	Asia and the Pacific	
Countries:	Indonesia, Philippines, Vietnam	
Focal Area:	International Waters (GEF-5)	
Strategic Programs:	**Objective I W-2**: Catalyse multistate cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change **Outcome 2.1**: Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles and policy/legal/institutional reforms into national/local plans **Indicator 2.1:** Implementation of national/local reforms; functioning of national inter-ministry committees **Outcome 2.2:** Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability **Indicator 2.2** Cooperation frameworks adopted and includes sustainable financing **Outcome 2.3**: Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation and port management and produce measureable results **Indicator 2.3**: Measurable results for reducing land-based pollution, habitat and sustainable fisheries from local demonstrations.	
Funding Source:	GEF Trust Fund	
Implementing Agency:	United Nations Development Programme	
Implementation Modality:	Inter-Governmental Organization Implementation (IGO)	
Executing Agencies:	Western and Central Pacific Fisheries Commission (WCPFC)	
FINANCIALS:		
Project Preparation Grant:	USD 60,000	
GEF Project Grant:	USD 2,233,578	
Co-financing Total:	USD 19,859,525	
GEF Agency Fees:	USD 201,022	
Total Cost:	USD 22,153,103	
PROJECT TIMELINE:		
Received by GEF:	08 April 2013	
Preparation Grant Approved:	02 May 2013	
Concept Approved:	01 June 2013	
Project Approved for Implementation:	12 May 2014	
State Date:	27 October 2014	
MTE		
Closing Date (Planned):	27 October 2017	
Closing Date Actual	03 December 2019	
TE	1 October - December 3, 2019	

Table of Contents

Executive Summary

Project Information Table			
Project Title:	Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas		
UNDP Project ID (PIMS #):	4753	**PIF Approval Date:**	01 Jun 2013
GEF Project ID (PMIS #):	5393	**CEO Endorsement Date:**	12 May 2014
Award ID:	77221	**Project Document (ProDoc) Signature Date (date project began):**	27 Oct 2014
Country(ies):	Indonesia, Philippines, Vietnam	**Date project manager hired:**	N/A
Region:	Asia and the Pacific	**Inception Workshop date:**	04-05 Nov 2014
Focal Area:	International Waters	**Midterm Review date:**	Mar-Apr 2017
		Terminal Review date:	Oct-Dec 2019
GEF-5 Strategic Programs:	IW-2, Outcome 2.1 IW-2, Outcome 2.2 IW-2, Outcome 2.3	**Planned closing date:**	27 Oct 2017
Trust Fund:	TF	**Actual closing date:**	December 3, 2019
Executing Agencies:	Western and Central Pacific Fisheries Commission (WCPFC)		
Other execution partners:	N/A		
Project Financing:	**at CEO endorsement (USD)**	**at Final (USD)***	
[1] GEF financing:**	2,233,578	2,224,357.36	
[2] UNDP contribution:	1,156,000	1,129,081.76	
[3] Government:	15,428,525	17,911,516.00	
[4] Other partners:	3,275,000	3,388,010.00	
[5] Total co-financing [2 + 3+ 4]*:	19,859,525	22,428,607.76	
PROJECT TOTAL COSTS [1 + 5]	**22,093,103**	**24,652,965.12**	

***Actual expenditures and co-financing contributions through 30 November 2019**

**Excludes PPG grant

Project Description

The Project was designed to remove the main barriers to sustainable fisheries' management of highly migratory tuna species in the East Asian Seas, primarily Indonesia, Philippines and Vietnam by strengthening national capacities and regional cooperation to implement fishery sector reforms that will sustain and conserve the highly migratory fish stocks in the West Pacific Ocean and East Asian Large Marine Ecosystems (LME) while also considering climatic variability and change. It was approved under the GEF-financed programme entitled "Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalysed Investments" (GEF Program ID 4936).

The Project is a follow-up to a successful first phase implemented from 2010 to 2012. That project realized notable improvements in data quality and compliance towards Conservation and Management Measures (CMMs) (Annexes) of the WCPFC for the three beneficiary countries.

The design of phase two (current project) followed up with gaps in data quality and CMM compliance and included an expanded scope, covering several new and cross-cutting aspects, including EAS subregional governance and cooperation mechanism, climate change, ecosystem approach to fisheries management (EAFM), ecolabeling and harvest strategies.

The Project's objective, "*to improve the management of highly migratory species in the entire West and Central Pacific (WCPF) Convention area by continuing to strengthen national capacities and international participation of Indonesia, Philippines and Vietnam in WCPF Commission activities*," was envisaged to be achieved through these three mutually supporting components:

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

COMPONENT 2: Implementation of policy, institutional and fishery management reforms

COMPONENT 3: Knowledge sharing on highly migratory fish stocks.

The Global environmental benefits were envisaged to be achieved as a result of the following:

- Improved monitoring of oceanic tuna fisheries in the EAS that are within the WCPF Convention area with a 40% increase in coverage by the end of the Project;
- Reduced bycatch of critically endangered species (e.g. sea turtles, sharks and seabirds) by enhanced sustainable management and harvesting of target species, thus improving the overall health and integrity of the marine ecosystem. By the end of the Project, catch of endangered, threatened or protected (ETP) species was expected to be reduced by 25%;
- Enhanced adaptive capacity to manage oceanic fisheries in the EAS under climate change conditions through integration of issues on emerging climate change impacts on oceanic fisheries into national and regional policy and institutional frameworks and the regional management regime;
- Progress towards certification of at least two oceanic tuna fisheries in the EAS by the end of the Project.

Purpose and Methodology

The purpose of the Terminal Evaluation TE was to gain an independent analysis of progress towards achieving the envisaged project objective and outcomes. The TE focused on documenting the main results and lessons, evaluating project design, using implementation and adaptive management, assessing results and gauging the likelihood that results achieved would be sustained after GEF funding ceased. The project performance was measured based on the indicators of the project results framework and relevant GEF tracking tools. The TE was an evidence-based assessment and relied on first person accounts and feedback from those involved in the project's design, implementation and supervision as well as review of available documents and findings obtained during a field mission (Annexes).

Outcome Evaluation Ratings Annexes

Achievement Summary Table		
Measure	**Rating**	**Achievement Description (TE)**
Project Strategy		The Project was designed under Objective 2 of the GEF-5 International Waters Strategy: Catalyse multistate cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change. The Project was a follow-up to a first phase, implemented from 2010 to 2012, that was successful in facilitating improvements in data quality and compliance towards Conservation and Management Measures (CMMs) of the WCPFC for the three beneficiary countries, including Indonesia and Philippines, which are both now full members of the Commission, and Vietnam, which remains a cooperating non-member. The second phase of the Project followed up gaps in data quality and CMM compliance and included an expanded scope, covering new and cross-cutting aspects, including subregional governance mechanism for EAS, climate change, ecosystem approach to fisheries management (EAFM), ecolabeling and harvest strategies. During MTE, many end targets were adjusted, enabling "contribution" to end results rather than definite levels. In this regard, the Project needed a strong exit strategy. This is now a requirement. The TE gave some suggestions for this (see recommendations). Cross-cutting aspects for including climate change, ecosystem approach to fisheries management (EAFM), ecolabeling and harvest strategies were thought to be realizable. The life-span of this Project was insufficient to properly address the original end result for Climate Change or the expected 25% reduction of bycatch generally through upgrading the observer programme. While the observer programme was robust and had been supported in Philippines, for the other two countries this area still posed a gap, especially for the new

		Zealand project that had been proposed as a follow-up. Finance was needed to fund the payment for a pilot demonstration of the observer programme in Indonesia and Vietnam.
Progress Towards Results	Objective Achievement: **Satisfactory (S)**	The objective had four targets as follows: • Improved monitoring of oceanic tuna fisheries in the EAS and coverage increased to 40%; • Reduction of the catch of ETP species (ambitious 25% changed by Project Board agreement); • Enhanced adaptive capacity to manage oceanic fisheries in the EAS under climate change conditions through revision of management framework; • Progress to possible certification of at least two oceanic tuna fisheries in the EAS through FIPs. Both Indonesia and Philippines are members and Vietnam is a cooperating non-member of the WCPFC. All three countries were obliged to comply with all relevant CMMs adopted by the Commission. TCC reviewed and assessed CCM's level of compliance in relation to the obligation of members and cooperating non-members of the WCPFC. One of the main objectives of the WPEA project was to "assist" the three countries to enhance their compliance, including data submission, which was achieved. Starting from more than 60 CMMs with noncompliance status in 2015, Indonesia improved its compliance level to 9 noncompliant and 2 capacity assistance needs (CAN) in 2018, a considerable change in the context of compliance with CMMs. In terms of scientitifc data improvements, Philippines was fully compliant with WCPFC CMMs. For Philippines, the Project fully satisfied or achieved the national level targets/expectations. The Philippine port sampling program or National Stock Assessment Program (NSAP) underwent expansion covering almost all the tuna landing sites throughout the country (Refer to 1.1.1 Overview of PHL port sampling activities—NSAP, Table 1 and Figure 3). The NSAP coverage was fully funded by the Philippine government through BFAR. PHL had 100% ROP coverage for its PS vessels operating outside PHL waters. Most of the expansion sites covered small- and medium-scale tuna fisheries. These initiatives/activities greatly helped in assisting PHL in its data compliance to various WCPFC CMMs. PHL also conducted workshops and consultancies to produce reports on climate change, EAFM, harvest strategy, risk assessment, tuna supply chain and certification/ecolabeling. As a member of the WCPFC, PHL was required to reduce catch of ETP species. There were WCPFC CMMs related to whale sharks, sea turtles, silky sharks and oceanic white-tip sharks, and PHL fully observed and implemented the provision of these CMMs and conducted investigations from its flagged vessels if there were alleged violations. PHL-flagged PS vessels were monitored by the Fisheries Observer Program with 100% observer coverage. BFAR plans and programs were required to incorporate mitigation measures or activities to reduce impacts of climate change in fisheries. PHL, through DA-BFAR, developed a Climate-Disaster Risk Reduction Manual of Operations that included actions plans and budget needs aligned to the country's objectives under the Department of Agriculture's mandates (the Project funded workshop/s for this activity). PHL developed two consultancy reports related to supply chain and certification by Dr. Jose Ingles. SFFAII was supportive of this initiative (during the conduct of interviews). Prior workshops had been conducted related to tuna supply chain and certification conducted under this Project. An ongoing initiative had the PHL high seas pocket #1 (PS-HSP1) operation MSC certified *(through the GenTuna Corporation in collaboration with BFAR and HSP1 operators)*. Handline operators in Gen San were also interested in having an FIP for their tuna handline fisheries for EU and US markets. The certification process is an industry-driven initiative. When stakeholders were ready, the government was willing to assist through BFAR. The Project contributed to private sector awareness of the need for data and monitoring, and greater levels of trust to share data and services for collecting data were reported as a result. Many CMMs were not applicable to Vietnam's EEZ. While Vietnam had an obligation mainly on data provision and reporting issues of WCPFC, it provided its Annual Report—Parts 1 & 2. According to the Compliance Monitoring Report (CMR) of WCPFC, Vietnam

		almost complied with all CMM requirements. There were increases on coverage of port sampling from the first phase to the second phase. Six provinces were expanded more tuna data collection in VNM. In addition, there was no legislation on port sampling following WCPFC protocol. After the Project was completed, a circular for port sampling was issued to legalize national fisheries data collection program. All aspects, such as climate change, EAFM, certification, harvest strategies, etc. were documented in the project implementation. However, there were still gaps in terms of practical management perspective, e.g. no harvest strategy framework was developed. Nevertheless, this concept was integrated into new Fisheries Law of VNM and could be considered for further development. Vietnam was not elected as a full member of the WCPFC as a result of this Project. While this was highlighted as an expected outcome of the Project, a clear pathway was absent in the original theory of change for bridging, such as regional policy goals and the interest and drivers for regional governance. By demonstrating its learning and compliance, the Project nonetheless "readied" Vietnam for an invitation to the commission. The policy advocacy work might have been more prominent in the theory of change as a central end of the Project target (dissemination of the final results and this terminal evaluation report to the political leaders in consideration of Vietnam's "readiness" to join the convention as a full member). Indonesia's baseline from the previous conditions has a significant improvement for data collection in terms of coverage. The Project also supported sustained participation in the international forums The compliance level of the Indonesia register reported improvements. These are verified by the SPC in annually recorded data.
	Outcome 1.1 Achievement: **Satisfactory (S)**	**Improved regional mechanisms for monitoring and assessment of highly migratory fish stocks and Illegal, Unreported and Unregulated (IUU) fishing in the POWP LME and the EAS LMEs** In general, there has been satisfactory achievement for the national level results under Outcome 1.1. Monitoring has improved in each of the three beneficiary countries. There are significant advances in the legal frameworks and implementation of vessel monitoring systems (VMS). Philippines: As a full member of the WCPFC, Philippines was required to reduce catch of the ETP species. There were WCPFC CMMs related to whale sharks, sea turtles, silky sharks and oceanic white-tip sharks. PHL fully observed and implemented the provision of these CMMs and conducted investigations if there were alleged violations from its flagged vessels. For PHL-flagged PS vessels, these were monitored by the Fisheries Observer Program with 100% observer coverage. PHL conducted/participated in the consultative forum (January 2019) conducted under this Project on IUF, with the participation of three countries with UNDP, SEAFDEC, PEMSEA and UNDP. The country also participated in a three-country workshop with Dr. Graham Pilling on subregional harvest strategy. While the application of VMS to combat IUU fishing had been implemented before this Project's start in Philippines in all waters where the Philippine tuna vessels were operating, the update on VMS technology was continued. The full implementation of the Fisheries Administrative Order 260 (FAO 260) on the Vessel Monitoring Measure (VMM) was expected to be in place before the end of 2019 through the Integrated Marine Environment Monitoring System (IMEMS) Project funded by the Philippine government through BFAR. Vietnam: Vietnam reported learning about the cross-cutting issues but noted that while subregional issues have been discussed through three country workshops, a formal subregional cooperation mechanism and plan for reduction of bycatch (observer pilot were not established. The level of understanding on the need and shape of subregional cooperation mechanism is different among three countries. Indonesia: Indonesia has witnessed a significant result with the realization of its harvest strategy for tropical tuna (inland waters) established and officially launched. Indonesia entered the implementation process for the harvest strategy through improved NTMP.
	Outcome 1.2 Achievement: **Satisfactory (S)**	**Enhanced capacity of technical staff, policy and decision makers in Indonesia, Philippines and Vietnam to integrate climate change impacts on highly migratory stocks into management regimes** This target was further adapted and rationalized with approval by the Project Board (suggested changes verified at MTE) for being overambitious in scope and budget. It was more realistic for its additional activities, such as making a "contribution to" rather than producing concrete end targets on making predictions. At the subregional level, there was

		no progress towards the aim of predicting climate change impacts on the EAS and western part of the POWP LME or developing LME scale adaptive management strategies. At the national level, there was limited progress with respect to strengthening predictive capacities. For Philippines, BFAR plan and programs are required to incorporate mitigations measures or activities to reduce impacts of climate change in fisheries. PHL, through DA-BFAR, developed a Climate Change—Disaster Risk Reduction Manual of Operations, including action plans and budget needs (the Project has funded workshop/s for this activity). This is aligned to the country's objectives under the Department of Agriculture's mandates. PHL developed two consultancy reports: a) "General Guidelines on Adaptive Management and Monitoring of Highly Migratory Fish Stocks to Address Climate Change," and b) "Application of Adaptive Management Guidelines for Capacity-Building of National Technical Fishery Staff, Policy and Decision Makers in Philippines" (by Rollan Geronimo). Vietnam: VNM used outcomes of a current national forecasting program to evaluate climate change impacts. This effort partly contributed to achieve targets of this outcome. Indonesia was in the process of integrating into the reviewed NTMP. It still required additional effort to implement and use this guideline.
	Outcome 1.3 Achievement: **Satisfactory (S)**	**Climate change concerns mainstreamed into national fishery sector policy in Indonesia, Philippines and Vietnam** The end-of-project target was found to be over-ambitious, i.e., incorporating adaptive management strategy for oceanic fisheries into a national cross-sectoral climate change strategy. This target went with 1.2 above. End target was changed to contribution. This work is a regional gap and need a follow up and possible further financial sponsor. At national level significant awareness has been raised but consultancy and mainstreaming into NTMP. The Project management further adapted and rationalized these outcomes and addressed the CC ambitions by making high quality "knowledge contributions" through expert and guidance work. The MTE had recommended that the national teams make synergies with ongoing country work. This has been considered post-MTE. While the Project's teams moved forward, many of the cross-cutting targets were regional, linked to setting the agenda at this level and with longer-term targets. For national work, a cross-cutting approach and more funding were required to reach the stated targets, which were design issues. The Project was adapted, and it achieved a significant amount towards all targets with the funds available. The substantive work on cross-cutting areas and governance needed an exit strategy and follow-up. For Philippines, the BFAR plan and programs were required to incorporate mitigation measures or activities to reduce impacts of climate change in fisheries. PHL, through DA-BFAR, developed a Climate Change-Disaster Risk Reduction Manual of Operations including actions plans and budget needs (the Project has funded workshop/s for this activity). This is aligned to the country's objectives under the Department of Agriculture's mandates. PHL also developed the two aforementioned consultancy reports (see Outcome 1.2). Vietnam concluded that this target of this outcome was achieved. For Indonesia, the knowledge gained from participation in the Project has been integrated into the reviewed NTMP.
	Outcome 2.1 Achievement: **Moderately Satisfactory (S)**	**Outcome 2.1: Enhanced compliance of existing legal instruments at national, regional and international levels** The expected end result regarding subregional collaborative governance was not made during MTE or after (clear absence of end target and no clear theory of change). An exit strategy is required. At the national level, there were significant results. Philippines fully participated in WCPFC technical processes (SC, TCC and other technical WG meetings). PHL implemented FAO 244: FAD Management Policy. "A Review and Analysis of the Operation of Anchored FADs in Philippine Waters and High Seas Pocket 1 in Consonance with Applicable WCPFC CMMs and National FADs Management Policy" was conducted by Dr. Alma Dickson. For Vietnam, the outcome was noted as very difficult to achieve, but the concept of harvest strategy development was documented and integrated into new Fisheries Law of VNM. Therefore, it can be considered for future development, not only for tuna fisheries but also for other species. In Indonesia, while the compliance issue was significantly improved compared to the baseline, gaps remained. For instance, in terms of data provision, several areas still required further improvement, such as provision of bycatch data, observer data and refinement of other commercial gear catch. Interm adoption of WCPFC CM into national regulations in some areas required futher efforts, such as a catch limit for purse seines.Indonesia's harvest strategy (inland water) was developed.

	Outcome 2.2 Achievement: **Moderately Satisfactory MS**	**Outcome 2.2: Adoption of market-based approaches to the sustainable harvest of tunas** With respect to supply chains, prior studies were initiated in Indonesia and Philippines, but these did not fulfil the end target criteria. TE agreed with the MTE analysis. For instance, in Indonesia the goals to establish monitoring and custody systems in Indonesia were not achieved, They were beyond the scope of the Project. Through close collaboration with WWF Vietnam was managing an FIP for long-line handling of fisheries. In this sense, progress under Outcome 2.2 in Vietnam has been better than in the other two countries. There are FIPs operating in Indonesia and Philippines, but the Project had no direct involvement. The Philippines implemented FAO 244: FAD Management Policy, as mentioned. For Indonesia, the supply *chain study* for tuna, in particular in PHL fishery, was conducted. One of the tuna industries, i.e citra raja ampat tuna canning, was awarded MSC certification in 2018. The effort of HS development from this Project has been previously addressed. HL fishery was awarded fair trade certification in 2015 and was in the process of earning MSC certifcation in 2019. Another effort for FIP for purse seine was undertaken.
	Outcome 2.3 Achievement: **Moderately Satisfactory MS**	**Outcome 2.3: Reduced uncertainty in stock assessment of POWP and EAS LMEs highly migratory fish stocks and improved understanding of associated ecosystems and their biodiversity** TE reviewed entries in the WCPFC data and statistics reports, which indicate how improved data quality allowed more accurate subregional assessment.[i] (SPC Science report). For Outcome 2.3, i.e., improved understanding of associated ecosystems and their biodiversity, limited progress was made. Risk assessments were completed using the bycatch and other data recorded through port enumeration and observation programs. For Philippines, there was 100% observer coverage for PHL-flagged vessels fishing in WCPFC-HSP1 and in Pacific Island Countries. *Observer coverage for PHL-flagged vessels operating in Philippine waters was limited, taking place only during the FAD closure and with the help of WPEA funding support, but coverage is to be enhanced in the coming years through the implementation of FAO 261-Rules and Regulations on Fisheries Observer Program (FOP) in Philippines and in Distant Water Fishing targeting straddling and highly migratory fish stocks.* Ms. Regina Bacalso made a consultancy report, "Risk Assessment for Selected Bycatch and ETP Species on Selected Tuna Fisheries." PHL attended/participated in the three-country workshop focusing on Risk Assessment with Dr. David Kirby (WPEA international consultant). For Vietnam, under FIP for tuna longline/handline, a risk assessment was conducted for bycatch and associated species by the Research Institute for Marine Fisheries. WPEA SM also collaborated and supported data to conduct this assessment. For Indonesia, risk assessment for tuna fishery and sharks was conducted through PSA analysis. This outcome was used to support the MSC process for HL fishery and FIP for purse seine. A gap was noted on the observer programme in Vietnam and Indonesia. The new project will not support pilot capacity building of the observer programme, leaving a gap for follow-up work.
	Outcome 2.4 Achievement: **Moderately Satisfactory**	**Outcome 2.4: Ecosystem Approach to Fisheries Management (EAFM) guiding sustainable harvest of the oceanic tuna stock and reduced bycatch of sea turtles, sharks and seabirds** The target of applying ecosystem models to the EAS LME information included in the Project document indicates that preliminary ecosystem models, e.g., SEAPODYM, were available for the POWP LME, but this was not applied in a regional management context. Philippines produced three EAFM reports: 1. Aligning the National Tuna Management Plan of Philippines In the Context of Ecosystem Approach to Fisheries Management (EAFM), 2. Approaches to EAFM for Tuna Management in Philippines, 3. Applying Ecosystems Approach to Fisheries Management (EAFM) to Tuna Fisheries (A Case Study). Workshops and consultation meetings were conducted in relation to this activity/topic (EAFM). The revised NTMP followed or adopted the EAFM framework. The Operations Guide for Filipino Fishermen was developed under this Project to help facilitate the implementation of Western and Central Pacific Fisheries Commission (WCPFC) conservation and management measures (includes CMMs on sharks, seabirds, sea turtles) by Filipino fishermen. It provides a summary of important information, including safe release guidelines that fishermen would need to consider in fishing for tuna resources in the western and central Pacific Ocean. This document is updated annually, printed and distributed to

		fishing operators/companies in hard copy and electronic form. In Vietnam, A consultancy task to develop an EAFM guideline for local authorities in development of their EAFM plan in the future. In addition, the Project proposed a pilot site to implement EAFM for tuna fisheries management. In Indonesia, an EAFM study was conducted from a study case on PL fishery. The outcome of the study was forwarded to be reviewed by NTMP. The TE assumption was that it would be integrated, but this was not confirmed.
	Outcome 3.1 Achievement: **Moderately Satisfactory**	**Outcome 3.1: Regional knowledge platform established on POWP LME and EAS LMEs shared tuna stocks and associated ecosystems** TE viewed this as the weakest part of the Project implementation and strategy towards results. Many lessons learned came from these results. While the outputs were completed, the outcome desired from this work was less than successful. KM was thought about only in a limited sense and not as a modality for implementation and/or as a result (consultative forum was intended to be a knowledge and cooperation mechanism). There was no sustainability strategy for this work. Additionally, the KM was to be a supportive implementing strategy, but no position was attached to this work at the PIU as intended by the project document. A dedicated KM or monitoring manager was not hired. The idea was to rationalize funds and conduct KM as a separate output together with PEMSEA. The actually learning—KM approach, especially at the subregional level—was conducted through three country workshops and finally through a first consultative forum meeting (not formalized). Consultative Forum convened once in January 2019 with participation by SEADEC. This work was lingering and needed both follow-up and an exit strategy. Philippines and two other countries, Indonesia and Vietnam, participated in a consultative forum in January 2019 with UNDP, SEAFDEC and PEMSEA. PHL participated in GEF IW Conference (IWC9) in Marrakesh, Morocco, November 5–8, 2018. The Project website is being developed in collaboration with PEMSEA. Indonesia has attended the three countries' WS annually. However, Indonesia was unable to attend the PEMSEA WS in 2018 because of a conflict dates with national activities.
Project Implementation and Adaptive Management		The Project was late getting started in Indonesia and Vietnam. The delay initiated the needed for an 18 month extension during MTE. The MTE made a justification for shifts in the target, mostly due to the lack of preparedness for the cross-cutting areas and the achievability of some of the subregional targets. The lack of preparedness on climate change, EAFM, harvest strategies and supply chain analyses put pressure on the project budget, delivery approach and general effectiveness. On the positive side, the choice of implementing partner was strategic for delivery of technically guided implementation and the choice made (due to the unique competencies of the PM) was significant in leading this Project to results. The strong participation of key implementation partners, including the project manager, national coordinators, UNDP Country Office programme manager/associate, and the UNDP GEF regional technical advisor (RTA) was reported as a project practice. Work planning was noted as a key strength. The process of guided work planning and technical "handholding by the PM/CTA" was verified by TE. The PM gained respect from the teams in the implementing countries. The implement modality was noted as very good for getting results because the PM/Cota was excellent in understanding the culture. Stakeholder engagement (reported as fairly narrow at MTE), grew. It had generally focused mostly on the technical implementation and on capacity building of fishery sector partners. While cross-sectoral stakeholder involvement was limited it had picked up post-MTE; for example, with the Ministries of Environment on climate change aspects. Synergies were made with complementary projects and programmers have not been developed. The Project results framework was very comprehensive, with 10 multifaceted indicators and 66 performance targets. Per MTE and verified, several baselines and end targets agreed upon in the project results framework were unclear, and the achievability of some of the end targets was questioned. The monitoring for results was weak throughout. The evidence of project results is partly documented in various WCPFC reports, but the results were not thoroughly consolidated and interpreted. For instance, the final report of outputs and outcomes was not prepared by the entire team. Rather, the PIR used a primary joint monitoring tool. It would have been optimal if the PIU had a monitoring officer on staff—lesson learned. TE received the complete list from project management of outputs and related document produced from Vietnam and Philippines (Annexes). This was valuable information that needed to be fully consolidated and uploaded on the PEMSEA website as per agreement. The baseline GEF IW tracking tool has not been prepared and or finalized at TR. This is a

		final recommendation. Philippines' team met all the outputs and targets as expected. Stakeholder engagement nationally was high. The national teams participated in consultation meetings/workshops, including collaborations with synergistic agencies/ongoing projects (e.g. SEAFDEC, PEMSEA and USAID: ECOFISH, OCEANS, PSA, PFDA). The national coordinator expressed gratitude for high level consultants who produced good quality reports with limited budget (e.g. Risk Assessment, EAFM, Climate Change, Supply Chain and Certification). This work was appreciated for contribution to project expected outcomes. Indonesia highlighted the importance of the visit of the project manager at least once a year to undertake work planning and participate in the technical workshop on reporting.
Sustainability	**Rating Moderately Likely**	As with the MTE, TE found evidence in three beneficiary countries of continuation in financing the data collection activities that were to be institutionalized within the operating budgets of the national and subnational partner organizations. Sustainability is supported in part by the New Zealand Government support. This enhances the likelihood for reinforcing data and compliance (see project description in **Annexes**). More could have been done to reinforce the government commitment and knowledge for policy, including the subregional policy (data sharing) goals and cross cutting areas including climate change, ecosystems and marketing work. The Private Sector participation grew during implementation. This was verified during the case study visit to the General Santos Port Authority on October 10, 2019. There were market pressures for implementing sustainable fishery management. One area flagged for future follow-up was support to fishermen for price regularization. It is currently a buyers' market, thus not in the favour of an equitable market. Philippines PHL fully funded the port sampling program with increased budget (mainstreamed in the regular budget of the PHL government). Collaboration and participation of stakeholders, other government agencies, organizations and ongoing projects funded by USAID and others have continued to enhance or strengthen. Since 2013, Indonesia has been a full member of WCPFC, thus increasing its prospect of full compliance. The subregional results and concerning the cross-cutting areas will require more time and follow-up to continue building the platform for cooperating around data sharing. For Indonesia, the project results and outputs were reportedly discussed at the level of CFR and DGCF. The national stock asessment program was likely to receive possible fund resources to support data collection at selected ports. A national observer program was allocated by DGCF to support data collection. Other data collection programs were highlighted as needing management attention by fishing industries and NGOs which work closely with CFR and RIMF.

PROJECT RESULTS SUMMARY

The Project had delivered technical and substantive results, notably improvements in data quality and compliance with WCPFC Conservation and Management Measures (CMMs) (see CMMs in Annexes).[ii] It has not done so well on delivering the policy and sustainability goals of the work, and some work needed to be done to address the governance and policy and financing gaps for sustainability. Improved availability of data, with regard to estimates of catch by *species and gears* in the beneficiary countries, contributed toward higher quality tropical tuna stock assessments prepared by SPC. This was a significant result. Pre-project, the catch from the East Asia Sea countries was labelled as "unclassified" (MTE 2017).

The Project has most significantly completed national tuna management plans in all three beneficiary countries—the first time management plans for tuna fisheries have been formulated. This was a key result toward achieving sustainable management of migratory tuna stocks. Interviewees reported (during TE) that for all three countries, including Vietnam, a cooperating non-member, there is a stronger regional voice at the WCPFC Commission regarding issues associated with the East Asian Seas region of the convention area.

The Project strengthened collaboration technically between the three beneficiary countries and cultivated technical communication lines among key fisheries management stakeholders, creating a solid foundation for subregional governance. The TE noted, however, that the meeting alone was missing a strong policy strategy (implementation and knowledge dissemination/advocacy work). This was a key learning from this project.

Country ownership was excellent, and co-financing contributions by national implementation partners have exceeded the total committed at project approval.

A key strength (noted by MTE and verified by the TE) was the strong continuity (and passion for the technical work) of the implementation partners, including project manager, national coordinators, regional partners, UNDP CO staff, and UNDP GEF RTA. The WCPFC provided steady co-financing contributions, including the in-kind project management services of the Science Manager of the WCPFC. The Project manager had a unique competency profile for overseeing the annual country work planning and competencies for learning by doing and day-to-day implementation "handholding," ultimately leading the three countries focal points and teams to their respective results. He generally played a dual role as project manager and as chief technical advisor. The role was taken up strongly by WCPFC, and has been obviously a contributing factor in the positive national delivery and results. The ownership was thus in part facilitated through the effective execution modality ensuring that the activities were closely aligned and integrated with national programming and budgeting.

Project was provided with excellent supported by UNDP Philippines and the regional RTA for technical and monitoring inputs (especially during project board) as well as project management and administrative services including procurement and audit. The audit services are commended and had helped the Project with good advice and by undertaking a timely correction on financial accountability. A major lesson learned, however, is that for the subregional and expanded results, (including the entire projects results sustainability), the Project needed a full team in place at WCPFC, including a KM and monitoring advisor. The likelihood of project sustainability has been diminished by a need for a policy and KM perspective. The monitoring would have picked up on these gaps. The sustainability of data collection and monitoring (compliance measure for WCPFPC) are enhanced by the national budgets for data collection by the three beneficiary countries and the continued follow-up project supported by the New Zealand Ministry of Foreign Affairs and Trade.

0. Relevance: Rating Satisfactory

Several Project targets (analysed at MTE) were not smart; some were found unattainable and subregional targets were noted as vague. This was corrected at MTE (see indicators review table below). The project teams had been overly ambitious in accepting half the grant and implementing it with the original design. This had an impacted on the decisions made about implementation and prioritization of the budget to the data and compliance activities. The log frame was comprehensively reviewed at MTE. Slight changes were introduced to targets in order rationalize the scope and expectations of the end targets.

The Project was highly relevant to international, regional and national priorities. At the subregional level, the Project was consistent with the Western and Central Pacific Ocean Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPO) and the WCP Fisheries Commission (WCPFC). Philippines and Indonesia were Commission members, while Vietnam was a cooperating non-member (CNM). Indonesia acceded to membership at the WCPFC 10th Regular Session in December 2013, after working toward ratification for the last eight years. The contribution of the Project to Indonesia readiness for membership was highlighted. Vietnam, still not a member, was moving toward that regional target.

The Project supported the EAS countries' contribution to the Western and Central Pacific Fisheries Commission (WCPFC). A compliance monitoring scheme was enforced, as the CMMs were legally binding and regularly revised and updated (CMMs for the EAS three countries Annexes).

Project had additional cross-cutting areas that are consistent with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA-PEMSEA mandate). The SDS-SEA provided the overarching framework for sustainable development of the EAS that aimed to ensure the sustainable use of coastal and marine resources.[iii] The SDS-SEA embodies a shared vision of the countries of the region for sustainable development of coasts and oceans, and the proposed Project was thus linked to the implementation of the SDS-SEA under a programmatic approach for the region. During the implementation, key global conventions were signed reinforcing collaborative work with PEMSEA and also a good case for continuing to develop the cross–cutting area and subregional governance targets, including fostering south south collaboration in the EAS region on the post-2015 sustainable development goals, the Paris convention in 2015 and the Sendai Agreement on Disaster Risk Reduction.

The Southeast Asian Fisheries Development Centre (SEAFDEC) is an autonomous intergovernmental body established in 1967. The mandate of SEAFDEC is "*to develop and manage the fisheries potential of the region by rational utilization of the resources for providing food security and safety to the people and alleviating poverty through transfer of new technologies, research and information dissemination activities*". SEAFDEC comprises 11 member countries, including Indonesia, Philippines and Vietnam, seven other Southeast Asian countries and Japan. SEAFDEC was developing a draft plan of action for regional cooperation on sustainable tuna management in SE Asian waters with a focus on neritic tuna species, traceability, catch certification, joint stock assessment and combating IUU fishing. The Project generated

national tuna management plans that were synchronized to some extent with knowledge inputs gained through this Project. Through the Consultative Meeting held by project in January 2019, all participants including SEAFDEC developed a diagram for the future Monitoring Mechanism to Combat IUU Fishing at WPEA Region. Refer to Para 28 in the attached CF Report. However, the links to SEAFDEC for purposes of the subregional governance results needs an exit strategy. This is a longer-term result. TE confirmed that the Project was highly relevant to three EAS countries and is linked to regional and national sustainable development goals and to each country's WPCFP compliance and data collection needs, yet the linkage to other related governance institutions needs post-project follow-up in order to consolidate the results.

For Philippines, the Project contributed to national priorities, particularly in terms of greatly enhanced and improved tuna data collection. The government has increased the budget from PHP 30M (USD 600,000) to PHL 150M (USD 3,000,000) per year, which covered almost all the tuna landing sites around the country (from around 300 landing/sampling sites in 2014, and port sampling covered around 800 landing/sampling sites since 2015). This contributed to the regional and international priorities in relation to WCPFC data obligations. Additionally, significant national, regional and international directives, policy/laws to which the Project contributed include initiating revision of the National Tuna Management Plan (NTMP). The latest NTMP was launched in 2018, and the previous versions were in 2012 and 2005.

The Project also contributed in the crafting of various Fisheries Administrative Orders (FAOs), as mentioned above. Vietnam considered tuna fisheries as the most important species in capture fisheries at the national level. The development and implementation of the WPEA document was a national priority for fisheries management. VNM endorsed a Fisheries Law in 2003. Since then, there have been too many emerging issues on fisheries management at international, regional and national levels which needed to be considered for changes. The Project was aligned with the direction of the Vietnamese Government to update the 2003 Fisheries Law. In addition, there was no specific legislation on tuna fishery management in Vietnam. Hypothetically, according to the project teams in Vietnam, the Project increased attention of policy makers on fishery management in Vietnam through cross-sector work and coordination in conducting work on outputs (see partial list of outputs in Annexes). The weak science-to- regional policy linkages were made noteworthy by interviews, an unverified area of the project monitoring. This could have been due to a weak monitoring system and little ability to articulate results, or it might have been undocumented and not really a result. It was hard to make a judgment, but generally the reporting of policy-level results have been undocumented and mostly anecdotal.

1. Effectiveness: Rating Satisfactory

Effectiveness was reviewed in terms of expected results, design and implementation strategy. There were three main problems that this Project intended to address:

1. Incomplete participation in the governance and compliance frameworks for oceanic tuna resources in the sub region, the WCPFC;
2. Inadequate scientific knowledge about oceanic ecosystems and their relationship with fisheries resources;
3. The advancing climate change-driven shifts in fisheries catch and area.

The project design had been adapted by the uniquely competent PM with profile (CTA/PM) (based on reality in the countries, the budget and scope. An early decision to continue the Project with half the grant led to adaptation and modification in outcome targets. The bulk of the financing directed to delivering technical assistance and work on data and compliance. The cross-cutting areas and subregional governance were a secondary priority and thus under-resourced and underfunded. There were design assumptions concerning the "readiness of countries to cooperate on the cross-cutting areas. The subregional governance work had not been well defined (MTE 2017). A theory of change was lacking for this aspect.

Through support of Project, there were significant improvements in all three countries for data and monitoring. The improvement in data and monitoring was qualified by the SPIs in their annual report to the commission (SPI August 2018). However, there are still significant data gaps in two countries and sustainability of efforts in all countries that needed to be addressed (Philippines is ahead of the other two countries in terms of capacities but still need sustainability plan). The sustainability issue and data gaps were highlighted during the TE as follows: improve data collection for ETP and bycatch; improve data collection through observer and logbook; test the OM for developed harvest strategy in the IAW (A full report on data and compliance status is provided by the SPI August 2018- also see results table analysis – Outcome 2.3)

The Project was operationalized at three levels, regional, subregional and national. The three component areas needed technically skilled and competent management to interweave the strategies towards the Project expanded expected results. The subregional targets were dependent on raising capacities at the national level. This demand rested with the

decisions of the project manager and highlighted the importance of the project board and the adapted implementation strategies to deal with design issues. Notably, the big issues for budget and resources were linked to the addition of new cross-cutting areas introduced to the Project in phase two.

A central implementation decision at onset of phase two in order to implement through regional and national processes (versus UNOPS) through the WCPFC, and there were trade-offs. Additional key lessons that emerged on effectiveness follow.

The subregional collaboration and data sharing targets need time. This was linked to idea of a sustained consultative forum. This required a sustainability mechanism as this was not clear in design and end targets; ME (results reporting and monitoring towards end targets on all aspects) was not strong throughout. Neither was KM, but PM and UNDP GEF oversight through PB took decisions and recommendations since MTE was to improve both and to capitalize on synergies with others for sustainability. All targets for monitoring and data collection were reached, but results were still limited in providing bycatch data and observer data;

MTE found the cross-cutting areas to generally not have smart targets and /or they were unattainable. This was verified by the TE. These goals were somewhat adapted. For example, the climate change expected results at the regional level required a much bigger budget and a plan to set up a monitoring system for monitoring CC impacts on tuna fisheries at the regional level (This is still needed and might constitute a follow up plan for financing partners). The solution during implementation was to engage knowledge experts and consultancy and to build partnerships on these areas to sustain this longer-term work, and to some degree the Project carried forth. However, there were limited data, limited expertise on CC and limited funding to really have a substantive impact on this work. An outstanding national result on ecosystems work included the national development of harvest strategy for tropical tuna in the Indonesia's archipelagic Waters. The subregional targets for Climate Change and Harvest Strategy are longer-term and need follow-up. The project knowledge management KM work has been a disappointment for the implementation. The three component outputs were delivered late, and there was no position for KM in the PIU. The strategy, however, as articulated in the project document was KM as an enabler for the other two complements. This was not considered. The idea had been to work with PEMSEA and to have PEMSEA support the Project with monitoring, but this was implemented very late.

Project Component	Expected Results	TE General Comments
Component 1:[1] Regional governance for building regional and national adaptive capacity of Indonesia, Philippines and Vietnam in the management of highly migratory stocks	1.1 Improved regional mechanisms for monitoring and assessment of highly migratory fish stocks and Illegal, Unreported and Unregulated (IUU) fishing in the POWP LME and the EAS LMEs	Generally achieved. The three countries are all reporting and compliant to the WCPCP convention. At subregional level, the consultative forum and the national level coordination for subregional participation was started late in project implementation. Areas for subregional cooperation were identified. This was a longer term target. These activities (outputs) needed an exit strategy and higher-level decisions at the regional, subregional (SEADEC, ASEAN, PEMSEA) and national level. Follow-up action was needed
	1.2 Enhanced capacity of technical staff, policy and decision makers in Indonesia, Philippines and Vietnam, to integrate climate change impacts on highly migratory stocks into management regimes	The original climate change targets were overambitious and adapted at the regional and national level. The regional end targets also depended on capacities and cross-sectoral coordination at the national level to do the necessary data collection and analysis for policy. To some degree, mainstreaming has been achieved, i.e. Tuna Management Plans, but more intersectoral coordination was needed. The project management dealt with these issues by identifying good quality experts in the Project to sensitize about the work and to begin to study the issues at the level of the countries. For mainstreaming, the work was mainstreaming into the national Tuna Management Plans.
	1.3 Climate change concerns mainstreamed into national fishery sector policy in Indonesia, Philippines and Vietnam	
Component 2: Implementation of policy, institutional and fishery management reform	2.1 Enhanced compliance of existing legal instruments at national, regional and international levels	Through National Tuna Management Plans, this outcome was partially achieved. More work on bridging the science policy interface at the national level was needed.
	2.2 Adoption of market-based approaches to sustainable harvest of tunas	This target was dependent on cooperation and influencing market pressures. The Project has contributed important knowledge and cooperation with the private sector inputs (mostly through invitations to meetings and events and demonstrating the utility of data collection and monitoring) at national level. An interesting

[1] *All outcomes monitored annually in the APR/PIR.*

		insight was that the tuna fisheries beneficiaries need support with price setting as it is totally a buyers' market. This was highlighted as a need for good practice and pilot work. The Osaka market was highlighted as a good practice that might be piloted in the region, i.e. Philippines General Santos Tuna Port.
	2.3 Reduced uncertainty in stock assessment of POWP LME and EAS LMEs' highly migratory fish stocks and improved understanding of associated ecosystems and their biodiversity	The Project dealt with this work mostly through undertaking risk assessment at national level. Philippines was more advanced that other two countries. There was much more capacity building and demonstration that can be done on the observer programme in Vietnam, and Indonesia required a demonstration programme and capacity building support for the observer programme. These were big gaps that the new funding of New Zealand would not pay for. The New Zealand project was also lacking the policy and management work, i.e. data analysis work. This was a gap in the follow-up work that a new GEF project might finance.
	2.4 Ecosystem Approach to Fisheries Management (EAFM) guiding sustainable harvest of the oceanic tuna stock and reduced by-catch of sea turtles, sharks and seabirds	More technical and capacity building work was needed on the observer programme, especially in Indonesia and Vietnam. The subregional targets for by catch monitoring and Harvest Strategies needed leadership on standards around data collection for bycatch in EAS waters.
Component 3 Knowledge sharing on highly migratory fish stocks	3.1 Regional knowledge platform established on POWP LME and EAS LMEs shared tuna stocks and associated ecosystems	This work was not well conceived and or executed. The Project needed a KM and monitoring plan linked to the Consultative Forum and the subregional governance target, the lack of which puts the sustainability in question.

2. Efficiency: Rating Satisfactory

In terms of value for money, considering the substantive results, cost per benefit, the Project was highly efficient based on the allocated budget of 2 million. For both phases, +/– 3 million had been invested, and all countries were compliant with the WCPFC regulations. This was a major achievement. The second phase introduced the cross-cutting areas at regional and subregional and national levels. For instance, MTE 2017 and subsequent **PIRs** reports related the following:

Adaptive management was employed by PM and PB to deal with two problems that were identified: insufficient budget and insufficient expertise. Compared with the scope of work related to i) climate change issues, ii) market-based approaches to sustainable fisheries, iii) establishing reference points and harvest control rules as part of developing a harvest strategy framework and iv) application of an ecosystem approach to fisheries management to tuna fisheries, the budget allocated was small and one could argue (evidently) that the knowledge and positioning results were substantive (see list of inputs from Project, Annexes). The management response was to conduct prior research using domestic experts to clearly identify actions to be recommended and to be undertaken to reach the project target.

In terms of the implementation and budget allocation, management decisions were made to continue all the work and so there were trade-offs. The lower budget influenced the implementation approach through government and regional entries as opposed to a separate project team, i.e. implementing through WPCFP rather than a project management unit. On one hand, this enabled capitalizing on the technical oversight and relationships and knowledge sharing building (albeit at the technical level) between the countries. On the other hand, there was some learning with respect to results and finance monitoring and oversight. The focus on science was another trade-off. One wonders, if the project team had been fully in place, would the policy goals have been better planned and implemented towards results?

In terms of project management, the normal UNDP HACT assessment was completed with the WCPFP, but this Project needed an extra layer of accountability. The need was picked up by a UNDP audit, and the mistake was corrected. The need was monitoring and recording expenditures at the country level. Another layer of accountability and monitoring at the country level was necessary

Recommendations

The TR recommendations, outlined below, were formulated with the aim of enhancing the likelihood that project results would be sustained after GEF funding ceases.

Table x: Recommendations Table		
No.	Recommendation	Responsible Entities
1.	Develop Exit Strategy and Knowledge Product Dissemination Plan. Host Workshop. •To support project sustainability, consolidation, dissemination, and embedding the project results into national and regional processes. •To provide concrete recommendations in the future for work on these cross-cutting areas: Climate Change, Ecosystems, Market-based Strategies and Economics, and the Subregional Governance cooperation work. The exit strategy and workshop might contain the following: •Developing a plan for consolidation of the project outputs for optimal audience reach and use. This includes consolidation of all project knowledge outputs, documentation, and classification and uploading to the PEMSEA website as a matter of priority; • Doing a political mapping and dissemination strategy in order to bridge the Science-Policy interface at the regional and subregional levels; • To present the results to the relevant policy-level decision makers as TE found the policy-science interface had been limited during implementation. This can begin by mapping the policy audience for the exit strategy. The meeting can be hosted, presenting the results, conclusions and discussion of way forward of the Project; • Produce a gendered and cost benefit analysis of the work in each country data and monitoring improvement (preferably in story form/case study format) in order to position the work for continued budget and financing with the relevant national policy makers. Project team might engage a policy think tank, but economic benefit information needs to be compiled next as a matter of priority; a study and recommendations to government on the sustainable financing and mechanisms for maintaining adequate levels of data collection should be included in the cost benefit analysis. Government funding streams for data collection structures, including enumerators, samplers, etc., remain tenuous and/or uncommitted in the three beneficiary countries and need to be pursued. • To discuss the recommendations for the continuation of work for the cross cutting thematic areas EAFM, CC, Economics (Market Strategies/Pricing) (see below).	GEF Secretariat, Regional UNDP/GEF RTA, UNDP, ASEAN, SEAFDEC, PEMSEA, National governments, WCPFC, New Zealand Project Proponents, Donors
2.	National Governments carry forward the Project's work by ensuring sustainable budgets for data and compliance, monitoring and assigning national focal points. Address data and information technical gaps that still need to be strengthened as well, including assessment on capacity gaps in the following ways: •Implementation of the National Tuna Management Plans; •Continuation of building the capacities for an observer program, data collection for commercial fisheries (other than purse seine and longline), data collection for bycatch, ERS, and discard; •Continuation of strengthening the work on monitoring the vessels fishing in EEZ, High Seas, and Territorial and distinguishing their catch base on different zones (VMS, SPot trace, EMS, e-logbook); •Continuation of improving and sustaining efforts at building capacity related to tuna data collection, monitoring, policy analysis, and management.	National Governments (lead) WCPFC/UNDP/GEF UNDP/GEF / Donor community / New Zealand Project Proponents.
3.	Market Strategies and Economics From iinterviews conducted in the region with the private sector during TE, it became clear that tuna fisheries are a buyer's market and as such does not promote efficiency, equality, or equity. Follow-up work at WCPFC should include regional work on market	UNDP/GEF. WCPFC Donor community and national

Table x: Recommendations Table		
No.	Recommendation	Responsible Entities
	pricing in the EAS region (led by WCPFC and a pilots i.e. Philippines to promote good practice. (Osaka market was highlighted as a good example that might be replicated regionally). It should be the feasible then to collaborate with the private sector on application of market-based commodity pricing. Next, regarding adoption of market-based approaches, conduct an assessment of the feasibility of continued collaborating with the private sector. It can be included in the exit strategy. Follow up with the Asian Seafood Improvement Collaborative (ASIC), an industry-driven initiative including operators from Indonesia, Philippines, and Vietnam. Such future collaboration is consistent with the regional context of the Project and can lead to constructive engagement with the private sector to carry forward this work. Develop concrete recommendations (possibly pilot idea) to be included in the exit strategy.	Governments, New Zealand Project Proponents.
4.	Ecosystem Approaches and Monitoring The subregional work for improving monitoring systems requires finding ways to assess reduction in ETP species. No regional monitoring systems are yet in place, and their existence is a need. Country reports to the WCPFC contain some narrative entries on bycatch, but developing specific monitoring systems for select ETP species now remains to be done. Develop concrete recommendations to be included in the exit strategy.	UNDP/GEF, WCPFC
5.	Climate Change Continuing the subregional work for improving monitoring systems for predicting and assessing climate change impacts on tuna fisheries requires consideration and action is required. Develop concrete recommendations to be included in the exit strategy.	UNDP/GEF. WCPFC
6.	Gender Develop a case study on the Gender dimension (results) to showcase in the exit strategy.	UNDP/GEF. WCPFC

Abbreviations and Acronyms

ABNJ	Areas beyond National Jurisdiction
ASEAN	Association of Southeast Asian Nations
ASIC	Asian Seafood Improvement Collaborative
BFAR	Bureau of Fisheries and Aquatic Resources (Philippines)
CBD	Convention on Biological Diversity
CF	Consultative Forum
CMM	Conservation and Management Measures (WCPFC)
CNM	Cooperating Non-member (WCPFC)
CoC	Chain of Custody
CSIRO	Commonwealth Scientific and Industrial Research Organization (Australia)
CTI	Coral Triangle Initiative
D-FISH	Directorate of Fisheries (Vietnam)
DGCF	Directorate General of Capture Fisheries (Indonesia)
EAFM	Ecosystem Approach to Fisheries Management
EAS	East Asian Seas
EEZ	Economic Exclusion Zone
ENSO	El Niño-Southern Oscillation
ETP	Endangered, Threatened or Protected species
FAO	Food and Agriculture Organization
FIP	Fishery Improvement Project
FMA	Fisheries Management Area
FRA	Forest Resource Assessment
GDP	Gross Domestic Product
GEF	Global Environment Facility
GT	Gross Ton
HCR	Harvest Control Rule
HSPI	High Seas Pocket No. 1
ICM	Integrated Coastal Management
IGO	Inter-Government Organization
IMO	International Maritime Organization
IUU	Illegal, Unreported and Unregulated fishing
IW	International Waters (GEF focal area)
LME	Large Marine Ecosystem
M&E	Monitoring and Evaluation
MARD	Ministry of Agriculture and Resource Development (MARD)
MDG	Millennium Development Goal
MMAF	Ministry of Marine Affairs and Fisheries (Indonesia)
MSC	Marine Stewardship Council
MTR	Midterm Review
NFRDI	National Fisheries Research and Development Institute (Philippines)
NPOA	National Plan of Action
NTMP	National Tuna Management Plan
PIR	Project Implementation Review
PIOFM	Pacific Islands Oceanic Fisheries Management Project
PIU	Project Implementation Unit

POWP	Pacific Ocean Warm Pool
PSDKP	Directorate General of Marine Resources and Fisheries (Indonesia)
RCFMC	Research Center for Fisheries Management and Conservation (Indonesia)
RFMO	Regional Fisheries Management Organization
RP	Reference Point
RPOA	Regional Plan of Action
RTA	Regional Technical Advisor
SAP	Strategic Action Program
SC	Scientific Committee (WCPFC)
SCS	South China Sea
SDS-SEA	Sustainable Development Strategy for the Seas of East Asia
SEAFDEC	Southeast Asian Fisheries Development Center
SPC	Secretariat of the Pacific Community
TCC	Technical and Compliance Committee (WCPFC)
TWG	Technical Working Group
UNCLOS	United Nations Convention on the Law of the Sea
UNFCCC	United Nations Framework Convention on Climate Change
UNDP	United Nations Development Programme
USD	United States Dollar
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission
WCPO	Western and Central Pacific Ocean
WPEA	West Pacific East Asia
WWF	World Wide Fund for Nature

1. INTRODUCTION

1.1. Purpose of the Review

The Terminal Evaluation objective was to undertake a final review of project outcomes. It reviewed project strategy, contribution to results, project implementation and adaptive management, and the likelihood that the envisaged global environmental benefits would be realized and whether the project results would be sustained after closure. The assessment of project results determined the extent to which the Project objectives were achieved, and whether the Project led to other short- or long-term and positive or negative consequences/results. A principal objective was to document the results, lesson learned, and to provide recommendation for future linked initiatives in order to reinforce, sustain or scale up the results.

1.2. Scope and Methodology

The Terminal Evaluation TE approach and methods followed the guidelines outlined in the UNDP Guidance for Conducting Terminal reviews (TRs) of UNDP-supported, GEF-financed Projects.[2] It was an evidence-based assessment, relying on feedback from key individuals who were involved in the design, implementation and supervision of the Project (Annexes: list of persons surveyed and interviewed). A vetting of key documents and findings was made during a mission and a field visit to observe the focus on data, monitoring and project-spun learning in cross-cutting areas in case study project sites. One international consultant carried out the TR. It included an inception report and development of an Evaluation Matrix with strategic questions concerning the project design and expected results. The evaluation matrix (Annexes) was developed to guide the review process as a data collection and analysis tool. The evaluator consultant identified strategic questions to guide the inquiry into the science to policy interface and the levels at which the work had become embedded in national and regional systems. Evidence gathered during the fact-finding phase of the TR was cross-checked between as many sources as practicable in order to validate the finding. Strategic emerging questions were raised during consultation and snowballed. Questions of the subregional governance and the sustainability of subregional cooperation targets were queried in depth.
An evaluation mission was completed 2-11 October 2019; the itinerary has been compiled in Annexes. Key stakeholders interviewed (including UNDP /GEF RTA, UNDP, IP, NTCs, Private Sector partners and enumerators) were listed in Annexes . A case study visit was taken to General Santos to visit the Tuna Fish Port operators and data collector and talk to fishermen. The TR completed a desk review of all relevant sources of information: PIFs, all relevant Phase One documents, including terminal review, phase two inception and MTE reports, original project document, project progress reports, financial reports and key project deliverables. A complete list of information reviewed was compiled in Annexes. The project results framework was used as a main evaluation tool in consultation with UNDP GEF and Project management teams at WCFPC and NTCs in assessing attainment of project objective and outcomes (see full review of RF Annexes)**.** A comprehensive country survey was distributed on project design and implementation, and results were disseminated and analysed (Annexes). A questionnaire was prepared and shared with the executive director of the WPCFP. Project co-financing realized by the final evaluation was assessed and summarized in the co-financing table compiled below in the section Finance. The TR consultant presented the preliminary findings of the TR at the end of the mission at a debriefing on 11 October in Manila and reviewed the final GEF Tracking Tool. This final filled-in tracking tool, prepared by the time of the TR report submission, was Annexesed to this report in a separate file.

Rating scale definitions are presented in Annexes. [iv]

1.3. Structure of the Review Report

The TR report was in line with the expectation of the UNDP GEF (TOR). It included a background and description of the project, indicating the duration, principal stakeholders and the immediate and development objectives. The findings included analysis and commentary on the following:

- Project Design and Formulation;
- Project implementation and adaptive management;
- Results;
- Relevance;
- Effectiveness;
- Efficiency*;*

[2] Guidance for Conducting Terminal Reviews of UNDP-Supported, GEF-Financed Projects, 2012, UNDP -GEF Directorate.

- Sustainability;
- Lesson Learned;
- Recommendations and next steps.

The report culminated with a summary of the conclusions reached and recommendations, formulated to enhance implementation during the final period of the project implementation time frame.

1.4. Limitations

The review was carried out September–December 2019, including preparatory activities, field mission, desk review and completion of the report according to the guidelines outlined in the Terms of Reference (Annexes). The first limitation was the late timing of the TE, which somewhat affected data collection methodologies. It was conducted six months after the final activities were delivered across four entities (with national level and regional level teams and proponents). Therefore, the project teams in countries had moved on from positions and/or disbanded their mechanisms for storing and sharing information. This limitation was overcome by identifying key informants (NTC) and other key stakeholders and surveying to support with details and information on all aspects of the project design, implementation and results. The interviews were held in person and by Skype in English and nearly all project documentation was prepared in English. The TE consultant was assisted by an interpreter during the field visit to General Santos Fish Port.
The secondary limitation was the lax use of the comprehensive log frame for a monitoring tool. While formal adjustments were suggested to the log frame made during the MTE, the actual changes were not recorded very well. The assessment was done under the assumption that the MTE had been approved, and the recommendations to the results framework were adhered to.
The third limitation was the absence of a final report by the project team. This made changing information unnecessarily difficult for verification purposes. The TE consultant overcame this by engaging into a comprehensive meeting on results with the project manager and the UNDP lead during 3–11 October.
Interviews were done with the key regional, subregional, national and subnational stakeholders during the mission.

2. PROJECT DESCRIPTION

2.1. Development Context

Oceanic tunas are widely distributed throughout the Pacific Ocean, the Atlantic Ocean, and other oceans of the world, from approximately 600N to 600S and are designated as highly migratory species under the United Nations Convention on the Law of the Sea (UNCLOS). Their effective conservation and management is complicated by their migratory/highly mobile nature and the many nations and regions involved in their harvest; hence their sustainable management requires cooperation among nations, either directly or through international organizations. Article 64 of UNCLOS underscored the importance of multilateral cooperation for the long term and sustainable management of the region's marine resources and the protection and conservation of its ecosystems.

The Western and Central Pacific Fisheries Commission (WCPFC) was established in 2004 as the relevant regional fisheries management organization (RFMO) in the Western and Central Pacific Ocean. The area of competence (Convention Area) of the Commission comprises all waters of the Pacific Ocean north and west of prescribed boundaries, to the coasts of Asia and is indicated in **Exhibit 3** below, which includes the East Asian Seas (EAS) as well as the Pacific Ocean Warm Pool (POWP) Large Marine Ecosystems.

Exhibit 3: WCPFC Convention area including East Asian Seas[3]

For the Exclusive Economic Zones (EEZs) of Indonesia, Philippines and Vietnam, connected with the POWP LME, the oceanic tuna catch[4] in 2012 was estimated at 632,000 metric tons, approximately 14 per cent of the global tuna catch and thus considered of global and regional significance. This comprises around 25% of the catch of skipjack, yellowfin and bigeye tuna in the Western and Central Pacific Ocean (WCPO), with significant catches of coastal tuna and associated species as well. Indonesia takes nearly 70% of that oceanic tuna catch,[5] Philippines takes 20%, and the balance is caught by the more recently developed Vietnam fishery.

In Philippines more than 1.5 million people depend on the fishing industry for their livelihood. The fishing industry's contribution to the country's Gross Domestic Product (GDP) in 2009 was 2.4%. Tuna exports (canned and fresh/frozen tuna) were valued at USD 455 million in 2012. Indonesia's marine region associated with the WCPFC Convention Area, i.e. Pacific Ocean waters and most archipelagic waters account for the equivalent of 59.8% of the total national tuna production. Tuna exports (fresh/frozen/canned) were valued at over USD 600 million in 2012. In Vietnam, tuna fisheries have only developed in recent years but have grown significantly. Vietnam's tuna export value increased over twenty times from USD 22.98 million in 2000 to approximately USD 569 million in 2012. The combined value of tuna exports[6] from the three countries in 2012 exceeded USD 1.5 billion.

At the subregional level, the Project was consistent with the Western and Central Pacific Ocean Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPO) and the WCPFC. Philippines and Indonesia were Commission members, while Vietnam is a cooperating non-member (CNM). Indonesia only acceded to membership at the WCPFC 10th Regular Session in December 2013, after working toward ratification for the last eight years. In order to mark the occasion of joining the WCPFC, Indonesia acknowledged the capacity building support it has received from the GEF-funded West Pacific East Asia (WPEA) Oceanic Fisheries Management project and voiced its support for the extension of this Project.

[3] Map copied from Figure 1 in project document.

[4] The catch of coastal (neritic) tunas from these three countries, generally regarded as straddling stocks, is also significant, exceeding 400,000 mt in 2012 and of great importance to food security in all three countries.

[5] Pacific Ocean waters only (WCPO) and not including Indian Ocean catches.

[6] Exports included include imports processed and re-exported, and in the case of Indonesia, tuna catches from the Indian Ocean.

The Project was consistent with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). The SDS-SEA provides an overarching framework for sustainable development of the EAS that aims to ensure the sustainable use of coastal and marine resources. The SDS-SEA incorporates the main principles, objectives and action programmes of a number of international and regional instruments and agreements, including the UN Convention on the Law of the Sea (UNCLOS), the UN Framework Convention on Climate Change (UNFCCC), Agenda 21, the Convention on Biological Diversity (CBD), the Global Programme of Action for Protection of the Marine Environment from Land-Based Activities (GPA), the World Summit on Sustainable Development, the UN Millennium Development Goals (MDGs), and a number of conventions associated with the International Maritime Organization (IMO). The SDS-SEA embodies a shared vision of the countries of the region for sustainable development of coasts and oceans, and the proposed project was thus linked to the implementation of the SDS-SEA under a programmatic approach for the region.

The Project also contributed to the implementation of the Regional Plan of Action (RPOA) of the Coral Triangle Initiative (CTI). It would in particular contribute to proposed activities on tuna stock and catch assessments, establishment of national tuna management plans and cooperation on measures to address illegal, unreported and unregulated (IUU) fishing. The key institutions in charge of the regional agreements and frameworks are described below. The CTI officially launched a Regional Plan of Action in May 2009. The action plan had five overall goals covering priority seascapes, including promoting the ecosystem approach to management of fisheries (EAFM) and other marine resources, establishing marine protected areas and promoting climate change adaptation and protection and conservation of threatened species. The GEF funded the CTI in collaboration with the Asian Development Bank. Philippines and Indonesia are two of the six CTI countries included in the Coral Triangle area and the Plan of Action, whereas Vietnam enjoys associated country status. Within the EAFM goal, targets and priority actions specifically address tuna and tuna fisheries.

With respect to the UNDP Strategic Plan, the project was consistent with the following primary and secondary outcomes of the UNDP Strategic Plan

UNDP Strategic Plan Environment and Sustainable Development Primary Outcome:

Outcome 2: Citizen Expectations for voice, development, the rule of law and accountability are met by stronger systems of democratic governance.

Output 2.5: Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation.

UNDP Strategic Plan Secondary Outcome:

Outcome 1: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded.

Output 1.3: Solutions developed at national and subnational levels for sustainable management of natural resources, ecosystem services, chemicals and waste.

2.2. Problems that the Project Sought to Address

Oceanic tuna stocks in East Asia faced a number of threats, rooted in a greater demand for fish from rapidly growing domestic population and increasing exports, which substantially increased fishing pressure on the marine fishery resources in the past two decades, both within the subregion and the wider WCPO. The major threats facing the fisheries sector are resource depletion and environmental degradation linked to the following:

1. Incomplete participation in the governance and compliance frameworks for oceanic tuna resources in the subregion, the WCPFC;
2. Inadequate scientific knowledge about oceanic ecosystems and their relationship with fisheries resources;
3. The advancing climate change-driven shifts in fisheries catch and area.

Tuna fisheries were also threatened by Illegal, Unreported and Unregulated (IUU) fishing, compounded by ineffective surveillance and monitoring, incomplete reporting to the WCPFC and gaps in the regulatory framework. These threats were exacerbated by climate change that causes changes in ocean regimes, strengthening of the El Niño-Southern Oscillation (ENSO) phenomenon and ocean acidification.

The main barriers to sustainable fisheries management of highly migratory tuna species in the East Asian LMEs include the following:

Barrier 1: Weak governance of oceanic tuna resources in the region at the subregional as well as national level within the Western and Central Pacific Fisheries Commission (WCPFC)

Subregional: The three countries worked collectively during the first phase of the WPEA project, but a coordinating mechanism was not established. Such a mechanism was required for sharing of data on highly migratory fish stocks to determine sustainable harvest levels at a regional and subregional level within WCPFC.

Some information was available on climate change impacts to the POWP LME, but model outputs were not extended to the EAS primarily for lack of data in this region. In order to enable the effective participation of all three countries in the WCPFC, their capacities to monitor and assess highly migratory fish stocks and report to the Commission, including on CMMs, needed strengthening.

Indonesia: At the time of project development, national monitoring system was gradually being established under the Directorate General of Marine Resources and Fisheries (PSDKP), Ministry of Marine Affairs and Fisheries (MMAF), mainly to cover large vessels (>30GT), but it was not fully integrated with fisheries data at the spatial management unit level, i.e., the Fisheries Management Area (FMA). Species composition by gear was available under the port sampling programme, covering only FMAs 716 (Bitung), 717 (Sorong), and 714 (Kendari). Such statistical data for archipelagic waters fisheries was partially available, but a scientific database enabling verification was not then available for Pacific archipelagic waters as a whole, i.e. FMAs 713, 714, 715. VMS and a catch certification scheme were still under development. Climate change impacts on oceanic fisheries and associated ecosystems had not been studied and analytical capacity in this area was limited.

Philippines: At the time of project development, monitoring coverage for small- and medium-scale tuna fisheries was low, and estimates were considered less reliable. Monitoring by VMS was limited to Philippines flag vessels operating purse seines/ring nets in the WCPO High Seas Pocket No. 1 (HSP1) and other countries' EEZs. Delays in manual submission of log sheets were common, resulting in a proposed e-logbook system to facilitate timely submission. The government of Philippines passed the Climate Change Act in 2009 as a framework for adaptation and mitigation action. In 2010, the National Framework Strategy on Climate Change (NFSCC) was approved and, in November 2011, the President signed the National Climate Change Action Plan (NCCAP). However, institutional capacities for the implementation of a consistent climate policy were still weak and activities were insufficiently integrated into planning processes. More importantly, the impacts on oceanic fisheries and its ecosystems had not yet been studied and capacity was limited.

Vietnam: At the time of project development, monitoring systems had been established in the three central provinces (Binh Dinh, Phu Yen and Khanh Hoa) which have historically accounted for the majority of the catch of large tunas for export under the WPEA in compliance with WCPFC requirements, but there was not complete coverage of all gears; in other provinces where significant amounts of oceanic tunas are landed, tuna fishery data were generally unverifiable. A VMS scheme was being implemented but had not yet been integrated with fisheries data. VMS, IUU and catch certification schemes were thus not fully established, but they were under development and initial implementation. There was also a lack of trained/skilled personnel, and there was no assessment of the capacity needed to interpret climate change impacts on oceanic fisheries and develop adaptive management strategies. No inputs for national policy formulation on climate change were available for Vietnam nor for oceanic fisheries.

Barrier 2: Inadequate implementation of policy, institutional and fishery management reforms at national level

The three countries lacked capacity to adequately comply and enforce existing legal instruments of the WCPFC and to fully implement supporting national legislation and the National Tuna Management Plans (NTMPs). They also lacked experience and capacity to apply market-based instruments, such as certification, to meet international requirements for sustainable harvesting and marketing of tunas. Indonesia, Philippines and Vietnam needed to start implementing the ecosystem approach to fisheries and finalize their national tuna management plans.

Remaining challenges included:

Regional/Subregional: At the time of project preparation, limited participation of Indonesia and Vietnam, in particular, in key WCPFC meetings, such as SC and TCC remained a barrier. Furthermore, assessments were not explicitly available on the subregional scale because of data gaps and the current assessment model's spatial structure. Preliminary ecosystem models, e.g. SEAPODYM and EcoSim are available for the POWP LME but had not been applied in a regional

management context. National applications of SEAPODYM were being developed for Indonesia and possibly Vietnam, but they required considerable further work before application.

Indonesia: Indonesia became a full member in December 2013, and some fishery legislation was under revision to accommodate all WCPFC requirements. The framework for archipelagic waters management through FMAs was then minimal but was being progressively developed for the seven Pacific FMAs. Limited data were available on the supply chain, and a chain of custody scheme (traceability) had not been established for any fishery, despite the growing market demand for certification. Pre-assessment of selected tuna fisheries had thus far been unfavorable. There was a need for a fishery improvement plan (FIP) focusing on selected oceanic tuna fisheries. Information on target species was available from WPEA-1 with coverage of FMA 716, 717 and 714. However, there was limited information on retained/bycatch species and no risk assessment study for tuna bycatch and ETP species existed. There was a National Stock Assessment Committee, and plans for national assessment were underway. Ecosystem modeling had been partly applied and some commitment to EAFM already exists through community-based activities although the NTMP lacked EAFM components. Turtle bycatch had been studied and some mitigation measures were underway. However, shark catch and seabird interactions were not well documented, and there was a low level of compliance with some CMMs.

Philippines: The fish aggregating device (FAD) management policy and compliance with some CMMs needed to be revisited, but Philippines was otherwise currently compliant with most of the WCPFC CMMs. Information was available on supply chains but had not been compiled. There was growing market pressure for ecolabeling and/or certification relating to sustainable fisheries. Several pre-assessments had been initiated. There was limited understanding of the ecosystems supporting the oceanic tuna fishery. Retained species and bycatch species for all gears were incompletely characterized. No study of EAFM for oceanic fisheries existed although they were being applied to some coastal fisheries. The legal basis of the NTMP was uncertain and needed to include commitments to EAFM. Turtle bycatch studies and some mitigation measures were underway. Moreover, shark catch and seabird interactions were poorly documented, and there was low level of compliance with some CMMs.

Vietnam: As a cooperating non-member (CNM), there was limited compliance with WCPFC CMMs or other management arrangements, in part because the South China Sea was tentatively excluded from the Convention Area. WCPFC CMM 2013-01 (CMM for bigeye, yellowfin and skipjack tuna in the WCPO) was one of the key CMMs that should be applied to all migratory ranges, but limited compliance of Vietnam might undermine the effectiveness of the CMM. However, Vietnam's National Tuna Management Plan, developed through the WPEA project, recommended domestic measures compatible with this CMM. There were incomplete data available on supply chain, and a chain of custody scheme had not been established for any fishery. MSC pre-assessment of the yellowfin and bigeye handline and longline fishery was unfavorable, and the need for an FIP was identified. Data collection on target species was initiated under WPEA, but coverage was incomplete for some fisheries, and data was not fully incorporated in regional assessments. Limited research on retained/bycatch species had been conducted, but they had not been comprehensively studied. Research surveys using two gears had been periodically undertaken; no national stock assessment was available, but this was planned. There was no EAFM application and the legal basis of the NTMP and EAFM inclusion in it was uncertain. There were few data on ETP species.

Barrier 3: Limited subregional knowledge sharing on highly migratory fish stocks

At the time of project preparation, there was no subregional repository for data on highly migratory fish stocks,[7] lessons learned and best practices in oceanic fisheries management in the EAS. This impeded the exchange of knowledge on shared stocks which was required to improve the subregional management regime. Establishing a subregional knowledge platform on shared tuna stocks and stock assessment at a subregional level were therefore priorities. More specifically, the remaining and barriers included the following:

- Limited information shared via WCPFC mechanisms, meetings and WPEA website;
- Limited outreach to stakeholders at national and subregional level;
- Limited participation in knowledge sharing events at international and EAS regional level, including IW: Learn;
- Provincial/FMA profiles as key information products in the tuna fishery were incomplete and not widely disseminated.

[7] SEAFDEC maintains a database for SE Asian tunas for its 11 members, but it is recognized as incomplete and will hitherto focus more on neritic rather than oceanic tunas; the ASEAN TWG is not known to be involved in any database activity.

2.3. Project Description and Strategy

The Project was designed under Objective I2 of the GEF-5 International Waters Strategy, aligned with Outcomes 2.1, 2.2, and 2.3 of Objective 2 (Table below). The project also made contributes to achieving to three Country Programme Outcomes as defined in UNDP's CPAP or CPD:

Indonesia: Outcome 5, Climate Change and Environment: Strengthened climate change mitigation and adaptation and environmental sustainability measures in targeted, vulnerable provinces, sectors and communities.

Philippines: Outcome 4, Resilience towards Disasters and Climate Change: Adaptive capacities of vulnerable communities and ecosystems strengthened to be resilient toward threats, shocks, disasters, and climate change

Vietnam: Focus Area One: Inclusive, equitable and sustainable growth.

Table: Alignment of Project Strategy with Objective 2 of the GEF-5 International Waters Strategy	
Objective 2 of the GEF-5 International Waters Strategy: Catalyze multistate cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change	**Project Objective:** To improve the management of highly migratory species in the entire West and Central Pacific (WCPF) Convention area by continuing to strengthen national capacities and international participation of Indonesia, Philippines and Vietnam in WCPF Commission activities
Outcome 2.1: Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles and policy/legal/ institutional reforms into national/local plans **Indicator 2.1:** Implementation of national/local reforms; functioning of national inter-ministry committees	**Outcome 1.1:** Improved regional mechanisms for monitoring and assessment of highly migratory fish stocks and IUU fishing in the POWP LME and the EAS LMEs
Outcome 2.2: Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability **Indicator 2.2** Cooperation frameworks adopted and include sustainable financing	**Outcome 1.2**: Enhanced capacity of technical staff, policy and decision makers in Indonesia, Philippines and Vietnam to integrate climate change impacts on highly migratory stocks into management regimes **Outcome 2.1**: Enhanced compliance of existing legal instruments at national, regional and international levels **Outcome 3.1**: Regional knowledge platform established on POWP LME and EAS LMEs shared tuna stocks and associated ecosystems
Outcome 2.3: Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and producing measureable results **Indicator 2.3**: Measurable results for reducing land-based pollution, habitat and sustainable fisheries from local demonstrations	**Outcome 2.2**: Adoption of market-based approaches to the sustainable harvest of tunas **Outcome 2.4**: Ecosystem Approach to Fisheries Management (EAFM) guiding sustainable harvest of the oceanic tuna stock and reduced bycatch of sea turtles, sharks and seabirds

Main Barriers

The Project was designed to remove the main barriers to sustainable fisheries management by strengthening national capacities and regional cooperation to implement fishery sector reforms that would sustain and conserve the highly migratory fish stocks in the West Pacific Ocean and East Asia LMEs while considering climatic variability and change. Specifically, the Project aims to do the following:

- Build the capacity of Indonesia, Philippines, and Vietnam to mainstream climate change impacts into their national fisheries institutions and policies;
- Strengthen regional collaborative mechanisms for monitoring and assessment of highly migratory fish stocks; use an ecosystems approach to fisheries management of shared target and non-target oceanic stocks;
- Strengthen national and regional monitoring, regulation and control;
- Link its activities to the work of the WCPFC. The WCPFC would establish a Consultative Forum to coordinate monitoring of highly migratory stocks across POWLME and SEA LMEs;
- Contribute to the implementation of the SDS-SEA.

The Project objective was *to improve the management of highly migratory species in the entire West and Central Pacific (WCPF) Convention area by continuing to strengthen national capacities and international participation of Indonesia, Philippines and Vietnam in WCPF Commission activities*.

This objective was envisaged to be achieved through three interlinked components:

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

This component aimed to strengthen the regional collaborative mechanisms for monitoring and assessment of highly migratory fish stocks, and Illegal, Unreported and Unregulated (IUU) fishing in the POWP LME and the EAS LME.

Outcome 1.1: Improved regional mechanisms for monitoring and assessment of highly migratory fish stocks and IUU fishing in the POWP LME and the EAS LME

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

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

COMPONENT 2: Implementation of policy, institutional and fishery management reforms

The objectives of this component were to enforce compliance with existing national, regional and international legal instruments, implement EAFM and the national tuna management plans and enhance adaptive management of shared stocks in the face of climate change. Partnerships with the private sector will be sought to promote market-based approaches to sustainable harvesting of shared tuna stocks, such as certification.

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

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

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

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

COMPONENT 3: Knowledge sharing on highly migratory fish stocks

The third component was to establish a regional knowledge platform and network for the Western Pacific Ocean and East Asian LMEs.

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

Global Environmental Benefits

The expected global environmental benefits generated by the Project included the following:

1.1. Strengthened international cooperation on priority transboundary concerns related to the conservation and management of highly migratory fish stocks in the West Pacific Ocean and East Asian Seas that are within the jurisdictions of Philippines, Indonesia and Vietnam;

1.2. Integration of issues on emerging climate change impacts on oceanic fisheries into national and regional policy and institutional frameworks and the regional management regime;

1.3. Reduction of bycatch of critically endangered species (e.g. sea turtles, sharks and seabirds) by enhanced sustainable management and harvesting of target species, thus improving the overall health and integrity of the marine ecosystem;

1.4. Evidenced-based information available to decision making for reforms related to economic, financial, regulatory, institutional issues to strengthen national and regional fisheries management. The reforms would be initiatives of Philippines, Indonesia and Vietnam governments with participation from key players (e.g. national and international institutions, nongovernment institutions, private sector). The reforms would contribute to the development of a comprehensive management framework for the East Asian oceanic tuna fisheries.

Global environmental benefits related to the sustainable harvesting of oceanic tunas in the EAS that are monitored using the GEF IW Tracking Tool included the following:

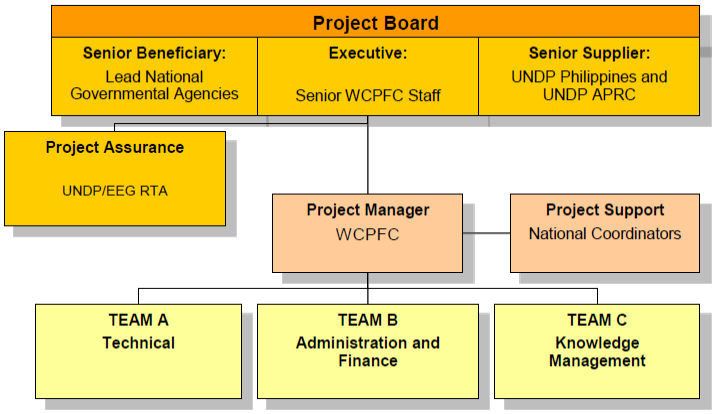
- Improved monitoring of oceanic tuna fisheries in the EAS and coverage increased by 40% by the end of the project;
- Reduction of catch of ETP species by 25% by the end of the project;
- Enhanced adaptive capacity to manage oceanic fisheries in the EAS under climate change conditions;
- Certification of at least two oceanic tuna fisheries in the EAS by the end of the project.

2.4. Implementation Arrangements

The Project is being implemented over a five-year period (One extension granted at MTE 2017), under an intergovernmental organization implementation modality (IGO) executed by the Western and Central Pacific Fisheries Commission (WCPFC) through its Science Programme.

UNDP was the GEF Implementing Agency for this Project. Operational oversight would be ensured by UNDP through the UNDP Philippines, and strategic oversight would be ensured by the UNDP GEF Regional Technical Advisor (RTA) responsible for the Project. This oversight also ensured that the project would practice due diligence with regard to UNDP's Environmental and Social Standards.

The organizational structure of the project is illustrated in the organogram below.



Project Organization Structure (from project document)

Project Board: Members of the Project Board included the WCPFC, key national governmental agencies and UNDP. The Project Board had three distinct functions:

Executive Role: This individual represented the project "owners" and chaired the board.

Senior Supplier Role: This role represented the interests of the parties concerned which provided funding for specific cost sharing projects and/or technical expertise to the project. The Senior Supplier's primary function within the Board was to provide guidance regarding the technical feasibility of the project. This role would rest with UNDP Philippines represented by the Resident Representative.

Senior Beneficiary Role: This role represented the interests of the three governments who would ultimately benefit from the project. The Senior Beneficiary's primary function within the Board was to ensure the realization of project results from the perspective of project beneficiaries.

The Project Board was thus responsible for making management decisions, in particular when guidance was required by the Project Manager. The board approved the annual work plans and budgets and also played a critical role in project monitoring and evaluation. As needed, the board arbitrating potential conflicts within the project and negotiating appropriate solutions. Based on the approved annual work pan, the Project Board could also approve deviations from the original plans.

2.5. Project Timing and Milestones

Project Milestones:

Received by GEF:	08 April 2013
Preparation Grant Approved:	02 May 2013
Concept Approved:	01 June 2013
Project Approved for Implementation:	12 May 2014
Start Date:	27 October 2014
Inception Meeting	4–5 November 2014
Activities Started	January 2015
Closing Date (Planned):	27 October 2017
Actual Close Date	April 2019
Terminal Evaluation	October–December 2019

The Project identification form (PIF) was approved in June 2013, and following an approximate one-year-long project preparation phase, the project obtained endorsement by the GEF CEO on 12 May 2014. The project document was then signed by representatives of the national governmental partners and the UNDP in October 2014. The 3-year-duration project was originally slated to close on 27 October 2017.

The Project inception workshop, which was arranged coincident with the first project board meeting, was held on 4–5 November 2014. Project activities effectively started in January 2015 in Philippines. Project start-up in Indonesia and Vietnam was delayed until late 2015 as a result of time needed to register the projects and further domestic approval procedures, e.g. in Vietnam, regional projects require approval by the Prime Minister. The Prime Minister of Vietnam granted approval on 6 July 2015; this was followed by the Ministry of Agriculture and Rural Development issuing an authorization on 13 August 2015 stating that the project would be implemented by D-FISH. The project management unit within D-FISH was formally set up on 27 October of that year, a full year following the start date of the project, when the project document was approved by the three beneficiary countries.

2.6. Main Stakeholders

The main stakeholders for the project and their expected roles and responsibilities, as outlined in the stakeholder involvement plan in the project document, are listed below.

Stakeholder	**Expected Involvement**
WCPFC	Regional coordination and implementation, project executing partner.
PEMSEA Resource Facility	Coordinating EAS Programme
Coral Triangle Initiative (CTI)	CTI Regional Plan of Action–IUU and EAFM
Lead national ministry/institutions	
INDONESIA	

Stakeholder	Expected Involvement
Directorate General of Capture Fisheries (DGCF/MMAF)	Data management, implementing WCPFC CMMs, fisheries legislation, observer program; project coordination
Research Center for Fisheries Management and Conservation (RCFMC/P4K)	Data collection, port sampling, EAFM/biological research; project coordination
PHILIPPINES	
Bureau of Fisheries And Aquatic Resources (BFAR/DA)	Project oversight, observer programs, MCS, IUU; project coordination
National Fisheries Research and Development Institute (NFRDI/BFAR)	Data collection, port sampling, EAFM; project coordination
VIETNAM	
Directorate of Fisheries (D-FISH, MARD)	Policy and legal issues; project coordination
Ministry of Agriculture and Resource Development (MARD)	Project oversight
Dept. of Capture Fisheries and Resource Protection (DECAFIREP)	Data collection, port sampling, observer program, database management, adaptive management, climate change
Other national ministries	
INDONESIA	
DG of Surveillance of Marine Resources and Fisheries (DGSMRF)	MCS and IUU monitoring
Ministry of Environment	GEF Focal Point, environmental policy
PHILIPPINES	
Bureau of Agricultural Statistics (DA)	Fisheries statistics
National Tuna Industry Council National Fisheries and Aquatic Resources Management Council (FARMC)	Policy advice
Philippines Fisheries Development Authority (PFDA)	Port sampling, landings data
VIETNAM	
Ministry of Natural Resources and Environment (MNRE)	Environmental management, climate change
Institute of Strategy and Policy on Natural Resources and Environment (SPONRE)	Environmental and climate change policy
Provincial Peoples Committees (PPCs)	Inshore fisheries (< 24nm) management and administration
Provinces/regions in each country	
INDONESIA	
Sulawesi Utara (Bitung) Sulawesi Selatan (Kendari) Papua (Sorong) Sulawesi Tengah (Mamuju)	Data collection and port sampling sites Data collection and port sampling sites Data collection and port sampling sites Data collection and port sampling sites (initiated in 2014)
PHILIPPINES	
11 Regions (1,3,4b, 5,6,8,11,CARAGA, ARMM) and 15 sites	28 enumerators deployed for data collection, port sampling
VIETNAM	
Binh Dinh Province	Data collection and port sampling provinces (intensive)

Stakeholder	Expected Involvement
Khanh Hoa Province Phu Yen Province	Data collection and port sampling sites Data collection and port sampling sites
Da Nang Municipality, Provinces of Quang Nam, Quang Ngai,, Ninh Thuan, Binh Thuan, Baria Vung Tau	Data collection, port sampling (upgrade from trial in 2013)
Non-Governmental Organizations	
WWF Sustainable Fisheries Partnership	Fisheries Improvement Projects (FIPs), EAFM pilot studies, observer programmes
Scientific/Academic institutions	
INDONESIA	
Komnas Kajiskan (National Committee on Fish Stock Assessment)	Stock assessment training and collaboration
Bogor Agricultural University, Centre for Coastal and Marine Resources Studies	Fisheries training, fisheries profiles
University of Indonesia, Faculty of Law	Legislative reviews
PHILIPPINES	
Mindanao S U (General Santos)	Data collection, port sampling
VIETNAM	
Research Institute for Marine Fisheries (RIMF), Haiphong, Vietnam	Stock assessment training, risk assessment, observers
Nha Trang University (Fisheries)	Fisheries technology, observers, seafood technology
REGIONAL	
CSIRO (Australia)	FAD research, data collection, tuna genetics (Indonesia)
Multilateral organizations	
Secretariat of the Pacific Community (SPC)	Training, database technical assistance
FFA	Liaison with PIOFM project
SEAFDEC	Liaison and cooperation in various aspects of project
Asean TWG	Regional policy on post-harvest and data collection
CTI Regional Secretariat and CTI Working Groups	IUU and other areas to be determined
Bilateral organizations	
ACIAR	Tuna research/supply chain data (Indonesia)
Private sector companies	
INDONESIA	
1. Harini Asri bahari 2. Sari Harta Samudera 3. Ocean Mitramas 4. Aneka Loka Indotuna 5. Bina Nusa Mandiri Pertiwi 6. Etnieko Sara Laut 7. Harini Nalendra 8. Jaya Bali Bersaudara	• Attending consultation meetings and workshops (e.g., meetings for updating National Tuna Management Plan, estimating national annual tuna catch, reviewing policy, legal and institutional arrangements of tuna fisheries, etc.) • Cooperation in the provision of data and verification process for the estimates of total tuna catch by industries • Provision of tuna imports and exports data • Cooperation in the facilitating of observers on-board deployment and provision of log sheets

Stakeholder	Expected Involvement
9. Jaya Kota 10. Lautan Lestari Abadi 11. Karunia Laut 12. Skipjact Indonesia Pratama 13. Agrindo Bahari Kencana 14. Agrindo Mina Bahari 15. Arabikatama Khatulistiwa Fishing Industry 16. Aru Samudera Lestari 17. Fischo Marindo Utama 18. Jaya Bali Bersaudara 19. Indonesia Tuna Association 20. Mentari Prima Bahari 21. Pathe Maang Raya 22. Perikanan Nusantara 23. National Fishing Fleet Association 24. Starcky Indonesia 25. Wailan Pratama 26. Waranei Perkasa 27. Firgo Internusa 28. Bitung Fishing Industries Association 29. Indonesia Pole and Line, Handline Association 30. Indonesia Fish Canning Association	• Coordination and/or implementation of the Fisheries Improvement Program (FIP) • Comply with various WCPFC CMMs (VMS, Logbook, IUU, etc.) • Arranging meetings and workshops at provincial level; etc.
PHILIPPINES	
1. SOCKSARGEN Federation of Fishing Industries Inc. (SFFAII) 2. Frabelle Fishing 3. Confederation of Fishing Industries (ConFed) 4. RD Fishing 5. San Lorenzo Ruiz Fishing 6. CHL Fishing 7. Trinity Homes Industrial Corp 8. TSP Marine Industries 9. Trans Pacific Journey Industries Corp 10. Marchael Sea Ventures 11. NH Agro Industrial Corp 12. Umbrella Fish Landing Association 13. Roel Fishing 14. Rell and Renn Fishing Corp 15. Damalerio Fishing Corp	• Attending consultation meetings and workshops (e.g., workshops for revising National Tuna Management Plan and Operations Guide for Filipino Fishermen, National Tuna Annual Catch Estimates Workshop, National Tuna Fishery Profiles, etc.) • Arrange meetings/workshops at provincial level • Cooperate in the provision of data and verification process for the estimation of annual total tuna catch by industries • Comply with various WCPFC CMMs (e.g. observer, VMS, etc.) • Continue to support and facilitate onboard observers and provision of log sheets; etc.

Stakeholder	Expected Involvement
16. Other tuna companies (e.g., General Tuna Canning Corp.)	
VIETNAM	
1. Vietnam Tuna Fisheries Association (VINATUNA) 2. Binh Dinh Tuna Fisheries Association 3. Khanh Hoa Tuna Fisheries Association 4. Phu Yen Tuna Fisheries Association 5. Culimer Vietnam Co., Ltd 6. Tin Thinh company 7. Vinh Sam company 8. Thinh Hung company 9. Hai Vuong company	• Attending national meetings and workshops convened by Government agencies (e.g. legal and policy review meetings, revising National Tuna Management Plan workshops, Climate Change Capacity Building training courses, etc.) • Coordination and/or implementation of Fisheries Improvement Program (FIP) • Arranging and funding meetings/workshops at provincial level • Provision of tuna fisheries data, participation in workshops for the estimation of national annual tuna catches, and verification process of tuna catches by industries • Comply with various WCPFC CMMs (e.g. IUU, observer, VMS, etc.), etc.

3. FINDINGS

3.1. PROJECT DESIGN AND FORMULATION

3.1.1. Relevance to International, Regional and National Priorities

This Project was a follow-up to a successful first phase implemented from 2010 to 2012. The first phase focused on improvements in data quality and compliance towards Conservation and Management Measures (CMMs) of the WCPFC for the three beneficiary countries: Indonesia and Philippines (full members of the Commission), and Vietnam, a cooperating nonmember.

This second phase was designed to follow up with gaps in data quality and CMM compliance and included an expanded scope, covering four additional cross-cutting areas: climate change, ecosystem approach to fisheries management (EAFM), ecolabeling and harvest strategies.

The implementation strategy changed slightly with the execution partner as the secretariat of the WCPFC. NOPs was dropped. The Project was highly relevant to regional and national fisheries management priorities and plans, TE consultant learned the Project had been highly aligned. It was reported by interviewees as highly relevant to regional plans and programmes (WCPFC) but less relevant to the subregional EAS agenda. Additionally during implementation, the Project began to fit within the context of the national commitments to work on sustainable development goals SDGs and Agenda 2030, Climate change 2015 and Sendia 2015, ,

Philippines

The Project contributed to national priorities particularly in terms of tuna data collection (greatly enhanced and improved). The government has increased budget from PHP 30M (USD 600,000) to PHL150M (USD 3,000,000) per year which now covers almost all the tuna landing sites around the country (from around 300 landing/sampling sites in 2014, port sampling covers around 800 landing/sampling sites since 2015). This has also contributed to the regional and international priorities in relation to our WCPFC data obligations.
Significant national, regional and international directives, policy/laws to which the project contributes would include the initiated revision of the National Tuna Management Plan (NTMP). The latest NTMP was launched in 2018 and the previous versions were in 2012 and 2005. The Project was reported as having contributed to the crafting of various Fisheries Administrative Orders (FAOs):

- FAO 236-4 (s. 2015): Extension of FAO 236-3 Series of 2014 on the Rules and Regulations on the Operations of Purse Seine and Ring Net Vessels Using Fish Aggregating Devices (FADs) locally known as Payaos during the FAD Closure Period as Compatible Measures to WCPFC CMM 2014-01
- FAO 236-5 (s. 2018): Extension of FAO 236-4 Series of 2015 on the Rules and Regulations on the Operations of Purse Seine and Ring Net Vessels Using Fish Aggregating Devices (FADs) locally known as Payaos during the FAD Closure Period as Compatible Measures to WCPFC CMM 2017-01
- FAO 245-3 (2015): Regulations and Implementing Guidelines on Group Tuna Purse Seine
- Operations in High Seas Pocket Number 1 as a Special Management Area

Indonesia

The Project contributed to regional and national priorities, particularly in terms of tuna data collection (greatly enhanced and improved) and fisheries management. Building on phase one, the project continued support data collection and port sampling in Bitung, Kendari, Sodohoa and Sorong. These activities contributed to provide size data, catch compostion by gear, by species and by sites. Series data (10 years) is now available and has been used for stock assessement in the WCPO in areas 4 and 7 of the CA and Harvest strategy for tropical tuna in the Indonesia Archipelagic Water.

The Project contributed to the development of National Tuna Management Plan which was reviewed for the first time after a launch in 2014. Indonesia has officially launched the interim harvest strategy for tropical tuna in the IAW (FMA713, 714, 715) in may 2018. The Prototype for an operating model was developed and is entering the implementation phase of the HS. Most significantly, the project has contributed to the issuance of ministry decree No 107/2015 for National Tuna Mangement Plan (NTMP). The interim Harvest strategy been officially launched in May 2018.

Vietnam

Interviewees stated that the country considered Tuna Fisheries as an important species in capture fisheries. While there was complexity noted of government institutional structure in Vietnam and there was delay to approve the project document, the development and implementation of project document has been a national priority for fisheries management. At regional level, interviewees stated Vietnam had not been ready for implementation of tuna port sampling independently, this project helped Vietnam to fulfil its obligations as CNM of WCPFC

VNM endorsed Fisheries Law in 2003. Since then, there have been emerging issues on fisheries management at international, regional and national levels need to be aligned and integrated therefore, the project is aligned with direction of Vietnamese Government to update 2003 Fisheries Law. There is no specific legislation on tuna fisheries management in Vietnam, and the project increased attention of policy makers on fisheries management in Vietnam through cross-sector work and coordination in conducting work on outputs (See list of outputs in Annexes).

3.1.2. Analysis of TOC/Strategy—Assumptions and Risks

TE found different views on the design effectiveness. Naturally, the design would be different for each country as each country had different capacity needs and interests towards the projects regional cooperation goals. Indonesia agrees the project had comprehensively covering the gaps on data collection and monitoring but missed the important aspect of data collection from the need for an observer program. There is a need still for operational data to be obtained from a functioning observer program in all three countries which required by the WCPFC (funding and programming work may be required to help fill this capacity gap linked to project expected outcomes - new project with New Zealand does not fill it).

The addition of four technical cross-cutting areas broadened the project focus (from phase one) beyond data collection and compliance reporting. The new design came with many assumptions concerning implementing partner capabilities, project budget and readiness (and capacities) for three EAS countries to cooperate across boundaries and to engage on cross-cutting work: climate change, harvest strategies, markets analysis and fisheries improvement and ecosystem management approaches at national, subregional and regional level. Significant outcome targets were not achieved at the EAS subregional level (issues pertained to design assumptions and overall budget). The joint EAS work on four cross-cutting areas and learning through WCPFC as IA, however, was found to have influenced the regional level policy window for future programmes. Subregional governance outcomes were experimental—through implementing, it was learned that there are mechanisms in place for EAS. The design focus and intention (based on interviews) was on the technical support for data and reporting support at national level. It would also be implemented with a focus on technical assistance by WC secretariat as a learning together project. There is little evidence of a sustainability plan for the other subregional cross-cutting outputs.

The project document, comprehensive and articulate, encapsulate the theory of change (however design of indicators and some targets for objectives however, were not all smart- see analysis in findings section). While the design thinking had been robust with a clear focus on actual needs (interviewees expressed this view) including data and monitoring (in continuation from the phase one) the phase two theory of change was also not fully fleshed out in narrative for the regional and subregional and national governance (sustained Consultative Forum) and policy targets. There were assumptions concerning will, resources and budget for many targets, i.e. CF, EAS governance and joint cross-cutting work. Additionally, design strategies for bridging the softer capacity development and policy work bridging science-to-policy, technical, and scaling targets with strategies were lacking. Project was generally implemented by the technical focal points. The policy work was not really considered in the implementation strategy. Policy bridging work was weak throughout the implementation and leaves a gap and points to need for exit strategy. There is a need for urgent follow-up to ensure the work is not lost to the policy audience in all three countries, including presentation, some economic work on cost benefit, dissemination strategies, documentation and uploading of the work on the PEMSEA WPEA website. Knowledge management was not embedded as a modality for reaching the project policy targets. This was not understood by the PM and or considered as an implementation strategy and/or for supporting the governance and policy objectives.

A decision was taken to go forward after project review by GEF with a substantially reduced project budget. This decision at once was a huge challenge for the extended Project expected results and cross cutting area work focus (from phase one), i.e. expected output targets on climate change , harvest strategies, by catch and economics and sub regional governance targets at three levels. The project management decision (interviewees and review of project board meetings) to focus on the substance requirement for the countries on data collection and monitoring. The key driver for project however, as highlighted by interviewees was the countries challenges in satisfying the EAS countries with their data

obligations to WCPFC. A key finding and lesson was that this project was designed for UNDP/GEF extended outcomes with 4US$ million dollar grant, the budget granted was less half that amount and implemented according to the original plan. In hindsight, this project should have better downscaled. The challenges in satisfying the data obligations to WCPFC results were fully achieved despite the budget challenges. The success in technical implementation was stated by interviewees as good collaboration between the project teams and the WCPFC secretariat as manager. Notably, Vietnam did not get WCPFC member status by end, despite project supported accomplishments (which constituted a significant change in capabilities for reporting and compliance to WCPFP), a key expected outcome.

Thus TE learned the Project management's main intention was to support countries with the necessary technical assistance for compliance and reporting. The extended project focus in phase two included sub regional collaboration targets needing strong strategies for partnership to relevant SEAFDEC and ASEAN forums. It needed aadequate budget for convening the national policy level stakeholders around the new sub regional collaboration and data sharing and planning agenda. Additionally, there was no sustainability plan built in regarding the sub regional collaboration mechanism at the regional and or national level. By end of project period however, the national task forces had been finally established and held a dialogue concerning the roles and benefits of a consultative forum. The first group meeting in January 2019 identified a list of priority areas for sub regional work. This was implemented late in implementation and needs follow-up (exit strategy).
It is the view of the evaluation consultant that there had been vagueness and misinterpretation between the sub regional governance vs. the sustained knowledge management and learning goals of the project design. For instance, in Indonesia, the sub regional goals for managing tuna resources were said to be quite clear by national governance (through the national fisheries act no. 45/20090 and Regional goals, which translated in the various CMMs, in particular CMM 2018-01. However, this fact does not discount that there is and remains a good argument for EAS joint work and collaboration within the WCPFC region and globally towards international Tuna fisheries management.

3.1.3. Results Framework

The project results framework was comprehensive with 10 indicators and 66 end-of-project targets, 4 at the objective level, and 63 divided among 8 expected project outcomes. These were distributed across regional, subregional and national dimensions. The detailed log frame (Annexes attached) was reported by project management interviewed as a "general" guide, used for annual work planning and implementation, but it had not been adhered to closely as strict monitoring tool, i.e. against final expected results (also see monitoring section for commentary).

The Project document states the project monitoring would ensure the participation of women in all its activities and will target at the minimum, 30 percent women participation in the national, regional and international capacity building activities. It will, to the extent possible, provide equal access to and benefits from the Project resources to both men and women. The project would undertake gender-disaggregated monitoring of its activities, outputs and impacts.

The gender dimension was evaluated at MTE and the findings were again confirmed at TE. The project results framework was not disaggregated according to gender (document review, consults and MTE). Interviewees held a consensus that the gender objectives were built into the project results framework (gender-disaggregated monitoring was a headcount at meetings), outputs, and impacts. The project document highlighted gender concerns (see section on National and Local Indicators and Benefits). This was not monitored. It was more off a check list.

The project implementation review (PIR) reports contains some information on women participation in project workshops and meetings. As per MTE (verified by TE), one of the three national coordinators, for the Philippines, is a woman; and the Team Leader for the Inclusive and Sustainable Development Unit of the UNDP Philippines is also a woman and a member of the project board. The project implementation was weak on gender monitoring because there was no disaggregated baseline data included (as per intent) to be used as a monitoring tool. The interviewees were of the mind that women's equality and impacts - inclusion was implicit in the thematic substance as key beneficiaries and stakeholders in improved Tuna fisheries monitoring systems as women are disparately dependent on fisheries for their rural livelihoods and are generally involved in fish work and port activities including as enumerators and Tuna port /production workers.

The cross-cutting area (overambitious) was more about rolling targets. The overambitious project targets were rationalized as making "contributions." For instance, when questioned how the addition of four new cross-cutting technical areas impacted results and implementation, the general consensus was that this was challenging and coped with those additions. Indonesia results were as follows: climate change assessment (conducted a prior study for CC in relation to the tropical tunas, developed the two guidelines for CC adaptation and mitigation and incorporated them into an

improved NTMP, EAFM (pilot implementation of ecosystems approach to fisheries management) conducted a trial of EAFM implemantation for PL fisheries in Sikka FMA 714, investigated the FAD impacts and conducted risk asessment for tuna fishery (including sharks and tuna).

The harvest strategy development (note: it was a first attempt for Indonesia and in the ASEAN countries to develop harvest strategy for tropical tuna in the IAW FMA 713,714v and 715). The country reported learning about the HS concepts and HCR, defining management objectives, developing its operating model and reporting to enter the implementation phase. For the market-based approaches, the output was purportedly addressed through the supply chain study for PL fishery.

For TE evaluator, it follows that the Project needed a strong exit strategy. The MTE was clear that the Project needed to focus more on the synergies and relations with ongoing projects to tuna monitoring aspects. To some degree this was done post-MTE, but it could also lead to a key TE recordation, which is to develop an exit strategy for this Project that outlines a dissemination plan for all the technical work completed on the cross-cutting area and follow-up for the EAS work.

The Project's overly large scope with cross-cutting areas added on from the phase one led to rational project management to focus of the budget allocation for results on data and monitoring and strategies to contribute most effectively to the other cross cutting area. The cross-cutting results was the hardest to assess as most of the activities were knowledge 'expert' inputs and required tools to measure learning outcomes across individual, organizational and institutional levels at regional, subregional and national levels. Much of the evidence for learning outcomes was subjective, based on consults and observation of case study in Philippines and the interaction among the project management, National Tuna Coordinators and the UNDP GEF teams.

Summary of the MTE review of log frame

As part of the Midterm Review 2017, the project results framework had been comprehensively assessed against the "SMART" criteria, whether the indicators and targets were sufficiently *specific, measurable, achievable, relevant and time-bound*. The Terminal Review assessment built on this analysis and considered what actions were taken based on the MTE review of the recommendations. A central recommendation from project management to fully review the log frame (take to project board for decision) after MTE was noted. This was not formally executed and monitoring was continued and implicit in the actions of the PM. The lack of formal changes in the inception report-vetted log frame made it difficult for the MTE and the current assessment. (TE consultant had to recreate the decisions into the agreed log frame).

During MTE several changes were suggested, including a full review of the project log frame. TE evaluator requested the final log frame from the PM. The assurance is that this was known, so the PM/CTA was fully aware of the agreed targets and helped the countries apply them. It was written for the purpose of this TE review (Annexes).

The MTE noted two out of four expected outcomes for the two-pronged objective level indicator. Two, 1.2 and 1.4, were labeled as not smart (quantifiable). All the output level targets were all considered compliant with the time-bound dimension of SMART criteria.

Project Component	Expected Results	TE General Comments
Component 1:[8] Regional governance for building regional and national adaptive capacity of Indonesia, Philippines and Vietnam in the management of highly migratory stocks	1.1 Improved regional mechanisms for monitoring and assessment of highly migratory fish stocks and Illegal, Unreported and Unregulated (IUU) fishing in the POWP LME and the EAS LMEs	Generally achieved. The three countries are all reporting and compliant to the WCPCP convention. At subregional level, the consultative forum and the national level coordination for subregional participation was started late in project implementation. Areas for subregional cooperation were identified. This is a longer term target. These activities (outputs) need an exit strategy. And higher level decisions at the regional, subregional (SEADEC, ASEAN, and PEMSEA) and national level. Follow up action is needed. .

[8] *All outcomes monitored annually in the APR/PIR.*

	1.2 Enhanced capacity of technical staff, policy and decision makers in Indonesia, Philippines and Vietnam, to integrate climate change impacts on highly migratory stocks into management regimes	The climate change work was overambitious and adapted at the regional and national level. The regional end targets also depended on capacities and cross-sectoral coordination at the national level to do the necessary data collection and analysis for policy. To some degree mainstreaming has been achieved i.e. Tuna Management Plans but more inter-sectoral coordination is needed. The project management dealt with these issues by identifying good quality experts into project to sensitize about the work and to being to study the issues at the level of the countries. For mainstreaming the work was mainstreaming into the national Tuna management plans.
	1.3 Climate change concerns mainstreamed into national fishery sector policy in Indonesia, Philippines and Vietnam	
Component 2: Implementation of policy, institutional and fishery management reform	2.1 Enhanced compliance of existing legal instruments at national, regional and international levels	Through National Tuna Management Plans this outcome is partially achieved. More work on bridging the science policy interface at the national level is needed.
	2.2 Adoption of market-based approaches to sustainable harvest of tunas	This target was dependent on cooperation and influencing market pressures. The project has contributed important knowledge and cooperation with the private sector inputs (mostly through invites to meetings and events and demonstrating the utility of data collection and monitoring s) at national level. An interesting insight was that the Tuna fisheries beneficiaries needs support with price setting as it is totally a buyers' market. This was highlighted as a need for good practice and pilot work .The OSAKA market was highlighted as a good practice that might be piloted in the region i.e. Philippines General Santos Tuna Port . TE learned economics is an emerging priority for WCPFC. A follow up project on market pricing in the EAS region might be a strategic 'equity' intervention.
	2.3 Reduced uncertainty in stock assessment of POWP LME and EAS LMEs highly migratory fish stocks, and improved understanding of associated ecosystems and their biodiversity	The project dealt with this work mostly through undertaking risk assessment at national level. Philippines is more advanced that other two countries. There is much more capacity building and demonstration that can be done on the observer programme in Vietnam and Indonesia requires demonstration programme and capacity building support for the observer programme. This is a big gap that he knew funding of New Zealand will not pay for. The New Zealand project is also lacking the policy and management work i.e. data analysis work. This is a gap in the follow up work that a new GEF project might finance.
	2.4 Ecosystem Approach to Fisheries Management (EAFM) guiding sustainable harvest of the oceanic tuna stock and reduced by-catch of sea turtles, sharks and seabirds	More technical and capacity building work is needed on the observer programme especially in Indonesia and Vietnam. The subregional targets for by catch monitoring and Harvest Strategies will need leadership on standards around data collection for by-catch in EAS waters.
Component 3 Knowledge sharing on highly migratory fish stocks	3.1 Regional knowledge platform established on POWP LME and EAS LMEs shared tuna stocks and associated ecosystems	This work was not well conceived and or executed. The project needed a KM and Monitoring plan linked to the Consultative Forum and the subregional governance target. The lack of which puts the sustainability in question.

Table: Review of Indicators (and achievement) at TE

Indicator "Smart' reviewed	MTE finding (Verified by TE)	Revised Indicators – Note only the end Targets were changed based on the MTE recommendations.	(Yes or No) achieved by end of project.
Indicator No. 1	Target 1.1, term "monitoring coverage" was unclear, and so progress was a challenge to measure and the achievability of the end target was questioned. The target of reducing catch of ETP species by 25%, target 1.2, is specific with respect to the envisaged value of the reduction, but the type of ETP species are not indicated. This was changed during MTE. For target 1.3, revision of management frameworks with the inclusion of climate change aspects does not necessarily mean that adaptive capacity	Sustainable harvesting of oceanic tunas in the EAS, including: • Improved monitoring of oceanic tuna fisheries in the EAS and coverage increased to 40% • Declining quantity/indicator of bycatch, including juvenile tunas ~~(PB5-Para25)~~	**Yes**

	has been enhanced, and for this reason, the relevance of this target is unconvincing. Target 1.4, the term "progress to possible certification" was NOT specific, and therefore could not be measured straightforwardly	• Enhanced adaptive capacity to manage oceanic fisheries in the EAS under climate change conditions through recommendations for the revision of management framework Progress to possible certification of at least one oceanic tuna fishery or other fishery sectors in the EAS, through FIPs.	
Indicator No. 2	For target 2.1, WCPFC compliance is assessed each year and it was unclear what was meant by achieving full compliance. MTE made note it would have also been advisable to be more specific in terms of which CMMs are relevant for each country; this could have been agreed upon at the project inception phase. Moreover, it seems overly optimistic to achieve full compliance over a 3-year timeframe. Target 2.2 is more or less the same as target 1.1 at the objective level, and similarly, the term "monitoring coverage" is unclear. For target 2.3, the phrasing was not specifics. Was the intention to develop a harvest policy for the entire EAS and/or POWP LME, or rather for each of the beneficiary country separately? Similarly, target 2.4 is not sufficiently specific, and not necessarily a relevant performance measure of achievement of Outcome 1.1.	Regional: All three countries comply with WCPFC requirements, and relevant CMMs. Improved monitoring of oceanic tuna fisheries in the EAS and coverage increased to 40% Subregional: Countries once a year *share information* which contributes to development of harvest policy for oceanic tunas across the relevant LMEs and within the WCPFC framework; Project coordinates with the EAS Program through the PEMSEA Resource Facility	**Yes**
Indicator No. 3	The end targets for Indicator No. 3 were SMART however targets around a Consultative Forum (CF) were unclear i.e. idea of "packing information". Target 3.7 was not specific; MTE stated it would have been clearer to specify the tuna fisheries targeted for VMS monitoring, rather than indicating "selected tuna fisheries". And, with respect to target 3.12, the term "well documented", regarding catch of retained and bycatch species should be more specific.	Indonesia: • Logbook coverage of all commercial gears and fleets improved up to 50% for fishing vessels >30 GT; • Coverage of artisanal fleet landings improved up to 50%; catch of retained and by-catch species well documented. Dependent and independent data available (port sampling, observer, logbook, surveys); • Scientific database for archipelagic fish resources developed and implemented; extend port sampling to cover AW FMAs up to 25% • VMS and catch certification system in place to address IUU. • National task force in place for packing of information for CF or other WPEA Subregional cooperation formats Philippines: • Monitoring coverage for small and medium scale tuna fisheries improved by 30%. • VMS monitoring and/or other technologies applied to selected tuna fishers operating in the Phil national waters and WCP CA to reduce IUU • E-logbook developed and pilot tested ready for implementation and adoption by stakeholders. • National task force in place for packing of information for CF or other WPEA Subregional cooperation formats Vietnam: • Monitoring systems expanded to 6 other provinces; increased coverage and quality of log sheet data for all tuna fishing fleets. • Landing data coverage of tuna fishing fleets significantly improved up to 70%. • Catch of retained and by-catch species well documented. • Integrated database established within National Fisheries Statistics system, including data entry, verification and database maintenance.	**Yes**

		• National task force in place for packing of information for CF or other WPEA Subregional cooperation formats • VMS scheme being developed for selected fisheries to apply for catch certification scheme and to reduce IUU	
Indicator No. 4	Indicator No. 4 is concerned with subregional and national dimensions of Outcome 1.2. The two-part indicator has four end targets, one at the subregional level and one each for the three beneficiary countries. The subregional target 4.1, the design and budget allocation did not account for LME scale climate change prediction and adaptive strategy development. The budget included USD 10,000 for international climate change modelers to provide and discuss model outputs to a regional climate workshop envisaged in Year 1 (USD 50,000 was allocated for the workshop), and to identify possible adaptation strategies. The budget for international modelers was insufficient. There was indication in the project document that certain regional and subregional models have been developed, but not include the EAS sub-region. The level of effort to expand or develop a subregional model for the EAS sub-region would require significantly more resources. Similarly, the achievability of the national level targets, including trial predictions (Philippines and Vietnam) and preliminary research/modeling (Indonesia) are questionable, considering the time and resources available.	Subregional: Preparation of country reports on climate change impacts and identifying interventions of climate change on tuna resources/fisheries in general Indonesia: Task force established to study climate change impacts on oceanic fishery sector; results of preliminary research/modeling on oceanic fisheries available; adaptive management strategies to mitigate impacts of climate change developed. Philippines: Trial prediction of climate change impacts on oceanic fisheries developed; 4 or more skilled personnel trained to interpret climate change impacts on oceanic fisheries and to develop adaptive management strategies. Vietnam: Trial prediction of climate change impacts on oceanic fisheries developed; 4 or more technical staff, policy & decision makers to integrate climate change impacts on highly migratory stocks.	**Yes**
Indicator No. 5	Indicator No. 5 supported the climate change adaptation strategies planned under Outcome 1.2 and to be mainstreamed into national policy as part of Outcome 1.3. The indicator is divided into two parts, one addresses incorporation of oceanic fisheries indicators and modeling outputs into national climate change strategies, and the second part calling for policies, strategies, plans, or programs that integrate climate change into national fisheries policies. There were three end targets for this outcome, one for each of the three beneficiary countries. The target for Indonesia, 5.1, aimed at climate change adaptive management strategies for oceanic fisheries incorporated into national cross-sectoral climate change strategy was found unrealistic. This result also requires strategies for close collaboration with enabling stakeholders, particularly the Ministry of Environment. The targets for the other two countries were focused on integrating climate change concerns into fisheries policies. This was more achievable; however, the first part of the indicator, i.e., incorporation into national climate change strategies, is not addressed.	Indonesia: Climate change adaptive management strategy for oceanic fisheries developed and incorporated in national cross-sectoral climate change strategy. Philippines: Policies/strategies/plans/programs that integrate climate change into national fisheries regulations approved and/or implemented. Vietnam: Climate change concerns articulated and integrated into the national fisheries policy	**Yes**
Indicator No. 6	Indicator No. 6 is about enhancing compliance of existing legal instruments at national, regional, and international levels. The target 6.1, is concerned with the subregional context, not a regional one, but during this review it became very clear, subregional collaborative governance was not well thought through as an end target. It would have been advisable to more clearly defining the envisaged end result, e.g., some type of formal agreement, or an informal arrangement among the beneficiary countries. Additionally, there are six end-of-project targets, one at the regional level, two for Indonesia, one for Philippines, and two for Vietnam. At national level, Target 6.2 involves applying reference points (RPs) and harvest control rules (HCRs) in Indonesia. The target states that the RPs and HCRs will be applied at the national level once applied at the regional level; The MTR recognized that the project did s not include plans to develop regional level RPs and HCRs. The achievability of developing RPs and HCRs in Vietnam, as Target 6.6, was questioned. Development of harvest strategies takes time, including extensive stakeholder consultations.	Regional: Subregional collaborative governance on tuna fisheries established. Participation in WCPFC's technical processes enhanced through full participation in WCPFC technical meetings (SC, TCC and other technical WG meetings) Indonesia: Tuna management strengthened through applying scientific procedure using Reference Points (RPs) and Harvest Control Rules (HCRs) at national level once applied at regional level; Archipelagic Water (AW) management regime established. Philippines: Compliance with CMMs of special concern to Philippines primarily FADs committed. Vietnam: Incorporation of compatible measures into national legal frameworks and incorporation of relevant WCPFC requirements completed.	**Yes**

	Target 6.4, for Philippines noted that what was meant by compliance "committed" was not sufficiently specific.		
Indicator No. 7	Indicator No. 7 supports results under Outcome 2.2, focused on adoption of market-based approaches to sustainable harvest of tunas. The three-part indicator has nine end-of-project targets, three for each of the three beneficiary countries. The three national level targets while similar; had distinct differences. The first target involves characterizing supply changes, and for Indonesia and Vietnam, and establishing monitoring systems and putting in place chain of custody (Coca) arrangements. Developing and operationalizing monitoring and custody systems was determined to be yet another tall order for this short project. For sustainable fishery certification targets, the MTE suggested to define what was meant by certification. For Indonesia, full certification was envisaged, whereas in Philippines achieving progress towards full certification was expected. In Vietnam, implementation of a fisheries improvement project (FIP) for the longline/hand line fishery was the specified result. And, with respect to private sector involvement, the term "sustained participation "was ambiguous.	Full application of relevant CMMs; and proposed reference points (RPs) and harvest control rules (HCRs) at national level. Indonesia: Supply chain characterized for selected tuna fisheries, monitoring systems established and information annually updated; custody system in place for selected fisheries. Philippines: Supply chain fully documents and annually updated. Several tuna fisheries progressing towards full certification. Sustained participation of fishing companies Vietnam: Supply chain characterized for tuna fisheries, with emphasis on export-oriented fisheries, and monitoring system established; Chain of Custody in place for selected tuna fisheries. FIP process implemented for longline/handline fishery Sustained participation of fishing companies	**Yes**
Indicator No. 8	Indicator No. 8 supports results under Outcome 2.3, focused on reducing uncertainty in stock assessment of POWP and EAS LMEs highly migratory fish stocks and improved understanding of ecosystems and their biodiversity. The three-part indicator has seven end-of-project targets, one set at the subregional level, two for Indonesia, one for Philippines, and three for Vietnam. The indicators and end-of-project targets for Outcome 2.3 are SMART criteria. The phrasing of the outcome implies that the project would support subregional stock assessments; this would entail extensive negotiation according to various data confidentiality agreements. There are subregional assessments being made, e.g., by SPC, the science provider for WCPFC, using national catch estimates	**Indonesia:** Data collection to support application of ecosystem models. EAFM strategy commenced for trial implementation in one FMA. EAFM conditions incorporated in revised NTMP Mitigation measures applied in selected fisheries; compliance with shark and sea turtle CMMs and NPOAs. **Philippines:** Potential study area that applies EAFM for oceanic fisheries selected. NTMP revised to include EAFM. Mitigation measures applied; Compliance with shark CMMs committed, **Vietnam:** Plan for the pilot application of EAFM at one selected site/fishery Revised NTMP with EAFM included Compliance with ETP CMMs and NPOAs	**Yes**
Indicator No. 9	Indicator No. 9 represents the envisaged results under Outcome 2.4, which focuses on the ecosystem approach to fisheries management (EAFM) for guiding sustainable harvest of oceanic tuna stock and reducing bycatch of sea turtles, sharks, and seabirds. The four-part indicator has eleven end-of-project targets, one at the subregional level, four for Indonesia, three for Philippines, and three for Vietnam. With respect to target No. 9.1, the aim of application of ecosystem models to EAS is not very specific, and the achievability of this target is also questionable, considering the time and resources available. Target No. 9.2 is also insufficiently specific, i.e., the type of data collection envisaged is unclear. Having EAFM conditions incorporated in revised NTMP, as called for in Target 9.4 is also unclear. The first target for Philippines under this outcome, No. 9.6, is selection of a potential study area for an EAFM pilot. This does not seem a relevant outcome level performance target; it is rather an activity. For target No. 9.8, the feasibility of developing smart	Subregional: WCPFC (through SPC) continue to conduct subregional assessments undertaken using WPEA data Indonesia: Indonesian data included in regional and subregional assessments; National assessments for target species commenced and annually updated. Risk assessment of retained, by-catch and ETP spp. commenced. Philippines: Comprehensive observer, catch sampling undertaken and risk assessment available for by-catch and ETP species. Vietnam:	**Yes**

	gear, presumably on the basis of the EAFM pilot within the timeframe of the project is questionable. Achieving compliance with ETP CMMs and NPOAs, following implementation an EAFM pilot in Vietnam, as phrased under Target 9.11 seems also overly optimistic. Realizing such compliance will take time, certainly longer than the allocated 3-year project implementation timeframe.	Annual total catch estimates produced and biological data collected for national and/or regional stock assessment of target tuna species; Information for risk assessment collected of retained and by-catch species and preliminary assessments undertaken; National level stock assessments of target tuna commenced.	
Indicator No. 10	Indicator No. 10 represents the envisaged results under Outcome 3.1, which focuses on establishing a knowledge platform on POWP LME and EAS LMEs shared tuna stocks and associated ecosystems. The four-part indicator has three end-of-project targets, each set for the regional dimension. With respect to target 10.2, it is unclear what is meant by reporting Consultative Forum activity, and hence, the measurability and achievability of this target is questionable.	Active website maintained in collaboration with PEMSEA, and commitment to preparation and dissemination of project publication, newsletters and other information products Consultative Forum **or other WPEA Subregional cooperation formats** activity reported. Increased participation in international and (sub-)regional knowledge sharing events (one per year), such as IW:Learn and related activities and the PEMSEA's EAS Congress	**Yes**

3.1.4. Gender Mainstreaming and Social Safeguards Analysis (See project mainstreaming section in findings section below)

The Project document states the project monitoring would ensure the participation of women in all its activities and will target at the minimum, 30 percent women participation in the national, regional and international capacity building activities. It will, to the extent possible, provide equal access to and benefits from the Project resources to both men and women. The project would undertake gender-disaggregated monitoring of its activities, outputs and impacts. This was not done and represents a lesson learned for the implementing partner as to the need for monitoring staff.

The gender dimension was evaluated at MTE and the findings were confirmed at TE. The project results framework was not disaggregated according to gender (document review, consults and MTE). Interviewees held a consensus that the gender objectives were built into the project results framework. (gender-disaggregated monitoring was generally a headcount at meetings), outputs, and impacts. The project document highlighted gender concerns (see section on National and Local Indicators and Benefits):

The project implementation review (PIR) reports contains some information on women participation in project workshops and meetings. As per MTE(verified by TE), one of the three national coordinators, for the Philippines, is a woman; and the Team Leader for the Inclusive and Sustainable Development Unit of the UNDP Philippines is also a woman and a member of the project board.

Safeguards

Additionally, as part of the project preparation phase (MTE report), environmental and social risks were screened using the UNDP Environmental and Social Screening Template. The screening analysis concluded that the project does include activities and outputs that support upstream planning processes that potentially pose environmental and social impacts or are vulnerable to environmental and social change. Furthermore, the analysis reported that the project would have positive socioeconomic impacts, through support of strengthening subregional collaborative mechanisms and national management processes.

As part of the PPP phase environmental and social screening process, the proposed project was concluded to not include implementation of downstream activities that potentially pose environmental and social impacts or are vulnerable to environmental and social change. And, there were no environmental or social aspects that required additional screening.

3.2. PROJECT IMPLEMENTATION AND ADAPTIVE MANAGEMENT

Project Implementation and Adaptive Management: Rating: Moderately Satisfactory

3.2.1. Management and Oversight Arrangements

Project Implementing Unit (PIU)

Based on the Project Cooperative Agreement (PCA) signed on 07 October 2014, WCPFC-IP was responsible for the overall Project and reporting to UNDP in the Philippines. WCPFC-IP has assigned the Responsible Parties (RPs):

(NFRD) and Bureau of Fisheries and Aquatic Resources (BFAR) in Philippines, Center for Fisheries Research (CFR) and Directorate General of Capture Fisheries (DGCF) in Indonesia, and Directorate of Fisheries (D-Fish), Ministry of Agriculture and Resource Development (MARD), and Department of Capture Fisheries and Resource Protection (DECAFIREP) in Vietnam to undertake day-to-day implementation activities of the Project. .

The WCPFC PIU was situated in Pohnpei, Federated States of Micronesia (FSM). The PIU had hired a full time Project Management Assistant and Finance Officer, both under the supervision of the Project Manager and Finance and Administration Manager of WCPFC-IP. The PIU liaises with Responsible Parties (RPs) to the Project namely National Fisheries Research and Development Institute (NFRD) and Bureau of Fisheries and Aquatic Resources (BFAR) in Philippines, Center for Fisheries Research (CFR) and Directorate General of Capture Fisheries (DGCF) in Indonesia, and Directorate of Fisheries (D-Fish), Ministry of Agriculture and Resource Development (MARD), and Department of Capture Fisheries and Resource Protection (DECAFIREP) in Vietnam including other stakeholders, in order to support the implementation of the Project.

WCPFC/PEMSEA

A part-time finance associate was based at the commission and had provided support to other projects and programmes. The project document included funding and plan for a Knowledge Management Associate, (MTE 2017). During the inception workshop, the project Board agreed, as a cost saving measure, to explore PEMSEA providing knowledge management support, including developing and hosting a project website. This was implemented late in the project implementation timeframe. A USD 45,000 grant letter was issued on 23 November 2017 from WCPFC-WPEA to PEMSEA Resource Facility. In 2019, PEMSEA sent an acknowledgment letter to sustain the work plan for three years. The activities included in the grant agreement include developing and hosting a website based WPEA project portal, linked to the SEA Knowledge Bank currently being managed by the PEMSEA Resource Facility. Other activities include design, develop, and implement a monitoring and evaluation reporting system (ME was not evidence at the time of TE); including a role in facilitating preparation of quarterly and annual project progress reports; and to facilitate preparation and dissemination of project reports and knowledge products. This was never fulfilled.

Project Board

TE learned the **Project Board PB** had convened 6 times since project inception. The first board meeting was held on 04-05 November 2014 in Bali Indonesia. A list of broad meetings is provided in the Annexes. The project board meeting minutes were highlighted by MTE as a strong feature of this projects implementation. All six were well attended and included decision makers (project) about the project (not necessarily policy level decision makers). The (recorded minutes) of the meetings show they had been well attended and action oriented with action points.

UNDP/GEF

UNDP/GEF had begun to support this project through strategic formulation. The UNDP provided extraordinary support to the design, implementation, and results. The project design is a result in itself. While in the end the original GEF budget requested was reduced and phase two was ambitious, the new cross-cutting areas and design were sound, on target, and strategic for regional-level results on tuna fisheries management and policy agenda setting, i.e. the inclusion of timely cross-cutting areas: economics, climate change, ecosystems, and risk management approaches. In fact, the cross-cutting areas raised the policy profile for important, very strategic work at the WCPFP. In discussion with the WCPFP management, the TE evaluator was able to ascertain that regional work is still needed on climate change, market and economic strategies, the ecosystems approach, and harvest strategies. These are areas for capacity building across the WCPFP region. For regional tuna fisheries management, these are critical areas for further and follow-up work. Through the UNDP Philippine office, the project has received day-to-day assistance from a digging project assistant. The TE observed the correspondent and the relationship built through such hand-holding support to the operationalization, monitoring, and fiduciary oversight.

UNDP Philippines and UNDP Regional GEF RTA supported the project's identification, concept preparation, appraisal, ProDoc preparation, start-up, oversight, supervision, completion, audit, and evaluation.

There had been an appropriate focus on results, and the comprehensive project design was diligently followed by the GEF/RTA and the UNDP Philippines project assistant through the project channels and the personalization and relationship built during implementation. The UNDP was involved in most of the three-country workshops, some technical work shops, and all the project board meetings. The GEF/RTA and UNDP Philippines project officers provided timely and substantive inputs on project implementation to the WCPFP and were involved in strategic decisions concerning the implementation. While there were tradeoffs and adaptive management, TE found that without undue

support, these were the right beacons to lead this project toward results and some unintended consequences, i.e. inflicting the regional agenda around the cross-cutting area, i.e. economics. For instance, a critical design was made by UNDP around the overly technical approach of the WCPFP versus the over-ambitious project design. These decisions were adequately supported through the project Board meeting and active involvement in work planning.
UNDP supported the Implementing Partner and project team on a day-to day-basis through biannual reporting and support to the GEF reporting requirements. UNDP also conducted an audit of the project and solved the issues that arose around need for more accountability at the level of the countries on spending and recording expenditure. UNDP also provided direct support to countries on demand and during the three countries workshops. Risk management was an important feature of the UNDP support. The project Board meetings and the required audit supported in this regard.
The project was granted an extension, which somewhat facilitated more time for the adapted project outcomes.
While the UNDP/RTA did support the IP, they were not able to influence the WCPFP's need for additional staffing, including monitoring staff and oversight of the management of environmental and social risks as identified through the UNDP SESP as the implementation unit. The project was in dire need of a monitoring staff, and the related issues infiltrated the implementation—a key lesson learned. If the project were to be extended to the WCPFP, it would have to be on the condition that there will be a full staff including the monitoring staff.

3.2.2. Implementation Approach and Work Planning

TE learned the project had a delayed start of project activities in Indonesia and Vietnam. The project endorsed by the GEF CEO on 12 May 2014, national governments approved the project document on 27 October – the official start date of the project – but it took a year for registration of the project and internal, domestic approval processes in Indonesia and Vietnam. The second phase, contained cross-cutting areas, technical areas not part of the first phase, including *climate change analysis and planning, pilot implementation of ecosystem approach to fisheries management (EAFM), facilitation of market-based approaches, and development of harvest strategies*. Interviewees confirmed during TE, the level of preparedness for the cross cutting areas and the sub regional targets was low. Interviewees from all countries and the region, as well as the MTE suggested the project expected outcomes would take more resource and a much longer implementation phase.

The project management implemented the technical capacity building through a 'learning by doing and technically guided annual implementation of the annual work planning. The process to achieve the cross cutting and subregional outputs were connected to the relevants experts improving capacitis firstly at national level. This project generated over 160 outputs in total including annual three country workshops and national events pertaining to the cross cutting topics.

Interviewees stated the work planning has been participatory and integrated with co-financing contributions. National coordinators prepared cost proposals for each of the activities planned for the subject year. The cost proposals itemize requested funding from the project and also indicate financing from national programs or other sources. The project manager reviews each activity level cost proposal, discusses the details with the national coordinators, and once agreement is reached, the proposal is recommended for funding.

While work planning has been detailed and closely checked against the indicative budget and work plan outlined in the project document, the envisaged results, per MTE, the end of project targets are not well integrated into the process. This is partly due to certain shortcomings with respect to validation of the indicators, targets, baseline figures. Generally, the results framework was not effectively used as a project management tool.

The project management, UNDP GEF enabled excellent support to cross cutting areas in terms of procurement process
The EAFM pilots were designed and executed in collaboration with USAID ECOFISH Project. EAFM activities are now mainstreamed in national plans and programs (e.g. NTMP). PHL conducted a workshop to finalize the CCDRR Manual of Operations. They hired a consultant and produce 2 outputs:
a) General Guidelines on Adaptive Management and Monitoring of Highly Migratory Fish Stocks to Address Climate Change,
b) Application of Adaptive Management Guidelines for Capacity-Building of National Technical Fishery Staff, Policy, and Decision Makers in Philippines (by Rollan Geronimo)

Philippines was ahead of other on harvest strategy. They worked on market based approaches. The consultancy reports and workshops were useful to make industry more aware. Now industry are moving towards certification (e.g. PS HSP1 operations with GENTUNA in collaboration with BFAR and HSP1 operators; hand line processors wanted to have a FIP)

The **EAFM pilots in Vietnam was not completed as planned.** However, country reported awareness on EAFM is enhanced by relevant stakeholders in VNM. The results of climate change reports were used for revision of NTMP. **The concept of harvest strategy was integrated into new fisheries law.** The country conducted one consultancy report on market-based approach. Based on the report, a new Circular was developed to establish a catch certificate system for EU market exportation.

3.2.3. Finance and Co-financing

The project was audited (2017). The audit was presented during the third project board meeting after concern was raised on accountability for national expenditure. While the WP had been capacity assessed, the countries systems were not. During the Board meeting for example (UNDP-Philippines) presented a summary of the audit findings from November 2014 to December 2016. The audit covers three financial statements: statement of expenditures (CDR), statement of assets and equipment, and statement of cash position. Findings, implications and recommendations delivered. Two findings were 1) absence of acquittals for cash advanced made to implementing countries and 2) improper asset management, where both were scored as high risk.

The project document spelt out requirements for implementation and financial accounting. The financial roles are reviewed by WCPFC's Project Manager. This served as basis of the Finance Manager for approval of the fund transfer to each country. The funding provided for the approved activities had enabled the implementing countries to achieve the project objectives. The Project's accounting procedures, policies and internal controls are same as the WCPFC-IPs. The payment processes and functions are performed by the Finance Department of WCPFC-IP. The national financial focal points are to adhere with their government accounting procedures, policies and internal controls including the payment processes and functions within their Finance Department.

The PIU was responsible for preparing all necessary qualitative and financial information for the activities and to facilitate timely preparation and submission to UNDP of annual progress reports, annual work plans, request for advances and Funding Authorization and Certificate of Expenditure ("FACE") forms based from the recorded expenditures. The Combined Delivery Report ("CDR") was prepared by the UNDP through the use of the FACE forms submitted by the PIU. TE reviewed the Audit from 2017 .There was weakness identified in the reporting on delivery system as country reporting on expenditures for activities and assets by countries as per the HACT agreements. The absence of a Project transaction listing impaired auditors ability to ascertain total cash advances made to each individual implementing country. In addition, Project acquittals and related supporting documents for Project expenditure were not available during the audit.

This was followed up and recertified. The Project had lacked clearly identified transaction listings that annotate the payment date, payment reference, amount, ATLAS budget classification and description. A cash ledger had been maintained by the implementing partner (WCPFC – IP) on QuickBooks Accounting System and was not classified according to Project expense account. For the purpose of advancing funds to implementing countries, budget proposals were prepared by the Project Implementation Unit which accompanied by requests for advances. Per MTE, the IP was the responsible party to UNDP and it was their responsibility to ensure countries accounted for and consults during expenses. This was then rectified and the audit vested the countries to verify the expenditures.

The lesson was the need to include the addition layer of reporting by countries on accounting for expenditures and holding proofs of this expenditure. The Project Implementation Unit (PIU) ensured TE that all country based activity was accompanied with an approved activity based proposal, including an approved activity budget. The funding in the approved budget was advanced to the implementing countries in order to carry out the approved activities as per Project Document. This was directly recorded in the books as expense upon transfer of the funds and reported to UNDP. This was verified by TE interviews and consults as well as document review.

Complete this section with actual expenditures for grant and co-financing and discuss reasons behind any variances between planned and actual expenditures.

Financial Expenditures

By TE defined as October 2019, 99 % of the USD 2,233,578 GEF implementation grant had been expended,

Table actual delivery

Co-financing

Co-financing contributions that have been realized by Terminal Evaluation amount to USD 21,462,186 which is 108% of the USD 19,859,525 committed at project approval. Final co-financing contributions are compiled below.

	In Kind US$	Grant US$	
Global Environment Facility		2,233,578	
United Nations Development Programme	**1,129,082**		
Republic of Phillipines , Department of Agriculture, Bureau of Fisheries and Aquatic Resources (BFAR) - staff, facilities and logistics, program support, invovlement of industry	3,892,675		
Republic of Indonesia, Ministry of Marine Affairs and Fisheries, Directorate General of Capture Fisheries (DGCF) - staff, facility, program support		1,390,000	
Republic of Indonesia, Ministry of Marine Affairs and Fisheries, Research Center for Fisheries Management and Conservation (RCFMC) - staff, facilities and logistics, program support		1,516,000	
Republic of Philippines, Department of Agriculture, National Fisheries Research and Development Institute (NFRDI)		4,335,850	
The Socialist Republic of Vietnam, Ministry of Agriculture and Rural Development, Directorate of Fisheries (D-FISH)		1,496,991	
The Socialist Republic of Vietnam, Ministry of Agriculture and Rural Development, Directorate of Fisheries (D-FISH) 5,280,000 In kind	5,280,000		
WWF Vietnam	88,010		
Western and Central Pacific Fisheries Commission	100,000		
Western and Central Pacific Fisheries Commission - staff, facilities, expertise		3,200, 000	
Totals	10,489,767	10,972,419	**21,462,186**

3.2.4. Monitoring and Evaluation Systems (Project Level)

While the project has generated substantive results, the formal monitoring and evaluation system was fairly rudimentary. The monitoring system and results were reported by interviewees (and based on consultancy and document review) as weak. For example, key scientific achievements and policy-level results achieved were insufficiently documented. Improvements with respect to compliance to WCPFC CMMs had to be generally captured in the annual reports from the TCC meetings (SPI data report 2019 attached as separate Annexes) and testimonials included in the WCPFC data and statistics reports.

The results achieved (in particular, the policy level results) were not fully captured and/or interpreted in the main report-PIR, and the project monitoring and evaluation systems had not been sufficiently utilized to guide project management.

A project monitoring and evaluation (M&E) plan had been included in the project document (Annexes).[v] As discussed above, the results framework was very comprehensive with regional, subregional and national dimensions. The project document stipulated that the country project Tuna Coordinators who would monitor the progress of all activities in the country, including I) submitting the individual activity proposal and budget, ii) coordinating consultancy contract and meeting preparations, iii) supervising activity outputs, such as meeting reports and data submission to WCPFC, and iv) being intensively involved in developing AWP and processing and evaluating the outputs of each activity. They did this.

The inception workshop was held on 4–5 November 2014. It included a review of the project results framework, but no significant revisions were made to it at that time. The MTE reviewed the results framework and highlighted many indictors as not smart and unwieldy (MTE 2017, verified TE).

A separate monitoring or evaluation plan was not developed by the PIU. The idea was that the ME plan would be outsourced to PEMSEA (MTE 2017).

The APR/PIR combines both UNDP and GEF reporting requirements. The project document stated the requirements. The quarterly progress would be monitored in the UNDP Enhanced Results Based Management Platform and annually: Annual Project Review/Project Implementation Reports (APR/PIR). The PIR export was prepared to monitor progress made since project start. The UNDP/GEF project implementation review (PIR) reports was the main results oriented M&E tool.

The project board meetings (these were fully supported by UNDP/GEF) however, provided a platform for all project partners to be informed and to provide strategic guidance. TE noted, however, that the policy level decision makers were not included on the project board. The TE was unable to ascertain whether the GEF OPT was keep informed of results. It was not evident and so constitutes a follow up recommendation for the exit strategy concerning the dissemination of project results.

UNDP support to the ME was beyond agreement additionality. The TE makes note that the UNDP has significantly went over and above to provide the IP with substantive support in this regard. The IP did not hire a ME staff. This is a lesson learned and a caution for future collaboration and support to WCPFP.

UNDP Philippines developed the required project reports on a bilateral basis and the annual PIR and PPR with the IP. The PIRs were reviewed and while the ratings were generally positive, they were not unrealistic to what the MTE and TE has found given the adaptation and PSC decision making. In fact, the self-ratings have been frank and realistic. The narrative adequately recorded the project adaptations and bottlenecks and changes (as well as solutions to problems as decided by the PSC).

Country level perspectives

Philippines

At the national level, NTC monitored and reported project results. The Project Manager (PM), held consultation meetings before the end of the year prior to the PB meetings to finalize Annual Work Plan/s for the PB approval. Then, usually in the Q1 or Q2 of the year, NTC would have a second meeting with the PM to review progress, including budget needs. WCPFC and UNDP are working on the Project reporting requirements. Submission of progress reports at used to be done WCPFC-SC and in the PB meetings. On the National level, the requirement is to report results/progress of the Project during the BFAR/NFRDI Planning and review workshops (Mid-Year and Year End). The MTE recommendations provided clarity and direction on what was expected based on targets/outputs/outcomes. The monitoring system was said to have worked fine for them. The strong, technically knowledgeable Project Manager was said to be a big advantage.

Vietnam

The monitoring and evaluation systems (subregional and national level) included D-FISH which, as an implementation agency, has to report financially and technically to MARD every six months. Project management reported monitoring and report project results via monthly, quarterly and annual progress reports. With regard to main reporting mechanisms, the results were discussed only during meetings/workshops. VNM has developed a national circular for data collection for all fisheries, including tuna fisheries. Before port sampling, only using FAO protocol was considered. Now port sampling follows WCPFC protocol. The MTE recommendations and follow-up for suggested bycatch mitigation (i.e. bycatch rate) was not achieved as expected.

Indonesia

The project ouputs were based on AWP. They provide specific proposal activity. All activites have been provided in written documents and reports to the project manager. Monitoring was conducted prior and during the visit of project manager. The national-level results were discussed during internal and preparatory meetings conducted in conjuntion with relevant activities and workshops. Evidence of program-level assessments showed up in support for the secretariat monitor project that was provided through the quarterly report.The MTE recommendations and follow-up helped people to obtain results by addressing several outstanding issues that needed further follow-up through direct communications, project manger consultations and by being brought up in the project Board after the MTE

Tracking Tools:

The GEF International Waters (IW) tracking tool, relevant for the GEF-5 replenishment cycle, is one of the important M&E tools for the project. The baseline tracking tool outlines include process indicators, mostly associated with regional cooperation frameworks and mechanisms. One of the process indicators, "*Management measures in ABNJ incorporated in Global/Regional Management Organizations (RMI) institutional/management frameworks*," was not applicable. As discussed in MTR, the baseline figures and end targets were not thoroughly vetted by the time of project approval or at the inception. There were no monitoring systems in place to assess reduction in catch of ETP species, and the term monitoring "coverage" was found to be vague and unclear. Therefore, the 40% end target was difficult to assess.

The final assessment of the tracking tool was not prepared during TE. Doing this is a key TE recommendation.

Final Report by Team

The project document mentioned that during the last three months, the project team would prepare the Project Terminal Report. This comprehensive report would summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results. This was not completed.

3.2.5. Stakeholder Engagement and Partnerships (Synergies)

The project document listed an extensive array of UN, government, NGO and private sector partners expected across the region (see section above). Examples of complementary projects and programs including the FAO-GEF Programme on Global Sustainable Fisheries Management and Biodiversity Conservation in the Areas beyond National Jurisdiction (ABNJ);

- World Bank-GEF Ocean Partnerships for Sustainable Fisheries & Biodiversity Conservation;
- UNDP GEF Pacific Islands Oceanic Fisheries Management Project (PIOFMP);
- Coral Triangle Initiative (CTI), the EAFM Working Group. There are other projects and programs operating at the national level, including USAID supported Smart Seas project in Philippines.

The MTE 2017 raised the synergies issue (for results on the four cross cutting areas). It made a key recommendation about the need to leverage project implementation through partnerships in order to sustain continuity and to leverage results of the cross-cutting knowledge inputs. The project stakeholder engagement broadened since MTE.

"Collaboration with other projects and programs was a key issue raised during the project review process. Partnering with complementary projects, possibly providing incremental funding for specific activities might be a more sustainable implementation strategy than implementing relatively small actions, such as funding prior studies and limited scope field trials." MTE 2017.

However, based on a legacy implementation modality in place from phase one, TE finds the implementation had focused on a core group of fisheries stakeholders. At ProDoc and MTE, this insular technical focus was highlighted as a risk for sustainability. The addition of cross-cutting aspects in the second phase required broader stakeholder involvement. For example, the climate change targets required cross sector inputs and by in in particular with the Ministry of Environment or other relevant stakeholders. Interviews revealed that post MTE these counterparts were invited when the results of consultancies were discussed. Private sector operators and associations were regularly invited to project meetings and workshops. TE had observed some limited evidence of efforts to develop collaborative partnerships for market-based approaches with the data collectors, BFAR policy personal and the General Santos Fish Port. This work will need to be continued possibly with a pilot on market pricing and association building at the regional level.

A key lesson learned has been the need to find creative way to bridge the science -policy decision making gaps through such technical forums.

Private sector operators and associations of fishing companies have been regularly invited to project stakeholder workshops. Vietnam reported direct involvement as part of the fisheries improvement project managed by WWF Vietnam (also see outputs log frame).

The national level interviewees commented on actual partnerships below.

Philippines

UNDP, PEMSEA, USAID, WCPFC, BFAR, NFRDI, PSA, PFDA, stakeholders (tuna industry), added value of PEMSEA KM work, data work with SPC and PEMSEA – website; SPC – data obligations to WCPFC
Reported the private sector inputs or involvement into project activities was mainly through consultation meetings/workshops/interviews. Some partners as a result of learning are initiating process leading to getting MSC certified (e.g. HSP1 purse seine operations) or having a FIP for their fisheries (e.g. handline fisheries in General Santos City), taking into consideration the needs of their market (e.g. US, EU).

Vietnam
In Vietnam regional and national implementing partners included RIMF, VIFEP, VINATUNA, Vietnam Association of Seafood Exporters and Producers (VASEP), WWF SPC, etc. The SPC was noted as a technical partner and provided technical support on data collection and database development and maintaining. SPC also conducted annual meetings for tuna catch estimation and NTC was invited. Vietnam private sector on tuna fisheries in Vietnam such as WWF, VASEP, VINATUNA were invited to every WPEA SM meetings. In addition, WWF collaborated with WPEA SM to conduct observer trips

Indonesia
Regional (WCPFC) and National implementing partners (DGCF, PUSDATIN, Provinces, NGOs (MDPI), Fising association (AP2HI, ATLI) Fishing industries (SFP). PEMSEA KM work (website developement for WPEA science bank knowledge paltform), data work with SPC (annual catch estimate and port sampling audit? (expert consultancy)
Indonesia engage the private sector inputs through data collection enhancement and provision, stake holder workshops) other partnerships evolve as some partner also provide funding to support necessary workshops when the Project cold not support.

The project collaborated with NGOs for data collection i,e. MDPI, AP2HI, SFP, ACIAR Project. At national programs for example in Philippines, linked tologbook and support for the observer program.This has been highlighted a key area for intervention i.e. To fund the observers programme.

3.2.6. Adaptive Management

The project was implemented according to the log frame and the activities outlined by the project document. Here, it was important to note the difference between using the log frame as a guide for work planning and using it as a results monitoring tool. The use of project document as a monitoring tool by project management was limited. As mentioned in design section, the GEF grant had been reduced before approval of the **project and the design and expected** results framework remained the same. The adaptive management measures included the PM guiding and rationalizing budget allocation for the cross-cutting project activities and expertise. Most of these inputs were expert consultancies and knowledge inputs but generally these area were overambitious in absence of the over half the project budget originally conceived for the work. The budget and results focussed on monitoring and data collection systems. Interviews were very promising about the PM unique profile to guide them technical and TE interviewees stated the decision on work planning were made jointly. The project manager made special trip to walk the NTCs and other national counterparts through comprehensive planning exercises in order to deliver on *all* expected results. The annual work plans were then approved by the projects boards. This was verified at TE.

3.2.7. Communications and Knowledge Management

The communication and knowledge management approach was very weak. KM was not viewed as an important implementing modality (for results i.e. policy etc.) and the expected outputs were late in developed in project timeline. Communication was insular and generally directed to the scientific and technical community involved. Project management only reached a decision with PEMSEA late for implementing KM outputs late during project implementation. This negated the progress on objective to learn and share knowledge linked to national policy goals and KM needs, PEMSEA especially for as per the subregional knowledge sharing and sub -regional governance targets, as a sustainability strategy and as PR the subregional governance goals.

The project facilitated communications through national level workshops and meetings, and through the annual three-country workshops. The project manager would employ guiding support to the three countries (CTS type role) individual missions to the three countries, constructively interacting with the national coordinators regarding developing activity proposals and monitoring activity level results.

The project board meetings have provided opportunities for high level communication of project progress.

Substantively, technically, the project has supported annual national tuna catch estimate workshops in the three beneficiary countries that have been attended by a broad mix of national, subnational, and private sector fisheries stakeholders. Additionally the project convened stakeholder workshop also have provided opportunities for increased external communication, e.g., through involving private sector operators and subnational authorities.

Regionally, the project has provided representatives from the three beneficiary countries several opportunities for improving joint and external communication; for example, the annual SC and TCC meetings convened by the WCPFC. The project has also funded participation in the UNDP GEF/PEMSEA hosted East Asian Seas Congress in Vietnam in November 2015, and the GEF IW meeting in Sri Lanka in 2016.

The project did make advances towards increasing collaboration with PEMSEA with respect to knowledge management. At the programme level,[9] there were positive developments with, PEMSEA Resource Facility. WCPFC issued a USD 45,000 grant to the PEMSEA Resource Facility on 23 November 2016 for development and implementation of a WPEA project portal and monitoring and evaluation reporting system. The note on execution was witnessed during TE.

A critic of the (MTE) verified by TE was to improve external communication, e.g., through collaborating with particular enabling stakeholders, such as the ministry of environment in the three beneficiary countries, on climate change and biodiversity aspects. According to interviews during TE this aspect was augmented during second half implementation (note TE findings on collaboration in synergies section).

3.2.8. COUNTRY OWNERSHIP

Country ownership has been high. The cumulative co-financing contributions at final exceed the committed sum. Generally, the ownership have been facilitated through an effective execution modality with the project activities aligned and integrated with national programming and budgeting. This was partly due to the PM unique CTA /PM competencies and reported abilities to meander through the unique national government cultures to get results. This strength of the project has been recognized by MTE and again during TE. There was a strong continuity of the implementation partners, including project manager, national coordinators, regional partners, UNDP CO staff, and UNDP GEF RTA. The WCPFC has provided steady co-financing contributions, including the in-kind project management services rendered by the Science Manager of the WCPFC.

The country ownership was in part represented by co-financing the high level of cofinancing contributions (also see section on finance below). The total co-financing exceeded the committed sum. Following up suggestions during the MTE mission about under results reporting, the national coordinator in Vietnam reported to TE to have included co-financing contributions from WWF Vietnam for their work on a fisheries improvement project (FIP) as it was delivering the cross-cutting benefits, not only to the private sector actors who are directly involved in the FIP, but also those working towards sustainable management of the tuna fisheries. Other reported having begun to see the value of such synergistic action for results as per the cross-cutting areas.

3.2.9 MAINSTREAMING

At its essence, the project's substantive content focused on mainstreaming cross-cutting issues and priorities (including gender) of UNDP/GEF. The general work on fisheries management and monitoring improvements supports job creation, gender, and equality. For mainstreaming, TE considered the project effects on gender, local populations (e.g., income generation/job creation, improved natural resource management arrangements with local groups, improved policy frameworks for resource allocation and distribution, and regeneration of natural resources for long-term sustainability) and the extent to which the project objectives conformed to agreed priorities in the UNDP country programme document (CPD) and other country programme documents, whether project outcomes have contributed to better preparations to cope with disasters or mitigate risk (if applicable), and the extent to which the poor, the indigenous, persons with disabilities, women, and other disadvantaged or marginalized groups benefited from the project and the poverty-environment nexus (how the project's environmental conservation activities contributed to poverty reduction).

Generally, while the original project document did a safeguard screening as described in the section on gender mainstreaming above, it was not in practice targeted at vulnerable and or marginalized, hidden groups. Also, the project

[9] The WPEA project is part of the GEF-financed program entitled: "Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments" (GEF Program ID 4936).

monitoring system was never set up and instituted for monitoring these issues. This is a weak part of the results reporting and the intent of the project. This is a project management lesson learned.

Additionally, there was no proper explanation of the gender marker in the project document, and the design for gender expected results was weak. The gender marker rating assigned in the project document (see page 87) states that the project would have a negligible impact on gender. As mentioned above in the section on gender and safeguards screening, the design and monitoring for these results was very weak and generally involved head counts. TE argues that this is not necessarily the case at TE and that while the project was underreporting results, including gender, an expected result in all GEF projects is that women are generally disparately impacted by natural resource mismanagement. Work on fisheries improvement would support them.

Gender and other vulnerable, marginalized, and hidden group results that can be better planned and even considered include the substantive work with support to data and monitoring systems and other aspects of fisheries management improvements for the three countries. As women are generally involved in this industry i.e. port and production work, substantive improvement in tuna fisheries management disparately impacts them. The PIR and other reports should be reporting on these results through check mark reports. This is a lesson learned for future work.

In fact, the project has made an impact on gender. For example, it demonstrated enumerators, and many monitoring employees involved in project implementation at the fisheries are female. This is a good impact. The project is still considering ways to continue results by ensuring project budgets for these new positions. There might be more work done on gender equity on government and fisheries industry positions in future initiatives.

The Project was however, an excellent vehicle for the delivery of scientific technical assistance mainstreaming into the countries for improving data collection and monitoring linked to the WPCFP convention and national Tuna management plans. In terms of the cross cutting areas and work on EAFM, harvest strategies, risk assessment, supply chain and certification, sub regional EAS consultative forum, these areas need data collection and data sharing in the future linked to the regional and national Tuna fisheries management systems. Through delivery of strategic knowledge inputs the project raised countries' and regional awareness around the need for EAS subregional cooperation and has supported the **mainstreaming of key knowledge** concerning the cross-cutting thematic areas in the regional, sub regional and national tuna management strategies. At the subregional level, the cooperation goals were discussed and a record was kept of data sharing and monitoring gaps with suggested areas for cooperation. Mainstreaming climate change has been somewhat achieved with integration of these issues in the Tuna management plans and support of the 'enabling work' under component two. Continued work is thus needed on the cross cutting area and the subregional and regional "knowledge goals" to support the 'mainstreaming –scaling up –repetition goals. The knowledge management work through three country workshops at the EAS level is a good practice but sustainability is an issue. The CF will need to continue to be supported. Having a pool of experts is rather a KM function (no cross-cutting strategy for that in the project – not sufficient budget for national level KM plans either). The institutional home for the cross cutting areas and support work need work and a sustainability plan.

3.2.10. IA/ UNDP/GEF VALUE ADDED

The UNDP Philippines and UNDP APRC (Asia Pacific Regional Centre) were reported as providing continuous oversight and strategic technical support and participation in the implementation and adaptive management towards results. UNDP Philippines was commended and reported as providing excellent day-to-day support to project manager and implementation strategies. On the technical side, oversight was provided by the Regional Technical Advisor from UNDP APRC.

The project reportedly benefited greatly from the UNDP /GEF project programme guidance and administrative assets including particularly audit and finance work of the UNDP. The UNDP Philippines has provided substantive support services, including administrative issues, financial reporting, and procurement support

The continuity of the UNDP staff involved as with the first phase was said by interviewees to have added to the effectiveness and efficiency of the project.

Reports were prepared timely by the project manager, with constructive input from UNDP. One criticism was for future more direct communcation from UNDP to NC related to the projects and audit process (e.g. HACTS, etc.).

3.3 RESULTS (ATTAINMENT OF OBJECTIVES) (RATED*)

3.3.1. Progress towards Outcomes Analysis

Objective: To improve the management of highly migratory species in the entire West and Central Pacific (WCPF) Convention area by continuing to strengthen national capacities and international participation of Indonesia, Philippines and Vietnam in WCPF Commission activities	
Progress towards achieving project objective is rated as:	**Satisfactory**

The Project improved monitoring of oceanic tuna fisheries in the EAS. This was a substantive aim of the project and is ***fully achieved*** at project closure. There were testimonials during TE and scientific evidence (data and monitoring improvements) to support the assessment of the objective. The original project design was scrutinized and rationalized during the MTE. It had been adapted by management during work planning and project boards. For instance, at the onset, the overly ambitious targets around the subregional governance and cross-cutting areas were further rationalized as "making contributions." The Project was, however, highly successful in delivering results with respect to its core work of improving data collection and monitoring of tuna stocks.

Significant barriers (highlighted by the MTE and verified by TE) came with the expanded scope, including subregional governance targets and four cross-cutting areas, including climate change assessment and planning, application of market-based approaches, implementation of EAFM, etc. The Project's ability to meet those end targets was challenged by (1) limited resources and (2) shortfalls in resource (consults, PIRs and MTE verified).

In TE discussions with the project management at regional and country level and based on a review of various project board decisions, the bulk of the budget allocation went to support continued improvements in data collection and monitoring while modest amounts were spent for the cross-cutting and subregional governance aspects. Adaptive management measures were taken, including downscaling activities by focusing on compilation of prior studies. MTE highlighted factors (verified), including recruiting qualified experts to carry out consultancies, such as climate change prediction, supply chain analyses and design of EAFM field trials.

The MTE 2017 had recommended leveraging opportunities on complementary projects and programs and working with the private sector. TE verified that post-MTE, the Project's regional and national teams began to place more emphasis on having increased synergies with complementary donor projects and private sector partners. Time and resources were limited, however, and the teams could do only so much in this regard. To build in synergies, more stakeholders were invited to activities and events, usually workshops. To sustain the important cross-cutting work, an exit strategy was needed as a priority. The Project, while excellent in the science aspects, was less effective at policy. Remedial measures needed to be put in place to ensure sustainability. TE suggested a case study of economic benefits, an exit strategy for data and monitoring gaps and subregional governance and a classification scheme and dissemination plan for all the knowledge outputs linked to the PEMSEA KM and Monitoring contract.

Regional:

Indicator 1: (a) Status of harvesting of shared oceanic tuna stocks in the WCPF Convention area in the EAS vis-à-vis sustainability criteria set by the WCPF Convention; (b) Application of market-based approaches to sustainable harvesting of oceanic tunas					
	Baseline	**REVISED AND APPROVED End Target (PB APPROVAL OF MTE)**	**Midterm Assessment**	**Status of Project at Final**	
Value:	Current coverage in average of the three countries fishery monitoring is around 15% **target**	0. 1. 1.1. Improved monitoring of oceanic tuna fisheries in the EAS and coverage increased to 40%	**On target**	Monitoring of tuna fisheries related to coverage rate was mostly based on tuna catch data collection from port sampling. In Philippines, tuna catch data were collected from all tuna landing sites (100%) covered. In Indonesia, 6 key tuna landing sites were covered from the baseline of 4 landing sites (50% increased). In Vietnam, 9 provinces were covered from the baseline of data collection from 3 provinces (200% increase). The Philippine port sampling program or National Stock Assessment Program (NSAP) underwent expansion, covering almost all the tuna landing sites throughout the country (refer to 1.1.1 Overview of PHL port sampling activities, NSAP, Table 1 and Figure 3). The NSAP coverage was fully funded by the Philippine government through BFAR. At beginning of the Project, VNM had only collected tuna fisheries data at some central provinces (i.e. Binh Dinh, Phu Yen and Khanh Hoa) for all gear types. This Project supported expanding data collection sites at 9 provinces in Vietnam for covering three gears.	**Achieved**
	Little compliance with bycatch reduction requirement	1.2. Reduction of catch of ETP species	**Not on target**	According to the 5th PB meeting, it was agreed to delete "by 25%" from the log frame. Main focus related with bycatch/ETP species is to conduct a risk assessment of bycatch species, which was completed by each country. As a member of the WCPFC, PHL was required to reduce catch of ETP species. There were WCPFC CMMs related to whale sharks, sea turtles, silky sharks, oceanic white-tip sharks. PHL fully observed and implemented the provision of these CMMs and conducted investigations, if there are alleged violations from its flagged vessels**.** For PHL-flagged PS vessels, these were monitored by the Fisheries Observer Program with 100% observer coverage. VNM was implementing regulations of CITES. In addition, regulations on bycatch mitigation were included in the revision of national tuna management plan**.**	**Achieved**
	No reflection of climate change in the current management framework	1.3. Enhanced adaptive capacity to manage oceanic fisheries in the EAS under climate change conditions through revision of management	**Marginally on target**	Each country completed guidelines to adaptively manage tuna fisheries to address the impacts of climate change; and national policies on climate change were developed at each country and submitted to the government to be reflected into their National Tuna Management Plan when it was revised**.** Center research for Fisheries (CRF) developed guidelines of climate change mitigation and adaptation for tropical tunas. This document wass incorporated into the reviewed National Tuna Managament Plan.	**Achieved**

				BFAR plan and programs were required to incorporate mitigation measures or activities to reduce impacts of climate change in fisheries. PHL through DA-BFAR developed a Climate Change–Disaster Risk Reduction Manual of Operations including action plans and budget needs *(the Project has funded workshop/s for this activity)*. This was aligned to the country's objectives under the Department of Agriculture's mandates. **VNM drafted two adaptive guidelines to consider climate change**. The first was to use for fishing communities that would have better understanding of where good fishing grounds could be located, considering the complexity of climate change. The second was for capacity training for policy makers and other related stakeholders on adaptive management with climate change issues. This activity was aligned with national strategies when climate, a hot topic, was considered. Joint country and national work promoted the "policy windows "with cross-cutting work at the regional level through project management based at the commission and reports to the commission on the project work (good strategy).	
	Tuna supply chains not well documented, no oceanic tuna fisheries in the EAS certified	1.4. Progress to possible certification of at least two oceanic tuna fisheries in the EAS through FIPs	**Marginally on target** .	Each country had several certification processes ongoing and some were completed. In the case of Philippines, for the past six years, the yellowfin tuna handline fishery of Mindoro Strait and Lagonoy Gulf was working relentlessly to address key issues of sustainability in order to attain MSC. In 2018, it officially entered into the full certification process. Detailed information was available from each country's consultancy report on certification. PHL developed two consultancy reports related to supply chain and certification by Dr. Jose Ingles. SFFAII was supportive of this initiative (during the conduct of interviews**). P**rior workshops were conducted related to tuna supply chain and certification conducted under this Project. There was an ongoing initiative to have the PHL high seas pocket #1 (PS-HSP1) operation MSC certified *through the GenTuna Corporation in collaboration with BFAR and HSP1 operators)*. Handline operators in GenSan were also interested to have an FIP for their tuna fisheries for their EU and US markets. Indonesia launched its interim Harvest strategy on 31 May 2018. One of Indonesia's fishing companies, PT Citra Raja Ampat Canning for pole and line fishery, earned the first MSC certification in 2018. Tuna handline fishery was now in process on the assessment for its MSC certification. Tuna purse seine fishery was also progressing in its Fishery Implementation Plan. VNM developed two consultancy reports conducted by Viet Anh related to supply chain and certification. These reports were to revise current status on supply chain and certification for tuna fisheries in Vietnam and propose some recommendations to effectively manage tuna fisheries supply chain and national certification system. The intent of the Project was to create synergies with ongoing initiatives. Post-MTE, this was a clear intent of the project manager and National Tuna Coordinators. Many changes with regard to the cross-sectoral goals, including inviting more stakeholders to meetings and events/workshops involving the cross-cutting work.	**Achieved**

Date:	**2013**	**March 2017**	**October 2017**		**October–December 2019**

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

Indicative budget in project document: USD 700,000

Actual cost incurred on this Component through 30 December 2019: USD

Outcome 1.1: Improved regional mechanisms for monitoring and assessment of highly migratory fish stocks and IUU fishing in the POWP LME and the EAS LMEs	
Progress towards achieving Outcome 1.1 is rated as:	**Satisfactory**

This component would strengthen the regional collaborative mechanisms for monitoring and assessment of highly migratory fish stocks, and Illegal, Unreported and Unregulated (IUU) fishing in the POWPLME and the EAS LMEs. Component outputs and activities to achieve them would include Outputs 1.1.1; 1.1.2: Joint WCPFC/PEMSEA Consultative Forum, established for effective monitoring of highly migratory stocks and marine ecosystems across the POWP LME and EAS LMEs.
The subregional project convened the subregional Consultative Forum. The project document said it would build on catch estimate and data review workshops at national level which would precede the Consultative Forum and frame a range of inputs to regional (WCPFC) processes: the Scientific and Technical and Compliance Committees, e.g. catch estimates, stock assessments, compliance with conservation and management measures and ecosystem management. The Consultative Forum was expected to involve a range of national, subregional and regional stakeholders, such as PEMSEA, SEAFDEC, ASEAN Tuna Working Group, the ABNJ Program, etc. While the CF convened, it was not formal and needed follow-up. The end target for this was missing from the project document. The expected outcomes were vague. The MTE asked for clarification of the end target, but this was determined to be outside the scope of this Project (PB meeting minutes).

Regional and Subregional:

In terms of general regional and subregional-level achievements under Outcome 1.1, they were satisfactory. For instance, compliance with respect to WCPFC CMMs improved in the three beneficiary countries. However, noted by the MTE and verified by this TE, Philippines had a longer track record as a WCPFC member and compliance there has been steadily improving. Indonesia joined the Commission in December 2013 (during this Project), and there was general improvement with respect to compliance. As a cooperating nonmember, Vietnam was compliant with the relevant CMMs, but stakeholders interviewed stated that achieving full compliance was something that was assessed annually, and it would take time, certainly longer than the 3-year project time frame.

The Project facilitated subregional discussions and capacity building on developing harvest strategies, and each of the three countries was considering harvest strategies for national tuna fisheries. There was discussion during the latest consultative forum and three country workshops, i.e. Yogyakarta on needs and interest for developing a subregional harvest policy, e.g. for the EAS LME.

At TE, the countries convened around the Consultative Forum (CF) which not been established as outlined in the project document. An excerpt from the project document reads "*The Consultative Forum would involve a range of national, subregional and regional stakeholders, such as PEMSEA, SEAFDEC, ASEAN Tuna Working Group, the ABNJ Program, etc*." With respect to coordinating with PEMSEA, there were achievements. Representatives from the three beneficiary countries attended the PEMSEA EAS Congress in 2015. The WPEA project and the PEMSEA Resource Facility also signed a letter of agreement in November 2016 and Oct 2019 that outlined how PEMSEA would assist in developing and hosting a project website. The monitoring and evaluation and reporting system was however not observed at TE.

Indicator 2: **Regional** (WCPF Convention area): Status of participation in WCPFC activities (CMMs, compliance monitoring, MCS etc.) and membership (CCM); **Subregional** (Indonesia, Philippines, Vietnam): Establishment of WCPFC/PEMSEA Consultative Forum (CF) to coordinate monitoring of oceanic tuna stocks across EAS LMEs in association with PEMSEA ,WCPFC and others						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
	Regional:					
Value:	Close to full participation by Indonesia and Philippines as members; Vietnam not compliant in some aspects and CNM status	Compliance levels improved in each of the three beneficiary countries. Achieving "full" compliance would take time, beyond the lifespan of the Project**.**	2.1. All three countries comply with WCPFC requirements, and relevant CMMs	**Marginally on target**	Both Indonesia and Philippines were members and Vietnam was a cooperating nonmember of the WCPFC. All three countries were obliged to comply with all relevant CMMs adopted by the Commission. TCC reviewed and assessed CCM's level of compliance. This was related to the obligation of members and cooperating nonmembers of the WCPFC. One of the main objectives of the WPEA project was to "assist" the three countries to enhance their compliance including data submission, which were well done through this Project. Starting from more than 60 CMMs with noncompliance status in 2015, Indonesia improved its compliance level down to 9 uncompliant and 2 capacity assistance (CAN) needs in 2018, which was a huge level-up in the context of compliance with CMMs. In terms of scientitifc data to be provided, PHL was mostly compliant with WCPFC CMMs. Vietnam was obligated mainly on tuna fisheries data provision and reporting issues of WCPFC. In this regard, Vietnam is currently providing the Annual Report–Part 1 & 2. In fact, according to the compliance monitoring report (CMR) of WCPFC, Vietnam almost complied with all CMMs requirements. It is noted that many CMMs were not applicable to Vietnam's EEZ.	**Marginally on Target**

Indicator 2: **Regional** (WCPF Convention area): Status of participation in WCPFC activities (CMMs, compliance monitoring, MCS etc.) and membership (CCM); **Subregional** (Indonesia, Philippines, Vietnam): Establishment of WCPFC/PEMSEA Consultative Forum (CF) to coordinate monitoring of oceanic tuna stocks across EAS LMEs in association with PEMSEA ,WCPFC and others						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					Vietnam has not been elected to the commission as a full member as a result of this Project. While it was an expected outcome of project, the evaluator noted the absence of a clear pathway in the original theory of change. That was for work bridging regional policy goals and the work on improvements in the data science and compliance of Vietnam. The Project has nonetheless "readied" Vietnam for an invitation to the commission by demonstrating its learning and compliance. The follow-up policy advocacy work might be a central end of project target (dissemination of the final results and this terminal evaluation report to the political leaders for consideration of Vietnam's "readiness" to join the convention as a full member).	
		Anecdotal evidence that monitoring coverage has increased to 40%.	2.2. Improved monitoring of oceanic tuna fisheries in the EAS and coverage increased to 40%	**On target**	The Philippine port sampling program or National Stock Assessment Program (NSAP) underwent expansion, covering almost all the tuna landing sites throughout the country (Refer to 1.1.1 Overview of PHL port sampling activities, NSAP, Table 1 and Figure 3). The NSAP coverage was fully funded by the Philippine government through BFAR. PHL had 100% ROP coverage for its PS vessels operating outside PHL waters. At beginning of the Project, VNM only collected tuna fisheries data at some central provinces (i.e. Binh Dinh, Phu Yen and Khanh Hoa) for all gear types. This Project supported to expand data collection sites at 9 provinces in Vietnam for covering three gears. The changes in data collection regimes and compliance status SPC report 2018 indicated significant expected results.	**Achieved**
	Subregional:					
	Three countries work cooperatively within WPEA project but there is no coordinating mechanism which includes all fishing entities in SCS and other LMEs	One of the topics included in the second three-country project workshop was **harvest strategy development, and each country was working towards developing harvest strategies.** There were no plans for developing subregional harvest strategies, e.g., for the EAS LME.	2.3. Countries once a year share information which contributes to development of harvest policy for oceanic tunas across the relevant LMEs and within the WCPFC framework	**Marginally on target**	WCPFC's Scientific Committee (SC) is held once a year, and one of key topics was the development of a harvest strategy framework. WPEA project supported each country's representatives to attend this technical SC meeting annually to share information and capacity building on various components within a harvest strategy framework of the WCPFC.	**Achieved**

Indicator 2: **Regional** (WCPF Convention area): Status of participation in WCPFC activities (CMMs, compliance monitoring, MCS etc.) and membership (CCM); **Subregional** (Indonesia, Philippines, Vietnam): Establishment of WCPFC/PEMSEA Consultative Forum (CF) to coordinate monitoring of oceanic tuna stocks across EAS LMEs in association with PEMSEA ,WCPFC and others						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					Indonesia first attempted to develop its tropical tuna HS in the archipelagic waters and shared its experience with Vietnam and Philippines. Currently, Indonesia had an interim harvest strategy and had a prototype of an operating model for tropical tuna in the archipelagic waters. VNM asigned its delegates to attend the three countries workshop to discuss and share tuna fisheries management and monitoring information together with PHL and IND. **VNM revised the fisheries law and issued a new fisheries law in Nov. 2017. This new law integrated harvest strategies and reference point concepts for further development by bylaw documents**. Design issues—Theory of Change and Strategies: End targets around this goal were not well articulated and or thought through during design. Informants agreed and project management dealt with this the best way by focusing budgets on the substance of the Project, which was to upgrade the capacities of all countries to do monitoring and reporting (SPC). The work on cross-setting areas was done as more of a learning contribution, and this was reported by beneficiaries as effective to open policy windows (cross-sector involvement in workshops) and begin to mainstream the issues in national tuna management plans. The WCPFC Science Committee Meeting was the subregional mechanism for raising the need for joint harvest strategies at the EAS level. The aim of the Project (interviewees) was to bring all three countries up to speed on data and compliance, including Vietnam as a full member and then push the need for a joint Harvest EAS agenda at the level of the WCPFC Science Committee. The Project has clearly contributed to this goal by raising capacities of all countries to comply and the awareness of the scientific committee of the need for joint EAS Harvest Strategy work by presenting project progress work. Here the project manager played an important role of showcasing the work of the Project to the Scientific Committee of the convention.	

Indicator 2: **Regional** (WCPF Convention area): Status of participation in WCPFC activities (CMMs, compliance monitoring, MCS etc.) and membership (CCM); **Subregional** (Indonesia, Philippines, Vietnam): Establishment of WCPFC/PEMSEA Consultative Forum (CF) to coordinate monitoring of oceanic tuna stocks across EAS LMEs in association with PEMSEA ,WCPFC and others						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
		WPEA beneficiary countries attended the PEMSEA EAS Congress in 2015. The project also signed a letter of cooperation in Nov 2016 with the PEMSEA Resource Facility; which includes developing and hosting a project website, and also developing a monitoring and evaluation system.	2.4. Project coordinates with the EAS Program through the PEMSEA Resource Facility	**On target**	The development of a WPEA project website and a monitoring and evaluation system were completed, supervised by the PEMSEA. Other bilateral consultation meetings and the first comprehensive Consultative Forum were convened in January 2019. Both WCPFC and PEMSEA agreed to continue cooperation on areas of mutual interests. PHL continued to collaborate with partners such as PEMSEA, USAID-OCEANS Project and SEAFDEC. VNM assigned its one participant to attend PEMSEA EAS Congress in 2015 in Da Nang, Vietnam. While the output was achieved—a webpage—the usefulness towards the end targets and goals were still at risk. PEMSEA had innate interest to support KM for EAS subregional ecosystem work. No evidence of an ME system was found. The Project was implemented by the commission, so the ME would need more than a letter but full integration and involvement of PEMSEA on boards and in implementation work planning.	**Achieved**
Date:	**2013**	**March 2017**	**October 2017**			

National:

This Outcome 1.1 was satisfactory. It had two parts with Regional and National implications. The Consultative Forum (CF) was conceived and first met formally in January 2019, but it was but not binding. The group held discussions on data sharing and monitoring needs and possible areas of cooperation. However, the CF was not firmly established as per project document and needed follow-up. The formation of national task forces to support information gathering for the CF was also achieved since MTE. The question was about its viability and sustainability. This needed a higher level decision and UNDP and GEF and WCPFPC could convene a regional high level forum to discuss the subregional follow-up.

While tuna fishery monitoring has improved in each of the three beneficiary countries, there were areas brought forth by interviews during TE that would require follow-up work, i.e. capacity development for the observer programme in Indonesia and Vietnam (see recommendations). However, significant results were achieved in terms of the legal frameworks and implementation of vessel monitoring systems (VMS). In Indonesia, the scientific database for archipelagic waters fish resources represented a significant result. TE did not get

evidence of how the conceptualization of information management systems had been or how countries learned from each other on that part. The funding from the New Zealand Government for follow-up activities and some further financing by GEF might cover this.

Indicator 3: **National** (common): (a) Formation of task force to prepare and package information for CF; (b) Comprehensive national databases for all aspects of oceanic tuna fisheries, including log sheet data, port sampling data, vessel register, MCS data, and bycatch; (c) Comprehensive VMS, IUU monitoring and catch certification system in place for each country.						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
Value:	**Indonesia:**					
	National logbook monitoring system gradually being established under PSDKP MMAF, mainly starting to cover large vessels (>30GT) and not fully integrated with fisheries data	The legal foundation of implementation of fishing logbook is the Ministerial Decree No. 48/PERMEN-KP/2014, approved on 17 October 2014. The expected logbook cumulative coverage by the end of 2017 is expected to be 50%.	6.1. Logbook coverage of all commercial gears and fleets improved up to 50% for fishing vessels >30 GT	**On target**	Logbook coverage varies among fishing ports and generally the rate has been improved during the project period, up to over 50% in some places. Detailed coverage rates are found in the country's Logbook Report.	**Achieved**
	Species composition by gear by species currently available under port sampling programme covering only FMAs 716 (Bitung), 717 (Sorong) 714 (Kendari); Limited data from surveys by research vessel	Coverage of artisanal fleet landings is the same as documented in the previous target. Catch data on targeted species and key bycatch species are documented. Port sampling, observer, logbook, and surveys are regularly carried out. The Observer Program was authorized in May 2016 by WCPFC/PEMSEA. There are shortcomings with respect to logbook coverage and quality among small and medium scale fishing operators.	6.2. Coverage of artisanal fleet landings improved up to 50%; catch of retained and bycatch species well documented. Dependent and independent data available (port sampling, observer, logbook, surveys)	**Marginally on target**	In Indonesia, handline and troll artisanal fisheries are covered by port sampling, and expansion of port sampling sites resulted in the increase of coverage over 50%. Recently, due to project work and support, along with improvements of conventional logbook , Indonesia now has their logbook for small scale fisheries and e-logbook (since 2018). Achieved logbooks.	**Achieved**
	Statistical data for AW fisheries were available, but biological data and scientific database to verify currently unavailable (FMAs 713, 714, 715)	Database developed starting in 2010, and was regularly updated and refined (for the second phase of WPEA, applied both offline and online data inputs), including bycatch data. Port sampling coverage within archipelagic waters FMAs was the same as indicated for target 3.1.	6.3. Scientific database for archipelagic fish resources developed and implemented; extended port sampling to cover AW FMAs up to 25%	**On target**	In Indonesia, Center for Fisheries Research scientific database for archipelagic fish resources and port sampling was expanded from four to six locations of key tuna landing sites, over 50% expansion of the coverage. The database was developed and improved interactively with dashboard and reported to the relevant fishing industries. Some countries were ahead of others.	**Achieved**
	VMS and catch certification scheme under development and limited application to deter IUU	VMS Scheme was approved through Ministerial Decree dated 04 June 2014. Catch Certification was approved through Ministerial Decree dated 29 June 2012. These regulations support efforts to reduce IUU fishing in Indonesia.	6.4. VMS and catch certification system in place to address IUU	**On target**	Indonesia had a legal framework on VMS. The work began before the start of the Project to address IUU fishing. The MCS Report was produced by this Project and introduced the Indonesian VMS programme.	**Achieved**

Indicator 3: **National** (common): (a) Formation of task force to prepare and package information for CF; (b) Comprehensive national databases for all aspects of oceanic tuna fisheries, including log sheet data, port sampling data, vessel register, MCS data, and bycatch; (c) Comprehensive VMS, IUU monitoring and catch certification system in place for each country.						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
	No mechanism in place for regional knowledge sharing on oceanic tuna though CF	National task force was not yet established. The three-country workshop planned for May 2017 would cover subregional cooperation. A national task force will be considered in this process.	6.5. National task force in place for packing of information for CF	**Marginally on target**	National task force was established to prepare the Consultative Forum and identified a list of priority issues to discuss at the Forum. National task force for the CF in particular for RFMOs was developed under the DCGF to cover both EEZ and high Seas. No sustainability of CF. This needed work to complement the follow-up project with New Zealand.	
	Philippines:					
	Current monitoring coverage for small and medium scale tuna fisheries is less than 10% (development of prototype for small-scale fisheries)	The approximate 100 landing areas cover at least 30% of the tuna catch, including that from small and medium scale operators.	6.6. Monitoring coverage for small and medium scale tuna fisheries improved by 30%	**On target**	In Philippines, all tuna landing sites are 100% covered for data collection. The Philippine port sampling program or National Stock Assessment Program (NSAP) underwent expansion, covering almost all the tuna landing sites throughout the country (Refer to 1.1.1 Overview of PHL port sampling activities, NSAP, Table 1 and Figure 3). The NSAP coverage was fully funded by the Philippine government through BFAR. PHL has 100% ROP coverage for its PS vessels operating outside PHL waters. Most of the expansion sites cover small- and medium- scale tuna fisheries. These contributed a major project result, the expansion of data collection systems at the national level.	**Achieved**
	Current monitoring by VMS limited to PS/RN PHL flag vessels operating in WCPO HSP1 and other countries' EEZs; limited application of VMS in Phil waters to address IUU	The Philippine Fisheries Code of 1998 (RA8550) as amended by RA10654 (series of 2015), Section 119 requires all catcher vessels 30GT and up operating in national waters to be covered by the Vessel Monitoring Measure (VMM). The full implementation of the new law will be expected to be realized in 4-years, by 2019.	6.7. VMS monitoring and/or other technologies applied to selected tuna fishers operating in the PHL national waters and WCP CA to reduce IUU	**On target**	Application of VMS to combat IUU fishing has been implemented before the start of this Project in Philippines in all waters where the Philippine tuna vessels are operating. Update on VMS technology has been continued. The full implementation of the VMM is expected to be in place before the end of 2019 through the Integrated Marine Environment Monitoring System (IMEMS) Project	**Achieved**
	Delays in manual submission of log sheets resulting in proposing an e-logbook system to facilitate timely submission	A national e-logbook (or e-Reporting) system has been developed and pilot testing is ongoing for PH vessels operating in WCPFC-HSP1 (high seas). Adoption of the PH e-logbook or e-Reporting system is expected to be realized upon the full implementation of the Catch Documentation and Traceability System.	6.8. e-logbook developed and pilot tested, ready for implementation and adoption by stakeholders	**On target**	E-logbook system has been developed and trial application was made. This will be further developed in the future. A national e-logbook (or e-Reporting) system has been developed and pilot testing is ongoing for PH vessels operating in WCPFC-HSP1 (high seas). Coverage of e-	**Achieved**

Indicator 3: **National** (common): (a) Formation of task force to prepare and package information for CF; (b) Comprehensive national databases for all aspects of oceanic tuna fisheries, including log sheet data, port sampling data, vessel register, MCS data, and bycatch; (c) Comprehensive VMS, IUU monitoring and catch certification system in place for each country.						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					logbook (or e-Reporting system) will be enhanced through the IMEMS to include vessels operating in EEZ. The work shows the importance of making synergies with other project to achieve the longer term expected outcomes.	
	No mechanism in place for regional knowledge sharing on oceanic tuna	A Technical Working Group for tuna fisheries (TWG-Tuna) was established by BFAR. The current administration needs to approve continuation of the group. Mandate for packing of information for CF would also need to be included.	6.9. National task force in place for packing of information for CF	**Marginally on target**	National task force was established to prepare the Consultative Forum and identified a list of priority issues to discuss at the Forum. A new Technical Working Group for tuna fisheries (TWG-Tuna) was established by BFAR**.** The Technical Working Group for Tuna Fisheries (TWG-Tuna) had the following functions, which may include but are not limited to the following: 1. Recommend policies, programs, projects and activities relating to the Tuna Regional Fisheries Management Organization (tRFMO) to which Philippines is a member or cooperating nonmember; 2. Prepare/Review Compliance Reports and other obligations/requirements of RFMOs; 3. Monitor and investigate current and emerging issues on tuna fisheries; recommend actions to be undertaken to BFAR Director; 4. Coordinate and maintain linkages with the industry and key stakeholders relating the work of the BFAR TWG-TUNA; 5. Prepare and finalize the National Tuna Management Plan and consider any updates thereafter; 6. Coordinate and provide technical support to the National Tuna Industry Council (NTIC) and the Tuna Fishing Industry in general; 7. Prepare working and information papers for NTIC meetings and other forums as maybe required. Attend NTIC Meetings as maybe necessary; 8. Perform other tasks as may be assigned by the Undersecretary for Fisheries/BFAR Director.	**Marginally on target**

Indicator 3: **National** (common): (a) Formation of task force to prepare and package information for CF; (b) Comprehensive national databases for all aspects of oceanic tuna fisheries, including log sheet data, port sampling data, vessel register, MCS data, and bycatch; (c) Comprehensive VMS, IUU monitoring and catch certification system in place for each country.						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					A member of this TWG may also task one of its members or staff to attend consultation meetings/ workshops to give updates and share lessons learned, including plans and programs of BFAR in relation to tuna fisheries management. There is need for a sustainability plan for forums. "The current administration needs to approve continuation of the group. Mandate for packing of information for CF would also need to be included." **There needs to be follow-up in the next phase.**	
	Vietnam:					
	Monitoring systems established in three central provinces (Binh Dinh, Phu Yen & Khanh Hoa) under WPEA in compliance with WCPFC requirements, but not covering for all gears and all other provinces	All 9 provinces covered, as of 2015. Log sheet data following WCPFC's template now covers tuna fishing fleets in three main provinces (i.e. Binh Dinh, Phu Yen and Khanh Hoa). Other provinces using national log sheet format. **Log sheet data not authorized by government and not yet submitted to WCPFC**.	6.10. Monitoring systems expanded to 6 other provinces; increased coverage and quality of log sheet data for all tuna fishing fleets	**On target**	In Vietnam, most tuna landing sites in the 9 provinces covered most artisanal tuna fisheries, and tuna survey data using gillnetting are available at Research Institute of Marine Fisheries. Under the project implementation**,** logbook coverage was very high with more than 50% in some provinces and gears (i.e. tuna longline/handline fishery). In addition, recognizing the importance of logbook provision, under the new fisheries law of VNM government, new logbook submission regulations were developed**.** Accordingly, fishermen needed to submit logbooks to fishing port authorities for catch verification/declaration process at the landing sites.	**Achieved**
	Current coverage of monitoring landing data is around 35%	All 9 provinces having tuna fisheries are participating in monitoring landing data. Baseline figure of 35% and the term "coverage" are unclear.	6.11. Landing data coverage of tuna fishing fleets significantly improved up to 70%	**On target**	Data collection provinces have been increased from 3 provinces to 9 provinces in Vietnam.	**Achieved**
	No bycatch data are currently documented	Shark, swordfish, marlin, etc. are documented in the 3 main provinces, starting in 2015.	6.12. Catch of retained and bycatch species well documented	**On target**	All catch of retained and bycatch species were well installed in the TUFMAN1 database, documented and reported to WCPFC.	**Achieved**

Indicator 3: **National** (common): (a) Formation of task force to prepare and package information for CF; (b) Comprehensive national databases for all aspects of oceanic tuna fisheries, including log sheet data, port sampling data, vessel register, MCS data, and bycatch; (c) Comprehensive VMS, IUU monitoring and catch certification system in place for each country.						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
	No integrated database system established	The TUFMAN-1 system is an offline system, not yet integrated**.** There are discussions to adopt the online version developed by SPC (TUFMAN-2). This is not included in the 2017 annual work plan. Discussion of next phase, funding by New Zealand government, including financing the online system.	6.13. Integrated database established within National Fisheries Statistics system, including data entry, verification and database maintenance	**Not on target**	D-Fish Fishery Information Center had an integrated database system and their tuna data were annually reviewed by the WPEA Tuna Data Workshop. A national database was developing for all fisheries including tuna fisheries. This was not funded by the Project, but there was impact from project implementation and a need to enhance national database development to support for traceability system including catch certification to export to other countries. The national strategy and budget for this exercise was not included. The focus work of the Project on data collection and reporting supported this important national work. This should be flagged for gap at end and a recommendation made.	**Marginally on target**
	No mechanism in place for regional knowledge sharing on oceanic tuna	Nationally, a technical working group has been established for restructuring tuna fisheries management, transferring more responsibilities to local level. Consultative Forum between WPEA-PEMSEA not yet established.	6.14. National task force in place for packing of information for CF	**Marginally on target**	**National task force was established to prepare the Consultative Forum and identify a list of priority issues to discuss at the Forum.** The task of the task force was to deal with all issues in relation to WCPFC including advising to government to help Vietnam on accession on WCPFC. The work on setting up a technical working group has presented a lesson learned for management and implementation as well as sustainability. While the subregional CF was developed late in project implementation, the national teams were also intended to support implementation and national policy level results. It went back to the Project's need for a policy and sustainability plan. Follow-up was needed in next phase.	**Marginally on target**
	VMS scheme being implemented but not yet integrated with fisheries data. VMS, IUU and catch certification scheme not in	A national VMS has been established and installed in 3000 offshore fishing vessels as a trial; also for other fisheries.	6.15. VMS scheme being developed for selected fisheries to apply for catch certification scheme and to reduce IUU	**On target**	VMS system was established and applied to selected fishing vessels even before the start of this Project in Vietnam to combat IUU; several types of certification were implemented. Refer to the national certification system consultancy report for details.	**Achieved**

Indicator 3: **National** (common): (a) Formation of task force to prepare and package information for CF; (b) Comprehensive national databases for all aspects of oceanic tuna fisheries, including log sheet data, port sampling data, vessel register, MCS data, and bycatch; (c) Comprehensive VMS, IUU monitoring and catch certification system in place for each country.						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
	place—under development and initial implementation				The new fisheries law required that all fishing vessels more than 15m in length needed to install a monitoring system. The Project was supported to develop one consultancy report to review VMS system in Vietnam. The report was a very important document for the Vietnam government to develop a technical guideline to select VMS service providers.	
Date:	**2013**	**March 2017**	**October 2017**			

Outcome 1.2: Enhanced capacity of technical staff, policy and decision makers in Indonesia, Philippines and Vietnam to integrate **climate change impacts on highly migratory stocks into management regimes**	
Progress towards achieving Outcome 1.2 is rated as:	**Moderately Satisfactory**

Subregional and National:

At the subregional level, there was limited progress on establishing a subregional system for monitoring climate change impacts on tuna fisheries. This was mostly convening work that complemented, but nothing was formalized. As during the MTE, there were no plans in place to predict change impacts on the EAS and western part of the POWP LME or to develop subregional-level adaptation strategies. Addressing the baseline and reaching the subregional target were beyond the scope of budget and the time frame of this Project. With very limited budget and the time frame of this Project, *the three countries developed guidelines to adaptively manage the impact of climate change on tuna fisheries at national level and capacity building on this issue*. In addition, by convening a three-country, subregional workshop on climate change impacts, the three countries had capacity building in understanding how to adaptively manage the impacts of climate change on tuna fisheries by sharing their national level activities.

In Indonesia, the impact of climate change was predicted through a consultative approach with climate change (CC) experts. Adaptive management strategies were developed through CC guidelines and integrated into the NTMP. This area would need a follow up-plan and strategies at the regional and subregional level. Sensitization and knowledge production work on these issues were achieved with technicians and some policy makers at the national level.

There was a need follow up the plan and strategies at the regional level. Sensitization and knowledge production work at the national level was achieved. At the national level, the Project supported strengthening climate change predictive capacities through expert forums and consultancies. For instance, in Vietnam, a consultant evaluated climate change impacts using an existing model. For Indonesia and Philippines, the efforts focused on carrying out prior studies. The study in Indonesia was completed in 2016, Philippines team was having difficulties recruiting a consultant for this task. Some progress was made towards developing climate change adaptation strategies at the national level.

Indicator 4: (a) Prediction of climate change impacts on oceanic fisheries and development of adaptive management strategies; (b) Capacity building to interpret climate change impacts on oceanic fisheries and to develop adaptive management strategies and incorporate these into management regimes						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
Value:	**Subregional:**					
	Some information available on impacts on POWP LME but model outputs not yet, extended to EAS and integrated with existing data	No plans are in place to predict climate change impacts on a LME scale, and subregional adaptive management strategies are not planned.	4.1. Trial prediction of climate change impacts on EAS and western part of POWP LME and appropriate adaptive management strategies developed	**Not on target**	Addressing the baseline and reaching the subregional target are beyond the scope of budget and time frame of this Project. With very limited budget and time frame of this Project, the three countries developed guidelines to adaptively manage the impact of climate change on tuna fisheries at national level and capacity building on this issue. In addition, convening a three country, subregional workshop on climate change impacts, the three countries had capacity building in understanding how to adaptively manage the impacts of climate change on tuna fisheries by sharing their national level activities. In Indonesia, the impact of climate change has been predicted through a consultative approach with climate change (CC) experts in the forms of WS. Adaptive management strategies have been developed through CC guidelines and integrated to the NTMP. **Need follow-up plan and strategies at the regional and subregional level. Sensitization and knowledge production work on these issues achieved with technicians and some policy makers at the national level.** **Need follow-up plan and strategies at the regional level. Sensitization and knowledge production work at the national level achieved.**	**Marginally on target**
	Indonesia:					
	Though National Climate Change Council established in 2008 (Presidential decree no. 46/2008), climate change impacts on oceanic fisheries and its ecosystems not studied	A prior study on climate change was completed in 2016, but this did not include modeling or other activity that strengthened predictive capacity. A task force has been established with the	4.2. Task force established to study climate change impacts on oceanic fishery sector; results of preliminary research/modeling on oceanic fisheries available; adaptive management strategies to	**Marginally on target**	Task force and climate change-related division were established in Indonesia. Two guidelines were developed, which included policies and strategies to mitigate the impacts of climate change on tuna fisheries.	**Achieved**

Indicator 4: (a) Prediction of climate change impacts on oceanic fisheries and development of adaptive management strategies; (b) Capacity building to interpret climate change impacts on oceanic fisheries and to develop adaptive management strategies and incorporate these into management regimes						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
	and current analytical capacity in this area is very limited	RCFMC, and two climate change guidelines are under preparation.	mitigate impacts of climate change developed		In Indonesia, a task force for CC was established under the Center for Fisheries Research. The task force was actively involved in the CC WS and gave inputs for the improvement of the reviewed NTMP. VNM has drafted two adaptive guidelines to consider climate change. The first guideline was to use for fishing communities who would have better understanding on where good fishing ground could be found due to complexity of climate change. The second one was for capacity training for policy makers and other related stakeholders on adaptation with climate change issues. This activity was aligned with national strategies when climate was considered as a recent hot topic. This national work was about synergies and policy work. It needed follow-up for sustainability and for moving towards the regional targets.	
	Philippines:					
	National climate change strategy developed, but impacts on oceanic fisheries and ecosystems not yet studied and current capacity limited	The national coordination unit has had difficulties recruiting a consultant to carry out a prior study. Trial prediction of climate change impacts on oceanic fisheries unlikely by project closure. Philippines is planning to develop a climate change and disaster risk management manual of operations not specifically focused on oceanic fisheries.	4.3. Trial prediction of climate change impacts on oceanic fisheries developed; four or more skilled personnel trained to interpret climate change impacts on oceanic fisheries and to develop adaptive management strategies	**Not on target**	Prediction of climate change impacts on oceanic tuna fisheries required both modeling work and availability of relevant environment and fishery data, which was absolutely impossible to conduct through this Project. This target should be removed. There were several workshops on climate change issues and around 30 government staff and people from private sectors attending the workshops, which were training workshops. Adaptive management strategies were developed through the two guidelines on climate change: a) General Guidelines on Adaptive Management and Monitoring of Highly Migratory Fish Stocks to Address Climate Change; b) Application of Adaptive Management Guidelines for Capacity-Building of National Technical Fishery Staff,	**Marginally on target**

Indicator 4: (a) Prediction of climate change impacts on oceanic fisheries and development of adaptive management strategies; (b) Capacity building to interpret climate change impacts on oceanic fisheries and to develop adaptive management strategies and incorporate these into management regimes						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					Policy, and Decision Makers in Philippines (by Rollan Geronimo). Policies/Strategies on climate change were reflected into National Tuna Management Plan. This national work was about synergies and policy work. It needed follow-up for sustainability and movement towards the regional targets.	
	Vietnam:					
	Lack of trained/skilled personnel and no existing assessment of capacity needed to interpret climate change impacts on oceanic fisheries and to develop adaptive management strategies	There has been some progress towards evaluating potential impacts of climate change on oceanic fisheries, using an existing model. Further analyses are planned in 2017. Four technical staff from the Ministry participated in the three-country workshop in 2016 that included sessions on climate change. Establishment of national climate change guidelines is included in the 2017 project work plan.	4.4. Trial prediction of climate change impacts on oceanic fisheries developed; four or more technical staff, policy and decision makers to integrate climate change impacts on highly migratory stocks	**Marginally on target**	Similar work was done on climate change issues in Vietnam. Two guidelines were developed: a) Guidelines for the Adaptive Management of Climate Change Impacts on Tuna Fisheries; b) Guidelines for capacity building, training of national and provincial technical fishery staff, policy and decision makers in Vietnam to cope with the impacts of climate change on tuna fisheries. Vietnam also developed economic modeling to predict tuna production using environmental data, the application of economic modeling in assessing climate change impacts on tuna fisheries in Vietnam. Policies on climate change impacts were developed and would be reflected in National Tuna Management Plan when the plan is revised. Three country workshops provided an excellent mechanism for collaboration and preparing strategies to influence policy windows. This was really developed as a strategy for change around regional and subregional expected outcomes.	**Marginally on target**

Indicator 4: (a) Prediction of climate change impacts on oceanic fisheries and development of adaptive management strategies; (b) Capacity building to interpret climate change impacts on oceanic fisheries and to develop adaptive management strategies and incorporate these into management regimes						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					This national work was about synergies and policy work. It need follow-up for sustainability and movement towards the regional targets.	
Date:	**2013**	**March 2017**	**October 2017**			

Outcome 1.3: Climate change concerns mainstreamed into national fishery sector policy in Indonesia, Philippines and Vietnam	
Progress towards achieving Outcome 1.3 is rated as:	**Moderately Satisfactory**

Indicator 5: (a) Incorporation of oceanic fisheries indicators and modeling outputs into overall national climate change strategy; (b) Policies/strategies/plans/program that integrate climate change into national fisheries policies and even legislation/regulations						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**		**Status of Project at Final**
Value:	**Indonesia:**					
	National policy formulation specific to oceanic fisheries under climate change is very limited, but some information available for adjacent POWP LME, as a suitable model/precedent	Climate change adaptive management strategy is under preparation. The strategy is envisaged to be approved through Ministerial Decree; this does not meet the target of incorporating into national cross-sectoral	5.1. Climate change adaptive management strategy for oceanic fisheries developed and incorporated in national cross-sectoral climate change strategy	**Not on target**	The climate change adaptive management strategy for oceanic fisheries was developed as a form of guideline to adaptively manage the impacts of climate change on tuna fisheries in the three countries, including Indonesia. Policies on climate change issues were developed and would be reflected into National Tuna Management plan once the Plan is to be revised. In Indonesia, climate change adaptive management strategy for tropical tuna was developed and integrated into the reviewed NTMP. Knowledge contributions achieved. Sustainability and follow-up were a significant concern. A bridge would be needed for this cross-cutting work with the New Zealand Project.	

		climate change strategy.				
	Philippines:					
	No pool of experts to mainstream climate change concerns into national fisheries sector policy. No specific regulations on climate change related to fisheries management established. RA9729: Philippine Climate Change Act of 2009 has served as the basis for the creation of the Climate Change Commission	There has been limited progress in recruiting a national consultant under Outcome 1.2. A manual of operations for climate change and disaster risk management is earmarked for 2017; this is unrelated to the project and does not focus on fisheries.	5.2. Policies/strategies/plans/programs that integrate climate change into national fisheries regulations approved and/or implemented	**Not on target**	Approval and implementation of policies/strategies/plans/programs that integrate climate change into national fisheries regulations would be approved and/or implemented once the government officially endorses the revised one. BFAR plan and programs are required to incorporate mitigations measures or activities to reduce impacts of climate change in fisheries. PHL, through DA-BFAR, developed a Climate Change Disaster Risk Reduction Manual of Operations including actions plans and budget needs (the Project has funded workshop/s for this activity). This was aligned to the country's objectives under the Department of Agriculture's mandates. PHL also developed two (2) consultancy reports: a) General Guidelines on Adaptive Management and Monitoring of Highly Migratory Fish Stocks to Address Climate Change; b) Application of Adaptive Management Guidelines for Capacity-Building of National Technical Fishery Staff, Policy, and Decision Makers in Philippines (by Rollan Geronimo). Policies on climate change were reflected in the National Tuna Management Plan. Mainstreaming climate change was somewhat achieved with integration of these issues in the tuna management plans and support of the "enabling work" under component two. Having a pool of experts was rather a KM function (no cross-cutting strategy for that in the Project and there was insufficient budget for national level KM plans). This might be linked to the strategy to have KM at PEMSEA. The pool of experts was not developed but might be developed and integrated with the KM work. This work needed a sustainability plan.	**Marginally Achieved**
	Vietnam:					
	No inputs to national policy formulation on climate change currently available for Vietnam, nor to oceanic fisheries	A consultancy activity is planned for 2017 to integrate climate	5.3. Climate change concerns articulated and integrated into the national fisheries policy	**Not on target**	Climate change concerns were articulated and integrated into the national fisheries policy and this policy was reflected in the National Tuna Management Plan. Climate change was integrated into the draft of VNM's national tuna management plan for approval consideration.	**Marginally on Target**

		change, EAFM, supply chain certification, and harvest strategy framework aspects into an updated version of the National Tuna Management Plan.			Project provided knowledge inputs and influenced policy with development of credible guidance. The development of a Tuna Management Plan was a significant achievement under this Project for Vietnam. It needed integration and more work on raising its profile at the national level. Work and KM though PEMSEA might help achieve national political traction for all three countries.	
Date:	**2013**	**March 2017**	**October 2017**			

Outcome 1.3: Climate change concerns mainstreamed into national fishery sector policy in Indonesia, Philippines and Vietnam	
Progress towards achieving Outcome 1.3 is rated as:	**Moderately Satisfactory**

National:

Outcome 1.3 was related to the climate change adaptive management strategies planned above. The three countries had different expectations for results. These were further adapted in all countries by TE. The climate change adaptive management strategy for oceanic fisheries was developed as guidelines to adaptively manage the impacts of climate change on tuna fisheries in the three countries, including Indonesia. Interviewees stated that in Indonesia climate change adaptive management strategy for tropical tuna was developed and integrated into the reviewed NTMP. The target to incorporating adaptive management strategy for oceanic fisheries into a national cross-sectoral climate change strategy was rationalized as it was unlikely to be achieved with budget/time etc. Per MTE the national coordination team invited the Ministry of Environment and other enabling stakeholders to a presentation of the outputs and related workshop events.

In Philippines, the national coordination team recruited a climate change expert. A manual of operations for climate change and disaster risk management was prepared in 2017/18. In Vietnam climate change concerns were integrated into national fishery policy, but not regulations or national cross-sectoral strategies. Vietnam integrated climate change considerations into an updated version of the National Tuna Management Plan (NTMP). See further output level results listed below.

Indicator 5: (a) Incorporation of oceanic fisheries indicators and modeling outputs into overall national climate change strategy; (b) Policies/strategies/plans/program that integrates climate change into national fisheries policies and even legislation/regulations						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
Value:	**Indonesia:**					
	National policy formulation specific to oceanic fisheries under climate change is very limited, but some information available for adjacent POWP LME, as a suitable model/precedent	Climate change adaptive management strategy is under preparation. The strategy is envisaged to be approved through Ministerial Decree; this does not meet the target of incorporating into national cross-sectoral climate change strategy.	6. 6.1. Climate change adaptive management strategy for oceanic fisheries developed and incorporated in national cross-sectoral climate change strategy	**Not on target**	The climate change adaptive management strategy for oceanic fisheries was developed as a form of guidelines to adaptively manage the impacts of climate change on tuna fisheries in the three countries, including Indonesia. Policies on climate change issues were developed and would be reflected into National Tuna Management plan once the Plan is to be revised. In Indonesia, Climate change adaptive management strategy for tropical tuna was developed and integrated into the reviewed NTMP. Knowledge contributions achieved. Sustainability and follow-up might be a significant concern. A bridge is needed for this cross-cutting work with the New Zealand Project.	
	Philippines:					
	No pool of experts to mainstream climate change concerns into national fisheries sector policy. No specific regulations on climate change related to fisheries management established. RA9729: Philippine Climate Change Act of 2009 has served as the basis for the creation of the Climate Change Commission	There has been limited progress in recruiting a national consultant under Outcome 1.2. A manual of operations for climate change and disaster risk management is earmarked for 2017; this is unrelated to the Project and does not focus on fisheries.	6.2. Policies/strategies/plans/ programs that integrate climate change into national fisheries regulations approved and/or implemented	**Not on target**	Policies/strategies/plans/programs that integrate climate change into national fisheries regulations would be approved and/or implemented once the government officially endorsed the revised one. BFAR plan and programs were required to incorporate mitigation measures or activities to reduce impacts of climate change in fisheries. PHL, through DA-BFAR, developed a Climate Change Disaster Risk Reduction Manual of Operations including action plans and budget needs (the Project has funded workshop/s for this activity). This was aligned to the country's objectives under the Department of Agriculture's mandates. PHL also developed two (2) consultancy reports: a) General Guidelines on Adaptive Management and Monitoring of Highly Migratory Fish Stocks to Address Climate Change; b) Application of Adaptive Management Guidelines for Capacity-Building of National Technical Fishery Staff, Policy and Decision Makers in Philippines (by Rollan Geronimo). Policies on climate change were reflected into National Tuna Management Plan. Mainstreaming climate change was achieved with tuna management plans and support of the "enabling work" under component two. Having a pool of experts	**Marginally Achieved**

					was rather a KM function (no cross-cutting strategy for that in the Project and insufficient budget for national level KM plans). This might be linked to the strategy to have KM at PEMSEA. The pool of experts was not developed but might be developed and integrated with the KM work. This work needed sustainability plan.	
	Vietnam:					
	No inputs to national policy formulation on climate change currently available for Vietnam nor to oceanic fisheries	A consultancy activity is planned for 2017 to integrate climate change, EAFM, supply chain certification and harvest strategy framework aspects into an updated version of the National Tuna Management Plan.	6.3. Climate change concerns articulated and integrated into the national fisheries policy	**Not on target**	Climate change concerns were articulated and integrated into the national fisheries policy and this policy was reflected into National Tuna Management Plan. Climate change was integrated into the draft of VNM's national tuna management plan for approval consideration. Project provided knowledge inputs and influenced policy with development of credible guidance. The development of a Tuna Management Plan was a significant achievement under this Project for Vietnam. It needed integration and more work on raising its profile at the national level. Work and KM though PEMSEA might help achieve national political traction for all three countries.	**Marginally on Target**
Date:	**2013**	**March 2017**	**October 2017**			

COMPONENT 2: Implementation of policy, institutional and fishery management reforms

Indicative budget in project document: USD 1,228,899
Actual cost incurred on this Component through 30 December 2019: USD

Outcome 2.1: Enhanced compliance of existing legal instruments at national, regional and international levels	
Progress towards achieving Outcome 2.1 is rated as:	**Satisfactory**

Additionally, the Project supported participation of three countries' delegates to attend the Scientific Committee and Technical and Compliance Committee meetings and the SPC's Tuna Data Workshop. The Project results were **highly satisfactory** with respect to compliance to WCPFC Conservation and Management Measures (CMMs). MTR reported (verified

in consults during TE) that the three countries had held meetings in the margin of the WCPFC meetings and/or SPC's TDW to complete their annual report. They noted that the SPC's assistance was very useful for completing their annual reports.

Through WCPFC requirements, the three countries had to cooperate on governance of tuna resources. Countries had their own systems to govern their tuna fisheries and also worked together through regional organizations, such as SEAFDEC, PEMSEA and CTI Triangle. During MTE and verified during TE, it became clear that the subregional collaborative expected targets were not clear. This was a topic during the project board and an earlier three-country project workshop in Yogyakarta May 2017. For example, the participants discussed collection of size data and completion of Annual Report Part 1 and 2 as key areas for cooperation.

The subregional stock assessment was discussed. The Yogyakarta workshop participants concluded that it was premature to conduct a subregional stock assessment under the condition that EAS had lack of fishery data and biological information for assessment. This issue had been "deferred until minimum data required for a subregional stock assessment are available." For harvest strategy issues, the three country meeting noted that they have different situations, characteristics, needs and management objectives. The meeting also noted that the area of archipelagic waters in Indonesia was relatively enclosed and had its sovereignty. In that context, a harvest strategy framework could be developed in Indonesia (to fulfil targets of the Project) but not in others at this time. Three-country cooperation for the development of an EAS harvest strategy framework was deferred but countries would look for any opportunities to cooperate in the future. Regarding the subregional cooperation related to the tuna supply chain analysis, the meeting noted that this issue was somewhat related to IUU fishing, traceability, vessel registration and port state measures, which required cooperation with other ministries/agencies to address such intergovernmental activities. In this regard, the workshop considered that the subregional cooperation on tuna supply chain analysis might be beyond the scope of this project activity. In the future, however, the three countries might have another opportunity to consider the inclusion of tuna supply chain analysis in the list of subregional cooperation. Regarding the climate change issues for a subregional collaboration, the workshop noted that Indonesia had good progress on climate change-related activities. They established an institute called Marine Research and Observation Centre (BPOL) in Bali, which covered the impacts of climate change on fisheries. It was highlighted by experts that it would be important to discriminate between annual variations vs. decadal trends of the impacts of climate change on tuna fisheries/resources. Other issues to be considered included sharing of environmental/oceanic data, capacity building in the climate change issue, visiting IDN's institute (BPOL in Bali) and impacts of marine debris on tuna resources.

Philippines. Note was taken of the 11 subregional initiatives, and five areas were suggested for subregional cooperation: 1) standardized fishery trends and abundance for tuna stocks; 2) addressing juvenile tuna catches; 3) cooperation for combating IUU fishing; 4) harvest strategy for oceanic tunas; and 5) EAFM. The opinion of Philippines was that the standardized fishery trends and abundance for tuna stock (CPUE) had few CPUE inputs from the EAS area in SPC's regional stock assessments, mainly due to the lack of effort in obtaining data. It considered an enhancement of effort. Data collection was the highest priority for CPUE assessment. Regarding the need to reduce juvenile tuna catch, Philippines pointed out that WCPFC encouraged EAS countries to investigate methods to reduce juvenile catches in the EAS area. The workshop noted that this high juvenile catch might be from the use of FADs and lights in surface fisheries. Vietnam noted that they used lights instead of FADs to aggregate fish for handling fishery. To verify the proportion of juvenile catches, the three countries considered the need to conduct a research to compare fish size distribution and catch composition of juveniles, highlighting areas for joint research. . For Philippines, there was progress reported towards this with respect to improving compliance in management of fish aggregating devices (FADs). The updated Fisheries Code, approved in 2015, partly covered issues associated with FADs, and the Project would support a consultancy in 2017 to further look into current FAD policies and to identify additional concerns (if any).

During the Yogyakarta meeting, Vietnam summarized its perspective for tuna fisheries and needs and benefits of subregional cooperation and proposed areas for collaboration. They included 1) data collection and sharing, 2) CPUE standardization and TAC allocation, 3) subregional tuna stock assessments, 4) ecological risk to bycatch and secondary species, and 5) mutual support at WCPFC meetings. At the national level, for both Indonesia and Vietnam, end-of-project targets were set regarding harvest strategies, specifically

development of reference points (RPs) and harvest control rules (HCRs). Indonesia started harvest strategy development in 2014, with support from the Project as well as other donors and government funding. For Vietnam, there has been only one workshop, held in November 2016, together with WWF Vietnam.

Indicator 6: Legal instruments fully compatible with WCPFC requirements, and compliance with WCPFC management requirements, including compliance with CMMs, ROP, RFV and application of reference points, and harvest control rules						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
Value:	**Regional:**					
	No collaborative governance on tuna fisheries among the three countries and limited compliance with technical application of WCPFC requirements due to limited involvement in WCPFC's technical processes (SC and TCC)	Subregional collaborative governance not yet "officially" established. This topic will be addressed during the planned subregional project workshop in May 2017. The Project has supported representatives from the three beneficiary countries to participate in WCPFC scientific committee (SC) and technical and compliance committee (TCC) meetings.	7.1. Subregional collaborative governance on tuna fisheries established. Participation in WCPFC's technical processes enhanced through full participation in WCPFC technical meetings (SC, TCC and other technical WG meetings)	**Marginally on target**	Through WCPFC requirements, the three countries were obliged to cooperate in governance of tuna resources. In addition, the three countries had their own system to govern their tuna fisheries as well as through regional organizations, such as SEAFDEC. PEMSEA and CTI Triangle. They were supposed to report back to the flag country for any violations. The WPEA project supported each country's delegates to attend technical meetings, such as the Scientific Committee and Technical and Compliance Committee meetings, and to attend SPC's Tuna Data Workshop.	**Achieved**
	Indonesia:					
	No RPs and HCRs considered yet as a scientific procedure	Development of a harvest strategy began in 2014, with incremental support by the WPEA project, other projects, and government funding. Unlikely that RPs and HCRs will be developed by planned project closure in October 2017.	7.2. Tuna management strengthened through applying scientific procedure using Reference Points (RPs) and Harvest Control Rules (HCRs) at national level once applied at regional level	**Marginally on target**	WCPFC continued to develop reference points and HCRs. The three countries applied the same or similar limit and target reference points to be compatible with high seas in the Convention Area, which enhanced tuna management at regional level. Application of reference points and harvest control rules were in progress for skipjack and yellowfin tuna fishery in Indonesia. In Indonesia, Archipelagic Water (AW) management regime was established and would be refined using the harvest strategy framework which was under development.	**Achieved**

Indicator 6: Legal instruments fully compatible with WCPFC requirements, and compliance with WCPFC management requirements, including compliance with CMMs, ROP, RFV and application of reference points, and harvest control rules						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					Indonesia had its NTMP. In addition to that, the interim Harvest startegy was officially launched in May 2018. Limit reference point was established at 0.2 of the spawning biomass at unfished level; management objective was to maintain the sustainability of the stock, and the operational objective was to maintain the stock with a projection of 0.1 below limit reference point. Target reference points would range from 0.3 to 0.4, which would be agreed to by the Satkeholders WS in late October 2019.	
	Some fishery legislation under revision to accommodate all WCPFC requirements, framework for AW management through FMAs currently minimal but progressively being developed (7 FMAs)	There is a national policy on archipelagic waters, e.g. maximum vessel size of 100 GT. In this context, the management regime is already established. The regime is now being strengthened by introducing a harvest strategy approach.	7.3. Archipelagic Water (AW) management regime established	**On target**	Tropical tuna management in the archipelagic waters was referred to NTMP. Excellent results. Indonesia was ahead of the other countries.	**Achieved**
	Philippines:					
	Existing FAD management policy and other CMMs need to be revisited for compliance, but Philippines currently compliant with most of the WCPFC CMMs	With the amended Fisheries Code (RA10654), approved October 2015, the new law has addressed most of the CMMs including issues/concerns on FADs. The Project is supporting a consultancy in 2017 to review current policy on FADs and to identify additional concerns on FADs (if any).	7.4. Compliance with CMMs of special concern to Philippines, primarily FADs committed	**On target**	FAO 244: FAD Management Policy was implemented. A Review and Analysis on the Operation of Anchored FADs in Philippine Waters and High Seas Pocket 1 in Consonance with Applicable WCPFC CMMs and National FADs Management Policy was also conducted by Dr. Alma Dickson.	**Achieved**
	Vietnam:					

Indicator 6: Legal instruments fully compatible with WCPFC requirements, and compliance with WCPFC management requirements, including compliance with CMMs, ROP, RFV and application of reference points, and harvest control rules						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
	Limited compliance with CMMs or other management arrangements; no RPs and HCRs considered yet as a scientific procedure	The National Tuna Fisheries Management Plan was approved by Decision No. 3562/QD-BNN-TCTS, 1 September 2015. In 2016, the Ministry developed a national action plan for Conservation and Management of Sea Turtles (WCPFC CMM 2008-03). In 2017, the Ministry is working on a national action plan for conservation and management of sharks, compliant with WCPFC CMM 2010-07). Also, relevant CMMs (7) were translated with support of the project and also by WWF.	7.5. Incorporation of compatible measures into national legal frameworks and incorporation of relevant WCPFC requirements completed	**Marginally on target**	Vietnam reviewed their fishery laws and regulations in line with WCPFC requirements, by which the government would consider revision of its national laws and regulations as needed. In early 2019, the Vietnam government adopted the new Fishery Law, which reflected international norms. Development of a reference point for tuna species was included into the new fisheries law in Vietnam. National tuna management plan was revised to reflect new concepts on tuna fisheries management into legislation. Fully achieved	**Achieved**
		Project supported one workshop in November 2016 together with WWF to discuss establishing RPs and HCRs. It is unlikely that RPs and HCRs will be developed by the planned project closure date of October 2017.	7.6. Full application of relevant CMMs and proposed reference points (RPs) and harvest control rules (HCRs) at national level	**Not on target**	As a cooperating nonmember, all relevant measures were fully applied to the Pacific **f**isheries in Vietnam and proposed reference points and HCRs were applied. A workshop was conducted in VNM to discuss how to develop the potential RP and HCR for tuna fisheries management. Development of reference points and harvest strategies of tuna species was included into new fisheries law. Fully achieved	**Achieved**
Date:	**2013**	**March 2017**	**October 2017**			

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

Progress towards achieving Outcome 2.2 is rated as:	**Moderately Satisfactory**

National:

Per MTE (verified at TE), with respect to markets and supply chain analysis, the goal to establish monitoring and custody systems was not achieved, as these are deemed beyond the scope of the Project. Vietnam was better than in the other two countries as it made close collaboration with WWF Vietnam, which was managing an FIP for longline/handline fisheries, progress under Outcome 2.2. With respect to the aim of sustaining and increasing private sector participation in each of the three beneficiary countries, private sector companies and associations were regularly invited to various stakeholder workshops (testimonials during TE), but there was never a monitoring system put in place to track the number, including the ones listed in the results framework. All three countries successfully studied the *supply chain* (see Knowledge Products Annexes) for selected tuna fisheries. For Philippines, the monitoring schemes, data collection from port sampling, observer programmes and logbook system were developed. A custody system for selected fisheries was also established by the private sector. In Indonesia, the supply chain for tuna fisheries was identified and reported in the document "Indonesian Tuna Supply Chain Analysis." These were good knowledge building results.

Indicator 7: (a) Supply chain characterized for tuna fishery sector, including processing, and custody systems established for tuna fisheries; (b) Improvements to fisheries to meet sustainable fishery standards for selected fisheries; (c) Number of private sector companies that cooperate in relevant project activities

	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
Value:	**Indonesia:**					
	Limited data available on supply chain, and monitoring and custody system not established for any fishery	Supply chains have not yet been characterized. The Project hired a consultant to review existing studies and made recommendations for an EAFM trial in NTT province in 2017. Establishing monitoring and custody systems seen by project team as government driven and beyond the scope of the Project.	8.1. Supply chain characterized for selected tuna fisheries, monitoring systems established and information annually updated; custody system in place for selected fisheries	Not on target	All three countries characterized their supply chain for selected tuna fisheries; monitoring schemes, such as data collection from port sampling, observer program and logbook system were fully developed. Custody system for selected fisheries was well established by private section. In Indonesia, supply chain for tuna fisheries was indentified and reported in the document of the Indonesian Tuna Supply Chain Analysis. This was a good knowledge building result.	**Marginally on Target**
	Growing market demand for sustainable certification but limited eco-certification conducted	There has been no direct project involvement with respect to eco-certification. Reportedly an FIP was initiated in 2014 for Yellowfin, Bigeye, and Cakalang (*Katsuwonus pelamis*). MSC pre-assessment completed in 2014 identified several shortcomings.	8.2.	**Not on target**	This target was removed as approved by the Board meeting. However, for information, there was a growing demand from the tuna fishing industries in Indonesia to have the MSC certicication. After Raja Ampat Tuna Canning earned its MSC certification, it was now followed by	**Marginally on Target**

Indicator 7: (a) Supply chain characterized for tuna fishery sector, including processing, and custody systems established for tuna fisheries; (b) Improvements to fisheries to meet sustainable fishery standards for selected fisheries; (c) Number of private sector companies that cooperate in relevant project activities						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					Handline Tuna Fishery for its MSC with the engagement from the MDPI (an NGO in Indonesia), while purse seines tuna fishery was joining the FIP. Handline fishery earned certification for trading fairness in 2017. While the target was removed, the Project had supported awareness and relationship with industries. Building trust was an important contributing factor for results leading to the end targets	
	30 companies already cooperate in project activities	The project document includes a list of 30 private companies. Fishing associations and private companies have been regularly invited to project stakeholder workshops, but there has been no specific monitoring of involvement of the list companies, or plans to expand involvement by an additional 5.	8.3.	**Marginally on target**	This target was removed as approved by the Board meeting. However, for information, the cooperation from tunas industry was growing, including the tuna association AP2HI (36 companies) and tuna association ATLI (12 companies) and various NGOs, such as MDPI, WWF, SFP and TNC, also participated in the work for tuna in Indonesia. Private sector was involved in Knowledge and Learning Events. Interviewers were pleased with the result of this (more trust for data sharing established). There was less restriction of data collector at ports.	**Marginally on Target**
	Philippines:					
	Supply chain complex, information available but not compiled	The Project has funded a consultancy on the prior study of tuna supply chain analyses. This is a work in progress; uncertain if information on current supply chains will be provided.	8.4. Supply chain fully documents and annually updated	**Not on target**	Dr. Jose Ingles prepared a consultancy report: "A Value Chain Analysis of Tuna landed at General Santos Port.**"** The Project has no budget to update annually. This was a good quality consultancy.	**Marginally on Target**
	Growing market pressure for ecolabeling certification relating to sustainable fishing. Several pre-assessments initiated	There has been no direct project involvement with respect to ecolabeling and certification. The same consultancy carrying out the supply chain prior study will reportedly also cover a review of ecolabeling certification.	8.5. Several tuna fisheries progressing towards full certification	**Not on target**	Dr. Jose Ingles prepared consultancy reports: 1. "Application of Market-based Approaches to Sustainable Harvesting of Oceanic Tunas" and 2. "Fisheries	**Marginally on Target**

Indicator 7: (a) Supply chain characterized for tuna fishery sector, including processing, and custody systems established for tuna fisheries; (b) Improvements to fisheries to meet sustainable fishery standards for selected fisheries; (c) Number of private sector companies that cooperate in relevant project activities						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					Improvement Program: A Manual for Towards Sustainable Fisheries for Philippines." This was a good quality consultancy	
	16 companies already cooperate with BFAR	The project document includes a list of 16 private companies. Fishing associations and private companies have been regularly invited to project stakeholder workshops, but there has been no specific monitoring of involvement of the list companies or plans to expand involvement by an additional 5. The SOCKSARGEN Federation of Fishing Industries, Inc. (SFFAII), which has been involved in project activities, has approximately 100 members.	8.6. Sustained participation of fishing companies	**Marginally on target**	PHL developed two consultancy reports related to supply chain and certification by Dr. Jose Ingles. SFFAII was supportive of this initiative (during the conduct of interviews. Prior workshops were conducted related to tuna supply chain and certification conducted under this Project. There was an ongoing initiative to have the PHL high seas pocket #1 (PS-HSP1) MSC certified (in progress through the GenTuna Corporation in collaboration with BFAR and HSP1 operators). Handline operators in GenSan are also interested in having an FIP for their tuna fisheries for their EU and US markets. Around 20 or more operators/companies were involved in these initiatives.	
	Vietnam:					
	Incomplete data available on supply chain and chain of custody scheme not established for any fishery	Overview report was prepared for provinces Khanh Hoa, Binh Dinh, and Phu Yen. The study is ongoing. Under the national restructuring program, supply chain analyses completed for 4 other provinces. Monitoring system for landing data already established. And a study on CoC has been reportedly conducted under the FIP managed by WWF.	8.7. Supply chain characterized for tuna fisheries, with emphasis on export-oriented fisheries, and monitoring system established; CoC in place for selected tuna fisheries	**Marginally on target**	Tuna supply chain was analyzed, and the chain of custody is in place as needed by the private sector. This issue belongs to private sector. A consultancy report was developed in VNM to revise the current tuna supply chain and propose how to modify for better management system. A new Circular was developed for catch certification system for fisheries products including tuna products exporting to EU countries. Good quality consultancy	**Marginally on Target**
	MCS pre-assessment of yellowfin/bigeye handline and longline	A 5-year action plan under the FIP managed by WWF was approved for tuna longline/handline fisheries. The plan is still ongoing, starting in 2012.	8.8. FIP process implemented for longline/handline fishery	**On target**	The PIF process is an on-going work in Vietnam.	**Achieved** **Achieved**

Indicator 7: (a) Supply chain characterized for tuna fishery sector, including processing, and custody systems established for tuna fisheries; (b) Improvements to fisheries to meet sustainable fishery standards for selected fisheries; (c) Number of private sector companies that cooperate in relevant project activities						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
	fishery unfavorable and need for FIP identified				Much cooperation has been made between the WPEA-SM Project and WWF under FIP process of tuna handline/longline in Vietnam. WPEA-SM collaborated with WWF to conduct observer trips. **WPEA SM collaborated with WWF to translate CMMs into Vietnamese and published it to distribute to stakeholders.** Excellent synergies expressed with WWF.	
	9 companies already cooperate in project activities	The project document includes a list of 9 private companies. Fishing associations and private companies have been regularly invited to project stakeholder workshops, but there has been no specific monitoring of involvement of the list companies, or plans to expand involvement by an additional 5. Under the FIP managed by WWF, there are more than 9 companies involved	8.9. Sustained participation of fishing companies	**Marginally on target**	In addition to tuna fishing companies, tuna associations (VINA TUNA) has also been attended any national cooperation meetings. Fishing industries was invited to attend every meeting/workshop of WPEA SM. Shared knowledge creation and collaboration lead to "trust'. Helpful for data collection type results. i.e. Collaboration and data sharing.	**Marginally on Target**
Date:	**2013**	**March 2017**	**October 2017**			

Outcome 2.3: Reduced uncertainty in stock assessment of POWP and EAS LMEs highly migratory fish stocks and improved understanding of associated ecosystems and their biodiversity	
Progress towards achieving Outcome 2.3 is rated as:	**Satisfactory**

Subregional and National:

The Project has undeniably supported the reduction of uncertainty in subregional assessments made by SPC. **S**PC conducted subregional assessments, and the three countries accepted the results of SPC's assessment (see footnote SPC 2018). WCPFC data and statistics reports (MTE 2017) indicated how improved data quality had allowed more accurate subregional assessment. Certain areas required further improvement, as concluded by SPC, the science provider for WCPVC (SPC) as follows:

Table 1 SPC August 2018

PHILIPPINES TUNA FISHERY DATA

During the past year, the WCPFC Secretariat and the SPC/OFP continued to work with their Philippine counterparts to improve the data available from Philippines' domestic fisheries.

The main activities related to data collected in Philippines' domestic fisheries over the past year include:

The Eleventh Philippines Annual Catch Estimates Review Workshop and the Ninth National Stock Assessment Project (NSAP) data review workshop were convened and attended by important stakeholders with knowledge and information on the tuna fisheries in Philippines (government, industry and NGOs). The coverage of logbook and observer data collected for the component of Philippines domestic purse seine fleet fishing in the High Seas Pocket #1 continued to be 100% for 2017 (as in previous years). E-Reported logbook data were again provided for this fishery covering 2017 activities.

Philippines have enhanced the monitoring of their complex and diverse domestic fisheries significantly over the past 5–10 years, with most of the important data gaps now resolved. However, areas that continue to need attention include the following:

Improving log sheet coverage for the purse seine vessels fishing in Philippines EEZ;

Consideration for establishing a logbook system for the large-fish handline fishery;

More reliable estimates for the small-scale municipal gears;

A better understanding of the extent of catches from the handline fisheries targeting large yellowfin tuna in some regions.

INDONESIAN TUNA FISHERY DATA

Prior to the recent WPEA projects, the absence of a breakdown of annual catch estimates by gear type, the lack of operational log sheet and size data for the Indonesian domestic fisheries was among the most significant gaps in the provision of data to the WCPFC, but these projects have assisted Indonesia to make significant progress in resolving at least two of these data gaps: the regular submission of size data and the provision of annual catch estimates by gear and species.

During the past year, the WCPFC Secretariat and the SPC/OFP continued to work with their Indonesian counterparts to improve the data available from these fisheries. Significant developments in the past year include the Ninth Indonesia/WCPFC Area Annual Catch Estimates Review Workshop (ITFACE-9), which was conducted in Bogor, Indonesia, in June 2018, and the Sixth Indonesia/WCPFC Port Sampling data review workshop was held in Bitung in March 2018.

The main outcomes of these workshops were these:

- The move to a nationally standardized data collection system (OneData), which is the main data source used in the annual catch estimates process. The ITFACE-9 workshop considered these data for the first time, and while there were anticipated challenges, there was optimism that data from the OneData initiative will improve over time;
- Improved coverage and quality of the port sampling data compared to previous years;
- Improvements to the database management and reporting system maintained by the Indonesia project data manager;
- The inclusion of reviews of logbook and observer data in the port sampling data review workshop.

Participants to the ITFACE-9 workshop noted that the 2017 longline and pole-and-line estimates were now closer to what were anticipated for these fisheries based on other sources of information, for example, vessel and landings activity and information from industry, independent reviews and study tours.

The ITFACE-9 workshop noted following potential issues in the 2017 estimates:

- The large discrepancy in the troll fishery estimates between 2015, 2016 and 2017;
- The catch estimate for purse seine appeared higher than anticipated, based on recent study tours and reviews;
- The implementation of national logbook data collection system continues to progress with the coverage of logbooks for vessels >5 GT up to 13% in 2017 (compared to 6.6% in 2016). A breakdown of logbook coverage by gear is not yet available. Some 2017 logbook data have been submitted to the WCPFC, but further data quality control is required before the balance of data can be submitted;
- One hundred and two (102) observer trips were conducted in the WCPFC Area of the Indonesian EEZ during 2017 and basic data for four (4) longline trips have been provided to the WCPFC, although many of the required WCPFC Regional Observer Programme (ROP) data fields were not included. Further collaboration will be required to ensure full observer data can be submitted to the WCPFC.

The most important areas for progress with catch estimates and data within Indonesia include the following:

- The need for more comprehensive review and consolidation of data from all potential sources in the catch estimation process (including industry and NGO data) which would help, inter alia, explain the trends in catches by gear;
- Compilation and submission of available aggregate and operational catch/effort data for recent years since the logbooks became mandatory in the Indonesian domestic tuna fisheries (20112017) although this is acknowledged as a long-term goal with assistance provided through the WPEA projects;
- Submission of observer data which covers the ROP data field requirements.

VIETNAMESE TUNA FISHERY DATA

Prior to the recent WPEA projects, there were no annual catch estimates, no operational and no aggregated catch and effort data available from Vietnam tuna fisheries, other than anecdotal information on catches (e.g. Lewis, 2005). Since the establishment of the three WPEA projects, there has been considerable progress in Vietnam to establish data collection and management systems for their tuna fisheries and it has ultimately resulted in the submission of, inter alia, annual catch estimates to the WCPFC over the past five years.

Significant developments in the past year include the following:

- The Seventh Vietnam Annual catch estimates workshop was conducted in June 2018 with a focus on reviewing data collected in the Vietnam tuna fisheries over recent years and the production of estimates for 2017 for their three tuna fisheries (longline/handline, gillnet and purse seine). The reliability of estimates continues to improve and the nine provinces involved (supported by the central Directorate of Fisheries) are more capable and comfortable with the process;
- The coverage of operational logbook data continues at around 30-35% for the handline fishery and at around 10% for their purse seine and gillnet fisheries. The coverage of landings data which are critical for the annual catch estimates process, was 35%, 45% and 43%, for HL, PS and GN, respectively;
- The WCPFC audit/review of 2017 data identified only one issue and stated that most data are of an acceptable quality.

Significant progress has been made in a short period, but there remain several challenges for Vietnam in the monitoring and data management areas, including the following:

- The continuation of the good progress with the coverage of logbook, landings and port sampling data collection for their longline, purse seine and gillnet fisheries;
- The compilation and provision of aggregate and operational catch/effort data from the longline fishery from logbooks collected since 2011;
- A sustainable observer programme.

Also, for improved understanding of associated ecosystems and their biodiversity, there were risk assessments conducted in each country using the bycatch and data recorded by enumerator and observatory programs. An interviewee explained that the risk assessments jointly reported contribute towards an improved understanding of the ecosystems of the highly migratory tuna stocks in the POWP and EAS LMEs.

Indicator 8: (a) Integration of data from oceanic tuna fisheries in Indonesia, Philippines and Vietnam into regional assessments of target tuna species; (b) Subregional/national assessments for target species; regular national assessments of target species; (c) Documentation and risk assessment of retained species and bycatch, including ETP species, in all fisheries/gears.

	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
Value:	**Subregional:**					
	Assessments not explicitly available on subregional scale because of data gaps and lack of assessment model spatial structure	SPC, as science provider for WCPFC, is conducting subregional (Region 4, skipjack; Region 7, yellowfin and bigeye) assessments based upon available data, including national catch data provided by the countries to the WCPFC. Regions 4 and 7 referenced above are a bit larger than EAS.	9.1. Preliminary subregional assessments undertaken with available data and assessment model	**On target**	**S**PC is conducting subregional assessments and the three countries accept the results of SPC's assessment. There were outstanding results in all three countries for reducing uncertainty based on the SPC assessment.	**Achieved**
	Indonesia:					
	Some target species data available from WPEA-1 with coverage of FMA 716, 717 and 714 for assessment. National stock assessment board exists and plans for national assessment underway	Indonesian data are used in the annual consolidated regional and subregional assessments made by SPC. Catch estimate assessments, by gear type and by species, and by fishing area, are made annually with the involvement of NGOS, associations and industries as well as national and subnational governmental representatives.	9.2. Indonesian data included in regional and subregional assessments; National assessments for target species commenced and annually updated	**On target**	Indonesian data, compiled from a more than 10-year time series based on port sampling, have been reflected into regional and subregional stock assessments. Indonesia conducts national fish stock assessments by its scientists, but regarding tuna assessments, they follow the results of stock assessments conducted by WCPFC/SPC.	**Achieved**
	Limited information on retained/bycatch species and no risk assessment study for tuna bycatch and ETP species	A consultancy is planned in 2017 to carry out a risk assessment. The assessment results will be presented or submitted to the next Forum Coordination Management and Utilizations of Fisheries Resources	9.3. Risk assessment of retained, bycatch and ETP spp. Commenced	**Marginally on target**	Risk assessment on bycatch species was conducted and report was produced. In Indonesia, Risk assesment for bycatch from tuna fishery was conducted to assess potential risk of sharks	**Achieved**

Indicator 8: (a) Integration of data from oceanic tuna fisheries in Indonesia, Philippines and Vietnam into regional assessments of target tuna species; (b) Subregional/national assessments for target species; regular national assessments of target species; (c) Documentation and risk assessment of retained species and bycatch, including ETP species, in all fisheries/gears.						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					and tuna associated with the operation of Tuna Fishery in Indonesian Waters. This was a good quality consultancy	
	Philippines:					
	Limited understanding of ecosystem supporting the oceanic tuna fishery. Retained species and bycatch species for all gears incompletely characterized	Currently there is 100% observer coverage for Philippine-flagged vessels fishing in WCPFC-HSP1 and in Pacific Island Countries. Observer coverage for Philippine-flagged vessels operating in Philippine waters is limited, only during the FAD closure and with the help of WPEA funding support. The project work plan for 2017 includes a consultancy for a risk assessment and a risk assessment workshop. The national coordination team is currently searching for qualified international consultants for the risk assessment.	9.4. Comprehensive observer, catch sampling undertaken and risk assessment available for bycatch and ETP species	**On target**	There was 100% observer coverage for Philippine-flagged vessels fishing in WCPFC-HSP1 and in Pacific Island Countries. Observer coverage for Philippine-flagged vessels operating in Philippine waters was limited: only during the FAD closure and with the help of WPEA funding support, but coverage would be enhanced in the future through the implementation of FAO 261. Ms. Regina Bacalso also made a consultancy report: "Risk Assessment for Selected Bycatch and ETP Species on Selected Tuna Fisheries." PHL also attended the 3-country workshop focusing on Risk Assessment. The combination of Project supported knowledge and consultancy activities at the national and EAS level Three Country Workshops increased the technical beneficiaries' and other stakeholders' understanding of the issues and the methodology for dealing with these issues, i.e. risk assessment.	**Achieved**
	Vietnam:					
	Data collection on target species initiated under the WPEA project, but coverage incomplete for some fisheries; data not fully incorporated in regional assessments	Annual catch estimates workshops (VTFACE) have been conducted in conjunction with a data collection review workshop.	9.5. Annual total catch estimates produced and biological data collected for national and/or regional stock assessment of target tuna species	**Marginally on target**	WPEA project supported two workshops annually: national tuna data review workshop and annual total tuna catch estimates workshop. Through these two workshops, information on national and official tuna catches by species and by fishing gear was produced and submitted to the WCPFC for regional stock assessments. Vietnam Tuna Fisheries Annual Catch Estimates (VTFACE) workshops were conducted every year to review data from port sampling and estimate tuna catches for submission to the Commission.	**Achieved**

Indicator 8: (a) Integration of data from oceanic tuna fisheries in Indonesia, Philippines and Vietnam into regional assessments of target tuna species; (b) Subregional/national assessments for target species; regular national assessments of target species; (c) Documentation and risk assessment of retained species and bycatch, including ETP species, in all fisheries/gears.						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
					There were significant changes in the way Vietnam collects data as a result of this Project's work on methods and reporting.	
	Limited research on retained/bycatch species conducted but not regularly studied	Bycatch data are collected to some degree. Reportedly a risk assessment for bycatch and retained species was conducted under the FIP managed by WWF.	9.6. Information for risk assessment collected of retained and bycatch species and assessments undertaken	**Marginally on target**	WWF and RIMF conducted risk assessments for bycatch species. Bycatch data was collected and a risk assessment of bycatch species was conducted under FIP and coordinated by WWF. Significant changes came about in the way Vietnam collects data as a result of this Project's knowledge work on methods and reporting.	**Achieved**
	Research surveys using two gears undertaken; no national stock assessment currently available but planned	Research Institute for Marine Fisheries conducted stock assessment for not only tuna but other small pelagic and demersal species for the entire country. The model used for the assessment is reportedly different from what is advocated by WCPFC.	9.7. National level stock assessments of target tuna undertaken	**Marginally on target**	WCPFC did not request tuna stock assessment at national level since the distribution of tuna stocks were Pacific-wide and assessments at regional level were considered reasonable. The three countries accept SPC's tuna stock assessments conducted in the EAS area as part of the regional assessment. RIMF conducted a tuna stock assessment in 2015 using WPEA SM port sampling data. It was significant that Vietnam began to collect information/data and was leading to National Stock Assessment. The future NTMA include stock assessment work.	**Achieved**
Date:	**2013**	**March 2017**	**October 2017**			

Outcome 2.4: Ecosystem Approach to Fisheries Management (EAFM) guiding sustainable harvest of the oceanic tuna stock and reduced bycatch of sea turtles, sharks and seabirds	
Progress towards achieving Outcome 2.4 is rated as:	**Moderately Satisfactory**

Subregional and National:

Application of ecosystem models to EAS countries and the subregion: This target was rationalized at the time of MTE as it was found to be beyond the scope of budget and time frame. Applying ecosystem models to the EAS LME (project document) indicated that preliminary ecosystem models, e.g., SEAPODYM,[10] were available for the POWP LME but was not applied in a regional management context. The project document was envisaged to lead to application of ecosystem models to EAS, but there were no activities or budget for a subregional modelling. Post-MTE, sites were proposed in Indonesia and Philippines, but not Vietnam. The Project contributed to raising awareness and set the stage for future work.

In terms of outputs at the time of TE, data collection was completed to support application of an EAFM to selected fisheries.

In Indonesia, a study on FAD and its implication to the resources was conducted. The outcome of this study was put forward to the NTMP in the context of EAFM aplication.

Philippines conducted a trial application of EAFM to tuna fisheries and three (3) reports were produced:

1. "Aligning the National Tuna Management Plan of Philippines in the Context of Ecosystem Approach to Fisheries Management (EAFM)";
2. "Approaches to EAFM for Tuna Management in Philippines";
3. "Applying Ecosystems Approach to Fisheries Management (EAFM) to Tuna Fisheries (A Case Study)."

Vietnam conducted several EAFM activities, including pilot application of an EAFM to selected fisheries, which did the following:

1. Convened a workshop on EAFM;
2. Gave guidelines for the Application of Ecosystem-based Fisheries Management to Tuna Fisheries in Vietnam;
3. Created an Ecosystem Approach to Fisheries Management: An Application to Selected Oceanic Tuna Fisheries in Vietnam.

Vietnam also conducted a Pilot application of EAFM at one selected site/fishery.

Indicator 9: (a) Application of ecosystem modeling to EAS EEZs to complement those for POWP LME and EEZs; (b) Incorporation of EAFM principles in national tuna management plans; (c) Pilot scale application of EAFM for oceanic species at selected sites/fisheries; (d) Reduction of bycatch of endangered, threatened and protected (ETP) species, such as sea turtles, sharks and seabirds

- Targets at the national level were met. Targets were partially met at subregional level "Knowledge inputs." The project made significant "knowledge" contribution to the cross-cutting end targets through knowledge work and technical inputs at the three country workshops and national consultancies.

	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**
Value:	**Subregional:**				

[10] SEAPODYM (Spatial Ecosystem and Population Dynamics Model) is a numerical model initially developed for investigating physical-biological interaction between tuna populations and the pelagic ecosystem of the Pacific Ocean. The Pacific Community (SPC), www.spc.int

	Ecosystem models available for POWP LME but not EAS	Application of ecosystem models not yet considered in work planning, and no specific line item in the indicative budget outlined in the project document.	10. 10.1. Application of ecosystem models to EAS	**Not on target**	Application of ecosystem models was very new to all tuna RFMOs, and this target was beyond the scope of budget and time frame of this Project.	**Marginally On Target**
	Indonesia:					
	Limited data collected for the application of ecosystem modeling	The selected area for a field trial is in the Sikka District, NTT Province. The pilot will compare FAD and non-FAD methods on the impacts to ecosystems. This is included in the 2017 work plan. The estimated 3-month timeframe for the trial is rather short.	10.2. Data collection to support application of appropriate ecosystem models	**Marginally on target**	Data collection was completed to support application of an EAFM to selected fisheries. In Indonesia, Study on FAD and its implication to the resources have been conducted. The outcome of this study was put forward to the NTMP in the context of EAFM aplication.	**Marginally On Target**
	Some commitment to EAFM exists through community-based activities	An EAFM strategy is envisaged to be formulated based on the results of the field EAFM trial.	10.3. EAFM strategy developed for trial implementation in one FMA	**Marginally on target**	This application is done in the Sikka District, NTT Province and EAFM report produced. The EAFM study has conducted together with the center government, local government, fishing companies and fishers in FMA 714.	**Marginally On Target**
	NTMP lacking EAFM components	The Project will support drafting of preliminary text for recommended inclusion into the NTMP.	10.4. EAFM conditions incorporated in revised NTMP	**Marginally on target**	Policies on EAFM were developed and would be reflected in the national tuna management plan once the plan is to be revised. In Indonesia, the EAFM outcaome was incorporated into the reviewed and improved NTMP (The NTMP was under an official review and scheduled in 2019)	**Marginally On Target**
	Turtle bycatch studied and some mitigation measures underway; shark catch and seabird interactions not well documented; low level of compliance	Certain mitigation measures will be recommended based on the results of the trial in NTT, e.g., the use of FADs. It is unlikely that these mitigation measures will be applied within the timeframe of the Project. There is no evidence of specific activities addressing compliance with shark and sea turtle CMMs and NPOAs.	10.5. Mitigation measures applied in selected fisheries; compliance with shark and sea turtle CMMs and NPOAs committed	**Not on target**	WPEA project did not conduct any specific activities related to applying mitigation measures to specific fisheries, but WCPFC had sea turtle and shark measures. All members and cooperating nonmembers should apply to all Convention Areas as appropriate. Indonesia had NPOA for sharks, sea turtles and sea birds. hammerhead sharks, oceanic whitetip, and these sharks were banned to shark finning and trade as a result in the regulation MMAF no. 12/2012. Such measures related to shark protection, and mitigation as agreed in the RFMOs was aligned to the national regulation.	**Marginally On Target**
	Philippines:					
	No study of EAFM for oceanic fisheries, legal basis uncertain	An EAFM pilot is tentatively planned in Davao; however, plans and implementation arrangements have not yet been developed and sorted out.	10.6. Potential study area that applies EAFM for oceanic fisheries selected	**Not on target**	Philippines conducted trial application of EAFM to tuna fisheries, and three reports were produced:	**Marginally on Target**

					1.“Aligning the National Tuna Management Plan of Philippines in the Context of Ecosystem Approach to Fisheries Management (EAFM)”; 2. “Approaches to EAFM for Tuna Management in Philippines.” 3. “Applying Ecosystems Approach to Fisheries Management (EAFM) to Tuna Fisheries (A Case Study).”	
	NTMP may lack EAFM compatibility	The NTMP is being revised, with inclusion of EAFM principles. A draft version was submitted for Ministerial review in 2016, and certain issues were requested to be added.	10.7. NTMP revised to include EAFM	**On target**	The revised NTMP followed or adopted the EAFM framework.	**Achieved**
	Turtle bycatch studies and some mitigation measures underway; shark catch and seabird interactions poorly documented; low level of compliance	Limited direct involvement by the Project, except, for example, supporting printing of an operations guide that is distributed to fishing operators. Mitigation measures are applied and compliance to various shark CMMs are committed. No evidence of progress with respect to developing Smart Gear.	10.8. Mitigation measures applied; Compliance with shark CMMs committed; Smart Gear developed	**Marginally on target**	As a member of the WCPFC, PHL was required to reduce catch of ETP species. There were WCPFC CMMs related to whale sharks, sea turtles, silky sharks, oceanic whitetip sharks. PHL fully observed and implemented the provision of these CMMs and conducted investigations if there were alleged violations from its flagged vessels. For PHL, flagged PS vessels are monitored by the Fisheries Observer Program with 100% observer coverage. PHL vessel crew fully observed and implemented the guidelines for the safe release of these species.	**Marginally On Target**
	Vietnam:					
	No EAFM application and legal basis uncertain	In March 2017, an internal workshop is planned for developing a pilot EAFM application. Limited time remaining to design and implement the pilot.	10.9. Pilot application of EAFM at one selected site/fishery	**Not on target**	Vietnam conducted several EAFM activities, including a pilot application of an EAFM to selected fisheries: 1) Convened a workshop on EAFM; 2) Produced “Guidelines for the Application of Ecosystem-based Fisheries Management to Tuna Fisheries in Vietnam”;	**Marginally On Target**

					3) Produced "Ecosystem Approach to Fisheries Management: An Application to Selected Oceanic Tuna Fisheries in Vietnam. Vietnam conducted a pilot application of EAFM at one selected site/fishery.	
	No inclusion of EAFM in NTMP	No progress towards this target. An activity is planned in 2017.	10.10. Revised NTMP with EAFM included	**Not on target**	Policies on EAFM were developed and the text would be reflected in the plan once the VNM government revised their National Tuna Management Plan. NTMP was revised to include EAFM into the new draft in VNM.	**Marginally On Target**
	Few data on ETP species and no compliance on bycatch mitigation	NPOAs under development for sea turtles and for sharks. Observer trips were conducted in 2015 (20 trips, including 4 for longline and 16 for handline fisheries) under the FIP; supported by WWF with some support from WPEA project. In 2016, 20 observer trips conducted; similar funding arrangements with WWF.	10.11. Compliance with ETP CMMs and NPOAs	**Marginally on target**	WCPFC did not have CMMs on ETP, so this target was not applicable to its members. The NPOAs were under development for sea turtles and for sharks.	**Marginally On Target**
Date:	**2013**	**March 2017**	**October 2017**			

COMPONENT 3: Knowledge sharing on highly migratory fish stocks

Indicative budget in project document: USD 198,318
Actual cost incurred on this Component through 30 December 2019: USD

Outcome 3.1: Regional knowledge platform established on POWP LME and EAS LMEs shared tuna stocks and associated ecosystems	
Progress towards achieving Outcome 3.1 is rated as:	**Moderately Satisfactory**

Regional:

The Project hosted three country workshops annually. These were effective for knowledge sharing and technical level collaboration and served as a KM modality (for results) during implementation. The first "semi-formal' Consultative Forum was convened by the Project in January 2019. The three countries participated with UNDP, SEAFDEC and PEMSEA. While the Consultative Forum convened, it was not formally established as outlined in the project document and described in the following excerpt from project document: *The Consultative Forum would involve a range of national, subregional and regional stakeholders, such as PEMSEA, SEAFDEC, ASEAN Tuna Working Group, the ABNJ Program, etc.*

The Consultative Forum was intended to be an ongoing *regional knowledge sharing and learning-cooperation platform*. PEMSEA had agreed in 2016 (see letter of agreement attached 2019) to develop and host the project website; however, this did not constitute the long-term hosting of the Consultative Forum. The interviewees stated during TE that the original concept was to initiate collaboration with ASEAN and SEAFDEC. It is the opinion of the TE evaluator that such higher level engagement still needed to be explored by the implementing partner together with UNDP GEF. The Project was successful in preparing the consultative form and making a good case, yet the work was lingering and still needed a political platform, The Project proponents did their part in identifying the areas of possible collocation, but the design for hosting a consultative forum needed a political audience. It was generally focused on the science and the science-to-Policy Bridge, including sustaining. The Consultative Forum needed further work to consolidate what the Project achieved.

The Project financed participation by representatives from each of the three beneficiary countries in the PEMSEA EAS Congress held in 2015 in Vietnam and in the GEF IW Conference held in 2016 in Sri Lanka and in 2018 in Marrakesh.

The WPEA website was developed under the PEMSEA facility.

There were follow-up recommendations for bridging the current project work with the New Zealand project follow-up. TE learned that the New Zealand project was very limited to data collection and compliance monitoring. The actual cross-cutting work and governance work was lacking an exit strategy, and it had only begun to have results.

Indicator 10: (a) Monitoring and knowledge sharing between POPW LME and EAS LMEs for target and associated species and their management; (b) Commitment to information sharing at all levels amongst WPEA members and beyond; (c) Current provincial/FMA resource profiles updated and disseminated;(d) Participation in global knowledge sharing events						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
Value:	Limited information shared via WCPFC mechanisms, meetings and WPEA website and limited outreach to stakeholders at national and subregional level	There is an existing WCPFC-WPEA website although it is not regularly updated. A letter of agreement was signed between the Project and the PEMSEA Resource Facility in November 2016 to have PEMSEA develop and host a project website by mid-2017 and also support development of a monitoring and evaluation reporting system. Project deliverables are disseminated to implementation partners, but not to the wider stakeholder community.	11.1. Active website maintained in collaboration with PEMSEA and commitment to preparation and dissemination of project	**Marginally on target**	WPEA website was developed under the PEMSEA facility and would continue to be updated as needed.	**Marginally On Target**

Indicator 10: (a) Monitoring and knowledge sharing between POPW LME and EAS LMEs for target and associated species and their management; (b) Commitment to information sharing at all levels amongst WPEA members and beyond; (c) Current provincial/FMA resource profiles updated and disseminated;(d) Participation in global knowledge sharing events						
	Baseline	**Midterm Status**	**End Target**	**Midterm Assessment**	**Status of Project at Final**	
			publication, newsletters and other information products			
	No interagency cooperation mechanism such as CF established	The Consultative Forum has not been established as outlined in the project document, with participation by a wide range of regional partners.	11.2. Consultative Forum activity reported	**Not on target**	The three countries participated in a consultative forum last January 2019, with UNDP, SEAFDEC and PEMSEA.	**Marginally On Target**
	Limited participation in knowledge sharing events, including IW: Learn.	The Project has supported representatives from each of the three beneficiary countries to participate in the PEMSEA EAS Congress in 2015 and the GEF IW Conference in 2016.	11.3. Increased participation in international and (sub-) regional knowledge sharing events (one per year), such as IW:Learn and related activities and the EAS Congress	**On target**	PHL was able to participate in GEF IW Conference (IWC9) in Marrakesh, Morocco, November 5–8, 2018. Other countries were offered the opportunity, but no one could attend the Morocco meeting.	**Achieved**
Date:	**2013**	**March 2017**	**October 2017**			

4. SUSTAINABILITY: RATING - MODERATELY LIKELY

Sustainability was an important aspect of the Project design. What has enhanced the likelihood that all the benefits would continue after GEF funding ceases. This Project clearly needed a sustainability or exit strategy. For regional governance results, Indonesia was a full member of WCPFC since 2013, thus increasing the prospect of continued improved compliance. However, Vietnam remains a non-member despite improvement to compliance and reporting to the commission during Project implementation. While there was evidence in each of the three beneficiary countries that financing of data collection might be institutionalized within the operating budgets of the national and subnational partner organizations, it was definitive. Continued support from the New Zealand Government, does enhance the likelihood for sustaining project results however, the scope of the new assistance is limited. While the private sector participation in activities continued to grow, more work will be needed to enhance this collaboration.

Evidence collected during TE shows that the sustainability hinges on hearsay commitment to continued government financing and implementation of the national Tuna managment plans. In Philippines, recent changes in priorities have resulted in a small reduction on the prior committed funds for the stock assessment programme. While financing in all three countries for data collection and monitoring has improved, it remains uncommitted. The sub regional results for impacts are dependent on all EAS countries continuing to build systems and working together to share data and engage in regional monitoring activities. Additionally, the progress made with respect to the new areas will require data collection, climate change, EAFM, harvest strategies. The work on traceability, certification and supply chain aspects require ongoing capacity enhancing. Pricing and economics is a new area for the region and opens an area for future comparative experiences haring and piloting work. In terms of the project efforts on national capacity building several of the core beneficiaries in key positions have moved on, threatening the uptake of the knowledge from the documents and policy work. The Project made synergies with complementary projects and programmers, but for sustainability this needed to continue to be built. The follow-up New Zealand project is not focused on reinforcing knowledge gains and policy gains made around the cross-cutting uses.

Philippines stated that while there had been good results, the budget for the port sampling program was now imbedded in the regular budget of the government (General Appropriations Act). They also take the view that capacity building activities should be continued, however, especially for government personnel. Other key areas of concern by countries were expressed as follows: The Consultative Forum was established and needs follow-up, possibly in connection with the follow-up New Zealand project. Another risk for data and monitoring is the speed at which data science and technology is evolving which might make it difficult for these countries to cope with any changes and continue to comply with the data standards required.

4.1. Financial Risks: Rating Likely

Although government support had increased in recent years (TE interviewees, MTE - National governments increased financial commitments with respect to monitoring and data collection. Per MTE, the Indonesia Government approved establishment of a research installation in the Indonesian port city of Biting. The Philippine Government substantially increased funding in 2014 for data collection. During this second phase of WPEA, the Project of WPEA did not support the salary of enumerators. The Vietnam Government reportedly[1] approved to extend funding for the data collection program. This was verified), TE verified that continued national financing is uncommitted over the medium to long term.

There is support from the Government of New Zealand for a follow-up project entitled “Western Pacific East Asia—Improved Tuna Monitoring,” but for the long term, sustainable financing would be required to ensure adequate monitoring is provided.

Due to the limited resources for cross-cutting work on climate change, EAFM pilot implementation, supply chain analyses and harvest strategies, there was difficultly making formal synergies with complementary regional projects, which diminishes sustainability (when GEF funds are needed). In key areas, e.g. TE learned the private sector,-industry and fishing association are beginning to support the activities related to data collection in conjunction with their need to gain MSC certification.

4.2. Socioeconomic Risks: Rating Likely

In full agreement with the MTE findings, TE learned from a case study visit and consults across the region that a large number of people's livelihoods and culture in the EAS region were supported by tuna fisheries. Additionally, increasing demands by foreign buyers and domestic and private sector actors were becoming more and more committed to sustainable management of the tuna resources. (General Santos visit, fish port). These advances increased the likelihood that results achieved on the project would be sustained.

The lack of capacity was the key barrier to achieving sustainable management of tuna fisheries in the EAS. The project had contributed to mitigating this, but the effort on the cross cutting areas was not big enough and long enough; there was insufficient time to impart meaningful contributions to capacity gaps on the important cross-cutting issues: climate change adaptation, EAFM, ecolabeling, harvest strategies, etc. While the New Zealand fund would support the data gaps, the subregional cooperation efforts, especially for reducing increasing risk, sustainability of the ecosystem, fair pricing and equity goals are needing more work and design thinking. These capacity gaps would need financing and continuation to support the regional, subregional and national enabling environment.

4.3. Institutional Risks: Rating Likely

Vietnam was still a cooperating non-member of a commission, but through project it has increasingly made advances towards full compliance with relevant CMMs. Strengthening subregional governance was a key aim of the project. While the joint activities and annual three-country workshops helped the collaborative subregional arrangement and a consultative forum convened, the expectations for the form and structure of the envisaged subregional governance needed an exit strategy. All three of the beneficiary countries endorsed the Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices, including combating illegal, unreported and unregulated fishing. Indonesia and Philippines were members of the Coral Triangle Initiative (CTI), and Vietnam had associated country status.

At the national level, the project facilitated the development of task forces for participating in subregional forums and undertook the completion of National Tuna Management Plans (NTMPs). The NTMPs have been endorsed through Ministerial decree (MTE 2017, survey TE). Each of the three beneficiary countries had incorporated climate change, EAFM and harvest strategy objectives into the NTMPs. These expanded plans further enhanced the institutional framework and governance structures required to achieve sustainable management of highly migratory tuna stocks.

4.4. Environmental Risks: Rating Moderately Likely

TE fully agreed with the MTE conclusion on this. The regional was faced with increasing stress as a result of the expected impacts of climate change. Donors and national governments had been investing heavily in improving knowledge and developing and implementing adaptation strategies. Improving climate change predictive capacities and developing adaptation strategies focused on subregional tuna fisheries under Outcomes 1.2 and 1.3, and cut across the other components as well. Limited resources were allocated for climate change analyses and strategic planning. There was no significant progress. This remained a gap and needed an exit and follow-up strategy for this Project.

5. RELEVANCE: RATING SATISFACTORY

The Project was highly relevant to international, regional and national priorities. At the subregional level, the Project was consistent with the Western and Central Pacific Ocean Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPO) and the WCP Fisheries Commission (WCPFC). Philippines and Indonesia were Commission members, while Vietnam was a cooperating nonmember (CNM). Indonesia acceded to membership at the WCPFC 10th Regular Session in December 2013, after working toward ratification for the last eight years. The contribution of the Project to Indonesia readiness for membership was highlighted. Vietnam, still not a member, was moving toward that regional target.

The Project supported the countries' is supporting EAS countries contribution to the Western and Central Pacific Fisheries Commission (WCPFC). A compliance monitoring scheme was enforced, as the CMMs were legally binding and regularly revised and updated (CMMs for the EAS three EAS countries, Annexes).

Project had additional cross-cutting areas that are consistent with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA-PEMSEA mandate). The SDS-SEA provided the overarching framework for sustainable development of the EAS, aiming to ensure the sustainable use of coastal and marine resources.[vi] The SDS-SEA embodied a shared vision of the countries of the region for sustainable development of coasts and oceans, and the proposed Project was thus linked to the implementation of the SDS-SEA under a programmatic approach for the region. However, the

links to PEMSEA and the subregional governance for these results needed an exit strategy. This was a longer-term result. During the implementation, several keynote conventions were signed reinforcing these results and this work, including the climate change convention in 2015 and the Sendai agreement on Disaster Risk Reduction.

The Southeast Asian Fisheries Development Center (SEAFDEC) was an autonomous intergovernmental body established in 1967. The mandate of SEAFDEC was "*to develop and manage the fisheries potential of the region by rational utilization of the resources for providing food security and safety to the people and alleviating poverty through transfer of new technologies, research and information dissemination activities."* SEAFDEC comprised 11 member countries, including Indonesia, Philippines and Vietnam, seven other Southeast Asian countries and Japan. SEAFDEC was developing a draft plan of action for regional cooperation on sustainable tuna management in SE Asian waters with a focus on neritic tuna species, traceability, catch certification, joint stock assessment and combating IUU fishing. The Project generated national tuna management plans that were synchronized to some extent with knowledge inputs gained through this Project.

TE confirmed that the Project was highly relevant to three EAS countries and was linked to regional and national sustainable development goals and to each country's WPCFP compliance and data collection needs. However, the linkage to other related governance institutions needed post-project follow-up in order to consolidate the results.

For Philippines, the Project contributed to national priorities, particularly in terms of greatly enhanced and improved tuna data collection. The government increased the budget from PHP 30M (USD 600,000) to PHL 150M (USD 3,000,000) per year, which covered almost all the tuna landing sites around the country (from around 300 landing/sampling sites in 2014 and port sampling covered around 800 landing/sampling sites since 2015). This contributed to the regional and international priorities in relation to WCPFC data obligations. Additionally, significant national, regional and international directives, policy/laws to which the project contributed included initiating revision of the National Tuna Management Plan (NTMP). The latest NTMP was launched in 2018, and the previous versions were in 2012 and 2005.

The Project also contributed in the crafting of various Fisheries Administrative Orders (FAOs) as mentioned above.

Vietnam considered tuna fisheries to be the most important species in capture fisheries at the national level. The development and implementation of the WPEA document was a national priority for fisheries management. VNM endorsed a Fisheries Law in 2003. Since then, there have been too many emerging issues on fisheries management at international, regional and national levels that needed to be considered for changes. The Project was aligned with the direction of the Vietnamese Government to update the 2003 Fisheries Law. In addition, there was no specific legislation on tuna fishery management in Vietnam. Hypothetically, according to the project teams in Vietnam, the Project increased attention of policy makers on fishery management in Vietnam through cross-sector work and coordination in conducting work on outputs (see partial list of outputs in Annexes). The weak science-to-regional policy linkages were made noteworthy by interviews with Vietnam (an unverified area of the Project monitoring). This could have been due to a weak monitoring system and little ability to articulate results or it might have been undocumented and not really a result. It was hard to make a judgment, but generally the reporting of policy-level results were undocumented and mostly anecdotal.

Formulation, Design, Strategy and Log Frame

Several targets were analyzed at MTE as not being smart, some were unattainable and subregional targets were noted as vague. These were corrected at MTE (see indicators review table below). The Project was ambitious in accepting half the grant and implementing it with the original design. This impacted the decisions made about implementation and prioritization of the budget to the data and compliance activities. The log frame was comprehensively reviewed at MTE. Slight changes were introduced to targets in order rationalize the scope and expectations of the end targets. For instance, the target around reduction of by-catch species of 25% was unrealistic as were the targets for climate change prediction and adaptation and mainstreaming, EAFM and other cross-cutting areas. The Project raised countries' and regional awareness of the need for EAS subregional cooperation and mainstreaming knowledge concerning the cross-cutting areas in the national tuna strategies. The cooperation goals were discussed and a record was kept of data sharing and monitoring gaps with suggested areas for cooperation.

6. EFFECTIVENESS: RATING SATISFACTORY

Effectiveness was reviewed in terms of expected results, design and implementation strategy. There were three main problems that the Project intended to address:

1. Incomplete participation in the governance and compliance frameworks for oceanic tuna resources in the subregion, the WCPFC;
2. Inadequate scientific knowledge about oceanic ecosystems and their relationship with fisheries resources;
3. The advancing climate change-driven shifts in fisheries catch and area.

The project design had been adapted by the uniquely competent PM with profile (CTA/PM) (reality in the countries, the budget and scope). An early decision to continue the Project with half the grant requested. This led to early modification in expectation and approach with the bulk of the financing directed to the technical assistance work on data and compliance. The cross-cutting areas and subregional governance were a secondary priority and thus under-resourced and underfunded. Additionally, there were design assumptions concerning the "readiness of countries to cooperate on the cross-cutting areas. The subregional governance work had not been well defined (MTE 2017). A theory of change was lacking for this aspect.

The choice of WCPFC as implementing partner was strategically made. WCPFC had offered its project manager services in kind. The selection of WCPFC was also to garner advances on the subregional and regional goals for expanded results areas, including climate change and risk reduction, ecosystems, market chain analysis—traceability results. These areas inherently constitute the global sustainability commitments and were targets the regions must aspire to. The Project needed as full team—lesson learned (see section on project management). The project management was commended for providing the technical and management oversight to countries to adapt and move.

To adapt the work plan around the outcomes, the budget was focused on the priority for improving the monitoring and data gaps. As noted by MTE, the data entries at the commission before this project support in 2010 were said to be noted in documents as unqualified. This was significantly changed, so the substance of this Project was highly successful. The need for addition of cross-cutting areas was the only thing that brought the overall results to satisfactory as opposed to highly satisfactory.

Through support of the UNDP GEF, in ten years of Project implementation there were significant improvements in all three countries for data and monitoring. The improvement in data and monitoring was qualified by the SPIs in their annual report to the commission (see footnote). However, there were data gaps in two countries that needed to be addressed (Philippines is ahead). Needs/gaps were highlighted during the TE as follows:

- Improve data collection for ETP and bycatch;
- Improve data collection through observer andlogbook;
- Test the OM for developed harvest strategy in the IAW.

The Project was operationalized at three levels: regional, subregional and national. The three component areas needed skilled and competent management to interweave the strategies towards results and to aim and adapt for "achievable" results at all three levels. These results were also linked and dependent on raising capacities at the national level. Many of the subregional results were dependent on capacities at the national level. The focus was thus on levelling the abilities to undertake compliance and reporting for all three countries and then regional and subregional cooperation goals. The assumption was that all this could be achieved together, but it was important to raise national capacities for the priority targets before some of the subregional cross-cutting goals could be met. This demand rested with the decision of the project manager and highlighted the importance of the implementation strategies to deal with design issues. Notably, the big issues for budget and resources were linked to the new cross-cutting areas introduced to the Project in phase two.

As mentioned above, a decision was taken to implement through regional and national processes (versus UNOPS) through the WCPFC, and there were trade-offs. Other key lessons that emerged on effectiveness follow:

Subregional data and information-sharing targets needed time. This was linked to idea of a consultative forum. They required a sustainability mechanism as this was not clear; ME (results reporting and monitoring towards end targets on all aspects) was not strong throughout. Neither was KM, but PM and UNDP GEF oversight through PB took decisions and recommendations since MTE was to improve both and to capitalize on synergies with others for sustainability. All targets for monitoring and data collection were reached, but results were still limited in providing bycatch data and observer data. Implementation of the data and monitoring and technical support to cross-cutting areas was really effective. This was learning by doing with countries. The bulk of the budget went to the work on data collection and monitoring (annual work plans).

In design, the cross-cutting areas had no smart targets or they were unattainable. For example, the climate change expected results at the regional level required a much bigger budget and a plan to set up a monitoring system for

monitoring CC impacts on tuna fisheries at the regional level. This was all discussed during the MTE. The solution was to engage more with partnership to sustain this longer-term work, and to some degree the Project carried forth. However, there was limited data, limited expertise on CC and limited funding.

An outstanding national result on ecosystems work included the national development of harvest statetgy for tropical tuna in the Indonesia's Archipelagic Waters.

The subregional targets for Harvest Strategy are longer-term.

The project knowledge management KM work was a greatest disappointment of the implementation. The three component outputs were delivered late, and there was no position for KM in the PIU. The strategy, however, as articulated in the project document was KM as an enabler for the other two complements. This was not considered. The idea was to work with PEMSEA and to have PEMSEA support the Project with monitoring, but this was implemented very late.

Project Component	Expected Results	TE General Comments
Component 1:[1] Regional governance for building regional and national adaptive capacity of Indonesia, Philippines and Vietnam in the management of highly migratory stocks	1.1 Improved regional mechanisms for monitoring and assessment of highly migratory fish stocks and Illegal, Unreported and Unregulated (IUU) fishing in the POWP LME and the EAS LMEs	Generally achieved. The three countries were all reporting and compliant to the WCPCP convention. At subregional level, the consultative forum and the national level coordination for subregional participation was started late in project implementation. Areas for subregional cooperation were identified. This was a longer-term target. These activities (outputs) needed an exit strategy and higher-level decisions at the regional, subregional (SEADEC, ASEAN, PEMSEA) and national level. Follow-up action was needed
	1.2 Enhanced capacity of technical staff, policy and decision makers in Indonesia, Philippines and Vietnam to integrate climate change impacts on highly migratory stocks into management regimes	The original climate change targets were overambitious and adapted at the regional and national level. The regional end targets also depended on capacities and cross-sectoral coordination at the national level to do the necessary data collection and analysis for policy. To some degree, mainstreaming has been achieved, i.e. Tuna Management Plans, but more intersectoral coordination was needed.
	1.3 Climate change concerns mainstreamed into national fishery sector policy in Indonesia, Philippines and Vietnam	The project management dealt with these issues by identifying good quality experts in the Project to sensitize about the work and to begin studying the issues at the level of the countries. The work was mainstreaming into the national Tuna Management Plans.
Component 2: Implementation of policy, institutional and fishery management reform	2.1 Enhanced compliance of existing legal instruments at national, regional and international levels	Through National Tuna Management Plans, this outcome was partially achieved. More work on bridging the science policy interface at the national level was needed.
	2.2 Adoption of market-based approaches to sustainable harvest of tunas	This target was dependent on cooperation and influencing market pressures. The Project has contributed important knowledge and cooperation with the private sector inputs (mostly through invitations to meetings and events and demonstrating the utility of data collection and monitoring) at national level. An interesting insight was that the tuna fisheries' beneficiaries needed support with price setting as it was a total buyers' market. This was highlighted as a need for good practice and pilot work. The Osaka market was highlighted as a good practice that might be piloted in the region, i.e. Philippines General Santos Tuna Port.

[1] *All outcomes monitored annually in the APR/PIR.*

	2.3 Reduced uncertainty in stock assessment of POWP LME and EAS LMEs' highly migratory fish stocks and improved understanding of associated ecosystems and their biodiversity	The Project dealt with this work mostly through undertaking risk assessment at national level. Philippines was more advanced that other two countries. There was much more capacity building and demonstration that could be done on the observer programme in Vietnam, and Indonesia required a demonstration programme and capacity building support for the observer programme. These were big gaps that the new funding from New Zealand would not pay for. The New Zealand project was also lacking the policy and management work, i.e. data analysis work. This was a gap in the follow-up work that a new GEF project might finance.
	2.4 Ecosystem Approach to Fisheries Management (EAFM) guiding sustainable harvest of the oceanic tuna stock and reduced by-catch of sea turtles, sharks and seabirds	More technical and capacity building work was needed on the observer programme, especially in Indonesia and Vietnam. The subregional targets for by catch monitoring and Harvest Strategies needed leadership on standards around data collection for bycatch in EAS waters.
Component 3 Knowledge sharing on highly migratory fish stocks	3.1 Regional knowledge platform established on POWP LME and EAS LMEs shared tuna stocks and associated ecosystems	This work was not well conceived and/or executed. The Project needed a KM and Monitoring plan linked to the Consultative Forum and the subregional governance target, the lack of which puts the sustainability in question.

7. EFFICIENCY SATISFACTORY

In terms of value for money, considering the substantive results, cost per benefit, the Project was highly efficient based on the allocated budget of 2 million. For both phases, +/– 3 million had been invested, and all countries were compliant with the WCPFC regulations. This was a major achievement. The second phase introduced the cross-cutting areas at regional, subregional and national levels. For instance, MTE 2017 and subsequent **PIRs** reports related the following:

For adaptive management in the WPEA project, two problems were identified: one was insufficient budget and insufficient expertise. Compared with the scope of work related to i) climate change issues, ii) market-based approaches to sustainable fisheries, iii) establishing reference points and harvest control rules as part of developing a harvest strategy framework and iv) application of an ecosystem approach to fisheries management to tuna fisheries, the budget allocated was small and one could argue subjectively that the knowledge and positioning results were substantive (see list of inputs from Project, Annexes). The management response was to conduct prior research using domestic experts to clearly identify actions to be recommended and to be undertaken to reach the project target.

In terms of the implementation and budget allocation, management decisions were taken to continue all the work, and there were trade-offs. The lower budget influenced the implementation approach through government and regional entries as opposed to a separate project team, i.e. implementing through WPCFP rather than a project management unit. On one hand, this enabled capitalizing on the technical oversight and relationships and the knowledge sharing building (albeit at the technical level) between the countries. On the other hand, there was some learning with respect to results and finance monitoring and oversight. The focus on science was another trade-off. If the project team had been fully in place, one wonders if the policy goals would have been better planned and implemented towards results.

In terms of project management, the normal UNDP HACT assessment was completed with the WCPFP, but this Project needed an extra layer of accountability. The need was monitoring and recording expenditures at the country level. It was picked up by a UNDP audit, and the mistake was corrected. Another layer of accountability and monitoring at the country level was necessary.

8. CONCLUSIONS, LESSONS AND RECOMMENDATIONS

The Project delivered technical and substantive results, notably improvements in data quality and compliance with WCPFC Conservation and Management Measures (CMMs) (see CMMs in Annexes).[vii] It did not do so well on delivering the policy learning and or sustainability goals, including monitoring for the crosscutting thematic areas (CC, EAFM, Markets Strategies and Economics) and the gender mainstreaming and project targeting the poor, marginalized and vulnerable. Continued work is needed to address the sustainability, financing and policy, including consolidation of

outputs and strategic messaging and disseminating. The project document was written to a much larger GEF grant for cross cutting thematic areas and it did not provide a disaggregated gender baseline. Overall, the project monitoring for cross cutting areas and gender results was very weak and in part due to not recruiting monitoring personal in the WCPFP implementation team, a key lesson learned. Improved availability of data, with regard to estimates of catch by *species and gear* in the beneficiary countries has contributed toward higher quality tropical tuna stock assessments prepared by SPC. This has been a significant result. Pre-project, for instance, the catch from the East Asia Sea countries was labelled as "unclassified" (MTE 2017).

The Project completed national tuna management plans in all three beneficiary countries—the first time management plans for tuna fisheries have been formulated. This is another significant result toward achieving sustainable management of migratory tuna stocks in the region. Interviewees reported (during TE) that for all three countries, there was a stronger regional voice at the WCPFC Commission regarding issues associated with the East Asian Seas region of the convention area.

The Project strengthened collaboration technically between the three beneficiary countries and cultivated technical communication lines among key fishery management stakeholders, and as already mentioned by the MTE has created a solid foundation for subregional governance. These meetings and all the work had been missing a strong policy strategy (implementation and knowledge dissemination/advocacy work). This was a key learning from this Project. The key issue with implementation has been the absence of a monitoring specialist in the team. The implementation approach has been understaffed at WCPFC and this is a key finding and presents a condition for future work with the implementing partner-to fully staff the project. The strategy for KM and monitoring was to work through PEMSEA but this was not feasible for results, while PEMSEA did its part the creation of an implement team was not evident. UNDP provided over and above support to the implementing partner on monitoring and also kept the project implementation in check through audit and reporting.

A key strength (noted by MTE and verified by the TE) was the strong continuity (and passion for the technical work) of the implementation partners, including the project manager, national coordinators, regional partners, UNDP CO staff and UNDP GEF RTA. The WCPFC provided steady co-financing contributions, including the in-kind project management services of the Science manager of the WCPFC. The Project manager had a unique competency profile for adapting the projects lofty goals and overseeing the annual country work planning and competencies for learning by doing and day-to-day implementation "handholding," ultimately leading the three countries focal points and teams to their respective results. He generally played a dual role as project manager and as chief technical advisor. The role was taken up strongly by WCPFC, obviously a contributing factor in the positive national delivery and results. The high country ownership was facilitated through the effective execution modality ensuring that the activities were closely aligned and integrated with national programming and budgeting. It was also supported by UNDP Philippines for project management and administrative services including procurement and audits. The auditing services were commended. They helped the project maintain its good results in undertaking a timely correction on finances and accountability. A major lesson learned, however, was that for the subregional and expanded results (including the entire projects results sustainability), the Project needed a full team in place at WCPFC, including a KM and monitoring advisor. The likelihood of Project sustainability has been diminished by a need for a policy and KM perspective. The monitoring would have picked up on these gaps. The sustainability of data collection and monitoring (compliance measures for WCPFPC) were enhanced by the national budgets for data collection by the three beneficiary countries and the continued follow-up project supported by the New Zealand Ministry of Foreign Affairs and Trade.

Recommendation table – Refer to Executive Summary

9. LESSON LEARNED

Aspect of Project	Lesson
Design – Links to National, Regional, International Priorities	· Fit for the purpose: Phase two of project continued with meeting a high demand for technical support on data and monitoring linked to the Regional Convention. Additionally, the national priorities fit technically for fisheries' improvements. The project's implementation approach learning by doing (through WCPFP) was ideal as the focus instrumentally supported the EAS countries with quality data collection and monitoring linked to their reporting requirements connected with the WCPFC Convention. However, the implementation approach through WCPFC also needed a

	greater focus on the new cross cutting areas requiring a broader work focus and a full project team especially knowledge inputs to set the new agenda i.e. economics, EAS sustained sub regional collaboration mechanism and regional policy work for Vietnam's inclusion into the convention.
Design – Adequacy of Strategies/Log Frame/TOC	· The project was not adequately adapted during the inception period. The project design was not reflective of the significant budget reduction (half). This was flagged at Project Board meetings and during MTE, when the expectations were downscaled to contributions. The major budget constraints forced significant changes in the end targets for the cross-cutting and subregional work on climate change, ecosystems, market approaches and harvest strategies. While the project influenced these areas, i.e. setting agenda, etc., and work has begun, it does not meet the end targets envisioned in terms of a monitoring system and data collection at the regional level. The inception period is important for adjusting strategies and scope in line with the budget. This work is still a regional need. · Including the new cross-cutting areas and sub regional collaboration mechanism goals in phase two needed regional policy end targets and strategies, i.e. to influence the WCPFP agenda. This was not clear in the Log Frame, TOC and implementation strategies. Additionally, the cross-cutting area had some ambitious change targets, so the project is a capacity building and agenda-setting the initiative, i.e. cross-cutting areas, climate change and ecosystems monitoring systems for upgrading the marketing approaches. · Theories of Change TOCs is important in narrative and in visual for design and for monitoring. The use of Log Frame as a monitoring tool was not apparent during implementation and the project document did not articulate good theories of change in the narrative, especially for the ambitious longer-term end targets of the cross-cutting areas. As mentioned above, the sub regional cooperation and EAS data sharing targets required political input, others needed a good strategy for bridging the science to the policy regional goals. · The project document needed an exit strategy. This is still needed before the project can close.
Implementation – Management/Finance/IP/UNDP /GEF Lessons	· The project management made good use of adaptive management measures, e.g. project board decisions on changes to indicators. · Management action required a high commitment, and this was fostered by stakeholder participation, and thorough data related work on enforcement and compliance. · Dedicated and skilled technical (data and monitoring technical input from SPI) persons were essential to conduct and implement the projects. The role of SPI in this project implementation and success cannot be understated. · As a capacity building measure for sustainability came mostly from the government employees involved in implementation. They were primary beneficiaries and supported learning results greater than if hiring contractual staff with less buy-in. This learning was underreported in the results monitoring system-PIR reports. While such an approach works, the strategies for the project CB targets sustainability (staff turnover) are this equally important i.e. public service certificates and policy and budget related goals. · Fostering collaboration and partnership with stakeholders, other agencies and organizations was a good strategy in attaining the Project targets/outputs/outcomes. The cooperation of relevant agencies was very important. Due to a low budget, much of the

	high-cost cross-cutting work was done pro bono by "high-level" experts and friends of the country. · Consistency and continuation were necessary for data collection, which required adequate supervision, funding, infrastructure and a database system in its management. The implementing partner should have included a full project team, which would have facilitated better implementation and better documentation of learning results and work on knowledge management. · Having a plan for direct communication from UNDP to NTCs was needed in relation to the project results monitoring and the audit process (HACTS, etc.) · Having a full project team is important for a greater effort and to avoid overloading full-time scientific staff members at the secretariat of the convention. Having a full-time staff at WCPFC must be considered a requisite for similar projects in the future. · Key learning has been the selection of a very strong PM with the best technical background is a significant for results, positive lesson learned. · Having a good communication line for implementation between UNDP, PM and NTCs is important.
Knowledge Management	· Knowledge management was an implementing strategy and an expected result, but this was not recognized. The weak narrative of knowledge management in the design made it unusable as a modality for implementation.
Sustainability	· Sustainability must be built into the design or projects are at risk. The instrumental focus on data and monitoring is not enough to sustain the results. The project needed a broader focus and the sustainability mechanisms built-in.While data and reporting support is key for sustaining some of the regional results, national sustainability is dependent on the policy environment. Having a project exit strategy to sum up this project's knowledge output will have high importance for sustainability. Many of the outputs require a policy-focused dissemination strategy. · Learning together by doing was an excellent implementation strategy for each country to improve data collection and compliance at the regional level and as a means to improve fisheries nationally through the three-country workshop and south south cooperation. · The project is only beginning to make a case for subregional governance. The early stage took place through recent collaborations with SEADEC, ASEAN i.e. during the CF discussions. The three countries are members of these organizations and the work carried out through this project, i.e. convening and gap/collaboration identification work, now urgently need a follow up plan with these agencies. · Cross-cutting areas needed longer-term strategy and achieving strong “formal” partnering institutions at the onset.
Results	· In terms of sustaining the results on data collection, monitoring and reporting cycle, it was also important to build up the capacities for analysis and management skills. These skills are necessary to translate the data collected into high-quality reports and management advice. Although the focus on data collection and monitoring is good, an additional need existed for focusing equally on management and analysis for policy and decision making. · The instrumental role of high quality scientific input/oversight and technical level experts in implementation was highlighted.

	· · As highlighted above, the project stated its work on the Sub regional collaboration targets i.e. a consultative forum and building synergies with key agencies for sustainability. These now urgently need an exit strategy. · Solid monitoring and evaluation plan including hosting regular and excellent prepared board meetings, MTE, TE and tracking were important to maintain the appropriate support for the management side. · Advocacy and policy work needed more strategy for sustainability and uptake (work bridging science with policy makers and their staff). This was essential to translate scientific work into policy.

[i] Scientific Data Available to the Western and Central Pacific Fisheries Commission - "*Progress and Gaps Assessment* including focus on progress under WPEA project in "Vietnam, Philippines and Indonesia" SCIENTIFIC COMMITTEE FOURTEENTH REGULAR SESSION, Busan, Republic of Korea **8-16 August 2018.** Peter Williams

[ii] Scientific Data Available to the Western and Central Pacific Fisheries Commission - "*Progress and Gaps Assessment* including focus on progress under WPEA project in "Vietnam, Philippines and Indonesia" SCIENTIFIC COMMITTEE FOURTEENTH REGULAR SESSION, Busan, Republic of Korea, 8–-16 August 2018. Peter Williams

[iii] The SDS-SEA incorporates the main principles, objectives and action programmes of a number of international and regional instruments and agreements, including the UN Convention on the Law of the Sea (UNCLOS), the UN Framework Convention on Climate Change (UNFCCC), Agenda 21, the Convention on Biological Diversity (CBD), the Global Programme of Action for Protection of the Marine Environment from Land-Based Activities (GPA), the World Summit on Sustainable Development, the UN Millennium Development Goals (MDGs), Sustainable Development Goals and a number of recent conventions associated with the International Maritime Organization (IMO), financing for development and DRR-Sendai. The SDS-SEA embodies a shared vision of the countries of the region for sustainable development of coasts and oceans and the proposed project is thus linked to the implementation of the SDS-SEA under a programmatic approach for the region. However the links to PEMSEA and the subregional governance for these results need an exit strategy. This is a longer term result.

[iv] Rating Scales: Progress towards results and project implementation and adaptive management were rated according to a 6-point scale, ranging from highly unsatisfactory to highly unsatisfactory. Sustainability is evaluated across four risk dimensions, including financial risks, socioeconomic risks, institutional framework and governance risks and environmental risks. Sustainability was rated according to a 4-point scale, including likely, moderately likely, moderately unlikely, and unlikely.

[v] The estimated cost for implementation of the M&E plan (project document) is USD 101,700, which is approximately 4.5% of the USD 2,233,578 GEF implementation grant. The budgeted M&E line items include

USD 22,700 for the inception workshop and report, USD 35,000 for the midterm review, USD 35,000 for the terminal evaluation, and USD 9,000 for financial audits (USD 3,000 per year).

[vi] The SDS-SEA incorporates the main principles, objectives and action programmes of a number of international and regional instruments and agreements, including the UN Convention on the Law of the Sea (UNCLOS), the UN Framework Convention on Climate Change (UNFCCC), Agenda 21, the Convention on Biological Diversity (CBD), the Global Programme of Action for Protection of the Marine Environment from Land-Based Activities (GPA), the World Summit on Sustainable Development, the UN Millennium Development Goals (MDGs), Sustainable Development Goals and a number of recent conventions associated with the International Maritime Organization (IMO), financing for development and DRR-Sendai. The SDS-SEA embodies a shared vision of the countries of the region for sustainable development of coasts and oceans and the proposed project is thus linked to the implementation of the SDS-SEA under a programmatic approach for the region. However the links to PEMSEA and the subregional governance for these results need an exit strategy. This is a longer term result.

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