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EVALUATION

Midterm Performance Evaluation of USAID/Philippines' Ecosystems Improved for Sustainable Fisheries Project FINAL REPORT



October 2015

This publication was produced at the request of the United States Agency for International Development. It was prepared independently by Sustainable Development Solutions Corp.

Photos of the site in Coron, Palawan. Photos taken by SDS Team headed by Dr. Cleto L. Nañola, Jr.

MID-TERM PERFORMANCE EVALUATION OF USAID/PHILIPPINES' ECOSYSTEMS IMPROVED FOR SUSTAINABLE FISHERIES PROJECT

Final Report

Prepared under Task Order: SOL-492-15-00004

Submitted to:

USAID/Philippines October 1, 2015

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ACRONYMS

700DALOY	700 Dedicated Alert Lines for Ocean Biodiversity
AIM	Asian Institute of Management
ARD	Associates in Rural Development
BFAR	Bureau of Fisheries and Aquatic Resources
BLGU	Barangay Local Government Unit
CBA	Cost Benefit Analysis
CCA	Climate Change Adaptation
CIG	Calamianes Island Group
CLEC	Coastal Law Enforcement Council
CP	Community Partnerships
CRM	Coastal Resource Management
DR	Danajon Reef
DSWD	Department of Social Work and Development
ECOFISH	Ecosystems Improved for Sustainable Fisheries
DA	Department of Agriculture
DENR	Department of Environment and Natural Resources
DILG	Department of Interior and Local Government
DOST-ICTO	Department of Science and Technology - Information Communication Technology Office
E3/FAB	Bureau for Economic Growth, Education and the Environment, Forestry and Biodiversity
EAFM	Ecosystem Approach to Fisheries Management
END	End of Project
EQ	Evaluation Question
FBBA	Fiberglass Boat Builders Association
FGD	Focus Group Discussion
GPBP	Grassroots Participatory Budgeting Process
HH	House Hold
IFRM	Integrated Fishery Resource Management
KII	Key Informant Interview
KR	Key Results
LG	Lingayen Gulf
MLGU	Municipal Local Government Unit
MI	Measuring Impact
MIS	Management Information System
MKBA	Marine Key Biodiversity Area
MOA	Memorandum of Agreement
MPA	Marine Protected Area
MPE	Midterm Performance Evaluation
MSP	Marine Spatial Planning
NEAT	Network Effectiveness Assessment Tool
NEDA	National Economic and Development Authority
NFRDI	National Fisheries Research and Development Institute
NGA	National Government Agency
NSAP	National Stock Assessment Program

OEECC	Office of Environment, Energy and Climate Change
PO	People's Organization
PES	Payment for Ecosystem Services
PNP	Philippine National Police
PNP-MG	Philippine National Police-Maritime Group
PPP	Public-Private Partnership
SBS	San Bernardino Strait
SDN	Surigao Del Norte
SDS	Sustainable Development Solutions
SEAT	Socio-Economic Assessment Tool
SN	South Negros
SOW	Statement of Work
TOC	Theory of Change
TP-LG	Ticao Pass-Lagonoy Gulf
TT	Tawi-Tawi
TVWS	TV White Space
UPPAF	University of the Philippines' Public Administration Research and Extension Services Foundation, Inc.
USAID	United States Agency for International Development
VIP	Verde Island Passage
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

PROJECT BACKGROUND

The *Ecosystems Improved for Sustainable Fisheries (ECOFISH) Project* was designed to support the goal of USAID/Philippines' Country Development Cooperation Strategy (CDCS) for the Philippines as **“A More Stable, Prosperous and Well-Governed Nation”** by achieving Development Objective 3 (Environmental Resilience Improved) through improving management of natural resources. It was also aligned to support the implementation of the Philippine Development Plan 2011-2016 (PDP), particularly on Chapter 4: Competitive and Sustainable Agriculture and Fisheries; and Chapter 10: Protection, Conservation and Rehabilitation of Environment and Natural Resources. Towards this goal, ECOFISH Project has aimed to improve the management of important coastal and marine resources and associated ecosystems that support local economies using the ecosystem approach to fisheries management (EAFM) as a cornerstone of improved social, economic and environmental benefits.

The **project has six key results** area: (A) increased fish biomass at an average of 10 percent across the eight marine key biodiversity areas (MKBA's); (B) increased number of people gaining new employment or better employment from sustainable fisheries management from project baseline situation by 10 percent; (C) established a national capacity development program to enhance the capacities of local government units (LGUs) and relevant national government agencies (NGAs) to apply EAFM; (D) created and operating eight public-private partnerships to support the project objectives; (E) placed 1.0 million hectares (ha) of municipal marine water under improved management; and (F) assisted 30 LGUs across the eight MKBA's with improved capacity for implementing EAFM. A five-year initiative, the project started in June 2012 and is on its third year of operation during the midterm performance evaluation (MPE).

Tetra Tech ARD was awarded the contract to implement the project in partnership with the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) and Local Government Units (LGUs) in the project sites.

EVALUATION PURPOSE AND QUESTIONS

The MPE employed the results chains' model representing the Theory of Change (TOC) for ECOFISH Project's key interventions. Primarily, this MPE documented and analyzed targeted deliverables and key results by life-of-the-project (LOP) as defined in the project's Monitoring and Evaluation (M&E) Plan. Twelve (12) evaluation questions based on TOC were also used to test the project's fundamental assumptions on the extent and conditions under which ECOFISH Project interventions will achieve the key results. The three main objectives of the MPE as specified in the Statement of Work (SOW) are:

- A. To assess the evaluability of the 12 evaluation questions relating to the final outcomes of ECOFISH Project by determining if these are empirically feasible and practically oriented;

- B. To document the progress of implementation in terms of achieving its key results, and analyze the factors and conditions that enhance or diminish achievement of results; and
- C. To analyze the main challenges in implementing the relevant strategies, and the extent to which the project was able to address these challenges.

The SOW also defined the 12 evaluation questions:

1. To what extent and under what conditions did an increased fish provision lead to better employment for fishing among households?
2. To what extent and under what conditions did a reduction in pressures lead to increases in fish stocks?
3. To what extent and under what conditions did increased enforcement effort and effectiveness lead to pressure reduction?
4. To what extent and under what conditions have public-private partnerships (PPPs) contributed to ecosystem approach to fisheries management (EAFM) outcomes?
5. To what extent and under what conditions are the enabling conditions in place to establish enterprises and for them to generate household income?
6. To what extent and under what conditions did income from enterprises lead to decrease in household fishing effort?
7. To what extent and under what conditions did the provinces facilitate inter-LGU fisheries management interventions?
8. To what extent and under what conditions did increased capacity of national government agency (NGA) lead to implementation of national and local policies?
9. To what extent and under what conditions did local government units (LGUs) move from fisheries management to EAFM?
10. To what extent and under what conditions did LGU policies and regulations lead to right sizing of fishing effort at the LGU level?
11. To what extent and under what conditions did social capital and leadership catalyze/create movement of LGUs from startup fisheries management to EAFM?
12. To what extent and under what conditions did the studies inform development of EAFM?

In July 2015, USAID/Philippines commissioned Sustainable Development Solutions Corp. (SDS), a Philippine development consulting firm, to conduct the MPE of ECOFISH Project. As part of this contractual obligation, SDS dispatched a team of experts, referred here as the MPE team.

EVALUATION METHODS AND LIMITATIONS

The MPE team employed a mix of evaluation methods: (1) key informant interview (KII); (2) focus group discussion (FGD); (3) secondary data review; and (4) documents verification on site. The MPE sites covered only four of eight MKBAs being assisted by the project: Calamianes Island Group (CIG), Danajon Reef (DR), South Negros (SN), and Verde Island Passage (VIP). The site selection targeted the locations of marine protected areas (MPAs) in four MKBAs. The municipalities and MPAs covered by this MPE include:

MKBA	Province	Municipality	MPA
Calamianes Island Group (CIG)	Palawan	• Coron • Culion • Busuanga	• Siete Pecados • Bugor • Royukon-Sagrado
Danajon Reef (DR)	Bohol	• Getafe • Inabanga • Tubigon	• Nasingan • Cuaming • Pangapasan
Southern Negros (SN)	Negros Oriental	• Siaton	• Tambobo • Salag-Maloh • Andulay Siit
Verde Island Passage (VIP)	Batangas	• Calatagan • Mabini • Tingloy	• Bagong Silang • San Teodoro-Twin Rocks • Sto. Tomas-Pulang Buli

The main limitations of this evaluation included: (i) non-availability of some key informants on agreed schedules, resulting in cancellation or reduction in time of actual interviews; (ii) only nine 9 of 12 planned FGDs with *Bantay Dagat* (Sea Warden) groups were conducted due to absence of these groups in three sample areas; and (iii) absence of supporting documents of some LGUs that claimed to have achieved EAFM Level 2 status during field verifications, leading to the conduct of independent assessment of LGUs' progress towards EAFM using the project's newly devised EAFM benchmark criteria.

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Findings

Overall, the project achievements are on track at midterm as summarized below according to the three main evaluation objectives.

Objective 1: The fundamental assumptions regarding the extent and conditions to which ECOFISH Project interventions will achieve targeted key results related to the “10 percent increase in biomass” are empirically feasible and practically oriented. However, the assumptions related to the “10 percent increase in the number of people with new or better employment” are not definitive as a significant number of interventions is still underway at midterm.

None of the 12 evaluation questions were answered by “NO”, indicating that all questions are on track to be answered by the end of implementation. Six (6) evaluation questions (EQ# 2, 3, 7, 8, 9, 12) were answered by “YES”, which means that all the indicators have been satisfied or these questions are already evaluable at midpoint. The six other questions (EQ#1, 4, 5, 6, 10, 11) were answered by “MAYBE”, which indicates that some indicators have not been satisfied yet at midterm. However, ECOFISH Project has started to implement activities to ensure that the answers to these latter questions will become “YES” by the end of implementation.

Objective 2: ECOFISH Project implementation is progressing and achieving results as planned. The factors and conditions to achieve the six key results are in place and enhanced, resulting in the project achieving most of its targets at midterm.

- **Key Result A** posted variable outcomes, as clarified in the Recommendations section:
 - o Fish visual census inside MPA only: 7.3 percent (VIP), -0.9 percent (SN);

- o Fish visual census inside and outside MPA: 1.89 percent (VIP), -28 percent (SN); and
 - o Fisheries: -35.8 percent (DR).
- **Key Result B** achieved nearly 50 percent of target at midterm based on proxy indicators:
 - o Expenditures: 37 percent (SN), 89 percent (CIG);
 - o Sea food diet: 18 percent (SN), 89 percent (CIG); and
 - o Enforcement: 40 percent (SN), 10 percent (CIG).
- **Key Result C** achieved more than 50 percent of target.
- **Key Result D** achieved more than 82 percent if target.
- **Key Result E** achieved more than 55 percent of target.
- **Key Result F** achieved more than 38 percent of target.

Objective 3: The main challenges at midterm include: (i) demonstration of enabled, operating and earning social enterprise; and (ii) piloting of a market-based instrument to support LGUs' capacity to shift from fisheries management to EAFM.

Conclusions

Using the TOC as reference, ECOFISH Project is able to set up the measures and processes to collect information that would allow USAID and its stakeholders to answer all the 12 evaluation questions by end of implementation. The desired economic outcomes can be achieved during the project life if it provides targeted and strategic interventions, with emphasis on one or two MKBAs to demonstrate operational and profitable social enterprises.

ECOFISH Project is on track in delivering its key results. The accomplishment rates of the six key results are significant or above 50% of targets at midterm, and most targets are likely to be achieved within the project life. However, substantive efforts need to be devoted to increasing economic and livelihood outputs, such as operating profitable enterprises, and revenue and financing schemes for LGUs to reduce fishing pressures and provide alternative income options to fishing households. Under the leadership of BFAR, the project provided technical assistance in the development of FishR and BoatR, two of the most important innovations rolled-out to reduce fishing pressures not only in eight MKBAs but also throughout the entire country.

The benchmark data on EAFM obtained from self-assessments of LGUs showed 19 of targeted 30 LGUs achieved EAFM Level 2 status at midterm. The MPE team's independent assessment of LGUs' progress from fisheries management to EAFM showed that only LGUs in VIP MKBA reached EAFM Level 2 benchmark criteria. The team noticed that some supporting documents (e.g., multi-institutional collaboration, gear-specific management and revenue measures enforced) were unavailable during field verification. Currently, the project is already looking at improving the self-assessment methodology.

Nevertheless, these 19 LGUs are all gearing to demonstrate "right sizing" of fishing effort in line with the results chain indicated in the TOC. "Right sizing" was coined by ECOFISH Project to promote the concept of finding the balance between the ecological capacities of MKBAs and fishing activities in those areas. The project is presently developing a design to incorporate this concept as the core of the fisheries management plan for inter-LGU collaborations. Moreover, the project will have to focus on the remaining 11 LGUs to attain EAFM Level 2 status.

Recommendations

(1) Right sizing of fishing effort

Establish enabling conditions for right sizing of fishing effort such as equitable sharing in the use/boundaries for fishing. Appropriate boundaries will prevent encroachment of fishers with destructive fishing and/or illegal fishing gears or commercial fishing vessels within municipal waters. This will ensure small fishers to have equal access to harvest the benefits of increased fish catch resulting from conservation effort and not the other way around, where large commercial fishers take advantage of the increased benefits.

(2) Gaining new or better employment

Use “better employment” as the primary indicator for Key Result B. Gaining “new employment” can be measured as a separate indicator and assessed through a pilot demonstration of at least one operating social enterprise in two most promising MKBAs. Generation of new employment is feasible with at least a single operating and earning social enterprise, meaning that the enterprise can afford to pay for labor and other social benefits for its employees. While new employment maybe generated by a newly established enterprise, its sustainability needs also to be ensured by demonstrating the operational profitability for at least two to three cycles of operation.

(3) Developing social enterprises

- Demonstrate preferably two social enterprises in the remaining years of the project in two most promising MKBAs that would reach the status of established, operating and earning enterprises;
- Establish at least one PPP linked with at least one social enterprise; and
- Work directly with agribusiness/processing firms that can provide the critical capacity building for evolving profitable enterprises, notably technology, capital and markets. To do this, ECOFISH Project needs to assist in establishing the enabling conditions (e.g. organization of small fishers, availability of raw materials, etc.) to attract potential agribusiness firms to invest, preferably through a business matching forum. The project can select a suitable partnership and roll out a sustainable social enterprise development through a phased approach beginning with a pilot in the most prepared MKBAs.

(4) Demonstrating market-based instruments

Accelerate the implementation of one pilot tested market-based instrument in a most promising MKBA, preferably payment for ecosystem services (PES), similar to what the project has demonstrated in providing 21-day Cash for Work (i.e., coastal clean-up and waste management) jobs to affected fishers in VIP MKBA in 2014 to enforce seasonal fishing closure of pelagic fish during its reproduction period. This PES scheme came in the form of compensations received by affected fishers for earnings lost during a period of fishery closure. The project needs to institute a long-term arrangement/partnership for PES scheme beyond the pilot stage. In support of this effort, the use of marine spatial planning (MSP) tool can be expanded to incorporate data generation of direct use values to serve as inputs to cost and benefit analysis (CBA). An expanded MSP tool offers greater opportunity for easier replication across LGUs due to less data requirements to assess the effectiveness and viability of PES instruments.

- (5) Make the following EAFM benchmark criteria as mandatory requirements for assessing LGUs' progress towards EAFM implementation since these criteria are basic activities of all coastal LGUs in the country as stipulated in Republic Act 8550 (Fisheries Code of 1998): These are:

Benchmark B3: *Fisheries monitoring and early fisheries management planning established.*

Under this aspect, it is important to have the “presence of fisheries baseline assessment” to establish the current and previous status of fishery resources. Issues have been identified and used for fisheries management options.

Benchmark B4: *Fisheries law enforcement team and program established.* To manage fishery resources, the “presence of enforcement team” that is well trained and equipped to do their job is very important.

Benchmark B7: *Fisheries registration and licensing system established.* This benchmark gives an updated information on all fishers and different fishing gears being used for effective formulation and implementation of fisheries laws and EAFM processes in MKBAs that cut across LGUs' politico-administrative boundaries.

- (6) Ensure standard application of the method of survey using fish visual census. Fish census survey is a skill. It may take time to master fish identification, particularly in the estimation of the total length of different reef fishes with varying body shapes and tail forms. These parameters have big implications in the computation of fish biomass, which is one of the key important indicators under Key Result A (i.e., 10 percent increase in fish biomass), as observed in fish biomass computed for SN MKBA.
- (7) For the next fisheries catch monitoring in 2017, it must coincide with the sampling months conducted during the benchmark data collection in 2013. This was the main reason of the negative percent change computed for DR MKBA (Key Result A: 10 percent increase in fish biomass). It is well recognized that there is a seasonality of fishing gears used in the country.
- (8) Emphasizing branding in all project activities
During the MPE period, majority of FGD participants were not familiar with ECOFISH Project or USAID as the agency providing support to the project activities. While some participants were aware or able to identify the activities conducted by the project, in many instances, specific interventions and activities were mistakenly identified as activities of other groups or projects. It is important that the project's good practices be properly recognized so that the participants themselves can duplicate it, or other potential adopters can seek guidance from ECOFISH Project.

I. EVALUATION PURPOSE AND QUESTIONS

I.1 EVALUATION PURPOSE

The midterm performance evaluation (MPE) of USAID/Philippines' **Ecosystems Improved for Sustainable Fisheries (ECOFISH) Project** made use of the results chain describing the Theory of Change (TOC) for the project's key strategies, as discussed below, to address three key evaluation objectives based on the Statement of Work (SOW) presented in **Annex I**:

1. To assess the evaluability of the 12 evaluation questions relating to final outcomes of the project by determining if these are empirically feasible and practically oriented;
2. To document progress of implementation progress in terms of achieving its key results, and analyze the factors and conditions that enhance or diminish achievement of these results; and,
3. To analyze the main challenges in implementing the relevant strategies, and the extent to which the project was able to address these challenges.

Following USAID's Evaluation Policy, the MPE also aimed to provide evidences and measures of achievements and challenges that the project stakeholders (i.e., USAID, Philippine government partners, Tetra Tech ARD as the contractor, and other implementing partners of the project, including civil society organizations [CSOs], academe and the private sector) could learn to improve effectiveness and achieve key objectives and targets of the project during the remaining two years of implementation.

In July 2015, USAID/Philippines contracted the conduct of this MPE to Sustainable Development Solutions (SDS), a Philippine development consulting firm, which assembled a team of experts¹ (referred here as the MPE team) for this engagement.

I.2 EVALUATION QUESTIONS

The TOC-based results chain for the project with the key strategies specified the 12 evaluation questions that were assessed during this MPE:

1. To what extent and under what conditions did an increased fish provision lead to better employment for fishing among households?
2. To what extent and under what conditions did a reduction in pressures lead to increases in

¹ SDS Mid-Term Performance Evaluation Team was composed of the Team Leader (Dr. Cleto L. Nañola, Jr.), Marine Biologist (Dr. Hilly Ann R. Quiaoit), Institutional Development Specialist (Ms. Milagros H. Tetangco), Economist (Mr. Virgilio E. Cabezon) and Statistician (Dr. Imelda G. Pagtolun-an). SDS President and Project Director (Mr. Renato S. Relampagos) and SDS Study Coordinator (Mr. Raymundo C. Lasam) provided overall guidance and administrative support, respectively. SDS in-house consultant (Luis P. Eleazar) assisted in the packaging and finalization of the Final Report. Nancy Villanueva-Ebuenga served as Contracting Officer's Representative from USAID/Philippines

fish stocks?

3. To what extent and under what conditions did increased enforcement effort and effectiveness lead to pressure reduction?
4. How and to what extent and under what conditions have public-private partnerships (PPPs) contributed to ecosystems approach to fisheries management (EAFM) outcomes?
5. To what extent and under what conditions are the enabling conditions in place to establish enterprises and for them to generate household income?
6. To what extent and under what conditions did income from enterprises lead to decrease in household fishing effort?
7. To what extent and under what conditions did the provinces facilitate inter-local government units (inter-LGU) fisheries management interventions?
8. To what extent and under what conditions did increased capacity of national government agencies (NGAs) lead to implementation of national and local policies?
9. To what extent and under what conditions did LGUs move from fisheries management to EAFM?
10. To what extent did LGU policies and regulations lead to right sizing of fishing effort at the LGU level?
11. To what extent did social capital and leadership catalyze/create movement of LGUs from startup fisheries management to EAFM?
12. To what extent and under what conditions did the studies inform development of EAFM?

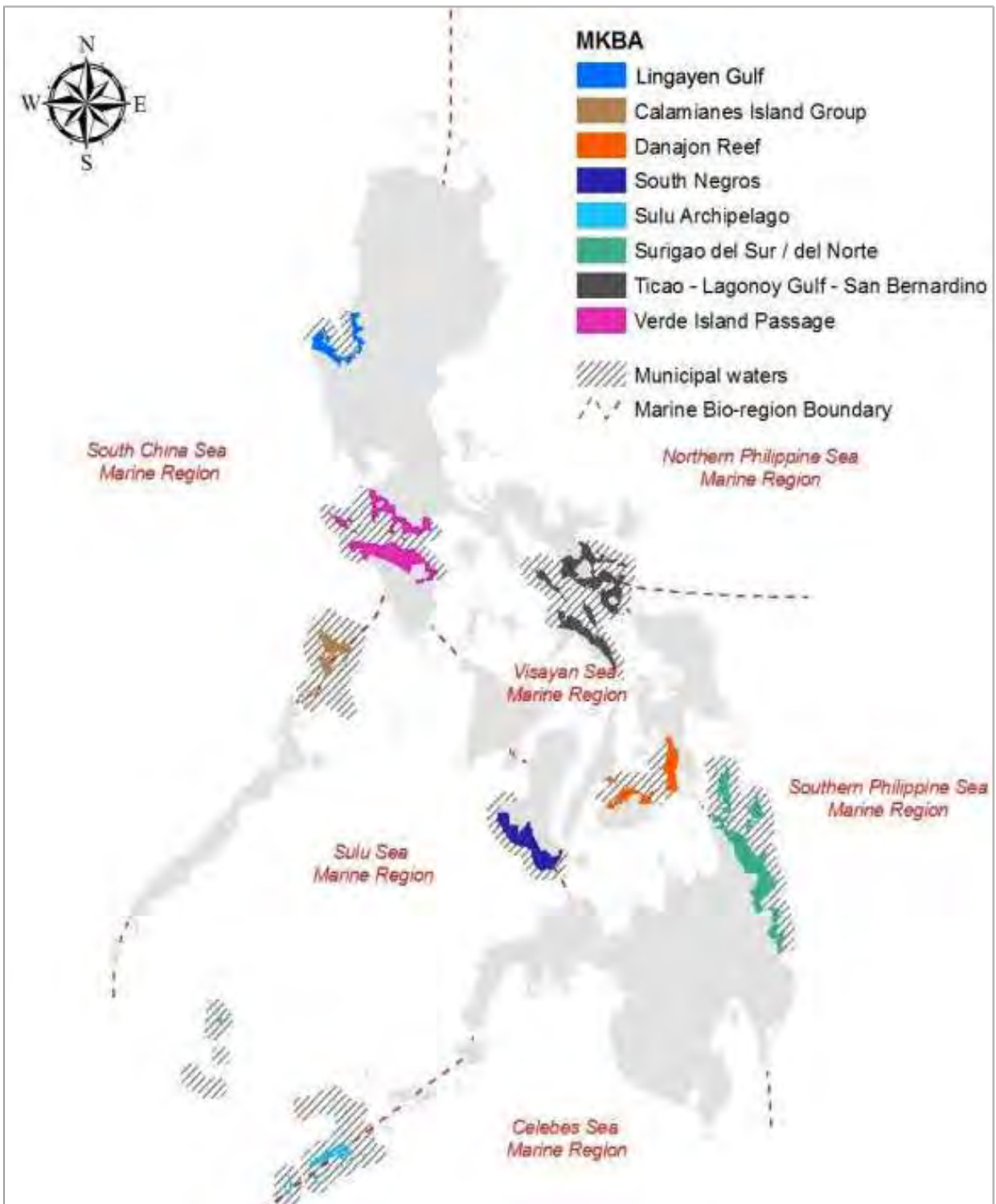
USAID/Philippines identified Evaluation Questions 9, 10 and 11 to be prioritized for assessing the progress of and analyzing the challenges of project implementation. This signified the important role of LGUs in establishing EAFM in project sites at the local level. These questions looked at the capacity building of LGUs and other stakeholders, mobilization of social capital and leadership, and enforcement of local policies and regulations to enable LGUs to shift from fisheries management to EAFM in project sites.

2. PROJECT BACKGROUND

2.1 PROJECT OBJECTIVES AND SITES

ECOFISH Project is a five-year initiative aimed at improving the management of valuable coastal and marine resources and associated ecosystems that support local economies. To achieve this goal, the project seeks to: (i) conserve biological diversity, (ii) enhance ecosystem productivity, and (iii) restore profitability of fisheries in project sites using EAFM as a foundation of improved social, economic and environmental benefits.

Tetra Tech ARD was contracted by USAID to implement the project in partnership with the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) and LGUs, covering eight (8) MKBAs in the Philippines: Calamianes Island Group (CIG), Lingayen Gulf (LG), Ticao Pass-Lagonoy Gulf-San Bernardo Strait (TP-LG-SBS), Danajon Reef (DR) South Negros (SN), Surigao del Sur and Surigao del Norte (SDN), Tawi-Tawi (TT), and Verde Island Passage (VIP) (**Figure 1**). This project started in June 2012 and is on its third year of operation at the time of evaluation.



.Figure 1: ECOFISH Project Sites

(Dashed lines represent the boundary of the marine biogeographic regions of the country.)

2.2 PROJECT KEY RESULTS AND DELIVERABLES

ECOFISH Project targeted six key results at the end of its implementation, as shown in **Table I**, which required seven tasks and the corresponding 13 deliverables to achieve these results. Specifically, **key results C to F** depended on certain tasks and deliverables, which altogether have been expected to lead to achievement of the **higher order key results A and B**.

Table I: Relationships Between Project Tasks, Deliverables and Key Results

Tasks	Deliverables	Results	
		Result A. An average of 10% increase in fisheries biomass across the eight MKBAs achieved Result B. A 10% increase in the number of people gaining employment or better employment from sustainable fisheries management from a baseline established at the start of the project achieved	Final Outcomes
Task 1. Establish and Implement a National Training Program Task 2. Provide Technical and Advisory Support at the National Level Task 3. Create Public-Private Partnerships	Deliverable 1. Policy Studies on EAFM, MPA, and Climate Change Completed Deliverable 2: Toolkits, Sourcebooks, and Case Studies on EAFM, MPA, and Climate Change Developed Deliverable 3: A National Database on EAFM Established Using the Annual Monitoring Data in the 8 MKBAs Deliverable 4: State of the Marine Resources Report Prepared Deliverable 5: National, Regional and Municipal EAFM Trainings Conducted Deliverable 6: Public-Private Partnerships Supporting ECOFISH Objectives Established	Result C. A national capacity development program to enhance the capacities of LGUs and relevant national agencies to apply EAFM established Result D. Eight public-private partnerships supporting the objectives of ECOFISH Project created and operating	Build Foundation
Task 4. Provide Technical and Advisory Support at the Local Level Task 5. Develop a Registry of Users of Municipal Fishing Waters Task 6. Identify and Implement Sustainable Financing Programs to Support EAFM Projects Task 7. Establish a Baseline on Coastal and Marine Resources and Relevant Socio-Economic Information, Develop and Apply Metrics on Monitoring	Deliverable 7: Bio-physical, Social and Economic Baseline Assessments of the 8 MKBAs Completed Deliverable 8: Scientific Studies on Select MKBA-Specific Fish Species Deliverable 9: MPA Network Analyses in the 8 MKBAs Deliverable 10: Fisheries Management Plans of Select Inter-LGU Alliances in the 8 MKBAs Deliverable 11: Registry of Users of Municipal Fishing Waters Established in Select Municipal LGUs in the 8 MKBAs Deliverable 12: Revenue Generation	Result E. 1.0 million hectares (ha) of municipal marine waters under improved management Result F. A core of 30 LGUs across the eight MKBAs with improved capacity for implementing EAFM	Implement Best Practices

Tasks	Deliverables	Results
EAFM Implementation in Target MKBAs	System for Fisheries Management Established and Effectively Implemented in Select LGUs Deliverable 13: Sustainable Financing Programs for EAFM Implemented in Select LGUs in the 8 MKBAs	

Source: ECOFISH MPE's SOW.

2.3 ALIGNMENT OF THE PROJECT OBJECTIVES AND ACTIVITIES TO GPH-US PRIORITIES

ECOFISH Project objectives and activities have been designed to support the current priorities of the Governments of the Philippines (GPH) and the United States (US), particularly USAID's Country Development Cooperation Strategy 2012-2016 (CDCS) for GPH with the overall goal of fostering "A More Stable, Prosperous, Well-Governed Nation." Under this strategy, the project is expected to contribute to achieving "Development Objective 3: Environmental Resilience Improved" particularly "Intermediate Result 3.2 Natural and Environmental Resource Management Improved" through strengthening national and local governance and management capacity for biodiversity conservation, ecosystem productivity enhancement, and profitability restoration of fisheries in project sites. It is also expected to contribute to achieving the priority objectives and actions set forth in the Philippine Development Plan 2011-2016 (PDP) particularly "Chapter 4: Competitive and Sustainable Agriculture and Fisheries, and Chapter 10: Protection, Conservation and Rehabilitation of Environment and Natural Resources.

At the national level, the project has focused its technical assistance to GPH's Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR) as the core partner in the implementation of different project activities. DA-BFAR has played a key role in the successful implementation of the project's precursor - the Fisheries Improved for Sustainable Harvest (FISH) Project - that initiated EAFM principles and practices in selected project sites. ECOFISH Project has built on FISH Project's initiatives to expand the application of EAFM in additional key marine biodiversity areas (MKBAs), and develop the crucial elements for scaling up EAFM through innovative approaches and partnerships nationwide. At the local and site levels, the project has worked in partnership with selected LGUs and civil society organizations (CSOs) to undertake the seven tasks and produce the 13 deliverables in order to achieve the six key results.

3. EVALUATION METHODS AND LIMITATIONS

3.1 EVALUATION FRAMEWORK

As noted earlier, the TOC for ECOFISH Project depicted in a results chain in **Figure 2** served as the main framework for this MPE. The results chain has identified what types of activities or interventions would lead to outputs and outcomes required as preconditions for achieving the higher-level project objectives (i.e., **key results A and B**). The relationships between the desired results and key activities/interventions as described in the results chain explained the change process envisaged by the project. Such relationships also served as the project's basis for formulating the 12 evaluation questions, which were the focus of this MPE to assess their evaluability (Evaluation Objective 1), as well as the progress (Evaluation Objective 2) and challenges (Evaluation Objective 3) of implementation at midterm. It has to be noted, however, that the TOC was developed when the project was already underway.

In assessing the evaluability of the 12 evaluation questions, the MPE used four guide questions:

1. Are the indicators appropriate (valid and logical measure) for the stated result?
2. Are there other indicators that the MPE team will recommend to aid in measuring a particular result?
3. Are there records (availability of data) in ECOFISH Project office and/or project partners to objectively substantiate the reporting of a particular indicator to USAID? If yes, enumerate the data sources and how often are the data being collected by the project.
4. Are the data being collected, analyzed, and reported by ECOFISH Project systematically organized and sufficient (quality of data) to inform objective decision-making for each of the indicators? If not, what improvements will the MPE team recommend to ECOFISH Project?

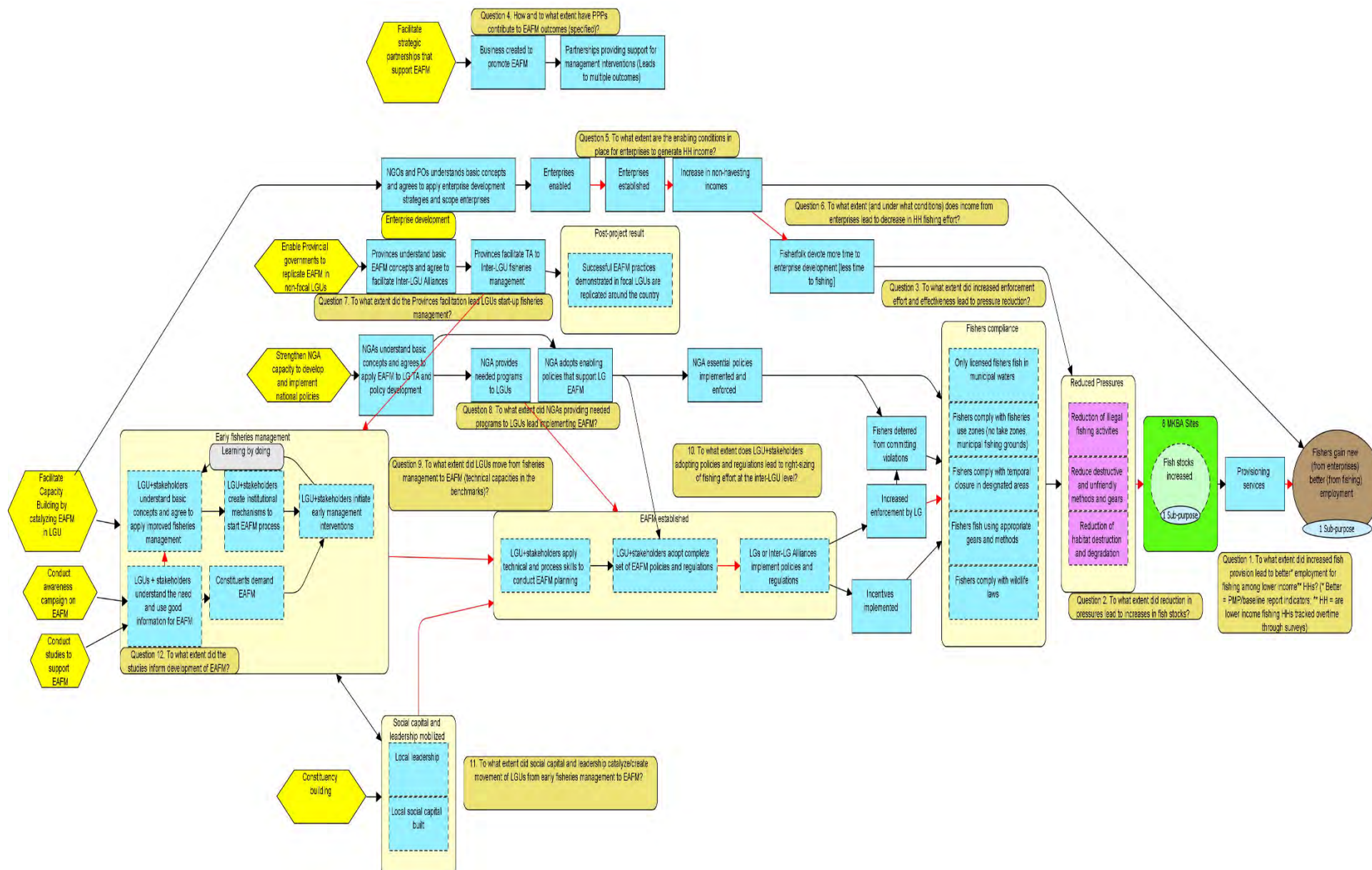


Figure 2: ECOFISH Project's Theory of Change

3.2 SITE SELECTION CRITERIA

Four MKBAs were pre-selected from among the eight ECOFISH Project sites based on the criteria (i.e., former FISH Project sites vs. new sites, resource rent condition, and extent of the project support on establishing social enterprises) stipulated in the SOW (**Annex I**):

- Danajon Reef (DR) in Bohol province,
- Verde Island Passage (VIP) in Batangas province,
- South Negros (SN) in Negros Oriental province, and
- Calamianes Group of Islands (CIG) in Palawan

In addition, the presence of operational marine protected area (MPA) with biophysical baseline information generated by the project at the start of implementation in 2013 was considered as a key criterion in site selection.

Based on these criteria, three municipalities with operational MPAs were selected per MKBA, except in South Negros MKBA where only the municipality of Siaton was included in the MPE due to the absence of extensive coral reefs in the region (**Table 2**). The geologic structure of the region with a very steep slope prevents the development of a coral reef area. Only the municipality of Siaton has a sloping bathymetry that allows reef development. Thus, the selected three barangays with operational MPAs were all situated in the municipality of Siaton.

Table 2: Four MKBAs and the Municipalities and Barangays with MPAs Included in the MPE

MKBA	Municipality	Barangays with MPAs
Verde Island Passage (VIP)	Calatagan	1. Bagong Silang
	Mabini	2. San Teodoro-Twin Rocks
	Tingloy	3. Sto. Tomas-Pulang Buli
Danajon Reef (DR)	Getafe	4. Nasingan
	Inabanga	5. Cuaming
	Tubigon	6. Pangapasan
Calamianes Island Group (CIG)	Coron	7. Siete Pecados
	Culion	8. Bugor
	Busuanga	9. Royukon-Sagrado
South Negros (SN)	Siaton	10. Tambobo
		11. Salag-Maloh
		12. Andulay Siit

3.3 DATA COLLECTION METHODS

A review of documents gathered during the inception phase guided the MPE team in choosing the most efficient and suitable methods of gathering information within the limited time allotted for the evaluation. Four methods were agreed with USAID/Philippines for the data collection: (1) key informant interview (KII), (2) focus group discussion (FGD), (3) secondary data review (SDR), and (4) documents verification on site (DVS). A desk review of secondary data was completed as an initial contractual deliverable (**Annex II**) which helped the team to identify data gaps for collection during the MPE to achieve the three evaluation objectives.

Upon the advice of USAID/Philippines, the MPE team utilized the results of an ecological survey conducted and reports prepared by ECOFISH Project for baseline information to compare the “before” and “midterm” conditions of the sites as a result of the project intervention. The team verified the information generated by the project during KIIs and FGDs, and documents (i.e., records of law enforcement patrolling, apprehension of lawbreakers, and many others) inspected at the Municipal and Barangay LGU levels.

Key Informant Interview (KII): This method involved a semi-structured one-on-one discussion between the interviewer and an informant who could provide detailed information and opinion based on his/her knowledge of a particular project issue. KII gathered qualitative information that could be narrated and cross-checked with quantitative data and FGD data as well as with the secondary data gathered and reviewed by the MPE team. The key informants included: (1) at the municipal level - Mayors, Administrators, Accountants, Agriculturists and/or Fisheries Technicians; Barangay Chairpersons; and Peoples Organization (PO) Presidents; (2) at the provincial level - Governors or Vice-Governors, Provincial Agriculturists and/or Fisheries Technicians, and Provincial BFAR Director; and (3) at the national level - BFAR Director. ECOFISH Project’s Chief of Party and field officers were also included in KIIs.

Focus Group Discussion (FGD): The guide questions for FGD were designed to elicit information, experiences and opinions on areas and topics specific to the project activities and interventions, including development processes applied in the project sites. Additionally, the questions were aimed to gather information that supports the validity of outputs and outcomes resulting from the project activities or interventions, and provide inputs to the overall project assessment, including the review of the evaluability of the 12 evaluation questions. Annex III presents the KII and FGD guide questions and data entry templates.

Secondary Data Review (SDR): This method covered all ECOFISH Project reports, such as; the general and annual work plans; performance monitoring plan; baseline assessment; and quarterly, annual and midterm progress reports provided by USAID/Philippines to the MPE team. The purpose of SDR was to investigate the appropriateness of indicators applied by the project to measure the desired results, the availability and quality of data for such indicators, and the other indicators and/or methods of data analysis that the project can apply to address each of the 12 evaluation questions. Section 4 of Annex II provides a summary of SDR results.

Documents Verification On Site (DVS): This method involved on site ocular observations, and collection and verification of documents gathered from ECOFISH Project office and LGUs in the field. The documents were not limited to the description of changes in MPAs but included fisheries-related ordinances and other instruments as benchmark criteria for EAFM. Some examples of these instruments include: CRM/MPA management plans; information, education and communication (IEC) and law enforcement plans; memorandum of agreements (MOAs); physical status of MPAs and many others. It also included documentation of the progress or status of the project’s ongoing/established social enterprises.

3.4 DATA ANALYSIS METHODS

The KII and FGD field notes and documentations were translated from local dialect to English to allow for uniformity in data processing, analysis and interpretation. The proceedings and information gathered were coded and analyzed using ordinary frequencies of responses and percentages in Excel sheet. From responses to each question, common themes were identified, codes were developed, and responses were entered in appropriate assigned codes.

3.5 LIMITATIONS OF THE EVALUATION

The data gathering methods allowed the MPE team to obtain mostly qualitative data from the project stakeholders. Hence, data analysis was limited to establishing trends due to statistical limitations (i.e., difficulty to find out the causality between dependent and independent variables in each of the evaluation questions). Trends were established using the qualitative data gathered from secondary sources, KII and FGD; and records checked and verified at the project office and on the field. Available performance information at the project office during the MPE also offered limited data to measure all outcomes set forth in the TOC, including the data required to assess the evaluability of the 12 evaluation questions.

KII. The MPE team had problems with non-availability of some informants during the actual interview schedule despite prior agreements. The two common reasons cited were: (1) more pressing matters that needed priority attention, such as, the visits of FAO representatives with existing projects in the municipality of Coron (i.e., CIG MKBA) and representatives of the “Tzu Chi Foundation” from Taiwan in the municipality of Inabanga (i.e., DR MKBA); and (2) conflict with municipal or barangay activities. This resulted in either cancellation or reduction in time of actual interviews.

FGD. Of the 12 FGD sessions planned for *Bantay Dagat* groups, only nine (9) sessions were conducted due to the absence of these groups in two barangays in the municipality of Siaton (i.e., SN MKBA), and in the municipality of Culion (i.e., CIG MKBA).

4. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

4.1 FINDINGS

The findings and recommendations presented below are structured according to the three Evaluation Objectives. This section ends with the general conclusions and recommendations drawn from key findings to contribute to the achievement of its targeted key results and generation of information to answer the 12 evaluation questions by end of the project life.

Objective 1: Evaluability of the 12 Evaluation Questions

To assess the evaluability of the 12 evaluation questions relating to the final outcomes of ECOFISH Project by determining if these are empirically feasible and practically oriented

The evaluability of each question was assessed through identification of key results that can be supported by indicators that satisfy the following criteria: (i) indicator appropriateness, (ii) data availability and (iii) data quality. If all the criteria were met, the answer to the evaluability of the question is “YES”. If some indicators have not been addressed nor observed in the field at midterm, but can be achieved by the end-of-the project (EOP), the answer to the evaluability of the question is “MAYBE”. If none of the criteria can be achieved by EOP, the answer is “NO”.

As shown in **Table 3**, six (6) of the 12 evaluation questions (EQ# 2, 3, 7, 8, 9 and 12) set forth in the TOC were answered by “YES”, meaning that all indicators linked to these questions have been satisfied, or these questions are already evaluable or can be answered at midterm. The other six (6) questions (EQ#1, 4, 5, 6, 10, and 11) were answered by “MAYBE”, indicating that some indicators have not been met at midpoint. However, the project has started to implement activities and collect information that would make these questions answerable by “YES” by EOP. None of the evaluation questions were answered by “NO”, suggesting that all evaluation questions are on track to be answered by EOP. In other words, all indicators are appropriate and the evaluation questions can be answered by EOP.

Table 3: Evaluability of the 12 Evaluation Questions

Evaluation Questions	Evaluability	MPE Findings
Evaluation Questions: 2, 3, 7, 8, 9 and 12 (6)	Yes	At midterm, 6 Evaluation Questions are already “evaluable” or can be answered.
Evaluation Questions: 1, 4, 5, 6, 10 and 11 (6)	Maybe	ECOFISH Project is currently implementing activities that will make these Evaluation Questions “evaluable” by EOP.
None	No	No Evaluation Question is considered “unevaluable” by EOP.

To demonstrate the assessment results of the evaluability of the 12 evaluation questions, the findings for Evaluation Question 2 for “YES” answer and Evaluation Question 3 for “MAYBE” answer are briefly described below.

For Evaluation Question 2: “To what extent and under what conditions did a reduction in pressures lead to increases in fish stocks?” This question was evaluated based on two key results identified by the project: (i) reduction in fishing pressure and (ii) increase in fish stocks. Each of the indicators of these key results was assessed by the MPE team based on the criteria listed above and the guide questions outlined in the Evaluation Methods and Limitations section.

In measuring the reduction in fishing pressures, the project used two indicators: number of identified violators in municipal fishing ground (MFG), and number of destructive and unfriendly methods and gears by type used within MFG, which the MPE team found appropriate within the Philippine context. Presently, data for the first indicator are available with LGUs particularly with local agriculturists’ offices, as well as with Philippine National Police Maritime Groups

(PNP-MG) and *Bantay Dagat* groups. Data for the second indicator are also available with agriculturists' offices, but only on legal fishing methods and gears. The list of destructive and unfriendly methods and gears still needs to be provided for the local enforcers to identify and confiscate. Data quality for these two indicators appeared to be adequate with a baseline data on fishery law enforcement capacity and response capabilities (established in Year 2), and intensive monitoring on fishery that provides records on the number of different gear types including dynamite fishing, use of toxic substances, and compressor fishing are in place.

For Evaluation Question 1: “To what extent and under what conditions did an increased fish provision lead to better employment for fishing households?” This question was evaluated based on two key results: (i) fish provision, and (ii) better employment. In the project design, “better employment” can only be achieved with operational and profitable enterprises, or by shifting to jobs that are not depleting fishery resources, e.g. ecotourism and small and medium-sized enterprises (SMEs) in growth centers near MKBAs. However, the key drivers that will lead to “better employment” have not yet been fully instituted: (i) enabling environment for enterprise development has been partially established, and (ii) critical elements have remained inadequate (e.g., capital, technology and market).

Annex IV shows the evaluability of the 12 evaluation questions based on the assessment made by the MPE team. **Figure 3** shows key constraints and main challenges to achieve key results.

Objective 2: Implementation Progress and Factors Affecting Results Achievement

To document the progress of implementation progress in terms of achieving its key results, and analyze the factors and conditions that enhance or diminish the achievement of these results.

(I) Progress on Achieving Key Results

Key Result A: An average of 10% increase in fisheries biomass across the eight MKBAs.

Based on data gathered, ECOFISH Project was close to meeting its midterm target (**Table 4**), with positive change in fish biomass, both inside and outside MPA, in VIP MKBA computed at about 1.9 percent at midterm (2015) compared to the baseline estimate (2013). The MPE team confirmed this project report, and also computed the change in fish biomass inside MPA only in VIP MKBA at 7.3 percent at midterm using the methodology developed by FISH Project (2004-2011). In SN MKBA, the team also confirmed the report on negative change in fish biomass computed at -28.0 percent for both inside and outside MPA, -0.9 percent for inside MPA only. These indicate that the project initiatives in VIP MKBA, particularly the enforcement of seasonal closure policy for pelagic species, have produced positive results. In SN MKBA, the negative change in fish biomass could be attributed partly to the temporary suspension of the inter-LGU collaboration that lessened fisheries law enforcement effort, and partly to the technical skills of field researches to apply the standard method fish visual census. In DR MKBA, the reported negative change in fish catch per person (measured in terms of catch per unit effort, CPUE) was computed at -35.8 percent.

Table 4: Achievement of Key Result A at Midterm

Indicator	Target at LOP	Midterm Report by ECOFISH Project	MPE Findings
Fish biomass inside MPAs	10% increase	Fish biomass (mt/km²) from fish visual census (both inside and outside MPA) VIP MKBA: 2013 = 43.04mt/km² 2015 = 43.87mt/km² Change = 1.89%	For VIP MKBA (ECOFISH data computed by MPE team): • 1.9% inside & outside MPA • 7.3% inside MPA only For SN MKBA (ECOFISH data): • -28% inside % outside MPA • -0.9% inside MPA only
Fish catch per person (Catch Per Unit Effort, kg/day)	10% increase	DR MKBA (without ring-net): 2013 (CPUE=6.39) 2015 (CPUE=4.10) Change = -35.8%	Increasing catch is perceived based on FGDs: • SN MKBA = 3.6% • DR MKBA = 6.9% • VIP MKBA = 17.4% • CIG MKBA = 0%

Summary of Findings

Ecofish deliverables

- 5. EAFM trainings (all levels)
- 6. PPPs supporting Ecofish
- 12. Revenue generation system established
- 13. Sustainable financing for EAFM

Evaluation Questions

- 1. Fish provision → "better employment"
- 4. PPPs → EAFM outcomes
- 5. Enterprises → ↑ HH income
- 6. Income from enterprise → ↓ HH fishing effort
- 10. LGU+stake holders → right sizing fishing effort
- 11. Social capital and leadership → early fisheries mgt to EAFM

Currently the observed constraints

Main challenge

If the above deliverables will be delivered at the EOP, then all the MAYBES will become YES



Figure 3: Theory of Change and its Relation to the 12 Evaluation Questions in Achieving Results A and B

FGD data showed that 3.6 to 17 percent of the participants perceived an increase in fish catch for VIP, DR and SN MKBAs (see **Annex VI** for detailed FGD results). This perceived positive change in fish catch could be attributed to the increasing level of community awareness on the policies implemented by LGUs, and the decreasing use of destructive methods and gears as expressed by 48.3 to 67.9 percent and 39.1 to 82.1 percent, respectively, of the participants.

Some discrepancies were observed in reported fish catch rates, and the presence and absence of monitored fishing gears (e.g. DR MKBA). These discrepancies could have originated from the differences in the date/season between the conduct of baseline assessment and the subsequent monitoring event. Interview with the ECOFISH Project team confirmed that the monitoring event for Year 3 was done in advance to ensure that the MPE could be provided with information. With known seasonality of fishing gears used in the country, such differences in monitoring dates could lead to measurement bias. Thus, the MPE team strongly suggests for scheduling of final monitoring (Year 5 in 2017) to coincide with the 2013 data collection to allow comparison of data sets.

Key Result B: A 10% increase in the number of people gaining employment or better employment from sustainable fisheries management from a baseline established at the start of the project. The project collected data for eight MKBAs from the survey of 5,000 households conducted in 2013 and 2015, but only data for CIG and SN MKBAs were made available to the MPE team for this Key Result. Data for other MKBAs at midterm have yet to be analyzed by the project to be ready for comparison with baseline data. Budget and time constraints, however, prevented the team to conduct an independent household survey. To assess the achievement on this Key Result, the team reviewed data for proxy indicators being monitored by the project to measure the improvement in employment of fishing households in CIG and SN MKBAs and FGD results to find out participants' views on how their lives have changed with the project interventions.

FGD results revealed that participants have varying degrees of perception when asked on whether their economic status/quality of life have changed with the project interventions (**Table 5**). About 48, 36, 13 and 3 percent of participants in DR, SN, VISIP and CIG MKBAs, respectively, reported positive change in economic status/quality of life (**Annex VI**), which could be attributed to the improved law enforcement and partnership building for the development of enterprises or alternative livelihoods. For them, "better quality of life" meant being able to send children to school, and provide for daily needs of family members. Some also mentioned the ability to buy basic home appliances, such as, electric fan, radio and/or television. However, the project reported that enterprise development has just begun, mainly in social and capacity building for people's organizations (POs) identified to operate the enterprises (e.g., fiberglass boat making).

Two types of partnerships were established by the project to create employment and support livelihood, such as: (1) three (3) national and four (4) MKBA-specific strategic partnerships, and (2) 82 community partnerships. Examples of these partnerships are: (i) Cash for Work (i.e., coastal clean-up and waste management) program with the Department of Social Welfare and Development (DSWD) in VIP MKBA, generating employment for 1,511 affected fish workers in four municipalities (i.e., Balayan, Calaca, Calatagan and Lemery) for 21 days of closed season of

Balayan Bay in 2014; and (ii) Fiberglass Boat Distribution cum Boat Making Training with World Wildlife Fund (WWF) and Polymer Products Philippines, Inc. (PPPI) in CIG MKBA, benefiting 452 fishers affected by Typhoon Yolanda from over 20 fishing communities in 2014-2015. They were also organized into a PO and trained to maintain and repair the boats, and start up a fiberglass boat making enterprise.

Table 5: Achievement of Key Result B at Midterm

Indicator	Target at LOP	Midterm Report by ECOFISH	MPE Findings
% of number of people gaining employment or better employment from sustainable fisheries management	10% increase	• Increase in net profit: 58% (SN), 51% (CIG) • Increase in expenditures: 37% (SN), 89% (CIG) • Increase in seafood diet: 18% (SN), 89% (CIG) • Increase in enforcement: 40% (SN), 10% (CIG) • Increase in MPA awareness and support: 15% (SN), 44% (CIG) • Increase in environment perception: 79% (SN), 86% (CIG)	Perceived better quality of life based on FGD participants: • 35% (10/28) SN • 48% (14/29) DR • 13% (3/23) VIP • 3.2% (1/31) CIG Partnership building created employment: • Cash for Work program with DSWD created jobs for 1,151 fish workers affected by closed season in VIP MKBA in 2014

ECOFISH Project has also monitored proxy indicators directly linked to job creation: change in net profit from fishing, change in household expenditures, and change in consumption of seafood diet.² Based on available project data, the number of people with increased net profit from fishing in CIG and SN MKBAs stood 51 and 58 percent, respectively. The number of people reporting higher expenditures also increased by about 89 and 37 percent in the same sites, respectively. Similarly, the number of people eating seafood more regularly increased by 89 percent in CIG MKBA and 18 percent in SN MKBA. Two factors that likely influenced the increase in net fishing profit include: increase in fish catch and better fish gate prices received. The rise in fish catch in the sites could be attributed to fishers' support to conservation effort as evidenced by the growing number of people who perceived: (i) improvement in law enforcement (40 percent in SN MKBA and 10 percent in CIG MKBA); (ii) increase in awareness and support for MPAs (44 percent in CIG MKBA and 15 percent in SN MKBA); and improvement in environmental quality (86 percent in CIG MKBA and 79 percent in SN MKBA). In addition, the project has included another indicator, "enterprise development" that can enhance the achievement of this Key Result to supplement fishers' income during closed season as in VIP MKBA, as discussed above.

Key Result C: Establishment of a national capacity development program to enhance the capacities of LGUs and relevant national agencies to apply EAFM. Targets for two of four indicators (i.e., number of persons trained, and number of person hours trained) of this Key Result were already exceeded at midterm (**Table 6**). The other two indicators also posted

² The proxy indicators included: (i) change in net profit from fishing; (ii) change in expenditure pattern; and (iii) change in consumption of seafood diet. The variables that could likely influence the change in net profit were also monitored: (i) number of people with perceived improvement in enforcement; (ii) MPA awareness and support; and (iii) environmental quality. In this context, "better employment" can be associated with higher income/net profit, which in turn drives people's propensity to spend on quality attributes of life (i.e. increased intake of protein food and improved assets).

high achievements at this period: 56.7 percent for number of EAFM training courses conducted and 87.5 percent for number of policies formulated on EAFM, MPA and climate change adaptation (CCA). The MPE team verified a substantive part of these achievements in the field. These achievements could be attributed to the high level of stakeholders' awareness on the principles of conservation, protection and sustainable use of marine resources because some municipalities or provinces in MKBA sites have been participants in similar interventions in the past. For instance, DR MKBA received support from USAID in the mid-1990s, and CIG and TT MKBAs in the early 2000s. This observation hints that a long-term consistent support is an important factor to achieving a certain level of institutional maturity that can lead to the development and enforcement of policies on EAFM.

Table 6: Achievement of Key Result C at Midterm

Indicator	Target at LOP	Midterm Report by ECOFISH	MPE Findings
Number of policies on EAFM, MPA and CCA formulated	8	7 (87.5%)	6/7 were verified on field
Number of EAFM training courses conducted	120	68 (56.7%)	13/17 were verified on field
Number of persons trained in EAFM, MPA and CCA	1,800	3,248 (180.4%)	Evidence of people trained at the Municipal LGU level. Participation of barangays varies across the sample sites and dependent of the types of training that are implemented by LGUs
Number of person hours trained	24,000	64,036 (266.8%)	Attendance sheets were verified at the LGU

Six (6) of the seven (7) policy studies completed by the project were verified by the MPE team:

1. Study to revitalize fishing registration including gear licensing (National Program for Municipal Fisher folk Registration, or FishR);
2. Registration and color coding of boats (National Municipal Fishing Boat Registration System, or BoatR);
3. Study on the seasonal closure for small pelagics in VIP MKBA;
4. Fish catch monitoring;
5. Study on the feasibility of eco-tourism program in Tubigon, Bohol; and
6. Value-chain analysis in eight sites in VIP MKBA.

These studies produced important outcomes, of which the three most well-known include:

- **FishR** and **BoatR** are being successfully implemented in four (4) MKBAs covered by this MPE. BFAR is now leading the implementation of these two policies at the national level. These two policies are important for accounting of fishery force in relation to fish harvest

which has strong implications for fishers at the local level, and policymakers at the national level. ECOFISH Project provided technical assistance in the development of FishR and BoatR - two of the most important innovations rolled-out to reduce fishing pressures across the country. More importantly, FishR and BoatR enabled LGUs to carry out fisher, boat and gear registrations, which were unimplemented provisions of the Fisheries Code since its enactment into law in 1998. These policies applied to all LGUs nationwide, not just in ECOFISH Project sites.

- The **TV White Space Supported Fisher Registration in DR MKBA** provided internet connectivity in six (6) remote coastal municipalities in Bohol province in support of BFAR's FishR program. In March 2015, ECOFISH Project received the Public-Private Partnership (P3) Impact Award in US for advancing innovation to promote sustainable fishing and save lives, particularly in facilitating registration of 3,663 fishers in DR MKBA. In 2013, this facility also served as a hub to facilitate communications between LGUs and relief workers for delivering assistance to Bohol earthquake-affected households in coastal municipalities when all communication networks were inoperative.
- The **study on the seasonal closure for small pelagics** was used as the basis for a policy decision to implement the closed season in Balayan Bay, Batangas province. This is expected to result in increased harvest of this species in the near future because of the improved condition for fishes to spawn. A continuing enforcement of the closed season policy can eventually help in the recovery of fish stock in VIP MKBA.

Under this Key Result, the project also provided technical assistance to BFAR and LGUs in the following aspects: (i) technical support for development and drafting of a Research Agenda for National Fisheries Research and Development Institute (NFRDI) including development of a standard training curriculum for their National Stock Assessment Program (NSAP), (ii) technical and legal support provided to the “hulbot-hulbot” case, and (iii) technical support and served as convenor to a series of forums to provide science-based information for effective and efficient recovery and rehabilitation of Bohol earthquake-affected LGUs and communities.

FGD and KII respondents identified capacity building as the most important ECOFISH Project interventions. Of the 17 training courses provided, 13 were identified to have contributed in increasing their capacity: law enforcement; FishR and BoatR; boundary delineation and CRM; MPA management; simple accounting; project proposal development; business planning; marine spatial planning; fish catch monitoring; financial planning; fiberglass boat building; and seaweed culture.

Key Result D: Eight PPP supporting the objectives of ECOFISH Project created and operating. At midterm, seven (7) PPPs were established out of LOP target of eight (8) PPPs, representing 88 percent accomplishment (**Table 7**). Five PPPs directly linked to conservation measures were satisfactorily completed, the most successful of which is BFAR's national FishR implementation in collaboration with Microsoft Philippines, and 700 Dedicated Alert Lines for Ocean Biodiversity (700 Daloy) with SMART Communications as piloted in DR and TT MBKAs, respectively. FishR has facilitated valuable compliance in the registration of fishers in DR MKBA, as noted above. Based on the project report, FishR recorded over 1.5 million registrants or roughly three-quarters of the total number of fishers nationwide. Moreover, 700 Daloy improved information flows between the public, police, and other enforcement agencies to

address marine wildlife violations in TT MKBA, resulting in over 3,000 reports and 3 major cases being filed for the period May to December 2014. In support of FishR, the “TV White Space” in partnership with Department of Science and Technology - Information Communication Technology Office (DOST-ICTO), BFAR, Bohol Provincial LGU, and Microsoft Philippines, exemplified a major success in PPP initiative of the project.

Table 7: Achievement of Key Result D at Midterm

Indicator	Target at LOP	Midterm Report by ECOFISH	MPE Findings
Number of strategic partnerships formally established and operating	8	7 (88%) 5 completed	7 were verified on field (5 on conservation and 2 on social enterprises)
Number of community partnerships (CPs) actively engaged and mobilized	100	82 (82%)	82 people's organization (POs) identified and trained. Documented in MIS database of ECOFISH

Two PPPs on social enterprise building are still in the preparatory stage. The partnership with Asian Institute of Management (AIM) focuses on enhancing entrepreneurial skills of fishers to capacitate them in developing project feasibility studies and business plans. AIM and ECOFISH Project have committed technical assistance in linking with organizations that can provide the funds to support social enterprises. In addition, the project partnered with WWF and PPPI to support the recovery of Typhoon Yolanda-affected fishers in Palawan Island by providing boats and training on fiberglass boat making to resume their fishing activity, as discussed earlier. The resulting local organization - Fiberglass Boat Builders Association (FBBA) - has planned to set up a fiberglass boat making enterprise upon acquiring the essential raw materials, molding facility and working capital.

Eighty-two (82) of LOP target of 100 community partnerships (CPs) have been established at midterm. The CPs included the training and institutional strengthening of existing POs. These POs were considered as effective agents of conducting community-based enforcement of fisheries laws and ordinances, and implementing livelihood projects. The CPs were relatively successful in enforcing the seasonal closure activity in VIP MKBA, in conjunction with accessing funding support for job creation for affected fishers through DSWD's anti-poverty program locally called “*Pantawid Pamilyang Pilipino Program*” to implement the Cash for Work (i.e., coastal clean-up and waste management) at the time that fishing was not allowed during the 2014 fishing closure.

Key Result E: One million hectares (ha) of municipal marine waters under improved management. The project planned to establish and manage networks of MPAs within each MKBA at least at the Level 2 based on EAFM benchmark criteria developed by the project in order to achieve this Key Result. At Level 2, adjacent waters between MPAs within MKBA would be included in enforcement and conservation initiatives.

At midterm, the project achieved about 55 percent of targeted 1.0 million ha of municipal waters under improved management, and 94 percent of targeted 320 ha under MPA networks established (**Table 8**). However, the inter-LGU enforcement cooperation established in SN MKBA in 2007 involving three (3) municipalities with the municipality of Bayawan acting as head

of the management body has temporarily stopped its operations. In effect, its total area of 214,183 ha was not included in the MPE computations of municipal waters under improved management. With this deduction, the project achievement was only 33.5 percent. During the feed backing activity with the project stakeholders, the LGU of Bayawan has committed to resume management of the network of MPAs. Currently, LGU members of this cooperation are negotiating for a new Memorandum of Agreement (MOA) to expand membership with inclusion of other LGUs in SN MKBA and clarify financial counterparts for the management of municipal waters. ECOFISH Project has been instrumental in the drafting and review of this new MOA. The reactivation of this MPA network is expected to result in bigger coverage in terms of ha of municipal waters under improved management than the current size.

Table 8: Achievement of Key Result E at Midterm

Indicator	Target at LOP	Midterm Report by ECOFISH	MPE Findings
1 million ha of municipal waters under improved management	1,000,000 ha	549,044 ha (54.9%)	334,861 ha. For now, less 214,183 ha in SN MKBA due to temporary suspension of inter-LGU management body operations.
Number of ha of MPA and network of MPAs established (cumulative)	320 ha	300 ha (93.8%)	300 ha (San Miguel MPA in the municipality of Linapacan, CIG MKBA)

Key Result F: A core of 30 LGUs across the eight MKBAs with improved capacity for implementing ecosystem approaches to fisheries management. ECOFISH Project was very close to meeting its midterm target relative to the two indicators (i.e., number of inter-LGU/MKBA fisheries management plans developed, and number of LGUs that have achieved EAFM benchmark Level 2 or higher) under this Key Result (**Table 9**). Three (3) inter-LGU/MKBA fisheries management plans were developed, representing 37.5 percent of targeted eight (8) plans, and two of these (i.e., for DR and SN MKBAs) were verified by the MPE team in the field. These plans have incorporated EAFM principles and processes, and aligned local development and conservation priorities of all cooperating LGUs towards a shared agenda to enable them to shift from fisheries management to EAFM.

Table 9: Achievement of Key Result F at Midterm

Indicator	Target at LOP	Midterm Report by ECOFISH	MPE Findings
Number of inter-LGU/MKBA fisheries management plans developed	8	3 (37.5%)	2 management plans verified on field (SN and DR MKBAs)
Number of LGUs that have achieved EAFM benchmark Level 2 or higher	30	19 (63.3%) Evidences claimed currently being verified by ECOFISH Project	Of 19 LGUs, 14 verified on field by the MPE team. So far, field results indicated that not all supporting documents are available or in existence. 5 LGUs belong to two MKBAs not covered by the MPE (i.e., LG and SDN)

The project reported a 63.3 percent accomplishment on the number of LGUs that have achieved EAFM benchmark criteria³ Level 2 or higher at midterm. Fourteen (14) of 19 LGUs that have reached Level 2 were verified by the MPE team in the field. Based on secondary data reviewed and results of the MPE conducted, some criteria claimed by some LGUs were not supported by the available documents. The MPE team suggested additional qualifiers to objectively assess the EAFM level of four MKBAs under review by using appropriate indicators of each EAFM criterion, and assigning scores based on data reviewed and field observations. Overall scores showed that VIP MKBA reached EAFM Level 2 while the other three MKBAs (i.e., CIG, DR and SN) remained in Level 1 (**Annex VII**).

A critical factor that drives LGUs to implement EAFM is the availability of funds to roll out the activities supportive of EAFM. The project has developed three (3) market-based instruments (MBIs) for this purpose: (i) payment for ecosystem services (PES), (ii) coastal adaptation fund, and (iii) trust fund. All of these are in the exploratory or initial stages of development and piloting. For example, the trust fund concept of having a pooled budget, where LGUs can draw funds for specific conservation measures, will have to go through the process of the budgeting cycle of the Department of Budget and Management (DBM), and endorsement by Congress. While the concept is noble, the earliest date that this can be taken up by Congress will most likely be in the year 2016 and its implementation, assuming that it is favorably endorsed by the Department of the Interior and Local Government (DILG), will take place at the earliest in 2017.

But, these are not the only LGUs being assessed by the project as stated in its midterm report. Currently, the project is assisting more than 70 LGUs to improve their capacity for EAFM implementation. The additional LGUs come from replication sites (i.e. other LGUs within MKBAs through a broader governance at the Provincial LGU or inter-LGU Alliance level). Hence, achieving the target under this Key Result is not limited to LGUs mentioned earlier.

(2) Progress on Achieving the Three Priority Evaluation Questions

The MPE team assessed the EAFM level of each LGU in four MKBAs under review using the project's 17 benchmark criteria to reach Level 2 - the threshold regarded by the project for declaring an LGU, like an MKBA, to have achieved the EAFM status. An LGU has to obtain a score 11 of 17 benchmark criteria to reach Level 2.

Evaluation Question 9: To what extent and under what conditions did LGUs move from fisheries management to EAFM? The baseline self-assessment conducted by LGUs in 2013 indicated that 12 LGUs scored at least 11 points (or satisfied the benchmark criteria).

³ The 17 EAFM benchmark criteria include: (1) Ecosystem boundaries established, (2) Coastal marine habitat monitoring and management planning established, (3) Fisheries monitoring and early fisheries management planning established, (4) Fisheries law enforcement team and program established, (5) Comprehensive fisheries management plan conducted and regularly updated, (6) Fisheries management office established and operational, (7) Fisheries registration and licensing system established, (8) Network of MPAs established, (9) Fisheries use zoning plan established, (10) Local constituencies for fisheries management organized and actively involved, (11) Multi-institutional collaboration on coastal and fisheries resources management (CFRM) established, (12) Species-specific management measures established, (13) Gear-specific management measures established, (14) Mangrove management area established, (15) Seagrass management area established, (16) Revenue generation established, and (17) Coastal environment-friendly enterprises established.

Their numbers increased to 19 LGU at midterm, indicating that an additional seven (7) LGUs have progressed towards EAFM Level 2 in 2015, as shown in **Figure 4** with their distribution across the MKBAs. Among the four MKBAs evaluated, the project reported that no LGU in CIG MKBA has reached a score of 11 points. The municipality of Coron in CIG MKBA scored the nearest at 8 of 17 benchmark criteria.

The 19 LGUs that managed to achieve EAFM Level 2 generally shared the following capacities: (i) have legal instruments that established ecosystem boundaries; (ii) have comprehensive fisheries management plans with funding support for implementation; (iii) have established inter-LGUs partnerships through their Municipal Agricultural Offices (MAOs); (iv) have legal instruments that established fisheries use zoning plan; (v) have local constituencies involved in the development, implementation and/or monitoring of fisheries management; (vi) have developed, enforced and monitored species-specific management measures, such as the seasonal closure for pelagic fish in VIP MBKA; (vii) have established and enforced resource generation measures; and (viii) have expanded successful coastal environment-friendly enterprises, such as the Ecolodge managed by PO in VIP MKBA. Securing sustainable funding support for law enforcement and implementation of comprehensive fisheries management plans, and the establishment and operation of inter-LGU partnerships for managing network of MPAs have been the main constraints of other LGUs that remained in EAFM Level 1.

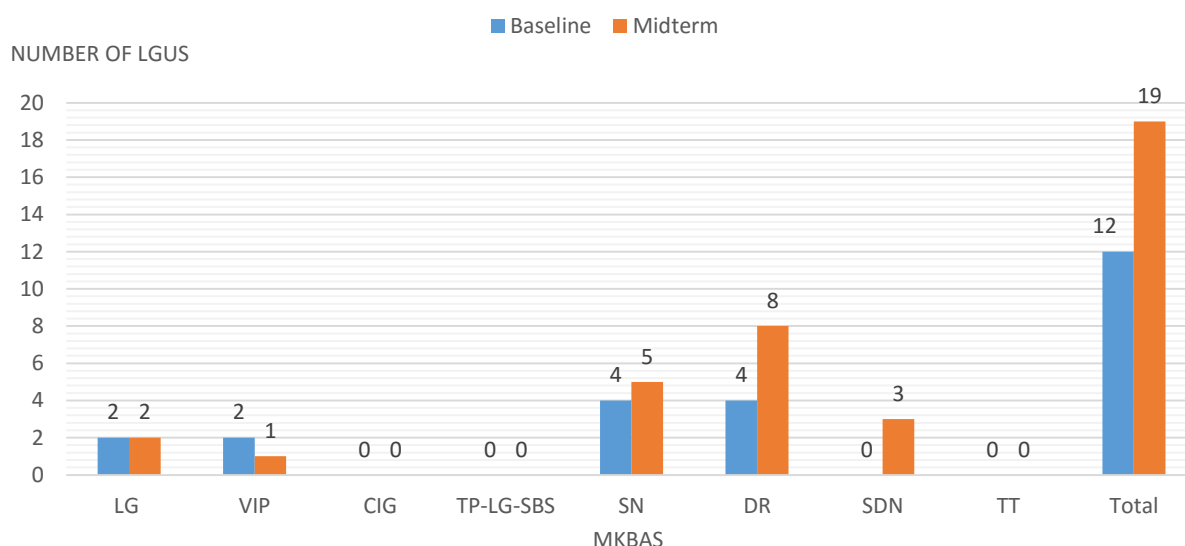


Figure 4: Results of LGUs' EAFM Self-Assessments at Baseline (2013) and Midterm (2015)

In addition, LGUs that reached the threshold for EAFM Level 2 status faster than others have coastal communities with high level of awareness on fisheries management, which could be attributed to similar technical assistance they received in the past, either from government or NGOs, except for TT MKBA. This latter MKBA was a recipient of USAID/Philippines' FISH Project in 2004-2011.

The MPE team found that supporting documents for some EAFM benchmark criteria were not available during the field verification. Hence, it was not possible to recheck the accuracy and consistency in the application of the benchmark criteria and scoring system, which appeared to be prone to measurement bias under a self-assessment setting. Standardization of data documentation and collection in LGUs for all EAFM benchmark criteria was also found to be deficient to allow direct comparison of LGUs' performance.

If the accuracy of LGU self-assessment scores could be confirmed, only 11 more LGUs need to be assisted by the project to achieve the LOP target of 30 LGUs by end of implementation. Most promising LGUs to achieve the target threshold for EAFM Level 2 include: Coron in CIG MKBA; Hilongas and Bato in DR MKBA; Sto. Tomas and Caba in LG MKBA; Matnog and San Vicente in TP-LG-SBS MKBA; Claver in SDN MKBA; Bongao and Panglima Sugala in TT MKBA; and Mabini, Tingloy and Lian in VIP MKBA. These LGUs scored from 5 to 8 out of 17 benchmark criteria during LGUs' self-assessment at midterm.

Evaluation Question 10: To what extent and under what conditions did LGU policies and regulations lead to right sizing of fishing effort at the LGU level? The concept of right-sizing of fishing effort has been introduced by ECOFISH Project to ensure equitable access to harvesting increased fish production (resulting from conservation effort), particularly for small fishers whose fishing gears are comparatively at a disadvantage *vis-à-vis* commercial fisher groups. At midterm, the project initiatives on right sizing focused mainly on improving the enabling environment, such as; advocacy campaign, additional policy studies, and strengthening policy formulation and coordination at the Municipal LGU level. Advocacy and strengthening policy formulation/coordination have been carried out through training activities at the municipal level. Some studies related to right sizing of fishing effort have also been done by the project but the results have yet to be reported and disseminated, while others have been deferred pending concurrence by BFAR.

Based on available documents, all LGUs in four MKBAs under review have established and implemented FishR and BoatR policies supported by the project, which provided updated records of all fishers and fishing boats/gears to determine the appropriate right sizing of fishing effort according to the carrying capacity of fishing grounds in MKBAs. This information has also guided LGUs to enact and enforce fishing closure and zoning ordinances, tract and prevent fisheries law violators, and conserve fish resources. All LGUs in four MKBAs have also enacted ordinances that prohibited the use of destructive/illegal fishing gears, mostly within specific municipal boundaries. The establishment of MPAs by some LGUs also served as closed areas for fishing. Effective enforcement of right sizing, however, requires neighboring LGUs in each MKBA to jointly support this policy through the inter-LGU collaboration. At midterm, only LGUs in VIP MKBA have enacted and enforced species-specific management policy (i.e., seasonal closure for pelagic fish) in Balayan Bay beyond politico-administrative boundaries, which was made possible by the active inter-LGU collaboration. Essentially, the current approaches to regulate fishing effort in four MKBAs consisted of: monetary measures (fines or penalties), gear-regulating measures, closed areas and, to a certain extent, closed seasons.

The few Municipal Mayors who were interviewed through KII have expressed the importance of right sizing policy and the potential for enacting the policy. However, they are also cautious

about its enforcement for lack of additional knowledge and information, such as, the methods of reducing opportunism by segregating friendly and destructive fishing gears, encouraging all fishers to ensure compliance, and motivating sustained enforcement to reduce speculative fishing. All these information could be provided by the project's ongoing studies if completed as scheduled.

Evaluation Question 11: To what extent and under what conditions did social capital and leadership catalyze/create movement of LGUs from startup fisheries management to EAFM? The project has measured social capital in terms of the presence of leaders/political will, local champions, and the ability to resolve conflicts among inter-LGUs. ECOFISH Project partnered with League of Municipalities of the Philippines (LMP) to support the training of newly elected Mayors (also called ONE-M Program) in eight MKBA sites. It supported the participation of five (5) current and past "champion" Mayors to mentor newly elected Mayor on environmental governance, particularly in coastal resources and fisheries management. ONE-M Program has aimed to bring together all concerned Municipal Mayors to build a network of cooperation and resource sharing in the form of a social capital that produces improved foundations for EAFM for the common good of all fishing households and communities. This program has been successful in producing "champion" Mayors involved in ECOFISH and/or FISH Project, or part of MOREFISH champions formed by FISH Project and LMP in the past. In supporting ONE-M Program, the project was able to reach out to other LGUs outside of eight MKBAs to share and promote best practices. Apart from training, these LGUs have gained additional knowledge and information through site-specific case studies that could enhance local policies and plans for EAFM.

This social capital formation has shown initial positive effects. The inter-LGU collaboration in SN MKBA exhibited the best example of how joint action can lead to evolution of stronger strategic alliances and additional resources for coastal resources and fisheries management. Recently, this collaboration forged a new MOU among the members to expand its inter-LGU alliances and clarify the members' financial contributions for coastal/marine conservation and fisheries management. In VIP MKBA, the inter-LGU collaboration resulted in effective enforcement of seasonal closure of pelagic fish in Balayan Bay, as noted above. In addition, San Fernando City Fisheries and Agricultural Resources Management Council (FARMC) included the concept of integrated aquatic and fisheries management in LG MKBA in the council's local development planning process.

Evidently, the project's social capital and "champions" formation effort has been instrumental in catalyzing the 19 LGUs to move from the traditional fisheries management to EAFM Level 2 status. The inter-LGU collaboration in SN, VIP and LG MKBAs showed how joint action could lead to improved management capacity of LGUs in these MKBAs.

However, the social capital formation has so far been significant at the national and municipal levels. Community-based constituency for EAFM has remained limited due to concentration of the current interventions at the municipal level. The shortage of counterpart "champions" and local leaders at the barangay level (i.e., Barangay Captains, Barangay Environmental Law Enforcers) has constrained the effective advocacy campaign and enforcement initiatives carried out or supported by the project at the site level. For instance, FGD data of fishers showed a

relatively low level of people's awareness about fisheries laws and policies, which averaged 61 percent in four MKBAs (ranging from 48 percent in DR to 68 percent in SN) covered by this MPE. This resulted in lower percentage of apprehended environmental law violators being convicted or penalized, which averaged 32 percent in four MKBAs (ranging from 13 percent in DR to 71 percent in SN). In DR, a small island named Cuaming has an area of only 7 ha with a total population of over 4,000 individuals. With extremely high population density (i.e., about 17 square meters per individual), this island faces overfishing due to poverty and scarcity of alternative sources of livelihood. People are desperate to gather anything edible from their surroundings regardless of legal consequences to have something to eat and survive each day. These constraints at the community level require not only local leaders and "champions" but broader social networks that include economic and cultural capital to engage national- and municipal-level stakeholders in developing and strengthening alternative sustainable livelihoods and enterprises for poor, small fishers and their communities to reduce pressures on fisheries.

Objective 3: Challenges in Implementation and Actions Taken to Address Them

To analyze the main challenges in implementing the relevant strategies, and the extent to which the project was able to address these challenges.

Training and Information Dissemination: Feedback gathered during FGDs with fisher and "Bantay Dagat" groups revealed that the cascading of EAFM information and awareness to local communities by LGUs was inadequate. Due to various reasons, LGUs were unable to reach as many stakeholders at the community level to transfer knowledge and information they gained from various training organized by the project. At the village level, participation to training was extended to officials of the Barangay LGUs and POs. Only a few ordinary fishers were able to attend those trainings. While this was not the project's fault, there have been lapses in monitoring the compliance of the Municipal LGUs, as the entry point of capacity building, to cascade the learning down to fishing households and communities. The inability of the Municipal LGUs to prepare work plans and implement activities for EAFM outreach at the village level appears to be a weak point that ECOFISH Project recognized only after training was provided to them. The project informed the MPE team that specific interventions have been planned to directly address these challenges, including increasing visibility in communicating project gains, results and best practices.

Social Enterprise: Establishment of profitable social enterprises to reduce fishing pressures and increase fish stocks in MKBAs would likely be constrained with the remaining period of the project implementation. The planned capacity building activities have just started, and nurturing the skills of small fishers to become entrepreneurs will certainly extend beyond the project life given their weak and varying absorptive capacities across the MKBAs. In addition, the lack of enabling conditions (i.e., market infrastructure, LGU incentives, agro-processing firms) can affect the viability of social enterprises. One key driver identified by the MPE team is the absence of agro-processing firms, CSOs, and other private organizations that could facilitate effective forms of market-supply chain such as co-production sharing or marketing agreement that improve the access of the small fishermen's product (e.g., processed fish, fish sauce, etc.) to markets.

As noted earlier, the planned piloting of a profitable enterprise would still be implemented through PPP to demonstrate the viability of such enterprise to reduce fishing pressures, and generate additional employment and source of income to fishing households and communities. Gaining sufficient income would likely require 2-3 operating cycles depending on the type of social enterprise to be established. Thus, the impact of achieving better employment would mainly be indicative by EOP. Currently, the project is working with AIM and FBFA for the start-up implementation of two social enterprises (i.e., establishing a facility for “incubating” prospective social enterprises for competitive market access, and building fiber glass boats) to generate additional employment and income.

Social Capital: The project showed that social capital formation was positively associated, among others, with the presence of leadership/political will, local champions, and process of resolving conflicts among LGUs. These were the key elements in effective functioning of the project interventions, such as: inter-LGU collaboration, strategic partnerships and community partnerships, which promoted consensus building, collective action, and resource sharing for enforcing fisheries laws, managing MPA networks, and developing social enterprises. The main challenge for ECOFISH Project is how to ensure the sustainability of inter-LGU collaboration, and replicate its good practices at the lowest LGU level (i.e., the Barangay Council and “*Bantay Dagat*” groups). For instance, the role of “*Bantay Dagat*” groups is critical as front liners in enforcing fisheries laws and conservation practices. However, FGD data rarely indicated the presence of “*Bantay Dagat*” or “*Barangay Kagawad*” champions in project sites, which could be attributed to the lack of follow through or sufficient mentoring by the Municipal LGUs. These community-based law enforcement groups or champions are the foundations for improved and sustained EAFM initiatives.

Achieving EAFM Benchmark Level 2: The MPE team verified the data claimed by LGUs to have reached a particular management level towards EAFM based on self-assessment using the suggested additional qualifiers for EAFM benchmark criteria. The MPE team was unable to find sufficient support for such claims where 63.3 percent of targeted 30 LGUs have attained EAFM Level 2 status. The EAFM matrix developed by the team to objectively assess the four MKBAs under review showed VIP MKBAs achieved Level 2 status, while the other three MKBAs remained in Level 1 status. A key challenge in assessing LGUs’ capacity for EAFM implementation through self-assessment is how to maintain standard data documentation and analysis of EAFM related activities at the LGU level to allow comparison of their performance and avoid measurement bias.

LGUs that reached EAFM Level 2 were found to be largely recipients of fisheries assistance in the past, either from government or NGOs. Thus, institutionalization of EAFM processes may take time to accomplish for new partner LGUs, possibly beyond the current project life because of the need for greater capacity building at the community level and strengthening of enabling conditions for EAFM implementation. The only exception is TT MKBA being an old MKBA site (i.e., a recipient of USAID’s assistance under Fish Project in 2004-2011). The weak implementation can be attributed to many factors (i.e., inadequate training or follow-up activities at the community level and the unstable peace and order situation in most MKBAs).

4.2 CONCLUSIONS

Overall, ECOFISH Project is on track to achieving its six targeted key results, and producing required information to measure its results indicators and answer the 12 evaluation questions by end of implementation. Specific concluding statements are presented below according to the three evaluation objectives.

Objective A: Evaluability of the 12 Evaluation

Six (50 percent) of the 12 evaluation questions are evaluable or can be measured at midterm, and the other six (6) questions may be answered by end of the project life in consideration of the current measures and processes being implemented to collect the required information. The evaluability of these latter six evaluation questions depend on certain conditions as briefly discussed below.

Evaluation Question 1: Achievement of this evaluation question requires the project to focus on the primary drivers that will lead to better employment. “Better employment” or “new employment” can be achieved through establishment of operational and profitable enterprises or shifting to jobs that are not depleting fish resources (e.g., ecotourism and SMEs in growth centers near MKBAs).

Evaluation Questions 4, 5 and 6: These questions relating to achieving Key Result B (i.e., 10 percent increase in the number of people gaining new or better employment from sustainable fisheries management) are the most challenging concerns because the project is required to establish and demonstrate profitable social enterprises that could be effectively and sustainably managed by local fisher groups or community partners within their capacities to generate household income, reduce household fishing effort and contribute to EAFM outcomes.

Evaluation Question 10: In theory, right sizing of fishing effort addresses the ideal carrying capacity of a fishing ground. With the current project interventions, the MPE team is confident that this is achievable by EOP, but there should be presence of other economic and social enterprises that fishing households and communities can earn a living to reduce pressures on fisheries. Right sizing of fishing effort is best done when LGUs have reached EAFM Level 2 status, where revenue-generating measures are expected to be effectively implemented and enforced by LGUs, and successful coastal environment-friendly enterprises are expanded by community partners under the guidance of the project or its strategic partners.

Evaluation Question 11: The social capital and leadership formation initiatives by the project are the major drivers for good governance and management of MKBAs and their networks of MPAs. The continued operation and expansion of inter-LGU collaborations is the key to the success of such initiatives due to their political mandates, financial resources and institutional contacts in the project sites as demonstrated in SN and VIP MKBAs.

In addition, the quantitative analysis being done by ECOFISH Project using fish visual census and catch data will provide information to validate increases in fish stocks vis-à-vis fishing pressure reduction, and substantiate the answer to **Evaluation Question 2**. The MPE team agrees with

these standard procedures, but considers the need to train all field staff involved in data gathering to have a common understanding of these procedures for accurate and consistent application.

Objective B: Progress in Implementation

As noted above, ECOFISH is on track in delivering its six key results. The achievement rates of these key results at midterm are significant, and most targets are likely to be achieved during the project life. Substantive works in the areas of livelihood and economic development to reduce fishing pressure and provide alternative income to fishing households are still in progress, such as, operating profitable enterprises, and revenue and sustainable financing schemes for LGUs, which the project needs to pay priority attention to in the remaining period of implementation.

FishR and BoatR: ECOFISH Project catalyzed the national implementation of FishR and BoatR, which is now being continued under BFAR's leadership. More importantly, FishR facilitates accounting of total fishery force of the country in relation to fish harvest, which has direct implications to a national support program for fishers and for policy making purposes. In support of FishR, the project has successfully introduced the TV White Space technology in partnership with DOST-ICT Office, BFAR, Bohol Provincial LGU, and Microsoft Philippines, leading to the prestigious P3 award received by ECOFISH Project in 2015.

EAFM Benchmark Data: The benchmark data on EAFM verified by the project based on LGUs' self-assessments showed a total of 19 of LOP target of 30 LGUs that achieved EAFM Level 2 status. However, field verifications showed that not all benchmark criteria were met to support some claims for scoring Level 2 status, such as, multi-institutional collaboration, gear-specific management, and revenue measures established, to cite a few. A more acceptable set of data qualifiers needs to be developed to apply the scoring system in a more consistent manner in support of LGUs' claims of their achievements towards EAFM Level 2 status.

Right Sizing: These 19 LGUs are on track to demonstrate the right sizing of fishing effort in line with the results chain indicated in the TOC. "Right sizing" was coined by the project to promote the concept of finding the balance between the ecological capacities of MKBAs and fishing activities in the area. Presently, the project is developing a strategy to incorporate this concept as the core of the fisheries management plan for the inter-LGU collaboration. This particular work is in progress, as the project has just started this during the first two quarters in Year 3 of implementation. Furthermore, the project also needs to focus on the remaining 11 LGUs to reach EAFM Level 2 status in order to meet its LOP target.

Objective C: Challenges in Implementation

While the basic assumptions regarding the extent and conditions under which ECOFISH Project interventions will achieve the key results related to the 10 percent increase in fish biomass are empirically feasible and practically oriented, the assumptions related to the 10% increase in the number of people with new or better employment are not definitive because substantial interventions are still underway at midterm. One of the remaining bottlenecks for

the project to achieve its target in implementing biodiversity conservation stated in the TOC (i.e., fish stocks increased) at LOP is the absence of established, operating and earning enterprise to achieve better employment at midterm.

4.3 RECOMMENDATIONS

(1) Right sizing of fishing effort

Establish the enabling conditions for right sizing of fishing effort such as equitable sharing in the use/boundaries for fishing. Appropriate boundaries will prevent encroachment of fishers with destructive fishing and/or illegal fishing gears or commercial fishing vessels within municipal waters. This will ensure small fishers to have equal access to harvest the benefits of increased fish catch resulting from conservation efforts; and not the other way around, where large commercial fishers take advantage of the increased benefits.

(2) Gaining new or better employment

Use “better employment” as the primary indicator for Key Result B. Gaining “new employment” can be measured as a separate indicator and assessed through a pilot demonstration of at least one operating social enterprise in two most promising MKBAs. Generation of new employment is feasible with at least a single operating and earning social enterprise, meaning that the enterprise can afford to pay for labor and other social benefits for its employees. While new employment maybe generated by a newly established enterprise, its sustainability needs also to be ensured by demonstrating the operational profitably for at least two to three cycles of operation.

(3) Developing social enterprises

- Demonstrate preferably two social enterprises in the remaining years of the project in two most promising MKBAs, to reach the status of established, operating and earning enterprises;
- Establish at least one PPP linked with at least one social enterprise; and
- Work directly with agribusiness/processing firms that can provide the critical capacity building for evolving profitable enterprises, notably technology, capital and markets. To do this, ECOFISH Project needs to assist in establishing the enabling conditions (e.g. groups of small fishermen, availability of raw materials, etc.) to attract potential agribusiness firms to invest, preferably through a business matching forum. The project can select a suitable partnership and roll out a sustainable social enterprise development through a phased approach beginning with a pilot in the most prepared MKBAs.

(4) Demonstrating market-based instruments

Accelerate the implementation of one (1) pilot tested market-based instrument in a most promising MKBA, preferably payment for ecosystem services (PES), similar to what the project has demonstrated in providing 21-day Cash for Work (i.e., coastal clean-up and waste management) jobs to affected fishers in VIP MKBA in 2014 to enforce seasonal fishing closure of pelagic fish during its reproduction period. This PES scheme came in the form of compensations received by affected fishers for earnings lost during a period of fishery closure. The project needs to institute a long-term arrangement/partnership for PES

scheme beyond the pilot stage. In support of this effort, the use of marine spatial planning (MSP) tool can be expanded to incorporate data generation of direct use values to serve as inputs to cost and benefit analysis (CBA). An expanded MSP tool offers greater opportunity for easier replication across LGUs due to less data requirements to assess the effectiveness and viability of PES instruments.

- (5) **Make the following EAFM benchmark criteria as mandatory requirements for assessing LGUs' progress towards EAFM implementation** since these criteria describe the major activities of all coastal LGUs in the country as stipulated in Republic Act 8550 (Fisheries Code of 1998). These include:

Benchmark B3: Fisheries monitoring and early fisheries management planning established. Under this aspect, it is important to have the “presence of fisheries baseline assessment” to establish the current and previous status of fishery resources. Issues have been identified and used for fisheries management options.

Benchmark B4: Fisheries law enforcement team and program established. To manage fishery resources, the “presence of enforcement team” that is well trained and equipped to do their job is quite important.

Benchmark B7: Fisheries registration and licensing system established. More importantly, this benchmark provides an accounting of all fishers and different fishing gears being used for easy implementation of fisheries laws.

- (6) **Ensure standard application of the method of survey using fish visual census.** Fish census survey is a skill. It may take time to master fish identification, particularly the estimation of the total length of different reef fishes with varying body shapes and tail forms. These parameters have big implications in the computation of fish biomass, which is one of the key important indicators under Key Result A (10 percent increase in fish biomass), as observed in negative percent change in fish biomass computed for SN MKBA. Such negative fish biomass computations could be partly attributed to the different skills of the second batch of field researchers with those of the first batch, and partly due to the different sampling months between the benchmark and midterm fish census conducted by the project.
- (7) **For the next fisheries catch monitoring in 2017, it must coincide with the sampling months conducted during the benchmark data collection in 2013.** This was the main reason of the negative percent change computed for DR MKBA (Key Result A, 10 percent increase in fish biomass). It is a well-known fact that there is a seasonality of fishing gears' used in the country.
- (8) **Emphasizing branding in all activities**
During the MPE period, majority of FGD participants were not familiar with ECOFISH Project nor with USAID as the agency providing support to the project activities. While some participants were aware or able to identify the activities conducted by the project, in many instances, specific interventions and activities were mistakenly identified as activities of

other groups or projects. It is important that the project good practices be properly recognized so that the participants themselves can duplicate it, or other potential adopters can seek guidance from ECOFISH Project.

Other possible areas for improvement include: (i) strengthening of inter-LGU cooperation on EAFM through expansion of membership to include other stakeholders (i.e., NGOs, POs, academe and private sector) in addition to LGUs for stronger partnerships and more inclusive and participatory development; (ii) supporting community ownership of EAFM processes by aligning LGU priorities with EAFM principles and priorities, and cascading capacity building to community-based groups/organizations like “*Bantay Dagat*” groups and Barangay Councils; (iii) mobilizing more champions and committed leaders to promote EAFM in a sustainable way; and (iv) establishing “EAFM resources” from various sources, such as; savings from fines and penalties, licensing and permits, PPP leveraged funds, LGU counterparts, etc. which could be legally established by LGUs and other stakeholders under existing laws and regulations in the country.

ANNEXES

ANNEX I

Statement of Work

ANNEX I: EVALUATION STATEMENT OF WORK

SECTION I – STATEMENT OF WORK

I. Introduction

The United States Agency for International Development/Philippines (USAID/P) seeks to conduct a mid- term performance evaluation that will assess the Ecosystems Improved for Sustainable Fisheries (ECOFISH) Project.

Award Number: 492-C-12-00008

Award Date/Duration: June 29, 2012 to June 29, 2017

Funding: US\$14,892,626

Implementing Partner: Tetra Tech ARD

COR/Alternate COR: Rebecca Guieb/Oliver Agoncillo

Start and completion dates for the Scope of Work: July-September 2015

The mid-term performance evaluation will make use of the results chains representing the Theory of Change (TOC) for ECOFISH project's key strategies prepared by USAID Office of Environment, Energy and Climate Change (OEECC) and Tetra Tech ARD with assistance from the Measuring Impact (MI) project and USAID Bureau for Economic Growth, Education and the Environment, Forestry and Biodiversity Office (E3/FAB). The evaluation objectives are:

- 1) To document the implementation progress of the ECOFISH project in terms of achieving its key results, and analyze the factors and conditions that enhance or diminish the achievement of these results;
- 2) To analyze the main challenges in implementing the relevant strategies, and the extent to which the project was able to address these challenges; and,
- 3) To investigate the evaluability of the evaluation questions relating to the final outcomes of the ECOFISH project by determining if these are empirically feasible and practically oriented.

II. Background

The ECOFISH project is a five-year contract that was awarded to Tetra Tech ARD on June 29, 2012. The project started at an opportune time with the commitment of Philippine government (GPH) to address overfishing and coastal habitat degradation in the Philippines. Improved management of coastal and fisheries resources is a prominent goal of the Philippine Development Plan (2011–2016), and GPH is collaborating with non-government organizations (NGOs) and academic institutions to achieve the goals and commitments of the Coral Triangle Initiative for Coral Reefs, Fisheries, and Food Security (CTI-CFF). ECOFISH is designed to support GPH priorities by applying an ecosystem approach to the management of fisheries and supporting the implementation of the CTI National Plan of Action.

The ECOFISH project is being implemented in eight marine key biodiversity areas (MKBAs), namely: (1) the Calamianes Island Group, (2) Lingayen Gulf, (3) Ticao Pass-Lagonoy Gulf-San Bernardino Strait, (4) Danajon Reef, (5) South Negros, (6) Surigao del Sur and Surigao del

Norte, (7) Tawi-Tawi in the Sulu Archipelago, and (8) Verde Island Passage. They represent all six marine bioregions of the Philippines and were selected due to their extremely high need for marine biodiversity conservation. These areas are marine ecosystem “hotspots” in the Philippines that mirror the common issues impacting capture fisheries locally and nationally (See Annex I).

The ECOFISH project is being implemented in partnership with the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) and the local government units (LGUs) in the project sites.

III. Description of the Project to be evaluated – ECOFISH

Context. The fisheries sector is enormously important to the economy of the Philippines particularly to the poorer and more marginalized citizens whose livelihoods depend on small-scale fisheries. Despite this importance, two-thirds of the 12 major fishing bays in the country are already overfished, and catch rates of reef fisheries are among the lowest in the world. Excessive fishing has resulted in the decrease in average sizes of fishes, shifts in species composition, and steep declines in abundance of valuable species. While the Philippines currently ranks 8th globally in total fisheries production, the economic and food security benefits derived from this sector are only a fraction of what they could be if managed sustainably. At the national level, the excess capacity of the fishing sector must be addressed by reducing the number of fishing licenses; combating illegal, unregulated, and underreported (IUU) fishing; and addressing short-term negative impacts on food security through strategic fish imports and other protein sources. At the local level, improved management of municipal waters must be addressed through the individual and collective efforts of local governments, communities, and assisting organizations. Climate change also poses an increasing threat to marine biodiversity.

Program Objective. The main objective of the ECOFISH Project is to improve the management of important coastal and marine resources and associated ecosystems that support local economies. It will conserve biological diversity, enhance ecosystem productivity and restore profitability of fisheries in project sites using ecosystem approach to fisheries management (EAFM) as a cornerstone of improved social, economic and environmental benefits. The application of EAFM principles and practices is a proven approach for reversing the decline of fish biomass in municipal waters and building community resilience. EAFM aims to manage fisheries at ecosystem scales rather than the scales defined by jurisdictional boundaries. Effective collaborative governance arrangements for EAFM provide the multiple benefits of improving ecosystem management, reducing the unit costs of management, and making the establishment of sustainable financing mechanisms and public-private-partnerships (PPPs) more feasible and attractive to investors.

Project Approach. ECOFISH builds on the many successful elements of its precursor project, the Fisheries Improved for Sustainable Harvest (FISH) Project. ECOFISH, however, raises the bar by aiming to expand the application of EAFM at additional sites and to put in place the elements for institutionalizing EAFM nationally through innovative approaches and partnerships. ECOFISH project’s overall programmatic approach is designed to achieve the next critical phase in coastal and fisheries resource management and trajectory—to advance

EAFM nationwide. This approach to achieve the key results and deliverables of ECOFISH is organized under three themes of interrelated guiding principles and corresponding implementation strategies: (a) biodiversity conservation; (b) governance; and (c) socio-economics. Gender mainstreaming is incorporated in all project activities as a crosscutting strategy. Underlying this approach is the basic assumption that establishing strategic and inclusive partnerships and empowering local institutions are fundamental in achieving significant impact in the eight MKBAs and at the national level (See Annex 2).

Deliverables and Key Results. Table I presents the main relationship between the 13 deliverables, seven tasks and the six key results. Tasks and deliverables leading to Results C and D build the foundation for project activities. Those for Results E and F drive the implementation at the MKBA level, and taken together they attain the overall ECOFISH Results of A and B. While the presentation of Key Results focuses specifically on deliverables, the seven project tasks are reflected indirectly in the interventions that are needed to complete each of the deliverables.

Table 1. Main Relationship between Project Tasks, Deliverables and Results

Tasks	Deliverables	Results	
		Result A. An average of 10% increase in fisheries biomass across the eight MKBAs. Result B. A 10% increase in the number of people gaining employment or better employment from sustainable fisheries management from a baseline established at the start of the project	Final Outcomes
Task 1. Establish and Implement a National Training Program Task 2. Provide Technical and Advisory Support at the National Level Task 3. Create Public-Private Partnerships	Deliverable 1. Policy Studies on EAFM, MPA, and Climate Change Deliverable 2. Toolkits, Sourcebooks and Case Studies on EAFM, MPA and Climate Change Deliverable 3. A National Database established using the Annual Monitoring Data in the 8 MKBAs Deliverable 4. State of the Marine Resources Report Deliverable 5. National, Regional and Municipal EAFM Trainings conducted Deliverable 6. Public-Private Partnerships Supporting ECOFISH Objectives established	Result C. Establishment of a national capacity development program to enhance the capacities of LGUs and relevant national agencies to apply ecosystem-based approaches to fisheries management Result D. Eight public-private partnerships supporting objectives of the ECOFISH project created and operating	

Tasks	Deliverables	Results	
Task 4. Provide Technical and Advisory Support at the Local Level Task 5. Develop a Registry of Users of Municipal Fishing Waters Task 6. Identify and Implement Sustainable Financing Programs to Support EAFM Projects Task 7. Establish Baseline on Coastal and Marine Resources and Relevant Socio-economic Information, Develop and Apply Metrics on Monitoring EAFM Implementation Target MKBAs	Deliverable 7: Bio-physical, Social and Economic Baseline Assessments of the 8 MKBAs Deliverable 8. Scientific Studies on Select MKBA-Specific Fish Species Deliverable 9. MPA Network Analyses in the 8 MKBAs Deliverable 10. Fisheries Management Plans of Select Inter-LGU Alliances in the 8 MKBAS Deliverable 11. Registry of Users of Municipal Fishing Waters Established in Select Municipal LGUs in the 8 MKBAs Deliverable 12. Revenue Generation System for Fisheries Management Established and Effectively Implemented in Select LGUs	Result E. One million hectares of municipal marine waters under improved management Result F. A core of 30 LGUs across the eight MKBAs with improved capacity for implementing ecosystem approaches to fisheries management	Implement Best Practices
	Deliverable 13. Sustainable Financing Programs for EAFM Implemented in Select LGUs in the 8 MKBAs		

IV. Past Evaluation Studies

This is the first evaluation of the ECOFISH project.

V. Evaluation Objectives

The mid-term performance evaluation will have the following objectives:

- 1) To document the implementation progress of the ECOFISH project in terms of achieving its key results, and analyze the factors and conditions that enhance or diminish the achievement of these results;
- 2) To analyze the main challenges in implementing the relevant strategies, and the extent to which the project was able to address these challenges; and,
- 3) To investigate the evaluability of the evaluation questions relating to the final outcomes of the ECOFISH project by determining if these are empirically feasible and practically oriented.

VI. Evaluation Questions

The results chains of the TOC for ECOFISH project's key strategies are shown in Annex 3. Using these, the mid-term performance evaluation will prioritize the following questions for the mid-term performance evaluation:

- 1) To what extent and under what conditions did LGUs move from fisheries management to EAFM?
- 2) To what extent did the LGU policies and regulations lead to right sizing of fishing effort at the LGU level?
- 3) To what extent did social capital and leadership catalyze/create movement of LGUs from startup fisheries management to EAFM?

In addition, the mid-term performance evaluation will look into the evaluability of the following questions:

- 1) To what extent did an increased fish provision lead to better employment for fishing among households?
- 2) To what extent did reduction in pressures lead to increases in fish stocks?
- 3) To what extent did increased enforcement effort and effectiveness lead to pressure reduction?
- 4) How and to what extent have PPPs contributed to EAFM outcomes?
- 5) To what extent are the enabling conditions in place to establish enterprises and for them to generate household income?
- 6) To what extent and under what conditions does income from enterprises lead to decrease in household fishing effort?
- 7) To what extent did the provinces facilitate inter-LGU fisheries management interventions?
- 8) To what extent did increased capacity of NGA lead to implementation of national and local policies?
- 9) To what extent did the studies inform development of EAFM?

VII. Audience, Intended Uses and Dissemination of Evaluation Findings

The audiences for the ECOFISH mid-term performance evaluation findings include USAID, Philippine government partners, Tetra Tech ARD as the contractor and other implementing partners of the project, including civil society organizations, academe and the private sector.

In accordance with the USAID Evaluation Policy, the findings from the ECOFISH mid-term performance evaluation will be shared as widely as possible, with a commitment to full and active disclosure. Furthermore, a summary including a description of methods, key findings and recommendations will be available to the public on-line in a fully searchable form.

VIII. Evaluation Methodology

The evaluation is expected to take place for three months (July-September 2015), mid-way through the ECOFISH project implementation when data would have been generated from the project's first monitoring event. Using the results chains of the project's TOC, the evaluators will employ qualitative and, as practicable, quantitative methods to obtain the information necessary to meet the requirements of this SOW. Qualitative data collection will include key informant interviews and focus group discussions. This methodology is not prescriptive and other forms of data collection maybe be considered.

The evaluation will be carried out at the national level and in four (4) of the eight (8) MKBAs, which are selected on the basis of the following criteria: (a) former FISH sites vs. new sites; (b) resource rent¹ condition; and, (c) extent of project support on establishing social enterprises. The evaluators will prepare a purposive random sampling design representing the project's key implementation partners at the national level and in the following MKBAs:

- Calamianes Island Group
- Danajon Reef
- South Negros
- Verde Island Passage

A. Evaluation Activities

1. Desk review and development of the evaluation approach using the TOC

The evaluators will carry out a desk review of different sources of information pre-compiled and received by USAID from the ECOFISH project and GPH. These include contracts, quarterly and annual reports, work plans, baseline assessment report and M&E plan, among others. Development plans and programs of GPH will be requested from the Philippine Government counterparts. USAID will be providing the evaluators with a list of ECOFISH project's implementing partners and project site information.

During the desk review, the evaluators are expected to participate in planning conference calls with USAID/P, MI and E3/FAB to discuss and review the draft results chains representing the TOC for ECOFISH project's key strategies and the associated evaluation questions as described in Annex 3. The evaluators will then conduct a desk study of available project documentation in order to finalize the results chain and synthesize project key results of strategies implemented by ECOFISH in the results chain. Results chains are to be consistent with the Conservation Measures Partnership (CMP) *Open Standards for the Practice of Conservation*², which are presented in a diagram that shows the intended short-, medium-, and long-term results of a specific intervention, leading ultimately to the expected outcome for the conservation targets. The evaluators will include qualitative and/or quantitative data found in the project documentation for any indicator of results of a specific strategy implemented by ECOFISH. The evaluators will also identify potential gaps in data for an indicator of achievement of a particular result from implementation of a strategy. The evaluators will also note any limiting factors described in the documentation for achievement of a particular result from implementation of a strategy. To ensure gender responsiveness, the evaluators should be guided by the new USAID Gender Policy³, and will ensure that for all people-level indicators, collection of data will be sex- disaggregated.

¹ Resource rents are the profits generated when all costs, including opportunity costs ('normal' profits), have been covered. It is a key concept in the management of fisheries as it refers to a source of considerable wealth available to society.

² For more information on the CMP and the *Open Standards*, go to www.conservationmeasures.org

³ http://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy_0.pdf

2. Development of the evaluation work plan

The evaluators will then develop an evaluation work plan that will include activities, milestones, deliverables, and itinerary. The proposed work plan will be discussed and finalized with USAID/P.

3. Data Collection and Fieldwork

The evaluators will spend about 15 days for fieldwork following the itinerary approved by USAID/P. A list of resource persons/organizations will be provided by USAID, but the evaluators are expected to make their own arrangements for fieldwork. USAID will provide the evaluators with an introduction letter for use in communication with the resource persons/organizations. The evaluators will provide an update to USAID at the mid-point of the fieldwork.

4. Evaluation debriefings

The evaluators will first discuss the summary of findings with PRM and OEECC followed by an internal debriefing with Mission management, and lastly a debriefing/presentation to relevant GPH departments and other stakeholders.

5. First draft of evaluation report submission

The detailed first draft of the evaluation report will incorporate the comments and suggestions during the debriefings and be submitted to USAID/P within 10 days from the last debriefing. USAID/P will provide comments within five working days from receipt of the report.

6. Submission of final evaluation report, summary and presentation slides

The final evaluation report, summary and debriefing presentation slides will be submitted to USAID/P within five working days from receipt of USAID/P comments on the first draft report.

7. Final publishable evaluation report approved by USAID/P

This report needs to be submitted to USAID no later than September 30, 2015.

B. Evaluation Data Analysis

The evaluators will use qualitative data analysis and identify and analyze patterns and themes related to the evaluation questions. As practicable, quantitative data analysis such as statistical tests will be used. USAID's Gender Policy should guide the analysis.

IX. Evaluator's Qualifications and Composition

A lead evaluator and two co-evaluators will carry out this mid-term performance evaluation. The evaluators should possess the following qualifications:

- a) Expertise and experience in quantitative, qualitative, and mixed method evaluation techniques
- b) Expertise in marine biodiversity conservation, including monitoring and evaluation for marine biodiversity programs, and broad geographical experience
- c) The necessary language skills for countries of focus, or engage local language interpreters to support interviews and reviews of local language documents and records.

X. Period of Performance

The period of performance is from July 1, 2015 to September 30, 2015 with an estimated total level of effort (LOE) of 60 days.

Activities/Tasks	Date and Estimate LOE
Desk review and development of the evaluation approach using the TOC	10 days
Submission of desk study summary and evaluation approach	Within 5 working days from completion of review
Development of the evaluation work plan	3 day
Submission of evaluation work plan	Within 3 working days from completion of coordination meeting with USAID
Fieldwork	25 days
Submission of fieldwork progress	Mid-way through fieldwork
Submission of draft debriefing presentation slides and the written summary	One week before scheduled debriefing
Evaluation Debriefing	4 days
Write up of first draft of Evaluation Report	12 days
Submission of first draft of Evaluation Report	Within 10 working days from last day of Debriefing
Write up of final draft of the evaluation report, summary and presentation slides	6 days
Submission of final draft of the evaluation report, summary and presentation slides	Within 5 working days from receipt of USAID comments
Submission of final publishable evaluation report approved by USAID/P	No later than September 30, 2015
TOTAL ESTIMATE LOE	60 days

XI. Deliverables

- 1. Summary of Desk Study and Evaluation Approach.** The evaluators will submit a summary of the desk study and evaluation approach including the evaluation questions, results chains and data for indicators, data collection tools and means of analyses, and criteria for site selection to USAID/P, MI and E3/FAB within 5 working days from completion of review.
- 2. Work Plan.** The work plan will set forth the conceptual approach and methodology for answering the evaluation questions and completing the deliverables. The work plan should establish realistic milestones, and seek to maximize results within budget resources to ensure a prompt and effective launch and delivery of contract activities. It also will set forth the schedule of the evaluators for the fieldwork. The work plan will be submitted to USAID within 3 working days from completion of consultation meetings with USAID.
- 3. Fieldwork Update.** The update should outline the evaluators' progress in fieldwork including implementation challenges and any propose changes as needed.
- 4. Debrief Summary Report and Presentation Slides.** The evaluators will provide a debriefing presentation consisting of the following: (a) a 5-10 page summary of key findings, conclusions and recommendations and (b) a powerpoint presentation covering the above material. The draft debriefing presentation slides and the written summary will be submitted to USAID/P for review a week prior to the scheduled debriefing date and then finalized by the evaluators for approval by USAID/P.
- 5. Detailed first draft of the evaluation report.** The detailed first draft of the evaluation report should not exceed 30 pages with no more than five (5) pages of executive summary, excluding annexes. The report shall follow the USAID's general guidance on Preparing Evaluation Reports (Annex 4).
- 6. Final draft of the evaluation report, summary and presentation slides.** The final report in MS Word format will be submitted together with a separate 5-10 page summary in PDF format and debriefing presentation slides. The report, summary, and presentation will be in English and submitted within five (5) days from receipt of USAID comments on the first draft report.
- 7. Final publishable evaluation report approved by USAID/P.** This report needs to be submitted to USAID no later than September 30, 2015. Submission is inclusive of the following:
 - (a) Five hard copies
 - (b) Five USB flash drives containing:
 - Electronic copies of the report (in PDF and MS Word formats);
 - Supporting documentation inclusive of complete data collected;

- Pictures and other visual materials; and,
- Presentation materials
- Electronic copies of the report (in PDF and MS Word formats);
- Supporting documentation inclusive of complete data collected;
- Pictures and other visual materials; and,
- Presentation materials

ANNEX II

Summary of Desk Review and Evaluation Approach/Workplan

ANNEX II: SUMMARY OF DESK REVIEW AND EVALUATION APPROACH

1.0 INTRODUCTION

The summary of desk review and evaluation approach is the first deliverable of the Sustainable Development Solutions, Corp. (SDS) as part of its contractual obligations to USAID-Philippines for the Mid-term Performance Evaluation of the Ecosystems Improved for Sustainable Fisheries (ECOFISH) Project. The report consists of the following:

- Summary of secondary data review to date,
- Detailed Evaluation Approach and Methodologies,
- Site selection criterion and coverage of the study,
- Data collection Instruments,
- Team Organization and Coordination Arrangements,
- Final Report Outline

2.0 ABOUT THE MID-TERM PERFORMANCE EVALUATION

2.1 Objectives of the Evaluation

The mid-term performance evaluation as stated in the contract will make use of the results chains representing the Theory of Change (TOC) for ECOFISH project's key strategies prepared by USAID Office of Environment, Energy and Climate Change (OEECC) and Tetra Tech ARD with assistance from the Measuring Impact (MI) project and USAID Bureau for Economic Growth, Education and the Environment, Forestry and Biodiversity Office (E3/FAB). The evaluation objectives are:

- 1) To investigate the evaluability of the evaluation questions relating to the final outcomes of the ECOFISH project by determining if these are empirically feasible and practically oriented;
- 2) To document the implementation progress of the ECOFISH project in terms of achieving its key results and analyze the factors and conditions that enhance or diminish the achievement of these results; and,
- 3) To analyze the main challenges in implementing the relevant strategies and the extent to which the project was able to address these challenges.

In this context, the accountability-related purpose of the ECOFISH mid-term performance evaluation will focus on the following evaluation questions as set out in the Statement of Work - SOL 492-15-000004.

To what extent and under what conditions...

13. Did an increased fish provision lead to better employment for fishing among households?
14. Did a reduction in pressures lead to increases in fish stocks?
15. Did increased enforcement effort and effectiveness lead to pressure reduction?
16. Have PPPs contributed to EAFM outcomes?
17. Are the enabling conditions in place to establish enterprises and for them to generate

household income?

18. Did income from enterprises lead to decrease in household fishing effort?
19. Did the provinces facilitate inter-LGU fisheries management interventions?
20. Did increased capacity of NGA lead to implementation of national and local policies?
21. Did LGUs move from fisheries management to EAFM?
22. Did the LGU policies and regulations lead to right sizing of fishing effort at the LGU level?
23. Did social capital and leadership catalyze/create movement of LGUs from startup fisheries management to EAFM?
24. Did the studies inform development of EAFM?

2.2 Scope of Work

The mid-term performance evaluation is scheduled to be completed in a period of 3 months, July –October 2015, with a 60-day level of effort. The undertaking will cover the four (4) of the eight MKBAs located: Verde Island Passage, Danajon Reef, Calamianes Island and South Negros. Table 1 lists the tasks and deliverables for the project as specified in the Scope of Work (SOW) and employing SDS' good project management practices in terms of implementing project performance evaluation similar to this undertaking.

2.3 Evaluation Deliverables

The table below presents the deliverables that will be submitted in accordance with the official start/award date of July 21, 2015:

Table 10. Tasks and Deliverables for the Conduct of the Mid-term Performance Evaluation of the Ecofish Project

Tasks	Deliverables
1. Finalization of the detailed approach, methodology/strategy and hypothesis for the conduct of the components of the performance evaluation	Deliverable 1: Summary of Desk Study and Evaluation Approach
2. Listing , acquisition and review of secondary data	
3. Finalization of the work and operational plan which details the updating and/or development of evaluation instruments; selection, hiring, deployment and supervision of study or field teams; organizing consultants and teams and setting up of coordination protocols with the involved stakeholders in the identified 4 marine key biodiversity sites include BFAR and local government units	Deliverable 2: Work Plan
4. Hiring, deployment and orientation/briefing of field team members/researchers	Deliverable 3: Field Work Update
5. Preparation for field work requirements: finalizing study instruments, acquisition of permits, confirmation of FGD and KII schedules and venues and preparing logistical requirements and permits for biophysical	

Tasks	Deliverables
assessment.	
6. Data collection in the 4 MKBAs, validation biophysical assessment; conduct of FGD and KII and review of additional secondary data	
7. Report preparation, checking and verification of data collected	Deliverable 4: Debrief Summary Report
8. Data analysis and preparation of the detailed first draft of the evaluation report	Deliverable 5: Detailed First Draft of the Evaluation Report
9. Report revision and submission of final draft and final publishable evaluation report	Deliverable 6: Final Draft of the Evaluation Report Deliverable 7: Final Publishable Evaluation Report
10. Carrying out of exit conference	

2.4 Evaluation Team Assignments and Coordination Arrangements

The SDS Home-Office Project Director is the primary liaison with USAID/Philippines, the main party contracting out the consulting services. A brief discussion of the responsibilities of the firm and the project team through the relevant personnel is given below.

1. SDS is responsible for the submission of deliverables for the Mid-term Performance Evaluation Study to USAID in the person of Project Principal and President, RENATO S. RELAMPAGOS.
2. The Project Team is responsible to SDS and USAID in the successful conduct of the Study through its designated Team Leader, Dr. Cleto L. Nañola, Jr.
3. Aside from those required in the SOW, SDS will be hiring additional technical and support staff such as: FGD moderator and note takers; KII interviewers and documenters; and researchers for on-site visitation of the coastal zone and the status of MPAs.
4. As per SOW, the SDS Study Team thru the Team Leader (technical concerns) and Manager/Coordinator (day-to-day schedule of activities, admin/logistics) will be reporting to and regularly coordinating with USAID/Philippines and that support will be provided by USAID in terms of coordination with BFAR, LGUs, Tetra Tech and relevant GPH and implementing partners, stakeholder groups and individuals who will participate in this exercise.
5. The Team Leader has the supervising authority over the outputs and performance of the nominated key personnel and field study teams to be hired. SDS shall provide all the necessary project management, coordination and administrative support to the Project Team in the execution of the Services through a dedicated Activity Manager and a Study Coordinator (Raymundo C. Lasam).

SDS has engaged the following specialists who will undertake the Mid-Term Performance Evaluation of the ECOFISH Project (Table 2):

Table 11: Task Assignments of Team Members

Name of Staff	Position Assigned	Task Assignments
Renato Relampagos	Home Office Project Director	• Ensure the provision of all required project deliverables and services specified in the contract and in accordance with the USAID requirements • Manage the execution of the project; in particular, the timely and effective implementation according to the Work Plan and expected deliverables as per contract • Represent SDS in official discussions with the USAID/P • Exercise effective leadership over the Study team; particularly ensuring the coordinated and highly satisfactory delivery of services by team members, including the periodic review of performance vis-à-vis expected tasks and outputs together with the SDS nominate home-office project director and manager
Dr. Cleto L. Nañola, Jr.	Team Leader	Specifically, the Technical Team Leader shall: • Lead the formulation and implementation of the evaluation design to include detailed approaches, methodologies and general evaluation analysis in accordance with USAID's requirements in the conduct of evaluation studies • Lead the development and finalization of data collection instruments such as the FGD and KII guide questions and survey instrument in close collaboration with the other team members • Oversee the data collection thru desk review, quantitative and qualitative approaches, data processing and analysis • Lead in site selection and sampling • Manage the orientation-training of study team members to include dry - run of data collection instruments • Ensure the quality and timely preparation and submission of all reports
Dr. Hilly Ann Quiaoit	Marine Biologist	• Conduct desk review and gathering of relevant secondary data • Assist the team in the development of detailed approach and methodology, and the development of data gathering instruments and tools, orientation and briefing design of field teams, data quality checks and review systems, etc. • Supervise ecological survey and assist the TL in the analysis of results
Milagros H. Tetangco	Institutional Development Specialist	• Assist the TL in the development and design of evaluation approaches, strategies, methodologies, data collection instruments, and methods of analysis • Responsible for the organization and supervision of the data collection and analysis for FGD and KII (qualitative study) • Together with the Team Leader and other key personnel, manage, implement and conduct the orientation-briefing of study team members and the pilot testing of FGD and KII instruments • Responsible for the data collection and analysis of data or results obtained from FGD and KII

Name of Staff	Position Assigned	Task Assignments
		- Design, manage the conduct of KII and FGDs and lead in the selection of FGD participants and informants for the key interviews - Ensure that quality control procedures are in place and observed - Conduct desk review and gathering of relevant secondary data
Virgilio Cabezon	Economist	Prepare analysis of the project vis-à-vis economic, financial, social and institutional standpoints
Dr. Imelda Pagtolun-an	Statistician	Provide technical guidance in ascertaining the evaluability of the 12 evaluation questions and provide guidance in the sampling or site selection
Raymundo C. Lasam	Study Coordinator	- Provide administrative and logistical oversight - Ensure that all preparatory activities are done for the conduct of FGD, KII and On-Site Visitation
	FGD moderators and note takers	- Assist or co-facilitate the conduct of various FGDs - Review FGD documentation
	KII documenters and interviewers for the conduct of KII	- Document the proceedings based on the templates contained in the manual - Responsible for photo and/or video documentation of KIIs - Transcribe the audio-recording
	Researchers	- In-charge of collecting data through on-site visitation in their assigned MPAs - Assist the TL and others specialist in the analysis and writing of results

All the field staff will be oriented and trained on the evaluation objectives; EAFM; ECOFISH Theory of Change; and data gathering methodologies including the use of the data gathering instruments. A two-day training for these FGD and KII teams will be undertaken in Tagbilaran City, Bohol where a pilot test in one of the sites will be conducted.

SDS Management and Evaluation Team Leader, will coordinate with, and seek guidance from, USAID/Philippines, BFAR and LGUs prior to the actual data gathering for the logistics and security in performing ecological survey; identification of, and arrangements with, project implementing partners to be involved in FGDs and KIIs. Coordination with BFAR and LGUs will be undertaken prior to data collection.

Figure 1 illustrates evaluation team composition, field supervision and task assignments of key experts during the data collection phase.

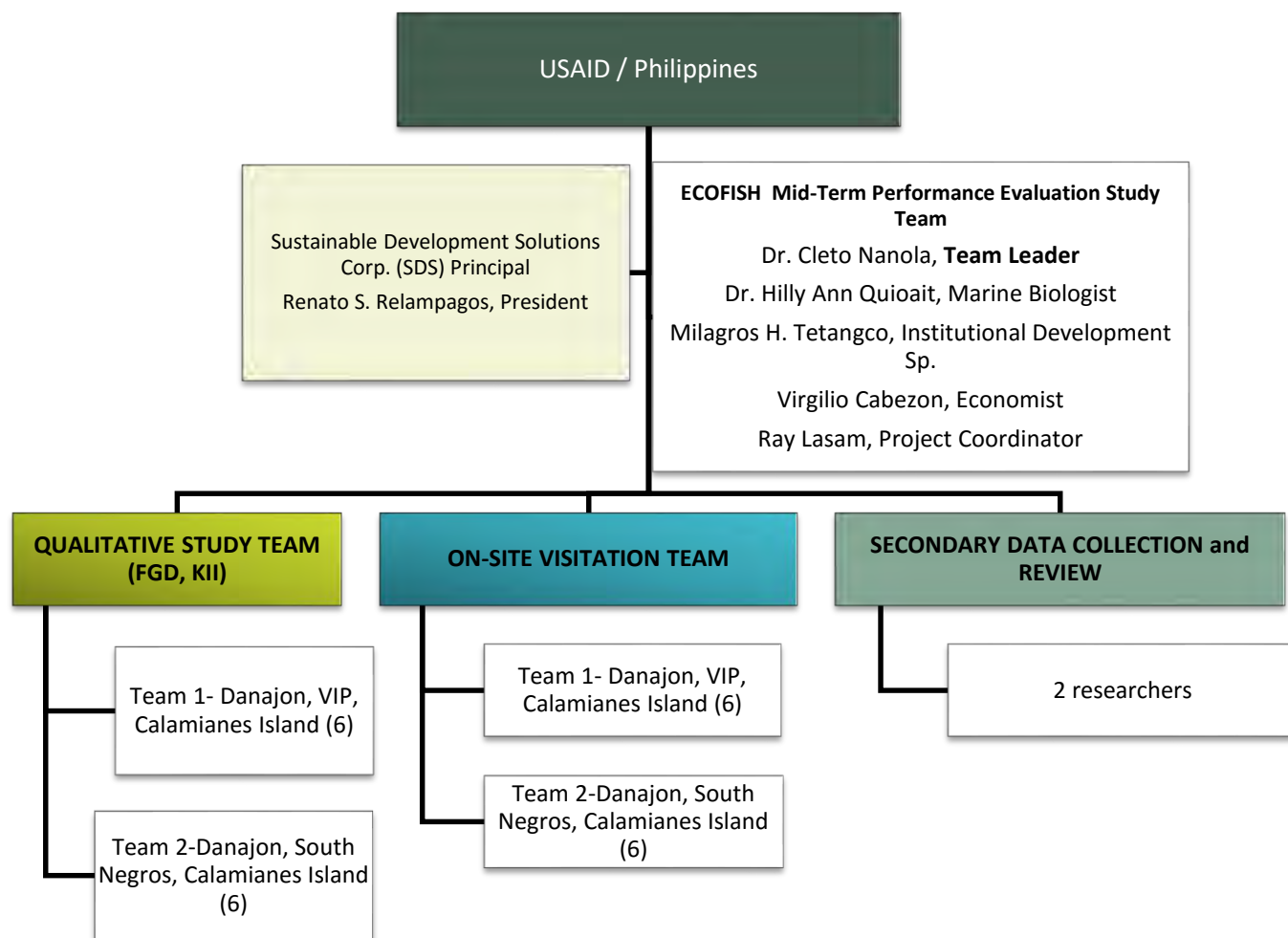


Figure 5 - Evaluation Team Organization and Coordination Structure

2.5 Period of Evaluation

The evaluation will be completed using 60 Level of Effort (LOE) days, starting on July 21 to October 17, 2015. Table 3 presents level of effort per task/activity as per contract.

Table 12. Level of Effort per Evaluation Task/Activity

Activities	LOE	Time line
1. Preparations (desk review, development of instruments, and meeting with USAID/Philippines)	8	July 23 - August 7

Activities	LOE	Time line
and TETRA TECH)		
2. Development of the evaluation work plan	4	August 10 - August 13
3. In country field work, analysis, debriefing and writing of first draft		
a. Team planning	1	August 17
b. Briefing with USAID/Philippines, discussion of work plan	1	August 18
c. Revision and submission of final work plan	1	August 20
d. Hiring of field teams		August 12 - August 24
e. Training of field teams	2	September 4-6
f. Field work: FGD, KII, On-Site Visitation; writing and submission of fieldwork update	14	September 7-25
g. Data analysis, submission of draft summary findings	12	September 30
h. Debriefing of draft summary findings	1	October 1 - tentative
i. Revision of draft summary findings	1	October 2
j. Debriefing of draft findings with USAID/Philippines and relevant stakeholders	1	October 3
k. Writing and Submission of detailed first draft	7	October 4-10
l. Writing and Submission of final draft	4	October 11-14
m. Writing and submission of publishable report	3	October 15-17

3.0 APPROACH TO THE FINAL PERFORMANCE EVALUATION

3.1 Evaluation Framework

The consultant considers a clear and complete understanding of the performance evaluation study requirements, its objectives and other justifiable constraints defining the scope of studies. Strategies and approaches are within the development mandate pursued by the USAID and BFAR and concerned LGUs in setting into motion the ecosystem approach to fisheries management program strategy of the ECOFISH Project.

ECOFISH Themes |
Components:

Key Activities

Biodiversity
conservation

Application, implementation and institutionalization of innovative EAFM principles and best practices in eight MKBA by rehabilitating, restructuring or protecting coast and fisheries resources thru establishing network of MPAs, species and gear management, updating of plans and regulations | ordinances | zoning

Governance	Building developing collaboration among multiple sectors for EAFM; capacity building on EAFM; and building champions and constituencies for sustainability of EAFM
Socio-economics	Build strategic partnerships to advance ECOFISH project goals; improve socio-economic conditions of fishing communities; reduce pressure on natural resources and increase income of beneficiaries
Gender Mainstreaming	Developing women's resilience by increasing their access to capital, provision of training for livelihood; and increase participation in planning and decision making processes and activities

The four (4) components are all aligned to their respective outputs, outcomes and, eventually, ECOFISH overall purpose | impact of improving management of coastal and marine resources that support local economies. Within the frame of the Project concept and design, integrated themes or components aim to achieve specific sets of results per deliverable. Results are set and so are the tasks and resources to enable implementation. Actual accomplishment, however, is constrained by exogenous factors. These may rest on three (3) entities; namely, (i) the Project mandate, including the policies and guidelines set at the USAID-P, PNP, and BFAR and if possible access to NSAP data, a project of BFAR on project operations and implementation; (ii) LGU activity/ prioritization and capacity to engage communities and issue policies or ordinances which support natural resources and biodiversity conservation; and iii) level of commitment and involvement of the communities and other stakeholder/institutional partners.

From the Theory of Change for ECOFISH Project, prescribed results in all levels of project characterization shall be gathered, updated and compiled for purposes of the assessment using widely accepted parametric and non-parametric tests. These tests would eventually relate to the overarching concern of the project unto which the degree of achievement of the primary goal and objectives would be measured in its generated relevance, process, effects and outcomes.

The activities operate in a circular dynamic reflective of their cohesion and interdependence; and suggestive of the roles of partners, oversight agencies, partner-beneficiaries (coastal and fishing communities, LGUs, private sectors and multinational and Filipino companies) reinforcing quality of benefits, lessons learned and results and outcomes from FISH Project implementation. As such, the effectiveness, efficiency and sustainability of the ECOFISH project cannot be attributed to a single component but rather to the sum total of their interactions. From this standpoint, a multi-level analysis will be performed: from activity to MBKA-specific and Project-wide; with case studies to highlight progress and outcomes of activities to date, determine challenges and strategies; assess processes and partnerships; and evaluate sustainability mechanisms. This Integrative Study Framework is designed to address the stated purpose of the evaluation (p. 6, SOL-492-15-000004).

The same Analytical Framework intends to realize the key EAFM principles required; and the suggested evaluation methodologies (page 6, SOW) including the investigation of the

evaluability of the evaluation questions, standard scientific methodology, results chain of the TOC and collaboration or participation of LGUs, various stakeholders and institutional partners. In view of these objectives, we anchor our basic approaches and methodologies on three (3) essential factors:

- (1) ECOFISH documents and reports, (e.g. contract, work plan, M&E plan, status reports Baseline/Benchmark, operations plans, MPA related studies of the 8 sites; covenant with BFAR and partner LGUs, FISH Project documents, etc.);
- (2) The Results Chain-TOC framework; and
- (3) Development experiences of coastal and fishing communities in the country as manifested in previous project completion evaluation and assessment studies and baseline/benchmark surveys undertaken by the ECOFISH Project and the Department of Agriculture-BFAR in the 8 MKBAs.

Moreover, the following matrix illustrates the conduct of the performance evaluation along the four axes: relevance (pertinence), process (effectiveness and efficiency), effects (achievement of the project's specific objectives), and outcome (achievement of the program's overall objective). Incorporating the levels of analysis and evaluation provides a guide to the SDS approach to the performance evaluation.

Table 13. Matrix Illustrating the Conduct of the Performance Evaluation

Relevance	Process	Effects	Outcome
Pertinence	Effectiveness Efficiency	Impact	Sustainability
Design Evaluation	Process assessment Structure assessment	Objectives/results assessment	Design evaluation Objectives/results assessment
Consistency Alignment	Appropriation and participation (with respect to partners and beneficiaries) Institutional and capacity building	Coverage and depth Institutional and capacity building	Appropriation and participation (with respect to final beneficiaries)
Exclusion/marginalization, gender equity, social-cultural factors, economic and technological trends, etc.			

3.2 Approach and Methodology

The proposed performance evaluation design and framework embodies the following proven approaches in attaining the objectives of these consulting engagements.

Consultative Approach. This framework entails the interplay of various stakeholders, thus, calling for clear understanding and consideration of various stakeholders' cultures and interests in the performance evaluation and assessment process. We envision a work plan that leverages on the

commitment and participation of the ECOFISH Project stakeholders and institutional partners. Entities that will be involved in the consultations shall include the USAID-P Team, ECOFISH project management and M&E team, BFAR personnel, participating local government units of the 8 MKBAs, community members, women's groups, community-based organizations, academic institutions, private sector partners, and oversight agencies if necessary. Their views and insights shall input to the documentation of progress, challenges, strategies employed, practical lessons learned in the course of the implementation, use/operation of facilities and services, and validation of outputs and outcomes resulting from various project interventions or tasks.

On the field, proposed research teams shall be deployed with the assistance of ECOFISH and BFAR personnel or staff in coordinating visits to the sites and organizing interviews and one-on-one discussions with community beneficiaries, local government officials, and other stakeholders. Such coordination work shall form part of the institutional arrangements to be established by the SDS team with the USAID team as early as the mobilization stage to advance the preparations for the field study and researches.

Other than biophysical assessment, consultations shall be deepened through the conduct of focus group discussions (FGDs) and key informant interviews (KIIs) with local stakeholders that include the community members, fishers associations, barangay and municipal government officials, SMEs, fishing cooperatives, other institutional partners, IP and women representatives, and ECOFISH and BFAR project staff. The purpose of these direct face-to-face discussions is to elicit local experiences and perceptions on the interventions undertaken, including apprehensions and reservations made on development processes applied in the area. For instance, the noted hesitance towards risk-taking or EAFM adoption by the fishing communities in some of the sites may have to be understood also within the context of existing cultural practices, IP traditions, their relations with the LGUs, enabling environment in terms of existing ordinances and local policies, and previous experience with coastal resources management. Such nuances would be captured in the documentation process for FGDs/KIIs where even subtle and taken-for-granted reactions (e.g., physical mannerisms and utterances) would be taken into consideration in the assessment.

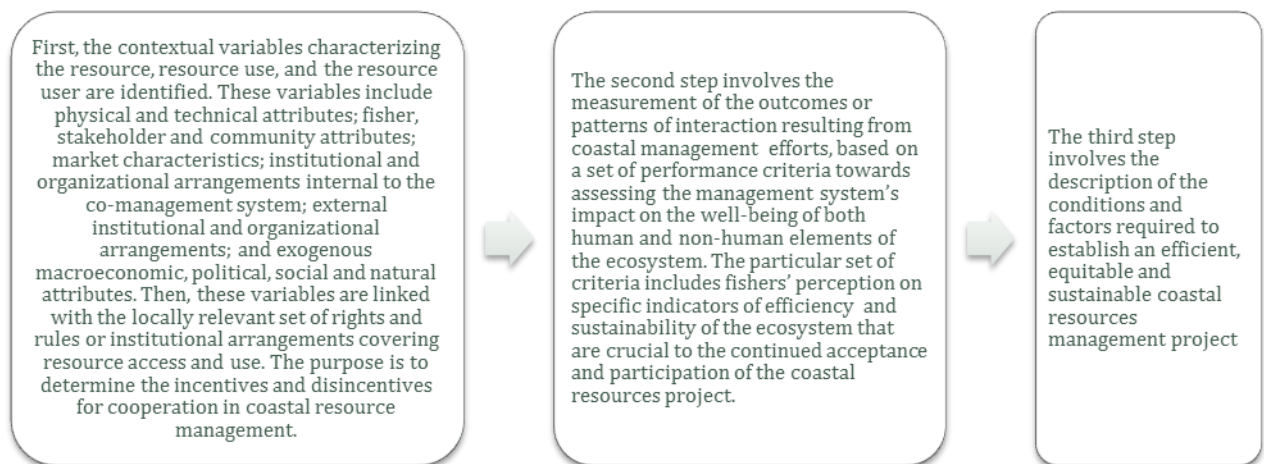
Participatory Approach. The participatory approach to the research process is closely tied to the consultative approach but for this performance evaluation, we distinguish the former as part of continuing efforts of the ECOFISH and USAID-P to involve local stakeholders in all phases of the project management cycle. We support the adoption of participatory approach as an effective tool in ensuring ownership and sustained involvement of the program partners and stakeholders. Participatory processes are highly important in evaluation studies particularly in determining the extent of social and economic well-being, which is not captured adequately or accurately in essence by figures and other quantitative indicators (e.g., poverty indicators). Here, self-rating and perceptions are vital in shedding light on such aspects as one's economic situation or satisfaction derived from project outputs, and other social dimensions and impacts derived from the ECOFISH project activities and investment. Other merits for using the participatory approach in this evaluation study are as follows:

- Identifying and addressing the multi-faceted concerns of partners stakeholders at the ground level;

- Focusing on operational concerns, issues and gaps that need to be addressed;
- Providing for alternatives for consideration not only in planning and managing interventions but also in designing them to fit the circumstances of local people in a given MKBA; and specific to development potentials and limitations of every barangay/municipality or coastal community;
- Improving informed decision-making process by taking into account the influence of traditional practices as well as attitudes and behavior towards risks and changes, building of new partnerships and alliances; and
- Understanding how local dynamics, such as social hierarchical structures, relations among people belonging to different denominations, and gender relations tend to influence the nature of institutional and organizational supports provided as well as conflict management strategies to be adopted in the future.

Institutional Analysis Approach. SDS also proposes to employ the Institutional Analysis Approach, in particular for the institutional set-up and structure for coastal areas covered by the ECOFISH interventions. According to Israel (2001), the approach involves 3-steps as illustrated below:

Figure 6 – Institutional Analysis Approach (Israel, 2001)



For the Institutional Analysis approach, data sources will be the interviews with key informant and ocular observations while the secondary sources of data are project reports, published literature, local and national institutions and other sources.

In the actual analysis, descriptive and inferential statistics will be used. The descriptive analysis includes frequency counts, percentages, means and standard deviation and similar statistics. For the quantitative analysis, techniques like correlation and regression and principal component analysis will be employed. Correlation and regression analyses will be utilized to determine the relationship between dependent and independent variables (Israel, 2001).

For coastal and marine biodiversity conservation, this will be looked at using the lens of EAFM. The different essential elements of ICM will be used and analyzed in their contribution to sustainable coastal and marine development in the sites: governance; socio-economics; stakeholders'

participation and mobilization, monitoring, assessment and reporting; and, sustainable development aspects (biodiversity conservation, enhanced ecosystem, profitability of fisheries). Taking the case on governance – which are policy, legislation, strategies and action plans, institutional arrangement, financing, information and capacity building – how are these elements interacting in ensuring effectiveness, efficiency and sustainability based on selected performance indicators (e.g. MPA-MEAT, MPA Management Effectiveness Assessment Tool; MPA-NEAT, MPA-Network Effectiveness Assessment Tool).

Established Performance Evaluation Approaches

For a performance evaluation to demonstrate consistency and responsiveness to the directions taken by the ECOFISH Project in the course of its implementation and monitoring activities undertaken, we believe that an approach that faithfully follows best practices in performance evaluation would be suited to this Project. This we interpret by means of a careful study of the Results Monitoring as per TOC, conduct of sound and appropriate statistical research methods and analysis, and the adoption of a program on Quality Control (QC) and Quality Assurance (QA) to ensure credibility of our outputs and findings.

Table 14. Established Performance Evaluation Approaches

Approaches	Particulars
Use of the Theory of Change	As stipulated in the SOW, the proposed performance evaluation shall primarily deal with the comprehensive and independent evaluation of the progress in the implementation in terms of achieving key results and the subcomponents' project outcome indicators as designed, implemented and made operational on the ground. As commonly understood, the monitoring framework is used to assess the operational flow of project inputs and outputs to desired outcomes and impact. In the conduct of this evaluation, we shall not be limited to the review and assessment of Project inputs, activities and outputs already in place which essentially fall within the realm of project monitoring and evaluation (M&E). For the social dimensions of Project progress to be appropriately captured in the performance evaluation, qualitative measurements of these higher-order project results by way of soliciting the various stakeholders' participation in the evaluation process, as discussed in the foregoing, shall simultaneously be undertaken. At the end of the study, we shall endeavor to establish progress, facilitating factors, challenges, strategies in the implementation and if the progress is in line to produce the desired project results and welfare effects on its target clientele or beneficiaries, and whether these results and effects could be attributed to the interventions introduced. This approach is guided by an adaptation of the results monitoring framework or TOC. The succeeding section discusses the methodologies to be employed based on the mentioned results monitoring framework.
Triangulation	Where possible and cost-effective, the quality of information can be enhanced by collecting data from more than one source and through more than one

Approaches	Particulars
	method. This principle of 'triangulation' comes from the surveying profession, where one must take a minimum of three theodolite readings to be confident of the exact location of a reference point.
Quantitative Analysis	By definition, quantitative data involves numbers that can be subjected to various forms of statistical analysis. Qualitative data on the other hand usually provides information on people's views, opinions, or observations and is often presented (at least initially) in a narrative form. An appropriate balance between the two is often best – with the interpretation of quantitative data being 'enriched' through an understanding of 'what people think.' Conversely, the statistical analysis of quantitative data may help confirm or raise questions about the information collected from surveying people's opinions. Some of the main methods that can be used to analyze and present quantitative data in a way which Project Managers are likely to find useful are outlined below: ▪ <i>Planned vs. Actual</i> - Monitoring is primarily about comparing what was originally planned with what actually happened. This analysis should therefore form the foundation of any monitoring, review, and reporting system. ▪ <i>Percentages/Ratios</i> - Calculating percentages and ratios is a particularly useful way of presenting performance information. Assuming that the planned targets are reasonably accurate/realistic, such ratios help us see how close we are to achieving what we originally intended. If for example; we are comparing planned with actual performance, low percentage figures immediately highlight areas of potential concern and should trigger an analysis of cause and subsequent decisions on what remedial actions to take. ▪ <i>Trends Over Time And Comparisons Between Periods</i> - An analysis of available data over different time periods can be extremely useful in revealing how the project is performing. This can aid the researcher in determining whether performance is improving or worsening between periods and allowing for the identification of seasonal variability. ▪ <i>Geographic Variance</i> - Projects which are being implemented in a number of different locations can be monitored in such a way that geographic variations in performance can be identified. Aggregate service delivery or 'outcome' indicators may show results that are generally in accordance with planned targets, but do not reveal location-specific problems that need to be addressed. An analysis of data from different districts, provinces or regions may therefore reveal issues requiring management attention. ▪ <i>Group Variance</i> - As with geographic variance, it may be important to monitor variance in outcomes between different social groups. For example, an important concern for many projects will be the impact of the project on both women and men. ▪ <i>Work Norms and Standards</i> - Many service delivery activities can be usefully

Approaches	Particulars
	monitored by establishing and then collecting information on work-norms or standards.
Quality Control and Assurance	Backed by strong management commitment to help anticipate, identify, and comply with the requirements of the USAID-P, our QA and QC program shall be proactive. The quality program includes independent reviews, audits, and corrective actions together with documentation of these activities. Under QA, key professional and the Project Management Team (PMT) members shall be engaged in systematic and planned reviews, audits, and the taking of corrective action needed for all contractual and agreed-upon technical procedures and processes. Meanwhile, our QC program shall ensure the provision of all required Project deliverables and services specified in the SOW and in accordance with the USAID-P requirements. These outputs and services shall be delivered in compliance with professional standards established by the consulting community as well as scientific and technical disciplines involved in the conduct of the evaluation study. In particular, we are adopting a research program that would ensure completeness, correctness, and consistency of data; sound data analysis; and interpretation.

3.3 Data Collection Methodologies

The performance evaluation design includes developing a methodology for collecting data, drafting and testing study instruments using both quantitative and qualitative methods of data collection.

On-Site Visitation

On-site visitation will be conducted in the 4 selected MKBAs (Calamines Island group, Danajon Bank, South Negros and Verde Island Passage) of which sampled sites are discussed in the succeeding section.

SDS team will conduct ocular observation along the coast particularly the physical development in the MPA but not limited to the presence of buoy markers, bill boards, guard houses, training center, etc. Observations will be documented by taking photographs. This will be done in all of the 3 MPAs per MKBA area, hence, a total of 12 actual site visits will be done.

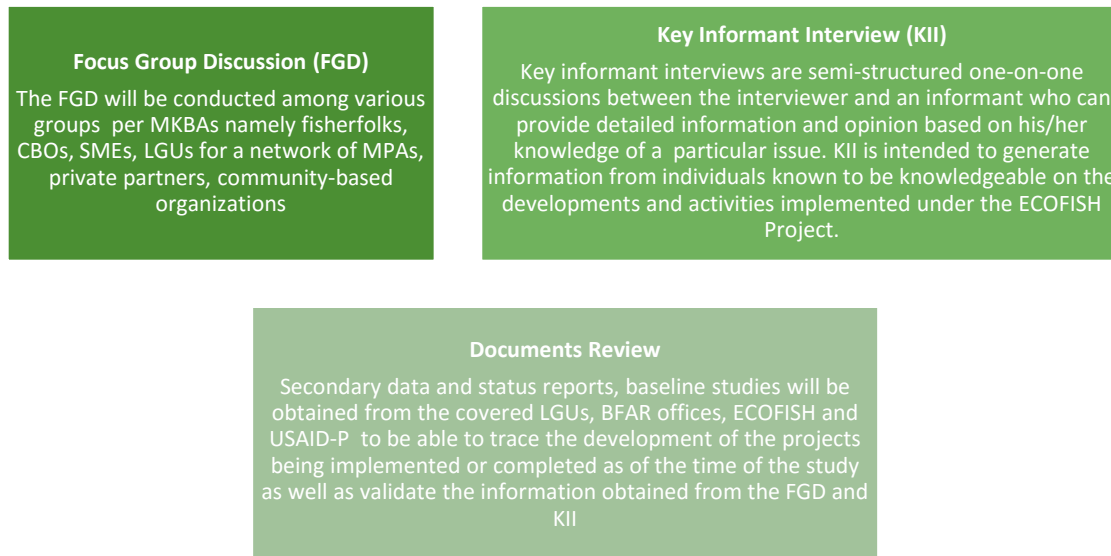
QUALITATIVE

The qualitative component of the study is intended to complement the quantitative component. Qualitative data will be derived from focus group discussions (FGDs) and in-depth interviews with key informants (KII): people who are involved in the project or the targeted partners or beneficiaries of the ECOFISH project.

The study will adopt Kirkpatrick's Model of evaluation which consists of several data capture tools namely: FGD with fishing communities, women, BLGUs, private sector, community based

organizations; and other implementing partners; individual interviews (KII) with the MLGU, regional BFAR personnel; PNP-Maritime, Coastguard, private sector representatives, USAID-P and ECOFISH personnel, and; documents review of the secondary data provided by the USAID-P, ECOFISH and the LGU Project staff.

Figure 7 - Kirkpatrick's Model of Evaluation



FGDs and KIIs will be conducted among coastal community members (fisher folks; participating LGUs: barangay and municipal leaders); BFAR personnel, IP and women beneficiaries; SMES, CBOs, private sector partners, training recipients; and other institutional partners.

Key Informant Interviews can extract data on perceptions, attitudes, and motivations deeper than a standardized interview. Because of its in-depth nature, the interview is self-revealing and personal; the focus is on the depth of meaning. The interview guide can either be structured and/or semi-structured. All the qualitative techniques employed in this study will also document experiences, challenges and strategies, lessons and insights learned that can be used to enhance the policy framework, planning strategies, project design and implementation of the ECOFISH Project and for similar coastal and marine management programs.

FGD guide questions will capture data as listed in Table below. These will be constructed in English and translated into the appropriate languages in the purposively selected 4 MKBAs. Along with the guide questions will be a screening form or an information sheet that will contain the social, economic and demographic backgrounds of the FGD participants. The guide questions will be pre-tested in the field prior to its virtual use in the study.

SECONDARY DATA COLLECTION AND ANALYSIS

Secondary data collection and review of existing program reports and reports such as progress reports; baseline study report; training design and reports; good practices in EAFM and community monitoring, among other available related data will be undertaken to complement the results of the performance evaluation methods of research that will be implemented.

Table 15. Summary of Data Collection Methodologies to be Employed Showing Sample and Areas to be Covered

Methodology	Particulars	Sampling	Respondents Areas to be Covered
Data Validation	A content analysis will be conducted in order to arrive at a comprehensive desk review. For data quality assessment	Not Applicable	Not Applicable
Focus Group Discussions	There should be between 8 to 10 participants in every session, with the participants exhibiting fairly homogeneous characteristics. The date and time should be convenient for the participants; the venue should be neutral, and so on.	2 sessions per municipality (fisher folks and Bantay Dagat group) =around 6 sessions per MKBA, a total of 24 FGD sessions	Fisher folks, women, barangay and municipal leaders, IP and youth beneficiaries
Key Informant Interview	The interview is self-revealing and personal and the focus is on the depth of meaning. The interview guide can either be structured or semi-structured.	Purposive identification of informants in close coordination with USAID-P and ECOFISH Project	LGUs (provincial, municipal, barangay levels); BFAR personnel, academic institutions, private sector partners, TETRA TECH, USAID and other partners
On-Site Visitation	Status of the coastal zone; the physical conditions of the MPAs; structures of enterprise development (if any)	Ocular observation and photo documentation	The enforcement team (e.g. Bantay Dagat and fisher folks); beneficiaries of the developed enterprises

3.3.1 Proposed Questions

Table 7 below lists the proposed evaluation methods based on the evaluation questions stipulated in the SOW. FGD and KII guide questions are found in Annexes 1 and 2, respectively.

Table 16. Evaluation Questions and the Proposed Methods

Evaluation Questions	Evaluation Methods
1) To what extent and under what conditions did an increased fish provision lead to better employment for fishing among households?	KII, FGD, secondary data review, on-site visitation

2) To what extent and under what condition did reduction in pressures lead to increases in fish stocks?	KII, FGD, secondary data review, on-site visitation
3) To what extent and under what conditions did increased enforcement effort and effectiveness lead to pressure reduction?	KII, FGD, secondary data review, on-site visitation
4) How, to what extent, and under what conditions have PPPs contributed to EAFM outcomes?	KII, FGD, secondary data review, on-site visitation
5) To what extent and under what conditions are the enabling conditions in place to establish enterprises and for them to generate household income?	KII, FGD, secondary data review, on-site visitation
6) To what extent and under what conditions did income from enterprises lead to decrease in household fishing effort?	KII, FGD, secondary data review, on-site visitation
7) To what extent and under what conditions did the provinces facilitate inter-LGU fisheries management interventions?	KII, FGD, secondary data review
8) To what extent and under what conditions did increased capacity of NGA lead to implementation of national and local policies?	KII, FGD, secondary data review
9) To what extent and under what conditions did LGUs move from fisheries management to EAFM?	KII, FGD, secondary data review
10) To what extent and under what conditions did the LGU policies and regulations lead to right sizing of fishing effort at the LGU level?	KII, FGD, secondary data review
11) To what extent and under what conditions did social capital and leadership catalyze/create movement of LGUs from startup fisheries management to EAFM?	KII, FGD, secondary data review, on-site visitation
12) To what extent and under what conditions did the studies inform development of EAFM?	KII, FGD, secondary data review

3.3.2 Sampling Design for Evaluation

Criteria for Site Selection

In each of the four MKBAs, the three municipalities with baseline assessment of their MPAs will be by default the municipalities to be surveyed. It follows that the MPAs to be surveyed are those with baseline information conducted in 2013. However, in the case of the conduct of FGD and KII, there will be only three barangays that will be sampled out of the several barangays surveyed during the baseline assessment.

Table 17. Sample Sites

MKBA	Covered MPAs	Municipalities to be covered
Verde Island Passage	13. Bagong Silang	Calatagan
	14. San Teodoro-Twin Rocks	Mabini
	15. Sto. Tomas-Pulang Buli	Tingloy
Danajon Reef	16. Nasingan	Getafe
	17. Cuaming	Inabanga
	18. Pangapasan	Tubigon
Calamianes Island Group	19. Siete Pecados	Coron
	20. Bugor	Culion
	21. Royukon-Sagrado	Busuanga
South Negros	22. Tambobo	Siaton
	23. Salag-Maloh	Sta. Catalina
	24. Andulay Siit	Bayawan

FGD participants

2 FGD sessions per municipality

- Group 1: 8-10 Fisher Folks
- Group 2: 8-10 Bantay Dagat Group

Key Informants

National level	Provincial level	Municipal level	Barangay level
1. TETRA TECH	1. Governor/Administrator	1. LCE/Administrator	1. Barangay chairman
2. USAID-P	2. Provincial Planning Development Officer (PPDO)	2. MAO/Fisheries Technician	2. Enterprise
3. BFAR Director /NSA Personnel	3. Accountant	3. Municipal Planning Development Officer (MPDO)	3. Peoples' organization president and treasurer
4. PNP	4. PPP partner-SMART 5. BFAR personnel 6. Academe	4. BFAR officer 5. Accountant 6. Enforcer -PNP Maritime	4. NGO CSO rep

3.4 Plan for Data Analysis

3.4.1 Processing of Qualitative Data

Qualitative data will be processed by translating and consolidating all field notes (transcription, if necessary) into one unified data base that will allow for data analysis and interpretation. The consolidation may be in the form of tables that show answers (direct verbatim quotations and translations) to specific questions. The Evaluation Team, and all those who will participate in the FGDs as moderators, recorders or note-takers will conduct a series of meetings to interpret the data and to better understand the context of answers (especially those in response to crucial issues). The resulting table shall contain the full range and depth of available information and answers to questions. On the other hand, the qualitative data generated from the KII will be compiled into themes and analyzed either manually or with the use of computer software.

3.4.2 Data Summation by Data Gathering Method

The information from each data gathering method (FGD, KII and SDC) will be treated on their own terms prior to cross verification with results from other methods. Data analysis from FGD and KII outputs will cover the “how” and “to what extent” did the ECOFISH Project achieve its expected results. The analysis will focus on the project’s key results.

3.4.3 Data Triangulation

Triangulation is the use of more than one type of perspective or source of information in order to validate the results of the evaluation or to cross check data from the different data gathering methods. For this evaluation, analysis will be done such that data from each method of research (e.g., Site Visitation, FGD, KII and SDC) will be used to confirm or supplement data from other methods.

4.0 SUMMARY OF DESK REVIEW

Twenty nine (29) ECOFISH documents (including power point presentations) have been reviewed. Table 9 summarizes the contents of these documents and explains their relevance relative to the conduct of the mid-term evaluation report (MTER). For purposes of clarity, sub titles are clustered under the “mother” document.

Table 18. Summary of Desk Review

Documents Reviewed	Highlights
1. ECOFISH-LOP Work plan - 2013-1 - Year 1 Work plan - Year 2 Work plan - Year 3 Work plan	- LOP work plan details ECOFISH implementing strategies, including the organizational structure throughout its 5-year period of implementation. The LOP work plan is akin to a project appraisal report (PAR). It contextualizes ECOFISH project design; and lays in perspective the activities and strategies to achieve the project results⁴, thus a good reading material. The missing element is the cost of different interventions. - Of significant is the composition of focal areas (municipal LGUs old and new), comprising the 8 MKBAs, which can serve as the “population” for selecting the sample municipal LGUs for primary data gathering. This would permit objective observation of project results (biophysical, governance, socio-economics, etc.). - Key strategic partners of Tetra Tech (PRIMEX, REECS, and MERF) have been identified in the overall ECOFISH implementing structure. The key resource people/institutions, notably Tetra Tech/REECS could lend valuable insights on the monitoring of ECOFISH data to date to provide a better assessment on the “evaluability” of the 12 questions.
2. ECOFISH-Mid-term	MTR presents the performance of ECOFISH, from year 1

⁴ During the 6 August 2015 bilateral consultation, Tetra Tech informed that the theory of change (TOC) was built into ECOFISH while the project is now under implementation. TOC was never considered in ECOFISH planning stage.

Documents Reviewed	Highlights
Report (MTR)-02-2015 • Year 1 Annual Report • Year 2 Annual Report • Year 1 Semi-Annual Report • Year 2 Semi-Annual Report • Jun-Sep 2012 Quarterly Report • Oct-Dec 2012 Quarterly Report • Apr-Jun 2013 Quarterly Report • Oct-Dec 2013 Quarterly Report • Oct-Dec 2014 Quarterly Report	to year 3, assessed and measured against the 6 results (Results A-Results F). Accomplishments were assessed vis-à-vis performance targets. MTR provides information that lends credence for descriptive performance evaluation. The depth of information available in the MTR would comprise a major input for the MTER, particularly in meeting objectives B and C of TOR (e.g. contribution to meeting targets and implementation challenges). • MTR is structured by deliverables and site-level accomplishments. At the end section of the report, a snapshot of the accomplishment is presented, useful for quick decision-making. • What went well and <i>vice versa</i> during the course of the 3-year period was discussed extensively. For instance, ECOFISH permitted enough leeway in implementing the activities that resulted in achieving immediate impact (Result C), brought about by deliverable 1 (policy studies). Snags that were encountered during the implementation can provide insights on lessons learned.
3. Tools and Instrument • Data Capture for ECOFISH Evaluation with inputs (Excel Template) • M and E Plan • Mid-term	• The Excel template is the most important document to permit "evaluability" of the 12 questions to answer Objective A of TOR⁵. For each question, dependent and independent variables have been identified, including specific measurement. • Data availability remains to be a major concern as most of the data (either primary or secondary) are under process.⁶ Second, the cost of collecting the data will have an important implication on the feasibility of each question. • On the assumption that data are available (as a first

⁵ The indicators to measure results were aptly discussed in the M and E Plan.

⁶ Tetra Tech/REECS argued that the data are readily available (conveyed during the 6 August 2015 consultation). Further, it may be worthwhile to know if ECOFISH considered the data requirement (e.g. data retrieval and collection) as part of the national database system (deliverable 3). As per MTR, the data base system has decided to use BFAR-FIMS and if so, is there a possibility to integrate the information generated by the 12 questions to be part of the system, in particular the governance aspect.

Documents Reviewed	Highlights
- Performance Evaluation Annex - PPP Rapid Appraisal Report	step) it is possible to select the variables that could explain causality (through the assistance of statistician). - The next step is to go through the whole matrix and answer individually the questions being posed for each variable and then factor the cost of collection and relative ease of collecting the data, the latter of which can be validated during the KIIs (second step)⁷. Only then can a final outcome be established. Is the relationship between the dependent (s) and independent variable(s) due to causality? Or can a plausible link be established? A causal or plausible link may be observed by a "change", and the change (developmental) should be attributable to ECOFISH intervention. The FGD/KIIs should be able to capture the change. - PPP Rapid Appraisal Report is informative material, especially in scanning the PPP environment. ECOFISH almost accomplished its target on strategic partnerships as of mid-term.
4. ECOFISH Baseline Assessment Report, 2013-07	The baseline assessment report is comprehensive. It has a wealth of information that can serve as: (a) basis for comparing mid-term accomplishments; and (b) quantitative data for selecting sample LGUS as sites for mid-term assessment, e.g. biophysical and socio-economic.

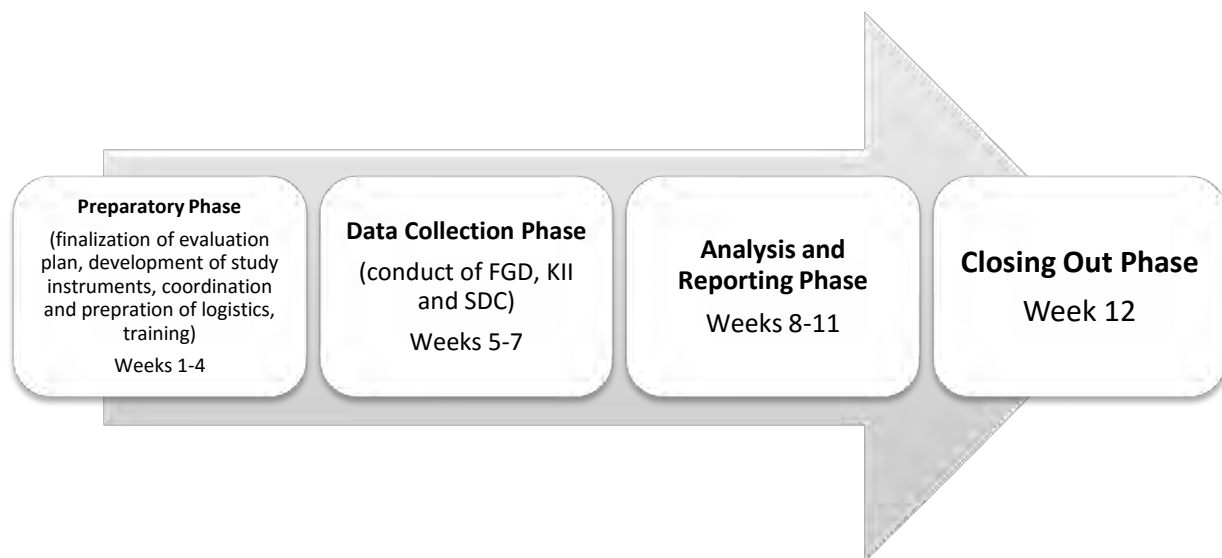
⁷ By asking the information required through KII, it can be determined whether, in fact, the point person/agency has the data or still to be collected.

ANNEX II: WORKPLAN

4.0 WORKPLAN

The ECOFISH Project Midterm Performance Evaluation will be completed in a 12-week period, with about 14-day field work for actual data gathering (i.e., the on-site visitation, FGD, KII, and possible additional secondary data collection, SDC), in accordance with the RFP. Figure 4 below highlights the four (4) phases of the evaluation with the estimated time for each phase. The Work and Deliverables Schedule in Figure 5 illustrates the week-by-week organization of activities and scheduling of accomplishments to comply with evaluation period of 60 LOE days.

Figure 8 - Phases of the Ecofish Project Midterm Performance Evaluation



As reflected in Figure 6, the critical activity during the Preparatory Phase is the recruitment and training of field teams composed of on-site visitation and qualitative study teams. Near critical activities during the Data Gathering Phase include the scheduling of KIIs with key informants and the availability of the target participants to the FGD sessions. The schedule for completion of expected deliverables is also shown in the table.

The SDS Evaluation Team will provide an update report to the USAID/Philippines at the midpoint of the field work on September 14, 2015.

Figure 9 - Final Work Plan for the Conduct of the Midterm Performance Evaluation of the Ecofish Project

		JULY -AUGUST					SEPTEMBER					OCTOBER			
	Week	0	1	2	3	4	5	6	7	8	9	10	11	12	0
	Activities	July 20-25	July 27-Aug 1	Aug 3-8	Aug 10-15	Aug 17-22	Aug 24-29	Aug 31-Sep 5	Sep 7-12	Sep 14-19	Sep 21-26	Sep 28-Oct 3	October 5-10	October 12-17	October
1	MOBILIZATION PHASE														
2	PREPARATORY PHASE														
	Conducting desk review of relevant documents														
	Levelling off meeting with USAID														
	Developing draft evaluation workplan, data collection instruments, survey questionnaires, interview guides for KIIs and FGDs and field schedule														
	Meeting with USAID/P to finalize tools and arrangements														
	Finalizing workplan and data collection instruments thru team workshops and meetings														
	Preparing logistical requirements and sending letter of invitation and confirming attendance														
	Hiring and training of field supervisor, interviewers, facilitators and documenters														
3	DATA COLLECTION PHASE														
	Conducting FGD, KII, and secondary data review in 4 MKBAs (Danajon Reef, Verde Island Passage, Calamianes Island, South Negros)														
4	REPORTING PHASE														
	Data analysis														
	Debriefing on draft summary findings with PRM and OEECC														
	Revision of draft summary findings														
	Debriefing of draft findings with mission management and with relevant GPH departments and other stakeholders														
	Drafting of detailed first draft														
	Writing of Final Draft based on comments														
	Submitting publishable report to USAID														
5	CLOSING OUT PHASE														
	Conducting exit conference with USAID/P														
	DELIVERABLES														
1	Submission of evaluation approach and desk study summary														
2	Submission of Work Plan														
3	Field Work Progress														

Figure 6 - Field Schedule for the Conduct of the Midterm Performance Evaluation of the Ecofish Project

ACTIVITY	September 03	September 04	September 05	September 06	September 07	September 08	September 09	September 10	September 11	September 12	September 13	September 14	September 15	September 16	September 17	September 18	September 19	September 20	September 21	September 22	September 23	September 24	September 25	September 26
Travel time from base home to Bohol for training																								
Training-Orientation in Bohol (Talibon)																								
Data collection in Danajon Reef (FGD, KII, secondary data collection)																								
Travel time to next MKBA/ site																								
Data collection in Verde Island Passage and South Negros (FGD, KII, secondary data collection)																								
Travel time to Calamianes MKBA (Palawan)																								
Data collection in Calamianes Island (FGD, KII, secondary data collection)																								
Data editing and encoding and review with the consultants team																								
Travel back home																								

Legend

	Teams 1 and 2 and consultants
	Team 1
	Team 2

ANNEX III

Data Collection Instruments

ANNEX III: DATA COLLECTION INSTRUMENTS

1.0 DATA COLLECTION INSTRUMENTS (KII AND FGD)

KII Guide Questions

Informant's Name and Designation:

Date of Interview:

Time Started:

Time End:

Place of Interview:

(venue/municipality/province/MKBA)

Interviewer:

Documenter:

Guide Questions: KII - Mayor

Name : _____

Province: _____

Municipality: _____

Interviewer: _____

Note taker: _____

Question	Probing Question
1. What is the present status of your municipal marine and fisheries resources?	1a. Before this, what was the status of these resources? 1b. What could have caused the difference before and now?
2. How long has the ECOFISH project been implemented in your municipality?	
(One of the interventions of the Project is to strengthen enforcement effort of fisheries policies and laws.) 3. Is there a province-wide or Inter-LGU composite Enforcement team?	____ Yes _____ No 3a. Who are the members of this Committee?
4. Is there an Enforcement Plan being implemented in the municipality?	
5. Was there change in enforcement effort resulting from Project intervention?	____ Yes _____ No IF YES: 5a. What are the changes?
6. With increased enforcement effort, is there a change in number of violators?	____ Yes _____ No 6a. Were persons apprehended subsequently penalized?

	6b. What are the types of penalties imposed on violators? 6c. Are there cases filed? By whom?
7. Has there been a decrease in the use of illegal fishing methods after the Project interventions?	
8. Did the increased enforcement effort lead to changes in land-based and sea-based operations/activities?	_____Yes _____No IF YES: 8a. What land-based operations are conducted? 8b. What sea-based operations are conducted?
9. Are there fisheries-related program/enterprise/activity initiated and established through Public-Private Partnership?	_____Yes _____No IF Yes: 9a. What type of activity, enterprise or activity? 9b. Were these enterprises/activities initiated/implemented by the LGU, ECOFISH, others?
10. Are these partnerships supported with agreement or MOA or any legal instrument?	
11. Are there identified potential social enterprise for specific target communities in the municipality?	
12. What support has been provided by the Province to the municipality in coastal resource management/fisheries management?	
13. What support does the municipality provide for the establishment of social enterprise (financing, infrastructure like stalls, site development such as roads)	
14. Has a network of MPAs been organized among the municipalities in the province?	_____Yes _____No IF YES: 13a. How many hectares are covered by the network? 13b. Are there legal instruments for MPA, network of MPAs?
15. Were there enforcement operations performed jointly by the LGUs?	
16. Are there local policies crafted that are influenced by national enabling policies. If YES, what are these?	30. Is there budget provided for policy implementation?
17. Is there budget provided for policy implementation	
18. Are there formal agreements on ecosystem boundary delineations?	
19. Is registration and licensing of gears implemented in the LGU?	
20. Is boat registration and color coding	

Guide Questions: KII - MAO/Municipal Fisheries Officer

Name : _____

Province: _____

Municipality: _____

Barangay: _____

Interviewer: _____

____ MAO ____ Mun. FO

Question	Probing Question
1. What is the status of your municipal marine and fisheries resources?	1a. Before? Now? 1b. What could have caused the difference?
2. How long has the ECOFISH project been implemented in your municipality?	
3. What are the interventions/activities being implemented by the ECOFISH project?	
4. What is your specific role/participation in ECOFISH implementation?	
<i>(The objective of the ECOFISH project is to improve the management of important coastal and marine resources and associated ecosystems that support local economies. One of the interventions of the Project is to strengthen enforcement effort of fisheries policies and laws.)</i>	
5. Is there an Enforcement Plan being implemented in the municipality?	
6. Is there a municipal composite enforcement team?	6a. What is the composition of the Team? 6a. Is this Municipal Composite enforcement team responsible for enforcement in all barangays? Or does each barangay have its own enforcement team?
7. Has there been change in Enforcement policies and implementation?	7a. What are these changes? 7b. What are the causes or reasons for the change?
8. What were the effect of increased enforcement effort on extent of compliance by resource users? Was there a change in number of violators?	8a. Were persons apprehended subsequently penalized? 8b. What are the types of penalties imposed on violators? 8c. Was there a change in the number of confiscated destructive and unfriendly methods and gears?
9. Did the increased enforcement effort lead to changes in land-based and sea-borne operations?	9a. What are the land-based operations being done? 9b. What are the sea-borne operations being

	barangays>
23. Is monitoring system for coastal marine habitat and fisheries in place?	IF YES: a. What is your monitoring system being followed?
24. Is monitoring done regularly? How often?	IF YES: a. How often do you monitor? b. Who does the monitoring?
25. Has compliance with policies and regulations led to pressure reduction?	a. Are there observable changes in the coastal and marine resources condition that could have resulted from compliance with fisheries policies and regulations?
26. Are there Champions (credible individuals, decision makers) supporting the project?	26a (IF YES): What support do they provide?
27. Are there plans made as a result of the studies conducted	(IF YES) What is the nature of support?
28. Are there studies completed that contributed or will contribute to the development of EAFM?	59. (IF YES) What are these? How were results of these studies used in the implementation of the project?
29. Are there policies developed as a result of the studies conducted	What are these?
30. Are there plans made as a result of the studies conducted	What are these?

Guide Questions: KII - Barangay Chairman

Name : _____

Province: _____

Municipality: _____

Barangay: _____

Interviewer: _____

Question	Probing Question
1. What is the present status of your municipal marine and fisheries resources?	1a. Before this, what was the status of these resources? 1b. What could have caused the difference before and now?
2. How long has the ECOFISH project been implemented in your barangay?	
<i>(The objective of the ECOFISH project is to improve the management of important coastal and marine resources and associated ecosystems that support local economies. One of the interventions of the Project is to strengthen enforcement effort of fisheries policies and laws.)</i>	_____ Yes _____ No IF YES: 3a. What change?
3. Was there change in enforcement effort resulting from project intervention?	
4. Did the increased enforcement effort lead to changes in land-based and sea-based operations/activities?	_____ Yes _____ No
5. What land-based operations are conducted? What sea-based operations are conducted?	
6. What were the effect of increased enforcement effort on extent of compliance by resource users? Was there a change in number of violators?	
7. Were persons apprehended subsequently penalized?	_____ Yes _____ No 7a. What are the common types of violations?
8. What are the types of penalties imposed on violators?	
9. Has there been a decrease in the number of confiscated destructive and unfriendly fishing methods and gears?	_____ Yes _____ No
10. What policies and regulations on fisheries are presently being enforced? What policies were enforced before?	
11. Is the community aware of these policies?	_____ Yes _____ No IF NO: 11a. Why?
12. How will you compare the volume of catch before and with ECOFISH intervention?	Before ECOFISH: _____ kilos/week With ECOFISH : _____ kilos/week
13. Did the increase in catch result to better quality of life?	

14. Are there established enterprise /livelihood activities in the community? (with by-laws, in operation, with established office)	_____ Yes _____ No IF YES: 14a. What type/nature of enterprise/activity are these? 14b. Are these supported with agreement or MOA or any legal instrument?
15. Were these enterprises/activities initiated or implemented by the LGU, ECOFISH, others?	
16. What is your participation in this enterprise?	
17. What is the participation of women in the different types of enterprise	
18. What benefits have been derived by the community from the enterprise?	
19. What support does the municipality provide for the establishment of the enterprise?	
20. Were there training related to enterprise conducted in the community?	_____ Yes _____ No 20a. What are these training? 20b. What training did you attend? 20c. Were there women participants in the training?
21. Are there identified potential enterprise in the barangay?	
22. Was the time spent by the fisherfolks on their fishing activities reduced because of the presence of the enterprise?	_____ Yes _____ No Don't Know _____ IF YES: 22a. How (less number of days fishing, etc.) IF NO: 22b. Why?
23. Is registration and licensing of fishing gears/fishing boats implemented in the barangay?	
24. What are the common fishing method used by fisherfolks?	
25. What are the common gears used by fisherfolks?	
26. Does the barangay have budget for policy enforcement?	
27. Were there enforcement operations performed jointly by the LGUs?	
28. Are there formal agreements on ecosystem boundary delineations?	_____ Yes _____ No
29. Is monitoring system for coastal marine habitat and fisheries in place?	_____ Yes _____ No IF YES: 29. What is the status of monitoring of violations? Of policy implementation?

	29b. Is monitoring done regularly? How often? 29c. Who does the monitoring?
30. Are coastal zones established in your municipal waters?	_____ Yes _____ No 30a. Has there been a community consultation? 30b. What type of community consultation? IF NO: 30c. Will you agree/comply if there would be a policy or regulation on zoning?
31. How many hectares is your Marine Protected Area (MPA)	
32. Has a network of MPAs been established among the LGUs?	_____ Yes _____ No IF YES: 32a. How many hectares is covered by the network? 32b. How many LGUs are involved?
33. Are there programs on coastal resource management supported or endorsed by the municipality?	_____ Yes _____ No 33a. What are these programs? (IF NO) 33b. Why?
34. Are there other sectors (such as business, local NGO, Academe) that provide support to the project?	_____ Yes _____ No IF YES : 29a. Who?
35. Are there credible and influential persons (champions) supporting the project? Who are they?	
36. In case there is fisheries-related conflict, how is this solved?	
37. Are decisions reached through consensus of various stakeholders?	_____ Yes _____ No If Yes: 37a. Who participate in consensus building?
38. Are there self-help projects established in the barangay?	_____ Yes _____ No IF YES: 38a. Who initiated these projects? 38b. Who are participating in these projects?
39. Has there been a change/improvement in the economic status or way of life of the families in the barangay?	_____ Yes _____ No IF YES: 39a. What are these changes?

FGD Guide Questions

Informant's Name and Designation:

Date of Interview: Time Started:
Time End:

Place of Interview:
(venue/municipality/province/MKBA)

Facilitator: Documenter:

Guide questions: FGD-Bantay Dagat

Province: _____ Facilitator: _____
Municipality: _____ Documenter: _____
Barangay: _____ No. of Pax: _____

Question	Probing Question
1. What is the present status of your municipal marine and fisheries resources?	1a. Before, what was the status of these resources?
2. What is your source of income?	_____ Fishing Others/non-fishing: _____ 2a. How much do you get from fishing? (monthly) 2b. How many months in a year? 2c. How much do you get from non-fishing? (monthly) 2d. How many months in a year?
3. When was Bantay Dagat organized? How many members are there?	
4. Are you familiar with the ECOFISH project?	_____ Yes _____ No IF YES: 4a. What do you know about ECOFISH? 4b. What/Who was the source of your information? 4c. How long has the ECOFISH project been implemented in your municipality?
<i>(One of the interventions of the Project is to strengthen enforcement effort of fisheries policies and laws)</i>	_____ Yes _____ No IF YES: 5a. What change?

Guide Questions: FGD- Fisherfolks

Province: _____

Facilitator: _____

Municipality: _____

Documenter: _____

Barangay: _____

Time started: _____ Time ended: _____

Question	Probing Question
1. What is your source of income?	_____ fishing Others/non-fishing: _____ IF FISHING: 1a. How long have you been fishing (years) 1b. How much do you get from fishing? Monthly : _____ Pesos 1c. How many months in a year do you fish? IF NON-FISHING: 1d. How much do you get from non-fishing? Monthly: _____ Pesos 1e. How many months in a year?
2. Are you familiar with ECOFISH?	_____ Yes _____ No IF YES: 2a. What do you know about ECOFISH? 2b. What/Who was the source of your information 2c. What ECOFISH projects implemented in the municipality/barangay do you know? (What projects does your municipality have related to coastal resource and fisheries management?)
3. Is there an existing organization of fisherfolks in the barangay?	_____ Yes _____ No IF YES: 3a. When was this organized? 3b. Are you a member of the organization? 3c. Does your organization participate in ECOFISH activities? 3d. In what activities does your organization participate? 3e. Do you participate in these activities? Before? _____ Now? _____
4. How will you compare the volume of catch before and with ECOFISH intervention?	Before ECOFISH: _____ kilos/week With ECOFISH: _____ kilos/week
5. Did the increase in catch result to better quality of life?	
6. What support do the women members of your family (wife, adult daughter)	

provide in relation to your fishing livelihood?	
7. Is there an established enterprise/livelihood activities in the community? (with by-laws, in operation, with established cooperative/office)	_____ Yes _____ No IF YES: 7a. What are these established enterprise/livelihood activities? 7b. What institutions/organization supported this enterprise activity? IF NO: PROCEED TO QUESTION # 16
8. What type/nature of enterprise/activity are these?	
9. Were these enterprises/activities initiated/implemented by the LGU, ECOFISH, others?	
10. Are these partnership supported with agreement or MOA or any legal instrument?	
11. Were there training conducted in the community related to the enterprise/activity?	_____ Yes _____ No IF YES; 11a. What are these training? 11b. What training did you attend? 11c Were there women participants in the training?
12. What is your participation in this enterprise?	
13. What is the participation of women in the different types of enterprise	
14. What benefits do you derive from the established enterprise?	
15. When you became involved in the enterprise activities, was there a reduction in the time you spend in fishing?	_____ Yes _____ No IF YES: 15a. How many days do you spend fishing now? Before? IF NO: 15b. Why? 15c. What fishing gear do you use?
16. Is registration and licensing of fishing gears/fishing boats implemented in the municipality?	
18. Was there an increase in compliance because of the	

enterprise and partnership?	
19. Was there change in enforcement effort resulting from project intervention?	☐ Yes ☐ No IF YES: 18a. What change?
20. Has the increase in enforcement effort resulted to higher compliance by fisherfolks?	☐ Yes ☐ NO
21. Has there been a decrease in the use of destructive methods and gears?	21. What are these destructive methods? Gears?
22. Were persons apprehended subsequently penalized?	☐ Yes ☐ NO IF YES: 23a. What are the types of penalties imposed on violators?
23. How will you compare the effort on enforcement of regulations and fisheries laws before and with project interventions?	
24. What are the land-based and sea-based enforcement operations?	
25. What policies and regulations on fisheries are enforced before and after Project intervention?	25a. Is the community aware of these policies? ☐ Yes ☐ No ☐ Don't Know IF NO: Why?
26. Are coastal zones established in your municipal waters?	☐ Yes ☐ No ☐ Don't know 26a. Has there been a community consultation? 26b. What type of community consultation? 26c. Will you agree/comply if there would be a policy or regulation on zoning?
27. In a scale of 1-5, what is the degree of participation of the community in programs and activities being implemented particularly on fisheries management?	
28. Are there credible and influential people (champions) supporting the project? Who are they?	
29. In case there is fisheries-	

related conflict, how is this resolved?	
35. Are decisions reached through consensus of various stakeholders?	_____ Yes _____ No IF YES: 34a. Who are the key partners who participate in consensus building?
36. Has there been a change /improvement in your economic status or way of life?	_____ Yes _____ No 35a. What changes?

2.0 LIST OF DOCUMENTS SEARCHED FOR

1. List of MPAs
 - Yearly MEAT results of all MPAs
 - Indicate if self-assessment or with facilitation from the outside (identify)
2. Yearly NEAT results for existing network of MPA
 - Indicate if self-assessment or with facilitation from the outside (identify)
3. EAFM and other fishery related ordinances
 - Ordinance numbers
 - Any form of documentation process (e.g. newspaper clippings, photographs, compiled report, etc.) of the public hearing for each of the ordinance mentioned above
 - Type of trainings participated/attended and list of personnel involved indicate funding source. Include attendance sheets and their designation
 - List of specific programs related to EAFM (e.g. close season of particular species of fish or invertebrates)
4. Draft/Legitimized MPA/CRM management plan
 - Resolution number and year legitimized
 - Any form of documentation process (e.g. attendance sheets, photographs, compiled report, etc.)
 - Type of trainings participated/attended and list of personnel involved indicate funding source. Include attendance sheets and their designation
 - Approved budget for the last 5 years
5. Draft/Legitimized Enforcement Plan
 - Resolution number and year legitimized
 - Any form of documentation process (e.g. attendance sheets, photographs, compiled report, etc.)
 - Members of the enforcement team and their designation
 - Type of trainings participated/attended and list of personnel involved indicate funding source. Include attendance sheets and their designation
 - Record/log books of enforcement team including the members (e.g. patrolling system of operations including number of personnel involved and their designation)
 - Police/Bantay Dagat records on fishery related violations
 - List of available equipment (year acquired funding source and status)
 - Approved budget for the last 5 years
6. Draft/Legitimized IEC Plan
 - Year approved of the IEC and what body made the approval
 - Any form of documentation process (e.g. attendance sheets, photographs, compiled report, etc.)
 - Members of the IEC team and their designation
 - Type of trainings participated/attended and list of personnel involved indicate funding source. Include attendance sheets and their designation
 - Past and current and types of IEC programs
 - List of available equipment (year acquired, funding source and status)
 - Approved budget for the last 5 years

7. Draft/Legitimized Biophysical Monitoring Plan of MPAs or network of MPAs
 - Year approved of the biophysical monitoring plan and what body
 - Any form of documentation process (e.g. attendance sheets, photographs, compiled report, etc.)
 - Members of the biophysical monitoring team and their designation
 - Type of trainings participated/attended and list of personnel involved indicate funding source. Include attendance sheets and their designation
 - List of available equipment (year acquired, funding source and status)
 - Approved budget for the last 5 years
8. Revenue generation for the last 5 years indicate the nature of the activity (e.g. permits and licensing, etc.)
9. Demography of the barangays within and adjacent to MPAs
10. MOA or any form of agreements for PPP
11. Types of livelihood programs and enterprise development funded/facilitated by the LGU for the last 5 years
 - List of beneficiaries per type of livelihood programs and/or enterprise development
12. Publications related to CRM champions, success stories, awards related to environment

ANNEX IV

Evaluability of the 12 Evaluation Questions

ANNEX IV: THE 12 EVALUATION QUESTIONS

Evaluation Question	Evaluability (at the end of ECOFISH project implementation)		
	YES	NO	MAYBE
1) To what extent and under what conditions did LGUs move from fisheries management to EAFM?			✓
2) To what extent and under what conditions did a reduction in pressures lead to increases in fish stocks?	✓		
3) To what extent and under what conditions did increased enforcement effort and effectiveness lead to pressure reduction?	✓		
4) To what extent and under what conditions have PPPs contributed to EAFM outcomes?			✓
5) To what extent and under what conditions are the enabling conditions in place to establish enterprises and for them to generate household income?			✓
6) To what extent and under what conditions did income from enterprises lead to decrease in household fishing effort?			✓
7) To what extent and under what conditions did the provinces facilitate inter-LGU fisheries management interventions?	✓		
8) To what extent and under what conditions did increased capacity of NGA lead to implementation of national and local policies?	✓		
9) To what extent and under what conditions did LGUs move from fisheries management to EAFM?	✓		
10) To what extent and under what conditions did the LGU policies and regulations lead to right sizing of fishing effort at the LGU level?			✓
11) To what extent and under what conditions did social capital and leadership catalyze/create movement of LGUs from startup fisheries management to EAFM?			✓
12) To what extent did the studies inform development of EAFM?	✓		

I. To what extent and under what conditions did an increased fish provision lead to better employment for fishing among households?

Evaluability: MAYBE. “Better employment” can only be achieved under operational and profitable enterprises or shifts to jobs that are not depleting fish resource, e.g. ecotourism and SMEs in growth centers near MKBAs.

Result area: Fish provision					
Indicator/unit	Appropriateness⁸	Data Availability⁹	Data Quality¹⁰	Analyses	Overall Remarks
CPUE within municipal fishing ground (relative to Baseline)	Yes. This is the standard indicator for fisheries monitoring.	Yes. This is a direct TA by Tetra Tech. Data are in their database. Currently, baseline monitoring data are available. While midterm data are still being processed. Data collection is programmed to be collected at the start or baseline, midterm and at EOP. Sampling strategy is intensive covering 3-month of CPUE in at least 3 LGUs per MKBA covering at least 1 barangay per LGU.	Yes. The data are summarized in a standard format for fisheries reporting system. For the available baseline information data, it was not yet analyzed for an “objective decision making” approach. The analyses covering the baseline and midterm reports may provide a trend on the effectiveness of the project intervention resulting an increase in fish provision.	Trend will show the % increase or decrease of the catch levels in relation to the level of fishing effort. Increase/Decrease of the standing fish biomasses in the MPAs and the spill-over effect will also be factored in. Such analyses will be done at the target-species level (economically important species). For the fish biomass, it is recommended that slender fishes such as from the Family Aulotomidae be excluded in the computation of fish	It “may” in the sense be that there are many factors involved related to CPUE. This parameter has to be analyzed in relation to the other indicators such as increased enforcement beyond MPAs or at the municipal or inter-LGU levels. The fish information (e.g. fish stocks) in MPAs however can drastically change due to natural calamities such as storms and earthquakes. These two events did happen in Calamianes and Danajon Reef MKBAs,
Weighted averages of Kg/day w/in MFG	Yes. This is the standard indicator for fisheries monitoring.				
Fish biomass in MPA	Yes. This is a very important parameter on the				

⁸ Is the indicator/unit appropriate?

⁹ Are there records in Tetra Tech to objectively substantiate the reporting of these indicators to USAID?

¹⁰ Are the data collected, analyzed and reported to USAID by Tetra Tech systematically organized or sufficient to inform objective decision-making?

	available standing stock for reef fishes only.	per municipality except for the South Negros MKBA. There are no other MPAs in the area because of the topography (very steep) of the coast. Most MPAs were designed to protect/cover coral reef areas.	appropriate unit, the fish biomass and total abundance including the benthic cover. Presence of enough replicates (5 transects inside and outside the MPA). This particular indicator (fish biomass) will show the trend of an increase or decrease in fish standing stocks. However, the positive increase at the minimum can be significantly noticed over a 5-year period.	biomass. A slight increase of length for this species corresponded to an exponential increase in weight.	respectively. Moreover, for fish census it is highly recommended that all those involved in collecting data be subjected to standardization prior to conduct of baseline assessment. A less experienced person on fish census either tends to under or overestimate fish sizes. Hence, the outcome of fish biomass computation is questionable.
Tons/km2 w/in MPA	Yes. This is the best unit for expressing available standing stocks.				
Other indicators not reported by Ecofish for this result area: None.					

Result area: better employment					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of households (HHs) with better employment resulting from the monitoring surveys of 5000 HH across all 8 MKBAs. * Better = PMP/baseline report indicators; ** HH = are lower income fishing HHs using municipal fishing grounds; track same HH	Yes. A household is the very basic unit to measure for this indicator	Yes. Available in the baseline assessment report and the recently concluded midterm monitoring report that was/will be submitted to USAID. The data gathering is scheduled to be monitored as baseline, at midterm and EOP. Close to 5,000 HH was reported during the baseline assessment report and the same number was/will be surveyed for the midterm and EOP. At the minimum, HH surveys covered 3 municipalities per MKBA where the MPAs are located and at least more than 100 HHs were surveyed per municipality except one LGU (Rosario) in Lingayen Gulf.	Yes. The assessment for “better employment” covers the fishing HH income by source: marine based and land based. Also included the HH fishing profile in terms of fishing gears, top most species caught and expenditures. The quality of data was enhanced such that the protocol for data collection for B,M,F will be the same HHs.	With the presence of high number of HH surveys collected at different time intervals, the approach would be using Propensity Matching scores between before and after and with and without program intervention.	A good analysis can be done for this indicator considering that it can track % of household with better income due to Ecofish intervention at the EOP.
Number of HHs meeting criteria for better employment	Yes. A household is the very basic unit to measure for this indicator.				
Other indicators not reported by Ecofish for this result area: Poverty threshold information.					

2. To what extent and under what conditions did a reduction in pressures lead to increases in fish stocks?

Evaluability: YES

Result area: Reduction in (fishing) pressures					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of identified violators in MFG	Yes. It is appropriate because violators put pressure on the environment by doing illegal and destructive fishing activities that would degrade or destroy the habitat; which is the case in many coastal areas in the Philippines. As a first step, reducing their number to the point of eliminating will drastically lessen the fishing pressure as well.	Yes. The data are with the LGUs particularly at the office of MAO/CAO, PNP and/or bantay dagat (e.g. enforcement logbook). Ecofish will have the data of violators, if these are provided by the LGU or enforcement team per MKBA. Otherwise, the numbers and trends per MKBA are not mentioned in the reports.	Yes. Ecofish has a baseline database on fishery law enforcement capacity and response capabilities (Y2). This was also the basis for identifying the types of trainings that were provided per MKBA and across MKBA. Ecofish addressed this by conducting intensive law enforcement capacity building program across the 8 MKBA (Reports Y1, Y2) including PNP-MG and BFAR. Supplemental support activities were also done like training on administrative adjudication (Danajon Reef Y1); the development of procedural enforcement handbook (Y2). Partners also respond like the PNP program on Adapt-	Unit of analysis will be the percent change of violators as compared to baseline or across time. The reduction of fishing violations during the life of the project especially in areas with known high fishing violators will reflect the effectiveness of the support of the project in the capacity of the LGUs to respond to such violations. While this is happening, an observable increase in CPUE per gear type will also be noticed when the information from B, M and F will be compared. Yes. An inventory as well as identification of	Analyses will be limited on a per MKBA basis because of the inherent uniqueness of each MKBA, where situations differ much across MKBA.
Number w/in MFG	Yes, RA 8550 provides the area of responsibility of the LGUs				

			an- MPA (AMPA).	the methods/gears within MFG will provide a picture on the source of stress on the habitat and the resource; the quantity indicates the degree of contribution of these destructive and unfriendly gears to the fishing pressure. A reduction of which could lead to less or eliminate fishing pressure from this source.	
Number of destructive and unfriendly methods and gears by type used w/in MFG	Yes. The identification of the type of destructive and unfriendly methods/gears within MFG will provide a picture of the contributors on fishing pressure	Yes. Only the legal methods and gears are within the records of the MAO through fisher's registry, permit and licensing. The list of destructive and unfriendly methods must still be provided for the local enforcers to identify.	Yes. Ecofish through their intensive monitoring on fishery have records of the number of different gear types including dynamite fishing, use of toxic substances and compressor fishing (for the latter it was not considered/declared by LGU as illegal).		
Number of gears by type w/in MFG	Yes. This unit is appropriate as it tells what fishing gears are used, consequently, the pressure within MFG.				
Other indicators not reported by Ecofish for this result area: State or condition of habitat destruction and degradation in the MFG.					

Result area: Increase fish stock					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
CPUE within MFG (relative to Baseline)	Yes, this is the standard indicator for fisheries monitoring.	Yes, this is a direct TA by Tetra Tech. Data are in their database. Currently, baseline monitoring data are available. While midterm data are still being processed. Data collection is programmed to be	Yes, the data are summarized in a standard format for fisheries reporting system. For the available baseline information data, it was not yet analyzed for an "objective decision making" approach. The analyses covering the	Trend will show the % increase or decrease of the catch levels in relation to the level of fishing effort. Increase/Decrease of the standing fish biomasses in the MPAs and the spill-over effect will also be factored in.	It "may" in the sense be that there are many factors involved related to CPUE. This parameter has to be analyzed in relation to the other indicators such as increased enforcement beyond MPAs or at the
Weighted averages of Kg/day w/in MFG	Yes, this is the standard indicator for fisheries monitoring.				

		collected at the start or baseline, midterm and at EOP. Sampling strategy is intensive covering 3-month of CPUE in at least 3 LGUs per MKBA covering at least 1 barangay per LGU.	baseline and midterm reports may provide a trend on the effectiveness of the project intervention resulting an increase in fish provision.	Such analyses will be done at the target-species level (economically important species). For the fish biomass, it is recommended that slender fishes such as from the Family Aulotomidae be excluded in the computation of fish biomass. A slight increase of length for this species corresponded to an exponential increase in weight.	municipal or inter-LGU levels. The fish information (e.g. fish stocks) in MPAs however can drastically change due to natural calamities such as storms and earthquakes. These two events did happen in Calamianes and Danajon Reef MKBAs, respectively. Moreover, for fish census it is highly recommended that all those involved in collecting data be subjected to standardization prior to conduct of baseline assessment. A less experienced person on fish census either tends to under or overestimate fish sizes. Hence, the outcome of fish biomass computation is questionable.
Reef fish biomass per MPA (relative to Baseline)	Yes, this is the standard indicator for fisheries monitoring.	Yes. In addition, it covers at least 3 MPAs per MKBA with 1 MPA per municipality except for the South Negros MKBA. There are no other MPAs in the area because of the topography (very steep) of the coast. Most MPAs were designed to protect/cover coral reef areas.	Yes. The data are summarized in a standard manner with an appropriate unit, the fish biomass and total abundance including the benthic cover. Presence of enough replicates (5 transects inside and outside the MPA). This particular indicator (fish biomass) will show the trend of an increase or decrease in fish standing stocks. However, the positive increase at the minimum can be significantly noticed over a 5-year period.		
Ton/km2 w/in MPA	Yes, this is the standard indicator for fisheries monitoring.				
Other indicators not reported by Ecofish for this result area: None.					

3. To what extent and under what conditions did increased enforcement effort and effectiveness lead to pressure reduction?

Evaluability: YES

Result area: Increased enforcement effort/operations					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
% change in number of land-based operations	Yes. This is important as it also monitors illegal fishing across the shore.	Yes. Data is available at the local bantay-dagat or MAO of the LGU, PNP or PNP-MG.	Yes. Intensive assessment needs have been identified by the Ecofish project, prior to the conduct of support to the enforcement teams in each MKBA area. The enforcement needs assessment was completed in Y2. Based on this, however, Ecofish only provided trainings for the enforcement team to enhance the team's operations. Ecofish has data only on the types of training it provided to each of the MKBA in response to their needs. The type of enforcement training, anchored on enforcement plan, triangulated with the records on apprehension, together with the information	The change in number in both land- and sea-based operations will have implications on the compliance of fishers vis-à-vis apprehension of violators. Thus, showing an established enforcement operations. Eventually, resulting in pressure reduction in the MFG.	Number of apprehensions per se, however, is not a direct measure of an effective and improve enforcement. LGUs with advanced enforcement capability coupled with IEC activities would have lesser number of apprehensions. But, decreasing trend of violators over time is an indication of an effective enforcement. Thus, reducing pressure on the MFG.
Number w/in MFG; % change	Yes, This is important as it also monitors illegal fishing across the shore. The assumption is that MFG covers 1 km landward from coast				
% change in number of sea-borne operations	Yes. This will monitor if fishers comply and use correct gears and methods.				
Number w/in MFG	Yes. This will monitor if fishers comply and use correct gears and methods.				
Existence of accurate records	Yes. This will monitor if apprehensions of violators are done.	Yes. Data is available at the local bantay-dagat or MAO of the LGU, PNP or PNP-MG.			

P/A for MFG	Yes. This will monitor if apprehensions of violators are done.		gathered from KII and FGD, will produce an effective training-needs appropriately addressed by Ecofish. The whole enforcement chain that cuts across all MKBAs is with the LGUs. ECOFISH only partly addressed this.		
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Other indicators not reported by Ecofish for this result area:
IEC campaign or consultations, if any, to support enforcement operations.

Result area: Increased enforcement effectiveness					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
% change in number of violations reported	Yes. A change in number of all these indicators will show the effectivity of the enforcement operations.	Yes. Data are with the LGUs, MAOs, enforcement team, bantay dagat or management council if it has. Ecofish has only the records of the different capacity training provided to the different MKBAs to increase effectivity enforcement.	Yes. Data were recorded at different levels from the bantay dagat all the way up to the PNP. For those who were penalized, records are also at the Office of the Treasurer. Ecofish does not have this information, unless provided by the LGUS. Otherwise, these are not indicated in the reports.	A reduction in number in violations, apprehensions, prosecutions, coupled with fines, confiscation and jail time will indicate the increased effectivity of the enforcement, resulting in the increased compliance of the fishers. Thus, less violators will mean less sources of pressure in the MFG.	As mentioned above, a decreasing trend of violators over time is an indication of an effective enforcement. Thus, reducing pressure on the MFG.
Number w/in MFG	Yes. A change in number of all these indicators will show the effectivity of the enforcement operations.				
% change in number of apprehensions	Yes. A change in number of all these indicators will show the				
Number w/in MFG		Yes. Data are with the LGUs, MAOs, enforcement team, bantay dagat or			

	effectivity of the enforcement operations.	management council if it has. Ecofish has only the records of the different capacity training provided to the different MKBAs to increase effectivity enforcement.			
% change in number of persons prosecuted	Yes. A change in number of all these indicators will show the effectivity of the enforcement operations.	Yes. PNP records and at the LGU			
Number w/in MFG					
% change in number of prosecuted persons jailed/fined	Yes. A change in number of all these indicators will show the effectivity of the enforcement operations.	Yes. PNP records and at the LGU			
Number w/in MFG					
% change in number of confiscated materials	Yes. A change in number of all these indicators will show the effectivity of the enforcement operations.	Yes. PNP records and at the LGU			
Number w/in MFG					
% change in the	Yes. A change in	Yes. PNP records and at			

value of confiscated materials	number of all these indicators will show the effectivity of the enforcement operations.	the LGU			
Number w/in MFG					
% change in number of violations/violators (by type)	Yes. A change in number of all these indicators will show the effectivity of the enforcement operations.	Yes. PNP records and at the LGU			
Number w/in MFG					
Other indicators not reported by Ecofish for this result area: None.					

Result area: reduction in (fishing) pressures					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
% change in number of identified violators	Yes. It is appropriate because reducing their number to the point of eliminating will drastically lessen as well the fishing pressure.	Yes. In addition to the above statements regarding the information on violators, records of the registry of fishing gears are with the MAO/CAO or provincial BFAR. All information are present with the LGUs. Ecofish does not track this kind of information, unless provided by the LGUS. Otherwise,	Yes. The yearly information on fishers registry, permit and licensing can actually detect % change (e.g. inc or dec) of licensed fishers/violators and gears that are environmentally- friendly or appropriate.	The percent change of violators as compared to baseline or across time is relevant as a reduction/increase of fishing violations means less/more fishing pressure; less pressure redounds supposedly to an observable increase in CPUE per gear type	As mentioned above, a decreasing trend of violators over time is an indication of an effective enforcement. Thus, reducing pressure on the MFG.
Number w/in MFG	Yes. It is appropriate because reducing their number to the point of eliminating will drastically lessen as well the				

	fishing pressure.	these are not indicated in the reports.			
% change in number of gears by type in focal areas	Yes. It is appropriate because reducing their number to the point of eliminating will drastically lessen as well the fishing pressure.				
Number/fishing gears w/in MFG					
Other indicators not reported by Ecofish for this result area: Carrying-capacity of MFG indicated by maximum number fishers/day/area which would be the baseline fishing effort and/or pressure.					

Gaps/ Recommendations			Ecofish must have the information on fishing violations as such information are needed to determine the effectiveness of the intervention on enforcement activities (through trainings given per needs assessment). To ensure effective intervention, Ecofish should also have the following to help analyze pressure reduction: list of licensed municipal fishers, fisheries use zones, temporal closures, list illegal gears/methods in LGU waters, gear-specific management.		
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4. To what extent and under what conditions have PPPs contributed to EAFM outcomes?

Evaluability: MAYBE. No evidence-based to show achievement or measurement of indicator, i.e. sustainable livelihood. Conservation, however, emerging results were successful, e.g. FishR. It looks like this question is being mixed up with enterprise development. While generically speaking, PPP is targeted for both conservation and economic objectives, it may be better to evaluate it focusing on PPP strictly for conservation, for reasons earlier cited under enterprise development (EQ5-EQ6). The recommendation is focus on conservation.

Result area: Intervention: Facilitate strategic partnerships that support EAFM					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Partnership facilitated	Yes	Yes. Legal partnerships are in the form of MOAs or any agreement mutual to both parties. The types of partnerships recognized by Ecofish may or may not have MOA. MOAs are with the POs.	Yes. All partnership engagements are recorded and analyzed by Ecofish.	The more of these indicators achieved by the LGUs, the better it is in the position of attaining EAFM level.	
Number	Yes				

Result area: Public-private partnerships support the objectives of the ECOFISH project					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Evidence of strategic partnerships actively engaged and mobilized	Yes	Yes. These are forms of partnership leading to EAFM particularly in reducing fishing effort. This is well accounted for by Ecofish.	Yes. The partnerships are identified and included in the regular reporting by Ecofish.	The more of these indicators achieved by the LGUs, the better it is in the position of attaining EAFM level.	
Number	Yes				

Result area: Increased enforcement					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of violations reported	Yes	Yes. Actual numbers of violations are not reported by Ecofish. It	Yes. The types of violations are considered and are reflected in the	The more of these indicators achieved by the LGUs, the better	

Number in MFG	Yes	only enumerates the prevalent types of violations. These violations are available in the log books of bantay dagat and PNP-MG.	type of trainings being provided by Ecofish.	it is in the position of attaining EAFM level.
Number of responses	Yes	Yes. These are reflected in the log books of bantay dagat but not necessarily part of the recording of Ecofish.	Yes. Being stressed or emphasized only during the conduct of enforcement training, as part of the enforcement chain organized Ecofish.	
Number in MFG	Yes			
Penalties/fines collected	Yes	Yes. These are reflected in the log books of bantay dagat, PNP-MG and Office of the Treasurer of the LGU but not necessarily part of the recording of Ecofish.	Yes. Ecofish provides advices for the proper documentation of the violation so violators can be fined correctly.	
\$	Yes			
Number of government institutions supported/involved	Yes	Yes. In the conduct of enforcement trainings, Ecofish involved all concerned institutions. These are reflected in their report.	Yes. Ecofish emphasizes the importance of each component of the enforcement chain and the roles of all government institution that are involved.	
Number in MFG	Yes			

Result area: Enabling conditions for fisher registration					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of fisher folk registered through the	Yes	Yes. Ecofish provided enabling condition for compliance on fisher	Yes. This is being monitored by Ecofish on how many fishers	The more of these indicators achieved by the LGUs, the better it	

partnership		folk's registry, the FishR. In effect fisher's registry was used as a criterion for engagement to a partnership.	benefited from partnership thru registry compliance.	is in the position of attaining EAFM level.	
Number in MFG	Yes				
Co-benefits to communities	Yes				
Number in MFG	Yes				
Functional database of fisher's registry	Yes	Yes. Ecofish provided proof that FishR is being used not only for the areas they covered but as a national program. The higher the compliance within MKBA (also at the national level) the greater the chance that EAFM is achievable.	Yes. FishR is already operating at the national level.		
Number of registrants	Yes				

Result area: Enabling conditions for enterprise development [May not be applicable]					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Capital provided to enterprise	Yes	Yes. As fisher folks are organized and do their obligations (compliance to FishR) they can easily attract donors so they can initiate any form of enterprise. Ecofish provides trainings on enterprise development. The names and number of enterprises created are available with the POs.	Yes. This must be recorded by Ecofish and can be reported as success stories.	The more of these indicators achieved by the LGUs, the better it is in the position of attaining EAFM level.	
\$ or Peso	Yes				
Number of enterprises supported	Yes				
Number	Yes				

TA hours by type	Yes	Yes. The created enterprise has this information. These are not mentioned in the regular reporting of Ecofish.	These were not mentioned in their (Ecofish) report.		
Hrs	Yes				
Purchase orders made	Yes				
\$	Yes				
Number of agreements signed for provision of good/services	Yes	Yes. The number and kind of agreements are being recorded by Ecofish.	Yes. These are reported in their regular reporting.		
Number	Yes				

Result area: Studies supported [may not be applicable]					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Blue crab study used for policy development	Yes	Yes. Study supported by Ecofish. All information are with Ecofish.	Yes. The study was supported in support of enterprise development.	The more of these indicators achieved by the LGUs, the better it is in the position of attaining EAFM level.	
Number	Yes				
Other supported studies leading to policy	Yes				
Number	Yes				
In lieu of the above: Policy studies/ memorandum circulars, etc. prepared (one indicator only)	Yes				
Number	Yes				

Result area: Capacity building supported					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of government entities supported	Yes	Yes. Ecofish provides capacity building program for the LGU to attain EAFM level. All related trainings are well documented.	Yes. Number and name of Government institutions trained are being reported.	The more of these indicators achieved by the LGUs, the better it is in the position of attaining EAFM level.	
Number	Yes				
Resources leveraged by partnership	Yes	Ecofish provides capacity building to LGUs so they can manage well their resources. Ecofish records the number of partnerships created through this.	All forms of partnership are being recorded by Ecofish to be part of analysis to attain EAFM level.		
Number	Yes				

5. To what extent and under what conditions are the enabling conditions in place to establish enterprises and for them to generate household income?

Evaluability: MAYBE. The enabling environment partially established, but critical elements are lacking, e.g. capital/ technology/market. HH income unlikely achievable without profitable enterprises.

Result area: Enabling conditions for enterprise development					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Potential social enterprises and target communities identified	Yes	Yes. Ecofish monitors all potential enterprise per LGU and records are available both for the enterprise and target communities.	Yes. All forms/kinds of engagement on enterprises are part of the report of Ecofish including product enhancement, business plans, financial plans and many others. These things are part of the preparatory phase for LGUs to reach acceptable level of EAFM status based from the benchmark. [The enabling environment may be established, but there is no guarantee that HH will be able to generate supplemental incomes from new enterprises, especially if these are newly organized. The key is “increased or break-even income” for HHs, without which they are	To show an increasing trend of number of HH with income derived from other sources aside from fishing. Benchmark before the project started.	
Number	Yes				
Feasibility studies, value chain studies conducted	Yes	Yes. Ecofish provides training for conduct of feasibility studies and value chain analyses and keep such records.			
Number	Yes				
Business plans for proposed enterprises drafted	Yes	Yes. Ecofish provides training for business plan developments and keep such records.			
Number	Yes				
Preparatory trainings conducted (EAFM orientation, gender mainstreaming, sustainable community management systems, financial	Yes	Yes. Ecofish organizes all types of trainings for the LGUs to reach EAFM level thru coordination with other agencies/institution. Ecofish has these records.			

management and basic accounting, bookkeeping, social marketing, branding, fair trade standards, etc.)			likely to back to status quo. Managing enterprises is a passion. Only a few perhaps of the beneficiaries has this trait or inclination. Note: Comment is related to EQ6]		
Number	Yes				
Prototype products or services developed	Yes	Yes. Ecofish coordinates with other institutions for product developments. Ecofish has these records.			
Number	Yes				
Linkages with markets and financial partners established	Yes	Yes. Ecofish facilitates linkages and records such documents.			
Number	Yes				
Community partnerships formally established and mobilized	Yes	Yes. Ecofish facilitates partnerships and records such documents.			
Number	Yes				

Result area: Enterprise established					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Enterprise profits generated from sell of goods and/or services	Yes	Yes. Ecofish records the established enterprise but does not record profits from sell of goods and services. These are available at the enterprise and the PO.	Yes. All forms/kinds of engagement on enterprises are part of the report of Ecofish including product enhancement, business plans, financial plans and	To show an increasing trend of number of HH with income derived from other sources aside from fishing. Benchmark before the project started.	
\$ for enterprise	Yes				

			many others. These things are part of the preparatory phase for LGUs to reach acceptable level of EAFM status based from the benchmark. [The enabling environment may be established, but there is no guarantee that HH will be able to generate supplemental incomes from new enterprises, especially if these are newly organized. The key is “increased or break-even income” for HHs, without which they are likely to back to status quo. Managing enterprises is a passion. Only a few perhaps of the beneficiaries has this trait or inclination. Note: Comment is related to EQ6]		
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Result area: HH Income					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
HH income generated through enterprise	Yes	Yes. Household income are monitored but not necessarily based on the	Yes. All forms/kinds of engagement on enterprises are part of	To show an increasing trend of number of HH with income derived	

\$ by HH engaged in enterprise	Yes	developed enterprise.	the report of Ecofish including product enhancement, business plans, financial plans and many others. These things are part of the preparatory phase for LGUs to reach acceptable level of EAFM status based from the benchmark. [The enabling environment may be established, but there is no guarantee that HH will be able to generate supplemental incomes from new enterprises, especially if these are newly organized. The key is “increased or break-even income” for HHs, without which they are likely to back to status quo. Managing enterprises is a passion. Only a few perhaps of the beneficiaries has this trait or inclination. Note: Comment is related to EQ6]	from other sources aside from fishing. Benchmark before the project started.	
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6. To what extent and under what conditions did income from enterprises lead to decrease in household fishing effort?

Evaluability: MAYBE. Capacity building for enterprise development has just started.

Result area: Income from enterprises					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Income from products and services	Yes	Yes. Ecofish keeps record of income of HH derived from products and services.	Yes. Ecofish provides this information on HH on their baseline assessment report, midterm report and EOP report. [The basic assumption that enterprises are financially and organizationally independent by the end of project (EOP) is overambitious. To date, ECOFISH has just started the capacity building for enterprise development; and it is unlikely that the beneficiaries have achieved adequate absorptive capacities to manage the enterprises by end EOP. Capacity building is likely to take a longer term vis-à-vis original plan because of the complex nature of managing the enterprises. Both supply and demand	% change of HH with and without the enterprise on income from enterprise, time spent fishing by gear type and others. Also to include non-participating HH. [For this analysis to be defensible, data series should be adequate, at least for several cycles of operations, e.g. seaweed, mariculture, etc.to make a sound conclusion, especially if value adding will be part of the enterprise.]	
\$ for enterprise	Yes				
Number of HH receiving income from enterprises	Yes	Yes. Ecofish is monitoring thousands of HH with and without income from enterprises.			
Number of HH	Yes				
HH income generated from enterprises	Yes	Yes. Ecofish monitors thousands of HH and accounts for the HH income generated from enterprises.			
\$ by HH engaged in enterprise	Yes				

			side constraints will have to be studied carefully. For the time being, ECOFISH does not have an institutional framework to link these fisher folks to access, technology, credit and markets. Thus, whatever data collected (income, sales, etc.) may not be representative of the entire viability of the enterprises, especially if the time period is very short.		
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Result area: Decreased fishing effort					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Time spent fishing by HH	Yes	Yes. Ecofish is monitoring these parameters during the conduct of HHs interviews from the start, middle and EOP.	Yes. Ecofish provides this information on time of fishing by gear type based on their baseline assessment report, midterm report and EOP report.	% change of HH with and without the enterprise on income from enterprise, time spent fishing by gear type and others. Also to include non-participating HH. [For this analysis to be defensible, data series should be adequate, at least for several cycles of operations, e.g. seaweed, mariculture,	
Hrs or days by HH	Yes				
Fishing effort (by gear type) at municipal level (enterprise/not enterprise)	Yes				
Number	Yes				

				etc.to make a sound conclusion, especially if value adding will be part of the enterprise.]	
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Result area: * "Under what conditions" - Moderating variable					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Compare sites with positive resource rents to those with negative resource rents	Yes	Yes. Ecofish has this information and it will be analyzed at the end of the project.	Yes. This is part of their regular reporting but the outcome will be determined at the end of the project.	% change of HH with and without the enterprise on income from enterprise, time spent fishing by gear type and others. Also to include non-participating HH. [For this analysis to be defensible, data series should be adequate, at least for several cycles of operations, e.g. seaweed, mariculture, etc.to make a sound conclusion, especially if value adding will be part of the enterprise.]	
Net benefits in Pesos	Yes				

Result area: Analysis to strengthen attribution:					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Compare to non-participants in the same municipality	Yes	Yes. Ecofish conducted baseline assessment of thousands of HH prior to their intervention on enterprise development.	Yes. This is part of their regular reporting but the outcome will be determined at the end of the project.	% change of HH with and without the enterprise on income from enterprise, time spent fishing by gear	
\$, HH income	Yes				

		Ecofish has these records.		type and others. Also to include non-participating HH. [For this analysis to be defensible, data series should be adequate, at least for several cycles of operations, e.g. seaweed, mariculture, etc.to make a sound conclusion, especially if value adding will be part of the enterprise.]	
Qualitative information on why fishing effort increases or decreasing	Yes	Yes. Ecofish conducts HH interviews and this perception is included. They have information as baseline, middle and EOP.			
	Yes				

7. To what extent and under what conditions did the provinces facilitate inter-LGU fisheries management interventions?

Evaluability: YES

Result area: Provinces facilitate TA for Inter-LGU management interventions					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of inter-LGU meetings	Yes	Yes. All indicator units are at the Provincial level at the office of the CRM focal person. Ecofish provide TA in relation to the development of inter-LGU related fisheries management policies.	Yes. Ecofish has information on the types of fishery management interventions they have assisted.	% increase of the managed area through alliance wide enforcement activities, support policies, and continues funding support from the LGU, PLGU and the other sectors.	This particular intervention takes time to accomplish. Based from the records, minimum time required is at least 2 years. That period covers only the formal agreement...
Number	Yes				
Budget-provided by Province for inter-LGU activities	Yes				
\$	Yes				
Personnel/office involved	Yes				
Number	Yes				
Buy-in for other LGUs to join inter-LGU alliance	Yes				
Number	Yes				
Number of inter-LGU trainings related to the activities mentioned	Yes				
Number	Yes				
Other indicators not reported by Ecofish for this result area: NONE					

Result area: Inter-LGU management interventions (from institutional mechanisms to increased enforcement)					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of Alliances formed	Yes	Yes. Both the Province and LGUs including Ecofish have these	Yes. The levels or scores of each alliance formed are officially reported to	% increase of the managed area through alliance wide	This particular intervention takes time to accomplish. Based
Number	Yes				

Number of Inter-LGU fisheries management plans	Yes	information on alliances including the joint activities. These are all recorded during the conduct of the NEAT per alliance formed in all MKBAs. For all of the documents/records to support claims based from the NEAT are with the PLGU and MLGUs. These information must be part of the database of the Ecofish	the Province and the Ecofish. These ratings are being used to gauge the performance of the management body to evaluate how prepared they are in relation to the management of their alliance. Verification of such information are substantiated by the available documents/reports (e.g. MOA, plans of joint activities, records of meetings, annual budget, etc.) indicated in the NEAT criteria.	enforcement activities, support policies, and continues funding support from the LGU, PLGU and the other sectors.	from the records, minimum time required is at least 2 years. That period covers only the formal agreement...
Number	Yes				
Number of joint fisheries enforcement operations performed	Yes				
Number	Yes				
Area of MPA that form a network	Yes				
Number	Yes				
Other indicators not reported by Ecofish for this result area: NONE					

8. To what extent and under what conditions did increased capacity of NGA lead to implementation of national and local policies?

Evaluability: YES

Result area: NGA programs to LGUs					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of NGA programs provided to LGUs to implement local policies [Number of budgeted NGA programs provided to LGUs to implement local policies]	Yes	Yes. Ecofish assisted the BFAR in formulating/ application of policies to support LGU in implementing national programs such as FishR and BoatR. Such information are available at Ecofish. Records are also available at the LGU.	Yes. There is an existing database at Ecofish and it is available and currently being used by the national office of BFAR for implementation and/or being implemented by the LGUs. All related fisheries programs, plans and budget are being used by Ecofish to evaluate the level of each LGU in relation to EAFM using the benchmark they established.	% of LGUs implementing the programs directly assisted by Ecofish All related plans will be analyzed base on the matrix of the benchmark that was developed to assess level of the LGU to reach EAFM level.	Need to look at the history of those LGUs currently implementing the FishR and BoatR if these were attributable to Ecofish or it was already existing and was improved with the intervention of Ecofish
Number	Yes				
Other indicators not reported by Ecofish for this result area: NONE					

Result area: LGU & stakeholders apply technical and process skills to conduct EAFM planning					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
LGUs apply skills to develop plans [or Plans developed to implement EAFM]	Yes	Yes. Ecofish provided training to formulate related fisheries management plans such as enforcement plans, MPA management plans, coastal fisheries	Yes. All these plans need approval by the concerned LGUs or cluster of LGUs. These plans are present in the database of Ecofish. These plans are needed	% of LGUs implementing the programs directly assisted by Ecofish All related plans will be analyzed base on the matrix of the	It must not only be the presence of the plans but the manner or degree of its implementation must be considered to evaluate to reach a
Qualitative	Yes, relatedness of the plans for EAFM				

		resource management (CFRM) plans, integrated (inter-LGU) management plans, fisheries development plans, fisheries catch monitoring plan, municipal zoning plans, habitat monitoring management plan, updating of their ordinances in support of EAFM and many others	for the management of the MKBA at EAFM level.	benchmark that was developed to assess level of the LGU to reach EAFM level.	certain level of EAFM status.
Other indicators not reported by Ecofish for this result area: NONE					

Result area: NGA adopts enabling policies that support LGU EAFM					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Presence of enabling policies	Yes	Yes. Ecofish assisted BFAR on enabling policies (FishR and BoatR) in support of the LGU to attain EAFM level	Yes. There is an existing database at Ecofish and it is available and currently being used by the national office of BFAR for implementation and/or being implemented by the LGUs.	% of LGUs implementing the programs directly assisted by Ecofish All related plans will be analyzed base on the matrix of the benchmark that was developed to assess level of the LGU to reach EAFM level.	It must not only be the presence of the plans but the manner or degree of its implementation must be considered to evaluate to reach a certain level of EAFM status.
P/A	Yes				
Other indicators not reported by Ecofish for this result area: NONE					

Result area: LGU & stakeholders adopt and implement policies and regulations					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Budget allocated for policy implementation	Yes	Yes. LGU provides budget in support of fishery related policies. Ecofish does not have records of the budget of LGUs since they started their interventions.	Yes. YBudget allotment and revenues are components of the benchmark criteria for the LGU to attain certain level of EAFM that was used by Ecofish to assess the status of each LGUs.	% of LGUs implementing the programs directly assisted by Ecofish All related plans will be analyzed base on the matrix of the benchmark that was developed to assess level of the LGU to reach EAFM level.	There is a need to account if the approved budget was really utilized for related fisheries activities and was not diverted.
\$	Yes				
Number of local policies influenced by national enabling policies	Yes	Yes. Ecofish has all records of local policies for all of its assisted LGUs per MKBA that was updated to conform to national policies (e.g. FishR and BoatR).	Yes. Several local policies have been upgraded with the assistance of Ecofish to conform to the national policies that were legitimized and being implemented by the LGUs. It has been utilized by Ecofish to determine benchmark level of each LGU in relation to EAFM.		
Number	Yes				
Other indicators not reported by Ecofish for this result area: NONE					

9. To what extent and under what conditions did LGUs move from fisheries management to EAFM?

Evaluability: YES

Result area: LGU moving from early fisheries management					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Other indicators not reported by Ecofish for this result area: NONE					

Result area: LGUs implement EAFM as a result of ECOFISH facilitation (Benchmark levels achieved by LGUs)					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Ecosystem boundaries established	Yes	Yes. All records are with the LGU/PLGU and Ecofish.	Yes. All of the indicators presented are criteria to establish/determine the benchmark for the EAFM status of each LGU. The data has not been verified if the claims of the LGUs are correct (e.g. presence of the documents.	The analysis will be based on the established benchmark made by Ecofish. To be EAFM, each LGU under the MKBA must attain level 2 of at least 7 out of the 11 criteria.	Benchmarking is the best approach for this kind of evaluation.
P/A	Yes				
Coastal marine habitat monitoring and management planning established	Yes				
P/A	Yes				
Fisheries monitoring and early fisheries management planning established	Yes				
P/A	Yes				
Fisheries law enforcement team and program established	Yes	Yes. All records are	Yes. All of the indicators	The analysis will be	Benchmarking is the
Comprehensive	Yes				

fisheries management plan implemented (with corresponding legal and policy instrument) and programs in the plan continuously funded		with the LGU/PLGU and Ecofish.	presented are criteria to establish/determine the benchmark for the EAFM status of each LGU. The data has not been verified if the claims of the LGUs are correct (e.g. presence of the documents.	based on the established benchmark made by Ecofish. To be EAFM, each LGU under the MKBA must attain level 2 of at least 7 out of the 11 criteria.	best approach for this kind of evaluation.
P/A	Yes				
Coordination among offices within the local government, institutional partners, and other participating local governments established	Yes				
P/A	Yes				
Fishers, boats, and fishing gears registration and licensing system implemented and enforced	Yes				
P/A	Yes	Yes. All records are with the LGU/PLGU and Ecofish.	Yes. All of the indicators presented are criteria to establish/determine the benchmark for the EAFM status of each LGU. The data has not been	The analysis will be based on the established benchmark made by Ecofish. To be EAFM, each LGU under the MKBA must	Benchmarking is the best approach for this kind of evaluation.
Individual MPA or MPAs sustained and MPA network arrangements established	Yes				
P/A	Yes				

Fisheries use zoning plan implemented (with corresponding legal or policy instrument) and monitored	Yes		verified if the claims of the LGUs are correct (e.g. presence of the documents.	attain level 2 of at least 7 out of the 11 criteria.	
P/A	Yes				
Local constituencies for fisheries management organized and actively involved	Yes				
P/A	Yes				
Multi-institutional collaboration on coastal and fisheries resources management (CFRM)	Yes				
P/A	Yes	Yes. All records are with the LGU/PLGU and Ecofish.	Yes. All of the indicators presented are criteria to establish/determine the benchmark for the EAFM status of each LGU. The data has not been verified if the claims of the LGUs are correct (e.g. presence of the documents.	The analysis will be based on the established benchmark made by Ecofish. To be EAFM, each LGU under the MKBA must attain level 2 of at least 7 out of the 11 criteria.	Benchmarking is the best approach for this kind of evaluation.
Species-specific management measures established	Yes				
P/A	Yes				
Gear-specific management measures established	Yes				
P/A	Yes				
Mangrove	Yes				

management area established					
P/A	Yes				
Seagrass management area established	Yes				
P/A	Yes				
Revenue generation established	Yes				
P/A	Yes				
Coastal environment-friendly enterprises established	Yes				
P/A	Yes				

10. To what extent and under what conditions did the LGU policies and regulations lead to right sizing of fishing effort at the LGU level?

Evaluability: MAYBE. “Right sizing” is at a very advanced stage of EAFM implementation.

Result area: LGUs+ Stakeholders adopting policies					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of LGUs adopting policies on right-sizing	Yes	May be, because not all sites have already policies on right sizing (e.g. South Negros, some parts of Bohol, and Palawan) In these provinces, the project are just beginning to come up with enabling activities that will lead to policies on right sizing. In Batangas with clear policies on right sizing, the data are available in ENRO and ECOFISH. In some sites, data collection for enabling activities are still in progress and not yet available in Ecofish.	May be, because not all sites have data on right sizing. Analysis for right sizing will only commence once the data becomes available. This is a direct TA by Ecofish.	The approach is with the use of a model. Concepts of such model already exist. It just have to be modified.	If all biological, physico-chemical information are available to come up with a model to be able to determine the correct right-sizing of fishing effort; Enabling efforts must be documented in each site and data collected by ECOFISH.
Number	Yes				
Ratio of all LGUs within a MKBA that have a policy	Yes				
Ratio	Yes				

Result area: Implementation of right-sizing					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Number of LGU implementing a registration and licensing scheme	Yes	Yes, LGU has this information. Ecofish implemented the FishR and BoatR. Ecofish has	Yes, Ecofish is monitoring the FishR and BoatR programs and claimed that these data	The approach is with the use of a model. Concepts of such model already exist. It	If all biological, physico-chemical information are available to come up with a model to be

Number	Yes	this database.	exist in their data bases.	just have to be modified.	able to determine the correct right-sizing of fishing effort; Enabling efforts must be documented in each site and data collected by ECOFISH.
Budget allotment for registration and licensing	Yes	Yes, LGU has always an annual budget appropriations for registry permit and licensing and these data are available in LGU and need verification and validation. . ECOFISH claimed that these data exist in their data bases			
\$ by LGU	Yes				
Personnel	Yes	Yes, LGU has this information. Not all LGUs have dedicated personnel for this task. Personnel involved have multiple tasks. Only those LGU with high revenue can provide dedicated personnel.			
P/A	Yes				

11. To what extent and under what conditions did social capital and leadership catalyze/create movement of LGUs from startup fisheries management to EAFM?

Evaluability: Maybe. The criteria mentioned are highly dependent on people's personality. Leaders most often have different ways of looking at things when it comes to environmental protection.

Result area: Social capital and leadership mobilized					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Leadership/political will	Yes	Maybe, data are already available on the responsiveness of the LGUs in relation to the creation of an office dedicated to CRM, budget and/or counterpart during the conduct of activities and personnel support. However, the data applying SEAT instrument to assess the level/score of LGU relative to this indicator has still to be gathered. These data already exist in LGU but Ecofish would like to measure it applying the instrument SEAT.	Maybe, currently reported indicator for this is the responsiveness of the LGU in sending representatives to attend trainings hosted by Ecofish. Data on this exist but ECOFISH develop a measure to generate score on social capital of each LGU applying SEAT instruments. These data has yet to be gathered	All of these indicators are built-in in all activities of Ecofish leading to EAFM. These indicators are to be generated applying SEAT instrument to generate success score of LGU relative to these indicators [What is going to be analyzed in social capital are the <i>structural</i> and <i>cognitive</i> , two distinct elements but inter-twined, meaning availability of POs (e.g. Bantay Dagat" whose structure is relatively strong with positive values towards conservation. The inventory of these organizations is available and tracking	These data are dependent on the response of LGU towards the activities of ECOFISH and are measured using SEAT instrument to generate social capital score of each LGU
P/A [qualitative]	Yes				
Champions (decision-maker) present	Yes				
P/A [qualitative]	Yes	Maybe, data are still to be collected by ECOFISH applying SEAT instrument. Ecofish recognizes the value of	May be, because the data to assess the score of LGU relative to this indicator depend on the application of SEAT.		

		this and the data is currently reported but Ecofish developed a SEAT instrument to generate the score of LGU based on these criteria.	Data is recorded by Ecofish as indicator of success and serve as “model” to others simply relaying the message that it can be done.	their efforts in conservation is also being monitored.] Since the 4 study areas covered by mid-term evaluation were confined on the relatively/improved MKBAs, that leaves the other 4 MKBAs	
Supportive external mentors present (e.g. business, local NGO, university)	Yes	May be, because while these data exist already, Ecofish would like to generate the social capital score of LGU based on SEAT which	Maybe, because as one of the indicator of SEAT, these scoring procedure has yet to be applied to the LGU.	without any information. Accordingly the other 4 MKBAs are considered with poor/weak institutional structures.	
P/A [qualitative]	Yes	include this as one of its indicator. Support from others both for industries and academes are being included in the report of Ecofish. This kind of support can be in a formal agreement or the supporters just simply provide logistical or technical support in any way they can.		The appropriate method of analysis is case study of two distinct MKBAs. The suggested Indicators are: 1) Memberships in local/ community associations and networks (number of members and internal heterogeneity) 2) Trusts and	
Key partners participating in consensus building	Yes	May be. This is one of the indicator of social capital and data will still be collected using SEAT instrument.	Maybe, One indicator of SEAT instrument which ECOFISH is planning to gather to calculate the social capital score of		
P/A [qualitative]	Yes				

			LGU.	adherence to norm; and 3) Collective action, i.e. cooperation is not imposed by external force, say government.
Capacity for collective action among self-help groups in the community	Yes	Maybe because this activity is still starting and no data has been established for the number of self-help groups capable for collective action in the community. This is one indicator of SEAT which ECOFISH constructed to measure social capital score of LGU. These data has yet to be gathered.	Maybe data for this indicator are still to be collected applying the SEAT instrument	
P/A [qualitative]	Yes			
Consensus/conflict process	Yes	May be, this data has still to be generated for LGU using SEAT instrument.	Maybe, this data has yet to be collected applying the SEAT instrument to LGU	
P/A	Yes			
Number of stakeholders engaged (level)	Yes	Yes, this data on participation of all sectors is covered in the report of Ecofish by involving different sectors in their activities.	Yes, because names and number of stakeholders are always part of the documentation process. This governance data is part of Ecofish data bases	
Number	Yes			

I2. To what extent and under what conditions did the studies inform development of EAFM?

Evaluability: YES

Result area: Studies					
Indicator/unit	Appropriateness	Data Availability	Data Quality	Analyses	Overall Remarks
Studies completed for training materials	Yes	Yes, because data exist on Ecofish direct assistance to protect small pelagics by implementing closure. Study has been completed and for implementation. Ecofish facilitated inter-LGU workshops to decide the period of closure. Documentation process is available at Ecofish. That involved several LGUs and was implemented to protect small pelagics during their spawning period (days only). This will be followed by the closure of “dulong fishery” days after. Such closures are back-up by scientific study.	Yes, because the result of the study provided specific period of closure to protect the fishery. Ecofish had a major role to provide the quality of the data to the general public prior to the closure.	% change of catch before and after closure and to continue monitoring years after.	
P/A	Yes				
Studies completed for inter-LGUs	Yes				
P/A	Yes				

Result area: Inform TA to Inter-LGUs					
Indicator/unit	Appropriatenes s	Data Availability	Data Quality	Analyses	Overall Remarks
Studies used in training materials	Yes	Yes, data shows that results of the study were used as training materials during the consultation with the stake holders	Yes	Scientific methods	
Qualitative	Yes				

Result area: Inform Inter-LGUs					
Indicator/unit	Appropriatenes s	Data availability	Data quality	Analyses	Overall remarks
Policies informed by studies	Yes	Yes, data shows that policies and ordinances made use of results of studies relative to enforcement and enforcement plans	Yes	Number of ordinances and policies passed that apply result of studies.	
P/A	Yes				
Plans informed by studies	Yes				
P/A	Yes				

ANNEX V

Findings on the 12 Evaluation Questions

ANNEX V: FINDINGS ON THE 12 EVALUATION QUESTIONS

Evaluation Questions To what extent and under what conditions...	MPE Findings
1. Did an increased fish provision lead to better employment for fishing among households?	ECOFISH is currently analyzing the results of their socio-economic survey to correlate better employment with increased fish provision. To measure better employment, the ECOFISH project uses proxy indicators such as improved seafood consumption, improved awareness on threats to marine resources, improved household savings, use of friendly fishing gears and decreased economic costs in fishing including time travel to fishing grounds. Based from ECOFISH data comparing benchmark and midterm information, there has been an increased in terms of the net profit (58% in SN, 51% in CIG), expenditures (37% in SN, 89% in CIG) that can be translated to more income, better seafood diet (18% in SN, 89% in CIG), enforcement (40% in SN, 10% in CIG) that can be translated to increase in food supply, awareness (15% in SN, 44% in CIG) and environmental perception (79% in SN, 86% in CIG). The latter two can be translated to compliance.
2. Did a reduction in pressures lead to increases in fish stocks?	Majority of the respondents in DR (72.4%) and SN (82.1%) indicated that there was a decrease in the use of destructive fishing methods akin to decrease in fishing pressures when ECOFISH started providing assistance. On the other hand, majority of the respondents in VIP (60.9%) and CIG (51.6%) did not feel any change (Annex IV Table E8). The main reason for this is that the latter two MKBAs are already enforcing their fisheries laws even before the start of the ECOFISH project. CIG was included under the FISH project while VIP has been assisted by other NGOs in the past. For DR and SN, 6.9% and 3.6% of the respondents, respectively, felt an increase in their catch while 17.4% of the respondents in VIP also reported some changes (Annex IV Table E1). The science based study related to this was the seasonal closure of small pelagics in Balayan Bay in December of 2015. In the first closure, significant increase in the fish density was observed months after the closure.
3. Did increased enforcement effort and effectiveness lead to pressure reduction?	Pressure reduction resulting from increased enforcement effort was acknowledged by all of the respondents in VIP and 31% in DR. In SN and CIG, all of the FGD respondents said otherwise (Annex IV Table E3). While some of the respondents in CIG (45.2%) and SN (28.6%) acknowledged that there was a change in enforcement effort (Annex IV Table E2), the compliance remained the same. In some MKBAs, women played a major role in enforcement, either as informants or in fisheries registration. In Tingloy, Mabini (VIP), there were 10 female bantay dagat members. In Tubigon (DN), two out of the 20 enforcers were females (Annex IV Table E20).
4. Have PPPs contributed	PPPs direct link to EAFM outcomes are based or linked to conservation measures and/or direct social enterprise building.

to EAFM outcomes?	Currently there are seven PPPs that were claimed by ECOFISH, Five of which are on conservation (FishR, BoatR, 700 Dedicated Alert Lines for Ocean Biodiversity, DALOY, Smart Communications and TV White Space Partnership) and two on social enterprises (in partnership with Asian Institute of Management (AIM) and Fiber glass boat building that created the Fiberglass Boat Builders Association, FBFA) Among them, the two conservation measures yielded high impact. FishR initiative has been picked-up by BFAR for a nationwide roll-out. The “TV White Space (TVWS) Partnership” in support of the FishR program won the P3 impact award last 2 October 2015 in New York City. This award is in recognition for leading PPPs that are improving local communities. The 700 DALOY was instrumental for protecting biodiversity and reporting of illegal activities in the coastal waters. It utilizes SMART communication facility to report illegal activities. This is cooperation with the Philippine National Police-Maritime Group (PNP-MG), the PNP and other enforcement agencies. Pilot testing have been done in Tawi-Tawi that yielded over 3,000 reports and 3 major cases from May to December 2014. The other social enterprise building needs to be strengthened. Such as FBBA needs working capital for the raw materials and molding facility.
5. Are the enabling conditions in place to establish enterprises and for them to generate household income?	ECOFISH made a partnership with AIM to provide training on entrepreneurial skills’ enhancement to develop project feasibility studies and business plans. The enabling environment is partially established but critical elements are lacking, e.g. capital/technology/market. The increase in household income is unlikely achievable without profitable enterprises already in place. Presently, the identified existing enterprises mentioned during the FGD were soap and fried-noodles making in VIP, and swine dispersal in CIG (Annex IV Table F10). Only 32.3% of the respondents in CIG were able to attend enterprise-related trainings and none in other MKBAs (Annex IV Table E11).
6. Did income from enterprises lead to decrease in household fishing effort?	ECOFISH has started their Capacity building for enterprise development in VIP on fiberglass boat making. There are limited information collected in the MPE to indicate that increase in income has been achieved, and that this has led to a decrease in the fishing effort of the fishing families.
7. Did the provinces facilitate inter-LGU fisheries management interventions?	The training provided by the ECOFISH at the provincial level enabled the province and the LGUs to harmonize the fisheries management approach in their jurisdiction. A concrete example of this is the seasonal closure of Balayan Bay (VIP MKBA) encompassing several LGUs and is being facilitated by the office of the PGENRO of Batangas. The province, which serves as the secretariat, orchestrated the coordination between the stakeholders in the bay and the LGUs. Social capital and leadership were key factors for the success of such endeavors.

	Based from the results of FGD with the fisherfolks, awareness on the inter-LGU fisheries management policies being implemented was high in all of the four (4) MKBAs included in the study. In DR, 48% of the respondent said yes in relation to community awareness on policies being implemented. Sixty seven point nine percent (67.9%) in SN, 65.2% in VIP and 64.5% in CIG (Annex IV Table E5).
8. Did increased capacity of NGA lead to implementation of national and local policies?	USAID defines policy to cover laws, policies, strategies, plans, agreements, or regulations addressing climate change and/or biodiversity conservation formally proposed, adopted, or implemented as a result of USG assistance. This means that it is not always policy studies that is delivered by ECOFISH to be considered under this EQ but also all other related strategies leading to EAFM. In effect, the policies that NGA and LGU partners are adopting are also those policies considered by ECOFISH as part of their deliverables. Currently, ECOFISH provided direct technical assistance to BFAR, PNP, PNP-MG and to a lesser extent with DA, DENR, DILG and NEDA. In general all of the national agencies mentioned are being trained on courses on EAFM curriculum. BFAR as the main partner of ECOFISH, is now leading the implementation of FishR at the national level. The same process with the BoatR program. The PNP and PNP-MG was provided with skills on boarding and technical knowledge on the national fisheries laws (RA8550) and awareness on the varied local ordinances in relation to fisheries. All of these link to proper coordination with the concerned national and local agencies of the government on how the country can better manage its coastal fisheries. In the end, this contributed to all of the MKBAs assessed to have 100% compliance on fisheries policy (see also Annex IV Table E5).
9. Did local government units (LGUs) move from fisheries management to EAFM?	The baseline self-assessment conducted by LGUs in 2013 indicated that 12 LGUs scored at least 11 points (or satisfied the benchmark criteria). Their numbers increased to 19 LGU at midterm, indicating that an additional seven (7) LGUs have progressed towards EAFM Level 2 in 2015. Among the four MKBAs evaluated, the project reported that no LGU in CIG MKBA has reached a score of 11 points. The municipality of Coron in CIG MKBA scored the nearest at 8 of 17 benchmark criteria. The 19 LGUs that managed to achieve EAFM Level 2 generally shared the following capacities: (i) have legal instruments that established ecosystem boundaries; (ii) have comprehensive fisheries management plans with funding support for implementation; (iii) have established inter-LGUs partnerships through their Municipal Agricultural Offices (MAOs); (iv) have legal instruments that established fisheries use zoning plan; (v) have local constituencies involved in the development, implementation and/or monitoring of fisheries management; (vi) have developed, enforced and monitored species-specific management measures, such as the seasonal

	closure for pelagic fish in VIP MBKA; (vii) have established and enforced resource generation measures; and (viii) have expanded successful coastal environment-friendly enterprises, such as the Ecolodge managed by PO in VIP MKBA. Securing sustainable funding support for law enforcement and implementation of comprehensive fisheries management plans, and the establishment and operation of inter-LGU partnerships for managing network of MPAs have been the main constraints of other LGUs that remained in EAFM Level 1. In addition, LGUs that reached the threshold for EAFM Level 2 status faster than others have coastal communities with high level of awareness on fisheries management, which could be attributed to similar technical assistance they received in the past, either from government or NGOs, except for TT MKBA. This latter MKBA was a recipient of USAID/Philippines' FISH Project in 2004-2011. The MPE team found that supporting documents for some EAFM benchmark criteria were not available during the field verification. Hence, it was not possible to recheck the accuracy and consistency in the application of the benchmark criteria and scoring system, which appeared to be prone to measurement bias under a self-assessment setting. Standardization of data documentation and collection in LGUs for all EAFM benchmark criteria was also found to be deficient to allow direct comparison of LGUs' performance. If the accuracy of LGU self-assessment scores could be confirmed, only 11 more LGUs need to be assisted by the project to achieve the LOP target of 30 LGUs by end of implementation. Most promising LGUs to achieve the target threshold for EAFM Level 2 include: Coron in CIG MKBA; Hilongas and Bato in DR MKBA; Sto. Tomas and Caba in LG MKBA; Matnog and San Vicente in TP-LG-SBS MKBA; Claver in SDN MKBA; Bongao and Panglima Sugala in TT MKBA; and Mabini, Tingloy and Lian in VIP MKBA. These LGUs scored from 5 to 8 out of 17 benchmark criteria during LGUs' self-assessment at midterm.
10. Did LGU policies and regulations lead to right sizing of fishing effort at the LGU level?	The concept of right-sizing of fishing effort has been introduced by ECOFISH Project to ensure equitable access to harvesting increased fish production (resulting from conservation effort), particularly for small fishers whose fishing gears are comparatively at a disadvantaged <i>vis-à-vis</i> commercial fisher groups. At midterm, the project initiatives on right sizing focused mainly on improving the enabling environment, such as; advocacy campaign, additional policy studies, and strengthening policy formulation and coordination at the Municipal LGU level. Advocacy and strengthening policy formulation/coordination have been carried out through training activities at the municipal level. Some studies related to right sizing of fishing effort have also been done by the project but the results have yet to be reported and disseminated, while others have been deferred pending concurrence by BFAR. Based on available documents, all LGUs in four MKBAs under review have established and implemented FishR and BoatR policies supported by the project, which provided updated records of all fishers and fishing

	boats/gears to determine the appropriate right sizing of fishing effort according to the carrying capacity of fishing grounds in MKBAs. This information has also guided LGUs to enact and enforce fishing closure and zoning ordinances, tract and prevent fisheries law violators, and conserve fish resources. All LGUs in four MKBAs have also enacted ordinances that prohibited the use of destructive/illegal fishing gears, mostly within specific municipal boundaries. The establishment of MPAs by some LGUs also served as closed areas for fishing. Effective enforcement of right sizing, however, requires neighboring LGUs in each MKBA to jointly support this policy through the inter-LGU collaboration. At midterm, only LGUs in VIP MKBA have enacted and enforced species-specific management policy (i.e., seasonal closure for pelagic fish) in Balayan Bay beyond politico-administrative boundaries, which was made possible by the active inter-LGU collaboration. Essentially, the current approaches to regulate fishing effort in four MKBAs consisted of: monetary measures (fines or penalties), gear-regulating measures, closed areas and, to a certain extent, closed seasons. The few Municipal Mayors who were interviewed through KII have expressed the importance of right sizing policy and the potential for enacting the policy. However, they are also cautious about its enforcement for lack of additional knowledge and information, such as; the methods of reducing opportunism by segregating friendly and destructive fishing gears, encouraging all fishers to ensure compliance, and motivating sustained enforcement to reduce speculative fishing. All these information could be provided by the project's ongoing studies if completed as scheduled.
11. Did social capital and leadership catalyze/create movement of LGUs from startup fisheries management to EAFM?	The project has measured social capital in terms of the presence of leaders/political will, local champions, and the ability to resolve conflicts among inter-LGUs. ECOFISH Project partnered with League of Municipalities of the Philippines (LMP) to support the training of newly elected Mayors (also called ONE-M Program) in eight MKBA sites. It supported the participation of five (5) current and past "champion" Mayors to mentor newly elected Mayor on environmental governance, particularly in coastal resources and fisheries management. ONE-M Program has aimed to bring together all concerned Municipal Mayors to build a network of cooperation and resource sharing in the form of a social capital that produces improved foundations for EAFM for the common good of all fishing households and communities. This program has been successful in producing "champion" Mayors involved in ECOFISH and/or FISH Project, or part of MOREFISH champions formed by FISH Project and LMP in the past. In supporting ONE-M Program, the project was able to reach out to other LGUs outside of eight MKBAs to share and promote best practices. Apart from training, these LGUs have gained additional knowledge and information through site-specific case studies that could enhance local policies and plans for EAFM. This social capital formation has shown initial positive effects. The inter-LGU collaboration in SN MKBA exhibited the best example of how joint action can lead to evolution of stronger strategic alliances and additional

	resources for coastal resources and fisheries management. Recently, this collaboration forged a new MOU among the members to expand its inter-LGU alliances and clarify the members' financial contributions for coastal/marine conservation and fisheries management. In VIP MKBA, the inter-LGU collaboration resulted in effective enforcement of seasonal closure of pelagic fish in Balayan Bay, as noted above. In addition, San Fernando City Fisheries and Agricultural Resources Management Council (FARMC) included the concept of integrated aquatic and fisheries management in LG MKBA in the council's local development planning process. Evidently, the project's social capital and "champions" formation effort has been instrumental in catalyzing the 19 LGUs to move from the traditional fisheries management to EAFM Level 2 status. The inter-LGU collaboration in SN, VIP and LG MKBAs showed how joint action could lead to improved management capacity of LGUs in these MKBAs. However, the social capital formation has so far been significant at the national and municipal levels. Community-based constituency for EAFM has remained limited due to concentration of the current interventions at the municipal level. The shortage of counterpart "champions" and local leaders at the barangay level (i.e., Barangay Captains, Barangay Environmental Law Enforcers) has constrained the effective advocacy campaign and enforcement initiatives carried out or supported by the project at the site level. For instance, FGD data of fishers showed a relatively low level of people's awareness about fisheries laws and policies, which averaged 61 percent in four MKBAs (ranging from 48 percent in DR to 68 percent in SN) covered by this MPE. This resulted in lower percentage of apprehended environmental law violators being convicted or penalized, which averaged 32 percent in four MKBAs (ranging from 13 percent in DR to 71 percent in SN). In DR, a small island named Cuaming has an area of only 7 ha with a total population of over 4,000 individuals. With extremely high population density (i.e., about 17 square meters per individual), this island faces overfishing due to poverty and scarcity of alternative sources of livelihood. People are desperate to gather anything edible from their surroundings regardless of legal consequences to have something to eat and survive each day. These constraints at the community level require not only local leaders and "champions" but broader social networks that include economic and cultural capital to engage national- and municipal-level stakeholders in developing and strengthening alternative sustainable livelihoods and enterprises for poor, small fishers and their communities to reduce pressures on fisheries.
12. Did the studies inform development of EAFM?	A concrete example under this evaluation is the seasonal closure of small pelagics in Balayan Bay (VIP). Before the closure came about, through scientific study, it has been established that the month of December was the spawning season of the targeted species. All of the stakeholders were informed and willingly complied with the seasonal closure. In the first closure, results were positive. Months after the closure, the

	density of the targeted fish species increase significantly by allowing the adults to spawn during the closure instead of being caught by fishing gears before or while they are spawning. Another similar study conducted by ECOFISH was on blue swimming crab for DR. But closure did not commenced yet. The project will also explore candidate mariculture species at the lowest trophic level. These will be the fast growing herbivorous fishes like the rabbitfishes. Other science based studies were simulation studies on fishing effort management. The data used include the fishery catch monitoring, fish visual census biomass estimates and socio-economic profile. This was piloted in DR and CIG and it will also be done in Tawi-Tawi and SDN. The outcome of this undertaking is in line with the right-sizing of fishing effort. All of these science based efforts by ECOFISH are inputs in achieving EAFM. The management is not only in terms of reducing fishing effort but also how can the marine resources be sustainable considering that there is always a need to harvest these organisms for food and livelihood.
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ANNEX VI

Sources of Information

ANNEX VI: SOURCES OF INFORMATION

1.0 PARTICIPANTS OF THE KEY INFORMANT INTERVIEWS

Table A. Participants of the Key Informant Interviews

National level	Provincial level	Municipal level	Barangay level
TETRA TECH	Governor/ Administrator	LCE/Administrator	Barangay chairman
USAID-P	Provincial Planning Development Officer (PPDO)	MAO/Fisheries Technician	Enterprise
BFAR Director /NSAP Personnel	Accountant	Municipal Planning Development Officer (MPDO)	Peoples' organization president and treasurer
PNP	PPP partner-SMART BFAR personnel Academe	BFAR officer Accountant Enforcer-PNP Maritime	NGO CSO rep

Table B. Number of Participants in the FGDs in the Four MKBAs

Province	MKBA	MPA/Municipality	No. of Participants FGD: Fisherfolks	No. of Participants FGD: Bantay Dagat	Total
Bohol	Danajon Reef	a. Pangapasan/Tubigon	10	13	23
		b. Cuaming/ Inabanga	10	10	20
		c. Nasingan/Getafe	9	8	17
Batangas	Verde Island Passage	a. San Teodoro/Mabini	6	15	21
		b. Sto. Tomas-Pulang Bato/Tingloy	7	10	17
		c. Bagong Silang/Calatagan	9	6	15
Dumaguete	South Negros	a. Tambobo- Bonbonon/Siaton	11	None	11
		b. Siit/Siaton	8	None	8
		c. Salag- Maloh/Siaton	9	4	13
Palawan	Calamianes				

Province	MKBA	MPA/Municipality	No. of Participants FGD: Fisherfolks	No. of Participants FGD: Bantay Dagat	Total
	Group of Islands	a. Sagrada, Busuanga	9	6	15
		b. Libis, Culion	8	None	8
		c. Tagumpay, Coron	13	9	22
		Total	109	81	190

Table C. List of Personnel Interviewed in KIIs in the Four MKBA Sites

Danajon Reef MKBA	Position	Name
Province of Bohol	Vice-Governor	Hon.
	Provincial Budget Officer	Florlinda P. Amora
	Administrative Officer,	Victorino Bagalor
	CRM Agricultural Technologist BEMO	Adelfa T. Salutan
	Provincial Fisheries Officer, BFAR	Crescencio Pahamutan
Tubigon	Municipal Agriculture Officer	Yolanda L. Labella
	Municipal Fisheries Technician	Victor Boligao
	Municipal Accountant	Nicefora S. Wong
	Barangay Chairman	Ricardo Fuentes
	President, Pangapasan Fishermen Association	Welfredo Mellomeda
Inabanga	CRM Coordinator	Renante Cempron
	Municipal Agriculture Officer	Leocadio M. Torregosa
	Agricultural Technician	Myrahlyn L. Deraco
	Municipal Accountant	Giovanni D. Melicor
Getafe	Vice-Mayor	Hon. Eduardo Torremocha
	SB Chairman of Fisheries and Aquatic Resources	Hon. Camilo Torremocha
	SB Chairman on Environment	Hon. Antonio Ouano, Jr
	Fishery Technician and Acting MAO	Jonas Luega
	Municipal Accountant	Jairus Socias
	PO President, NASFIMRA	Artemio Vergara
Verde Island Passage MKBA		
Province of Batangas	Head, Coastal Management Section, PGENRO	Loreta Sollestre
	Assistant Provincial Administrator	Hon. Ronaldo Tumaming, DPA
Bagong Silang, Calatagan	Ma. Emelyn Custodio Municipal Agriculture Officer Josefa A. Menoza OIC Municipal Accountant Joel Natividad Rico Barangay Chairman Rodrigo de Jesus Bantay Dagat Chairman Randy Tabiano, Sr.	5

	PO President, PAROLA	
Lemery	Provincial Fisheries Officer Bureau of Fisheries and Aquatic Resources (BFAR)	Rose Del Mundo
San Teodoro, Mabini	Municipal Planning and Development Coordinator, Municipal Planning and Development Office	Anacet A. Dalangin
Sto. Tomas-Pulang Bato, Tingloy	Vice-Mayor	Hon. Danilo Datingaling
	Municipal Agriculture Officer	Teodora C. Mendoza
	Chairman, Bantay Dagat	Reynaldo A. Manalo
South Negros MKBA		
Province of South Negros	Administrator Budget Officer Accountant	
Siaton	Vice-Mayor	Hon. Teddy Yap
	Municipal Agriculturist	Abednego P. Gerona
	Municipal Accountant	Ma. Judilyn Yong
	ENRD OIC	Joaquin dela Peña
	Maritime Officer	PO3 Felix Calayon
	BFAR OIC	Mr. Villanueva
Bayawan	Agricultural Center Chief	Faith Napigkit
	Fishery Technician; Team Leader- Bantay Dagat	Ian Butch V. Sala
Sta. Catalina	Municipal Agriculturist	Norma Namacpacan
	Municipal Accountant	Rebecca R. Gomez
	MENRO	Esteban Llamigo
Calamianes Island Group MKBA		
Province of Palawan	Assistant Provincial Agriculturist of Palawan	Dr. Romeo Cabungcal
	Provincial Livelihood Coordinator of Palawan	Dr. Myrna N. Lacanilao
	Operations Officer of Bantay Palawan Task Force	Armand Val Baaco
	Provincial Fishery Officer of Palawan	Mario Basaya
Coron	Municipal Mayor	Hon. Clara Espiritu Reyes
	Entry Machine Operator, Office of Accounting	Bernaldino Gumasing, Jr.
	Municipal Budget Officer	Joseliza D. Galpo
	Municipal Planning Officer	Michael Adrian Fababeir
	Component Manager Bantay Coron	Marlo J. Gesta
	OIC-Quarantine, BFAR	Elsa Cruz
Tagumpay, Coron	Barangay Councilor	Estela Daculla
Libis, Culion	Municipal Mayor	Hon. Pablo C. Mayola
	Municipal Administrator	Santino Josef G. Gomez

Sagrada, Busuanga	Municipal Agriculture Officer	Arnel H. Alcantara
	Municipal Accountant	Loida C. Gesta
	Agricultural Technician	Myralyn L. Deraco

Table D. Members of the MPE Team and their Roles

Number	Name	Role	Degree
Team 1			
1	Analyn B. Mejares	KII Interview	MS Environmental System, Market & Climate
2	Sue Andrey Ong	KII Interview	BS Marine Biology
3	Daphne E. Sambaan	Documenter	BA Secondary Education
4	Lorine Bano	Documenter	BS Business Administration
5	Joey P. Cabasan	Site Inspector	BS Biology
6	Mae Angeli C. Paradela	Site Inspector, Data keeper	BS Biology
7	Rowena Abellija	FGD Facilitator	BEED
8	Rex Samuel Abao	FGD Facilitator	MS Marine Biology
9	Jaylann Tuba	KII Interview	BS Marine Biology
10	Warwin Sabasaje	FGD Facilitator	BS Marine Biology
11	Dr. Cleto Nanola Jr	Team Leader	PhD Marine Science
12	Milagros Tetangco	Institutional & Development Specialist	MS Development Communication; PhD Management (continuing)
13	Emmaruth V. Pelayo	Project Coordinator	BS Forestry
Team 2			
1	Patrice Bianca Roa	FGD Facilitator, Data keeper	MS Marine Science (continuing)
2	Fra-and Timothy Quimpo	KII Interview	BS Marine Biology
3	Timothy Joseph Quimpo	Site Inspector	BS Marine Biology
4	Rhea Arroyo	Documenter	BS Arts in International Studies
5	Frances Camille Rivera	KII Interview	MS Marine Biology
6	Patrick Raymond Inotao	Site Inspector	BS Marine Biology
7	James Mark Borcillo	FGD Facilitator	BS Information Management
8	Kristine Galarrita	KII Interview	MS Marine Biology
9	Ildelyn I. Jamin	Documenter	BD Nursing
10	Ma. Clarinda Gutierrez	FGD Facilitator	Associate in Arts
11	Maria Isabel Macaibay	KII Interview	
12	Dr. Hilly Ann Quiaoit	Marine Biologist	PhD Marine Science

Number	Name	Role	Degree
13	Dr. Imelda Pagtolun-an	Statistician	PhD Sociology
14	Ninosa Nuque	VP for Business Development, SDS	MA Development in Communication
15	Cleofe Dela Cruz	Project Coordinator	

FGD Results

Table E. FGD results

Table E1. Volume of catch before and with project intervention

Fish availability	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Better catch before	12	41.4	17	60.7	7	30.4	16	51.6	52	46.8
Catch is increasing	2	6.9	1	3.6	4	17.4	0	0.0	7	6.4
Undecided	15	51.7	10	35.7	12	52.2	15	48.4	52	46.8
Total	29	100	28	100	23	100	31	100	111	100

Table E2. Change in enforcement effort

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	12	41.4	8	28.6	5	21.7	14	45.2	39	35.1
No	3	10.3	20	71.4	0	0	0	0	23	20.7
Undecided	14	48.3	0	0	18	78.3	17	54.8	49	44.2
Total	29	100	28	100	23	100	31	100	111	100

Table E3. Has increased enforcement resulted to higher compliance?

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	9	31.0	0	0	23	100	0	0	32	28.8
No	20	69.0	28	100	0	0	31	100	79	71.2
Total	29	100	28	100	23	100	31	100	111	100

Table E4. Policies enforced before project intervention

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
None	2	6.9	4	14.3	0	0	0	0	6	5.4
Fishing not allowed in sanctuary	0	0	0	0	1	4.4	0	0	1	0.9
Use of illegal fishing method prohibited	0	0	0	0	1	4.4	2	6.5	3	2.7
Prohibition on										

dumping garbage on the shore	0	0	0	0	0	0	8	25.8	8	7.2
Not aware	27	93.1	24	85.7	21	91.2	21	67.7	93	83.8
Total	29	100	29	100	23	100	31	100	111	100

Table E5. Is the community aware of the policies being implemented?

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	14	48.3	19	67.9	15	65.2	20	64.5	68	61.3
No	15	51.7	9	32.1	8	34.8	11	35.5	43	38.7
Total	29	100	28	100	23	100	31	100	111	100

Table E6. Were persons apprehended penalized?

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	4	13.8	20	71.4	6	26.1	5	16.1	35	31.5
No	8	27.6	2	7.1	0	0	10	32.3	20	18.0
Don't know	17	58.6	6	21.5	17	73.9	16	51.6	56	50.5
total	29	100	28	100	23	100	31	100	111	100

Table E7. Penalties imposed on violators

Penalty	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
None	9	31.0	0	0	1	4.3	0	0	10	9.0
Warning on first offense	2	6.9	1	3.6	0	0	0	0	3	2.7
Fine	1	3.5	5	17.9	4	17.4	0	0	10	9.0
Case filed in court	0	0	0	0	0	0	1	3.2	1	0.9
Confiscation of gear and payment of fine	0	0	0	0	0	0	2	6.5	2	1.8
Apprehended & jailed	0	0	0	0	0	0	1	3.2	1	0.9
Don't know	17	58.6	22	78.6	18	78.3	27	87.1	84	75.7
Total	29	100	28	100	23	100	31	100	111	100

Table E8. Was there decrease in the use of destructive methods and gears?

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	21	72.4	23	82.1	9	39.1	15	48.4	68	61.3
No	8	27.6	5	17.9	14	60.9	16	51.6	43	38.7
Total	29	100	28	100	23	100	31	100	111	100

Table E9. Presence of established enterprise/livelihood

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	3	10.3	10	35.7	4	17.4	1	3.2	18	16.2
No	26	89.7	18	64.3	16	69.6	11	35.5	71	64.0
Not aware	0	0	0	0	3	0	19	61.3	22	19.8
Total	29	100	28	100	23	100	31	100	111	100

Table E10. Existing enterprise/livelihood activities

Enterprise	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Mangrove development	2	66.7	0	0	0	0	0	0	2	11.1
Fish trading	1	33.3	9	90.0	0	0	0	0	10	55.5
"bobo" (fish trap)	0	0	1	10.0	0	0	0	0	1	5.6
Soap making	0	0	0	0	1	25.0	0	0	1	5.6
Fried noodle ("shing-a-ling")	0	0	0	0	3	75.0	0	0	3	16.6
Swine dispersal	0	0	0	0	0	0	1	100	1	5.6
Total	3	100	10	100	4	100	1	100	18	100

Table E11. Were there enterprise-related training conducted?

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	0	0	0	0	0	0	10	32.3	10	9.0
No	29	100	28	100	23	100	21	67.7	101	91.0
Total	29	100	28	100	23	100	31	100	111	100

Table E12. Time spent in fishing

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No change	29	100	26	92.8	23	100	31	100	109	98.2
Everyday	0	0	1	3.6	0	0	0	0	1	0.9
Depends on the phase of the moon	0	0	1	3.6	0	0	0	0	1	0.9
Total	29	100	28	100	23	100	31	100	111	100

Table E13. Presence of coastal zone management

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	13	44.8	9	32.1	10	43.5	14	45.2	46	41.4
No	16	55.2	19	67.9	13	56.5	17	54.8	65	58.6
Total	29	100	28	100	23	100	31	100	111	100

Table E14. Agreement/compliance if zoning is implemented

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	9	31.0	0	0	4	17.4	0	0	13	11.7
No	20	69.0	28	100	19	82.6	31	100	98	88.3
Total	29	100	28	100	23	100	31	100	111	100

Table E15. Ways of resolving conflicts

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Amicable settlement	12	41.4	4	14.3	3	13.0	10	32.3	29	26.1
Mediation of barangay officials	4	13.8	4	14.3	1	4.4	1	3.2	10	9.0
Intervention of influential persons	0	0	1	3.6	0	0	2	6.5	3	2.7
Vote of majority	0	0	1	3.6	0	0	0	0	1	0.9
No conflict	0	0	1	3.6	2	8.7	0	0	3	2.7
Don't know	13	44.8	17	60.6	17	73.9	18	58.0	65	58.6

Total	29	100	28	100	23	100	31	100	111	100
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Table E16. Is there change in economic status/quality of life?

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	14	48.3	10	35.7	3	13.0	1	3.2	28	25.2
No	15	51.7	18	64.3	20	87.0	30	96.8	83	74.8
Total	29	100	28	100	23	100	31	100	111	100

Table E17. Familiarity with Ecofish

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	4	13.8	7	25.0	7	30.4	6	19.4	24	21.6
No	25	86.2	21	75.0	16	69.6	25	80.6	87	78.4
Total	29	100	28	100	23	100	31	100	111	100

Table E18. Knowledge about Ecofish

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Conducts training	3	10.4	1	3.6	5	21.7	7	22.6	16	14.4
Conducts survey of corals	1	3.4	0	0	0	0	0	0	1	0.9
Monitors fish species that we catch	0	0	1	3.6	0	0	0	0	1	0.9
Provides crab fattening project	0	0	0	0	0	0	2	6.5	2	1.8
Provided fiberglass boats to Yolanda victims	0	0	0	0	0	0	10	32.2	10	9.0
They are "muro-ami" fishers	4	13.8	0	0	0	0	0	0	4	3.6
Provides loans to fisherfolks	1	3.4	0	0	0	0	0	0	1	0.9

Not familiar with Ecofish	20	69.0	26	92.8	18	78.3	12	38.7	76	68.5
Total	29	100	28	100	23	100	31	100	111	100

Table E19. Is there an organized Fisherfolks Association?

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	21	72.4	19	67.9	16	69.6	13	41.9	69	62.2
No	8	27.6	9	32.1	0	0	4	12.9	21	18.9
Don't know	0	0	0	0	7	30.4	14	45.2	21	18.9
	29	100	28	100	23	100	31	100	111	100

Information obtained from the FGD participants clearly show that the women have gone beyond their regular responsibility of taking care of the daily needs of the family. As related by the FGD participants the women are generally in-charge of marketing the catch of their husbands or older sons either through house-to-house peddling or selling the fish in the market. They also help in repairing damaged fish nets. Majority (74.9%) of the Bantay-dagat FGD participants in the four (4) MKBAs included in the study acknowledged the participation of women in enforcement activities (Annex Table 2). Women serve as "informants" and are on the lookout for illegal fishing activities. In Tingloy, Mabini ten (10) of the Bantay-dagat are women and they are primarily in-charge of monitoring fishing activities while the men bantay-dagat do the patrolling. In addition, the women bantay-dagat of Tingloy are also involved in the "shing-a-ling" livelihood project of their organization. The women do the cooking while the men do the marketing and delivery of orders to some business establishments. In San Teodoro, Mabini in VIP and in Pangapasan, Tubigon in Danajon Reef there are similarly female members of the bantay-dagat team. In Coron, Palawan two of the 20 members of the bantay-dagat team are women and they are assigned at the docking area of tourist boats to check on the manifest and the compliance with the requirements such as passenger capacity, presence of Coast Guard and whether the boat captain is licensed.

Table E20. Women participation in enforcement activities (Bantay-Dagat FGD)

Response	Bohol		South Negros		Batangas		Palawan		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	22	68.8	4	100.0	20	66.7	9	64.3	55	74.9
No	10	31.3	0	0	0	0	5	35.7	15	16.7
No answer	0	0	0	-	10	33.3	0	0	10	8.3
Total	32	100	4	100	30	100	14	100	80	10

ANNEX VII

EAFM Benchmark Results

ANNEX VII: EAFM BENCHMARK RESULTS

Table F. Assessment of the EAFM Benchmarks at Various Levels of Implementation. Data obtained from the field.

Benchmark Table F1. Ecosystem boundaries established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Ecosystem boundaries drawn and established Ecosystem boundaries drawn incorporating institutional and political considerations	-Water boundaries either barangay or municipality (baseline map) -Baseline map of ecosystems (can be per barangay or municipality)	LGU Technical Map Simple Drawings of ecosystems by LGUs	Maps are available (Boundary settled between Cebu Province: Lapu-lapu, Cebu and Talibon)	Maps are available (But with existing boundary conflict)		Not yet done (Ecofish assisting)
Level 2: Formal agreement on ecosystem boundaries Ecosystem boundaries agreed upon by the participating local governments through a memorandum of agreement or other form of policy instrument	-Municipal waters delineated -Legal Agreement or Policy Instrument among adjacent municipalities	LGU NAMRIA	Some Bohol Province LGUs with existing boundary disputes		Maps are available. LGUs with legal instruments.	
Level 3: Ecosystem boundaries legally recognized by the national government Ecosystem boundaries recognized by the national government as part of its Coral Triangle Initiative	Legal Agreement or Policy Instrument among adjacent municipalities signed by National	DENR-BMB NAMRIA				

	Government or NAMRIA					
Score			I	I	2	I

Benchmark Table F2. Coastal marine habitat monitoring and management planning established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Coastal marine habitat baseline assessment conducted and habitat profile developed – Marine habitat profile developed through compilation of secondary data and baseline assessment of the status of coral, seagrass, and mangrove habitats – Issues and opportunities pertaining to coastal habitats, socio-economic, governance and other related issues identified – Key indicators for habitat, socio-economic and governance aspects developed as part of the future monitoring and evaluation	-Resource Ecological Assessment 2015 for corals, seagrass, mangroves -List or Document on issues, concerns and opportunities -Monitoring Plan for REA; including identified indicators for habitat, socio-econ and governance in the M & E plan; Management plan for each resource	LGU TETRA TECH FGD and KII	Ecofish and Haribon conducted Resource Ecological Assessment.	Monitoring of mangrove and fish catch is regularly done by LGUs (no significant coral reefs in MKBA)	Monitoring is done regularly.	Monitoring of mangroves only.
Level 2: Coastal/marine habitat monitoring conducted regularly and fed	-Series of Resource	LGU TETRA		(no feedbacking	Some LGUs used MEAT	

back to stakeholders and resource users – Key habitat data collected analyzed and compared to baseline – Analyzed monitoring results presented to stakeholders and resource users	Ecological Assessment from 2013-15 for corals, seagrass, mangroves -Comparative report from 2013 -Documentation Community Meeting (Attendance Sheet; Program)	TECH		nor analyses)	and made comparative reports	
Level 3: Results of coastal/marine habitat monitoring used in formulation of marine habitat management plans and actions – Baseline and monitoring results analyzed and results used to formulate habitat management options – Habitat management options presented to stakeholders for formulation of habitat management plan or improvement of existing habitat management plan – Habitat management plans enacted	-Management Plan Revised based on REA results (sections, report, pictures) - Stakeholders meeting on results; improved or revised plan (section) -Enacted revised Management Plan on habitats (Report, pictures, etc.)	LGU TETRA TECH				
Score			I	I	2	I

Benchmark Table F3. Fisheries monitoring and early fisheries management planning established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Fisheries baseline assessment conducted and habitat profile developed -Fisheries profile developed through compilation of secondary data and baseline assessment of the status of fishery resources, fishers, and fishing effort (boats and gears) -Issues and opportunities pertaining to fisheries, socio-economic, governance and other related issues identified -Key indicators for fisheries, socio-economic and governance aspects developed as part of the future monitoring and evaluation	-Fisheries profile; fisheries resource monitoring report or baseline or status assessment report (e.g. CPUE, fish landing, # fishers, list gears, etc.) -Issues and concerns raised by the stakeholders relating to fisheries -M & E plan includes identified indicators for fisheries, socio-econ and governance	LGU TETRA TECH	Done by LGUs and Ecofish	Done by LGU and Bantay Dagat	Done by LGUs	None so far
Level 2: Fisheries (catch and effort) monitoring conducted regularly and reported back to stakeholders and resource users -Key fisheries data collected analyzed and	-CPUE regular monitoring results; attendance sheet data reporting; Comparison	LGU TETRA TECH	Fish catch monitoring are regularly conducted by LGUs	Monitoring of fish catch are regularly done by LGUs	Fish catch regularly monitored, with available documentation	

compared to baseline -Analyzed monitoring results presented to stakeholders and resource users	report or document of previous and latest fisheries monitoring result -Documentation report of public consultation (with pictures, audio or video)				of reports	
	-Fisheries management plan showing strategies or interventions based on monitoring results -Minutes of the public consultation; Documentation report of public consultation (with pictures, audio or video); Compilation of management responses from the stakeholders	LGU TETRA TECH				
Score			2	2	2	0

Benchmark Table F4. Fisheries law enforcement team and program established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Fisheries law enforcement team and law enforcement program established - Members of fisheries law enforcement team identified, trained and deputized - Law enforcement program developed and funded - Law enforcement assets (boats, radios, GPS, etc. procured)	- List of members of law enforcement team; - CLE certificate for each of the members - Law enforcement plan or program - Pictures showing patrol boat, radios, GPS or any materials used by CLET in enforcement	LGU TETRA TECH	Enforcement team are established but are still drafting the law enforcement plan	Enforcement team and program are established but there is a need to update the ordinance	Enforcement established	Enforcement team established but still drafting the program/plan
Level 2: Fisheries enforcement operations regularly conducted and enforcement database established - Fisheries law enforcement operation planning (Oplan) regularly conducted - Results of enforcement operations documented in a form of data base - Coordination mechanism with agencies (police, navy, coast guard) having coastal and fisheries law enforcement mandates established	- SEABORNE patrol schedule; Copy of patrol order given by the municipal mayor - Logbook of patrol schedules or attendance form showing the names of the patrollers;	LGU TETRA TECH	Inter-LGU CLEC (<i>mht</i>)	Inter-LGU CLET	Regular patrolling VIP	Calamianes Monitoring Team

	-INTER-agency or LGU enforcement; MOA with other partner agencies (PNP, Maritime, Coast Guard) Coastal enforcement plan showing coordination mechanism with other partner agencies					
Level 3: Fisheries law enforcement operations sustained and enforcement effectiveness evaluated. Collaborative enforcement with other participating local governments conducted • Fisheries law enforcement operations continuously funded • Training of fishery law enforcement team regularly updated • Effects of fisheries law enforcement evaluated and operations improved • Joint enforcement with other participating local governments conducted	-3-5years annual financial plan enforcement allocated budget; Audited expenditure report for the last 2-3 years -Documentation report CLE trainings -Performance and result evaluation report -Joint enforcement report with other	LGU TETRA TECH				

	partner LGUs					
Score			2	2	2	2

Benchmark Table F5. Comprehensive fisheries management plan conducted and regularly updated

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Comprehensive fisheries management plan developed and adopted - Comprehensive fisheries management plan laid out, programs and activities in response to issues identified in the baseline assessment and profile - Comprehensive fisheries management plan incorporates habitat management plans and early fisheries management plans - Draft comprehensive fisheries management plan presented to stakeholders	-Comprehensive fisheries management plan (can be draft) showing programs and activities addressing issues and concerns gathered during the baseline assessment -Comprehensive plan section on habitat and fisheries management - Minutes during the presentation of the draft comprehensive	LGU TETRA TECH	Still drafting the Comprehensive Fisheries Management Plan	Still drafting the Comprehensive Fisheries Management plan	Done Comprehensive Fisheries Management Plan	Still drafting the Comprehensive Fisheries Management Plan

	fisheries management plan to the stakeholders					
Level 2: Comprehensive fisheries management plan implemented and programs in the plan continuously funded • Comprehensive fisheries management plan adopted through enactment of enabling policy instrument or legislation (ordinance) • Programs and activities in the comprehensive fisheries management plan funded by the local governments	- Ordinance adopting the comprehensive fisheries management plan -Audited expenditure report showing fisheries management activities being funded; Annual Financial statements	LGU TETRA TECH			Fisheries Plan implemented and funded	
Level 3: Fisheries management plan revised or updated based on the monitoring results • Comprehensive fisheries management plan reviewed, updated and revised following the results of the regular coastal/marine habitat and fisheries (catch and effort) monitoring schemes • Programs and activities in the comprehensive fisheries management plan	-Updated comprehensive fisheries management plan, showing sections revised from monitoring results - 1-2 year financial statement showing fisheries	LGU TETRA TECH				

regularly funded	management activities funded					
Score			1	1	2	1

Benchmark Table F6. Fisheries management office established and operational

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Fisheries management office in each local participating government established with corresponding mandate and staff - Fisheries management office with mandate to implement and coordinate fisheries management activities established - Fisheries management office allocated with human and financial resources to perform mandated activities	-Document creating fisheries management office; -Picture of the fisheries management office; -Roles and Functions of the office -Organizational structure; -List of staff in the management office; -LGU Budget allocating budget for human and operational use of the fisheries	LGU TETRA TECH	Fisheries is built-in the Municipal Agricultural Office. All these documents are through the regular files, budget, and office of the MAO.	Fisheries is built-in the Municipal Agricultural Office. All these documents are through the regular files, budget, and office of the MAO.	Fisheries is built-in the Municipal Agricultural Office. All these documents are through the regular files, budget, and office of the MAO.	Fisheries is built-in the Municipal Agricultural Office. All these documents are through the regular files, budget, office of the MAO and Bantay Palawan Office

	management office; -LGU Budget plan or Work Financial Plan of the fisheries office					
Level 2: Coordination among offices within the local government, institutional partners, and other participating local governments established • Staff of fisheries management office trained to effectively perform mandated activities • Linkages between fisheries management office, offices within the local government and institutional partners developed • Linkage between the fisheries management office and other participating local governments within the defined ecosystem established	-Certificate of training for the staffs of the fisheries management office -MOA or any agreement of collaboration with other partner agencies and LGUs -MOA or any agreement indicating guidelines for collaboration with other partner agencies and LGUs	LGU TETRA TECH	Staff attended trainings; (but MOAs with other LGUs are not available)	Staff attended trainings; Inter-LGUs partnership thru the MAO offices	Staff attended trainings; Inter-LGUs partnership thru the MAO offices	Staff attended trainings; (but MOAs with other LGUs are not available)
Level 3: Leveraging support of programs with institutional partners and collaborative endeavors with participating local governments within the ecosystem boundary established • Fisheries management office able to	-Activity report with other participating partner institutions, agencies or LGUs;	LGU TETRA TECH				

leverage financial and services support of programs with institutional partners and other government agencies	-Financial support or counter-parting from other units or partners					
• Collaborative activities between the fisheries management office and other participating local governments in developing common fisheries management policies, common ordinance and joint management planning established	- MOA of collaboration with other partners defining roles and functions;					
	-Draft ordinance or joint planning on collaborative activities;					
	-Fisheries Management plan among inter-LGUs					
Score		1	2	2	1	

Benchmark Table F7. Fisheries registration and licensing system established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Fishers, boats and fishing gears registration and licensing system established • Fishers, fishing boats, and fishing gear registration procedure established • Registration and licensing initiated • Fisheries registration and licensing	- Ordinance showing the registration and licensing scheme of the LGU - BOATR and FISHR installed in	LGU TETRA TECH	Registration and Licensing Done	Registration and Licensing Done	Registration and Licensing Done	Registration and Licensing Done; but database not properly updated

data base developed	the LGU's computer - Database for registration					
Level 2: Fishers, boats, and fishing gears registration and licensing system implemented and enforced • Registration and licensing database functional and registration and licensing data stored and analyzed • Registration and licensing system fully functional	- BOATR and FISHR database with list of registered fishers, gears and boats -Database up-to-date; Pictures showing registration certificates, coding of fishing boats	LGU TETRA TECH	These are all available but registration is not yet 100% completed.	Continuous implementation on this.	Continuous implementation on this.	
Level 3: Fishers, boats, and fishing gears registration and licensing system implementation sustained and information from the database used for fishing effort control and regulations • Database fully functional and information used to determine and monitor fishing effort • Fisheries registration and licensing information used to revise and improve plans and policies on fisheries management.	-Functional Database with records >1 year - 1-2 year Monitoring report of number of registered fishers, gears or boats					
Score			2	2	2	1

Benchmark Table F8. Network of Marine Protected Areas (MPA) established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level I: Individual MPA or MPAs established, baseline data collected, MPA management plan implemented, and monitoring system established • MPA site identified, boundaries delineated, zones (no-take and buffer zones) established • MPA baseline information (live hard coral cover, reef fish biomass, diversity, etc.) collected • MPA management plan formulated and adopted (preferably supported by legal instrument), management body and enforcement team trained and organized • Enforcement protocol operational, enforcement infrastructure established and enforcement assets procured and utilized • Management body and enforcement team conduct regular implementation and enforcement activities with funding support from local government • MPA monitoring regularly conducted and compliance monitored	-Buoys, signages and markers visible in the perimeter of the MPA -Baseline assessment report on fish, coral cover, seagrass, mangroves etc. -Ordinance declaring the area as MPA; -Organizational chart of the MPA management body or committee; -MPA management plan formulated and adopted through a resolution or ordinance -Patrol boats, radios, flashlights,	LGU TETRA TECH	Individual MPAs are established but MPA network arrangements are yet to be made	Individual MPAs are established but MPA network arrangements are yet to be made	Individual MPAs are established but MPA network arrangements are yet to be made	

	guardhouse available -Copy of the regular monitoring activity reports; Schedule of MPA monitoring; LGU Financial statement showing MPA support -MPA monitoring documents, schedules, etc.					
Level 2: Individual MPA or MPAs sustained and MPA network arrangements established - Activities of the MPA Management body and enforcement team sustained - Implementation and enforcement activities funded by local government - MPA monitoring sustained and impacts regularly presented to stakeholders - Components of the MPA network identified and MPA managers organized - Implementation and coordination arrangements established - Enforcement and monitoring protocols harmonized and agreed	-2-3 year activity reports of the management body - LGU (Audited) MPA expenditure rpt; LGU Financial budget for management body or for MPA -2-3 year monitoring and evaluation report of the MPA					Network of MPAs established

	-List of MPA managers for each MPA; - Agreed guidelines and protocols for the network; - MOA with other partners in the network; - Organizational set-up MPA network or inter-LGU/barangay MPA bodies; -Protocols on inter-LGU MPA enforcement and monitoring					
Level 3: MPA network arrangements implemented, enforced and sustained • MPA network management plan developed • Coordination meeting among MPA network management bodies regularly conducted • Programs in MPA network management plan implemented and funded • MPA bodies of members of the MPA network conduct collaborative MPA	-MPA network management plan -Minutes of regular meetings of the network members -Activity reports of the network -Collaborative assessment reports, documentation or					

monitoring activities	minutes; -MPA monitoring proofs and zoning map or ordinance					
			I	I	I	2

Benchmark Table F9. Fisheries use zoning plan established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Fisheries and other uses identified and zoning plan developed - Existing and potential municipal water uses identified and mapped - Interaction among the various activities evaluated and conflicting uses identified and resolved - Proposed zonation map developed and regulatory mechanisms formulated	- Fisheries use zoning map - List of regulations proposed or implemented in the area; -List of conflicting uses -Zonation (Draft) map for fisheries resources; -Draft regulations mechanisms	LGU TETRA TECH	Drafted proposed zoning with the help of Ecofish.	With zoning map.	With zoning map.	No available data.
Level 2: Fisheries use zoning plan implemented (with corresponding legal or policy instrument) and monitored	-			With legal instrument	With legal instrument	

• Fisheries use zoning plan presented to stakeholders and resource users for approval • Enabling policy or zoning ordinance enacted and management and enforcement arrangement established	Minutes/Documents of Public presentation fisheries use zoning plan - Ordinance or resolution supporting the fisheries use map or zoning;					
Level 3: Fisheries use zoning plan improved, sustained and objectives attained (e.g. resource use conflict reduced) • Fisheries use zoning plan updated and revised • Implementation and enforcement of zoning regulations sustained • Resource use conflict reduced	- Updated version of the fisheries use zoning plan - 1-2 year implementation report of the fisheries use zoning plan -Reports showing trends of resource use conflict					
Score			1	2	2	0

Benchmark Table F10. Local constituencies for fisheries management organized and actively involved

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Local constituencies for fisheries management organized Organization concerned with fisheries management formed	-List of organizations involved in the fisheries management MOA, ordinance or resolution or any document showing support to group	LGU TETRA TECH	Established Fisherfolk organizations	Established Fisherfolk organizations	Established Fisherfolk organizations	Established Fisherfolk organizations
Level 2: Local constituencies for fisheries management actively participated in program development and implementation - Organization concerned with fisheries management involved in policy formulation and review of management plan - Organization concerned with fisheries management participating in program implementation and monitoring of results	- Attendance sheets during the policy formulation showing the organization names involved in the planning - Activity reports acknowledging partner organizations as being involved in the monitoring and				Involved in monitoring and implementation	

	implementation					
Level 3: Local constituencies for fisheries management sustained and expanded Organization concerned with fisheries management actively lobby for the development of management measures and implementation of the programs in the fisheries management plan	- Attendance of meeting/ consultations showing organizations pushing for developing or implementing measures on fisheries management					
Score			1	1	2	1

Benchmark Table F11. Multi-institutional collaboration on coastal and fisheries resources management (CFRM)

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Multi-institutional collaboration on CFRM established - Potential partners from LGUs, NGAs, NGOs, academe, private sector and funding institutions identified - Potential arrangements among neighboring LGUs that form the ecosystem identified - MOAs and other instruments adopted through municipal legislative action or	-List of potential institutions for CFRM -Legal documents, ordinances or resolution stating arrangements among LGUs Delineation among	LGU TETRA TECH	Still drafting the CFRM legal documents for this	There is CFRM; (but, without legal instrument)	There is CFRM, with legal documents	There is CFRM; (but without legal instruments)

signed by collaborating partners and planning, implementation, coordination and monitoring arrangements established	LGU's and partner institutions on the task and responsibilities of each stakeholders. (Stewardship Agreement) Establishment of a technical working group assign on the CFRM. CFRM plan formulated and adopted through a resolution or ordinance among stakeholders					
Level 2: Multi-institutional collaboration on CFRM effectively implementing programs and services - Multi-institutional CFRM program identified and plans for their implementation drafted - Multi-institutional CFRM activities coordinated, implemented, enforced and monitored	- Formulation of multi-institution activities aiming on holistic growth for the CRFM -Copy of the regular monitoring/meeting activity reports of the TWG; -Activity reports					

	acknowledging partner organization as being involved in the monitoring and implementation of the CRFM					
Level 3: Multi-institutional collaboration on CFRM sustained and showing positive impacts Multi-institutional CFRM program implementation sustained with measurable positive impacts to collaborating LGUs and coastal communities Multi-institutional collaborative mechanisms reviewed and improved, and contributing to effective CFRM	-Assessment reports, evaluations and documentation on the effects (BENEFICIAL) of the collaborative activities of the CRFM; -Minutes of regular meetings of the institutions involved. -Copy of the multi-institutional CRFM plan incorporated in the LGU's ordinances -Regular monitoring and					

	evaluation of the activities being implemented by the multi-institution CRFM					
Score			I	I	I	I

Benchmark Table F12. Species-specific management measures established

Benchmark Description	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VIP	CIG
Level 1: Species that constitute the “significant food web” identified and baseline assessment conducted - Economically important species that constitute a significant portion of the food web based on the fisheries profiling process identified - Focus group discussion to identify early and immediate management action for identified economically important species conducted Baseline assessment of identified species conducted	-List of identified significant food web species from Resource Ecological Assessment; List of the species identified - Documentation of FGDs; results showing proposed management of the identified important species - Baseline assessment of the identified species		None	Yes for dolphins and sea turtles	Yes on Galunggong and matambaka	No available data
Level 2: Species-specific management measures developed, enforced and	- Draft individual or group				Established close season	

monitored • Species-specific management options for identified species drafted • Consultations on species-specific management options conducted • Selected species-specific management measure implemented (supported by legal instrument) • Fisheries monitoring protocol for identified species developed	ordinances on the protection of the identified economically important species -Community consultation on the management of the identified important species - Establishment of management measures and supporting ordinances per selected species - Monitoring protocol on the fisheries of the selected species					
Level 3: Species-specific management measure sustained and monitoring results show impacts • Enforcement of species-specific management measure established and sustained • Fisheries monitoring of species-specific management intervention sustained and	-Ordinance or resolution supporting management of the identified species; -Enforcement plan or activity done and sustained;					

results regularly presented to stakeholders and resource users	-Proof of fisheries monitoring done and sustained; Documented regular public consultation and evaluation on the management results to users.					
Score			0	1	2	0

Benchmark Table F13. Gear-specific management measures established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level 1: Gear-specific management measure identified and baseline assessment conducted - Gear-specific issues based on the fisheries profiling process identified - Focus group discussion to identify early and immediate management action for identified fishing gears conducted - Baseline assessment of identified fishing gears conducted	- Copies of the issues and concerns raised by the stakeholders relating to gear-specificity - Documentation of FGDs showing proposed management of the identified fishing gear - Baseline assessment of the	LGU TETRA TECH	Enacted an ordinance; Enforcement is done for illegal gears;	Enacted an ordinance; Enforcement is done for illegal gears;	Enacted an ordinance; Enforcement is done for illegal gears;	Enacted and ordinance; Enforcement is done for illegal gears;

	identified gear					
Level 2: Gear-specific management measures developed, enforced and monitored • Gear-specific management options for identified fishing gears drafted • Consultations on fishing gear-specific management options conducted • Selected gear-specific management measure implemented (supported by legal instrument) • Fisheries monitoring protocol for identified fishing gears developed	- Draft individual or group ordinances on the on the gear-specific management -Document on Community consultation on the gear-specific management - Establishment of management measures and supporting ordinances per selected gear - Monitoring plan conscripted for the gear-specific management		But no gear-specific management.	But no gear-specific management.	But no gear-specific management.	But no gear-specific management.
Level 3: Gear-specific management measure sustained and monitoring results show impacts • Enforcement of species-specific management measure established and sustained	-Enforcement reports and list of violators apprehended on the specific species gear; -Ordinance or					

Fisheries monitoring of gear-specific management intervention sustained and results regularly presented to stakeholders and resource users	resolution supporting the gear-specific management; -Public consultation on the status of the gear-specific management					
Score			I	I	I	I

Benchmark Table F14. Mangrove management area established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level I: Mangrove management area established and baseline data collected - Mangrove management site identified, boundaries delineated, zones (rehabilitation zones, aquasilviculture zones, etc.) established - Mangrove baseline information (mangrove species, mangrove cover, fish and invertebrate species, human activities) collected - Mangrove management plan formulated and adopted (preferably supported by legal instrument), management body and enforcement team trained and organized	-Baseline map of mangroves done (can be per barangay or municipality); -Mangrove resource-use zoning delineated and mapped out in municipality -Report on baseline assessment on mangrove species,	LGU TETRA TECH	Mangrove projects of BFAR were established in LGUs (assuming on baseline assessment, activities, or, mapping)	Mangrove projects of BFAR were established in LGUs (assuming on baseline assessment, activities, or, mapping)	Mangrove projects of BFAR were established in LGUs (assuming on baseline assessment, activities, or, mapping)	Mangrove projects of BFAR were established in LGUs (assuming on baseline assessment, activities, or, mapping)

	associate invertebrates, fishes and human activities present in the mangrove area. -Mangrove management plan adopted with supporting resolution or ordinance; Management body created					
Level 2: Mangrove management plan developed, implemented and monitoring system established • Enforcement protocol operational, enforcement infrastructure established and enforcement assets procured and utilized • Management body and enforcement team conduct regular implementation and enforcement activities with funding support from local government • Mangrove monitoring regularly conducted and compliance monitored	-Enforcement activity and monitoring in placed (banning of cutting mangroves, dumping garbage, etc.); -Guardhouse, binoculars and other paraphernalia available; and bantay-dagat established to enforce the law;					

	->1-year enforcement reports; annual LGU budget for management and enforcement of mangroves -Reports on implemented regular monitoring, regulations and apprehensions in mangrove areas					
Level 3: Mangrove management sustained and monitoring results show impacts - Activities of the mangrove management body and enforcement team sustained - Implementation and enforcement activities funded by local governments - Mangrove monitoring sustained and impacts regularly presented to stakeholders	-More than 1-year enforcement reports, enforcement activity reports and list of violators apprehended -Budget from the LGU showing allocated budget for human (bantay dagat) and operational expenses					

	(guardhouse, flashlights etc.) -Public presentation, evaluation and consultation on the mangrove conditions					
Score			I	I	I	I

Benchmark Table F15. Seagrass management area established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level I: Seagrass management area established and baseline data collected - Seagrass management sites identified, boundaries delineated, zones (rehabilitation zones, rabbitfish protection zones, etc.) established - Seagrass baseline information (seagrass species, seagrass cover, fish and invertebrate species, human activities) collected - Seagrass management plan formulated and adopted (preferably supported by legal instrument), management body and enforcement team trained and	-Baseline map of seagrass areas created (can be per barangay or municipality); -Seagrass resource-use zoning delineated and mapped out in municipality -Report on baseline assessment on seagrass species,	LGU TETRA TECH	Do not have specific program for seagrass management	Do not have specific program for seagrass management	Do not have specific program for seagrass management	There is seagrass-managed established by NGO

organized	associate invertebrates, fishes and human activities present in the seagrass area. -Seagrass management plan adopted with supporting resolution or ordinance; - Management body created					
Level 2: Seagrass management plan developed, implemented and monitoring system established • Enforcement protocol operational, enforcement infrastructure established and enforcement assets procured and utilized • Management body and enforcement team conducting regular implementation and enforcement activities with funding support from local government • Seagrass monitoring regularly conducted and compliance monitored	-Enforcement activity and monitoring in placed (e.g. use of appropriate gears and structures); -Guardhouse, binoculars and other paraphernalia available; and bantay-dagat established to enforce the law; -> 1-year					

	enforcement reports; annual LGU budget for management and enforcement of seagrass protection -Reports on implemented regular monitoring, regulations and apprehensions in seagrass areas					
Level 3: Seagrass management sustained and monitoring results show impacts - Activities of the seagrass management body and enforcement team sustained - Implementation and enforcement activities funded by local governments - Seagrass monitoring sustained and impacts regularly presented to stakeholders	-More than 1-year enforcement reports, enforcement activity reports and list of violators apprehended -Budget from the LGU showing allocated budget for human (bantay dagat) and operational expenses					

	(guardhouse, flashlights etc.) -Public presentation, evaluation and consultation on the seagrass conditions					
Score			0	0	0	1

Benchmark Table F16. Revenue generation established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level I: Revenue generation system on CRM/fisheries management established - Potential revenue-generating coastal and fishery management programs assessed and identified - Revenue collection program established with clear purpose and implementation arrangements of how the funds will be used in coastal and fisheries management activities - Specific revenue ordinance enacted, or revenue clause (indicating use of funds) should be part of enacted fishery ordinance	- List of potential programs or activities generating revenue for coastal and fisheries management; - Report or minutes meeting assessing revenue-generating programs - Work and Financial Plan on	LGU TETRA TECH	Revenues are generated from penalties	Revenues are generated from penalties	Revenues are generated from penalties and resource users' fees	Revenues are generated from penalties

	the use of the funds generated showing from collection to usage; - List of priority projects that will be funded on the funds generated - Ordinance enacted specifying revenue-generating mechanism and its usage; - Or, an enacted Ordinance indicating such as part of the whole resolution					
Level 2: Revenue-generating measures effectively implemented and enforced • Revenue collection program implemented and compliance monitoring activities conducted • Revenues collected monitored, and program implementation evaluated and modified/adjusted if necessary	- Financial statement showing revenue collected verified by the collecting officer; - Annual audited budget statement, validated by 1 more officer;					

	- Report or document that funds are used					
Level 3: Revenue-generating measures sustained showing positive impacts • Sustained implementation of revenue-generating measures • Revenue collection program and schemes for their use in the fisheries management program are already established components of the local government's Annual Investment Plan Revenues from fisheries related interventions are plowed back to fisheries management activities	- Financial statement of >2 years showing revenue collected - Sustained Plan for fund collection and identified annual programs for the fisheries management are funded by this revenue; - M & E Plan to ensure funds are used, programs implemented and complied; and, revised if needed - AIP showing allocation of LGU funds and from revenue-generation for fisheries management - Activity report					

	showing counter-parting budget from LGU allocation and revenue-generated funds; - Annual verified financial statement showing the support in funding management activities from the LGU and the revenues from fisheries					
Score			I	I	I	I

Benchmark Table F17. Coastal environment- friendly enterprises established

BENCHMARK DESCRIPTION	DATA	SOURCE	DANAJON REEF	SOUTH NEGROS	VERDE ISLAND PASSAGE	CALAMIANE S ISLAND GROUP
Level I: Coastal environment-friendly enterprises initiated Non-fishing livelihoods, low-impact mariculture, ecotourism established for fisherfolk/coastal communities to augment incomes • Involvement and management arrangement defined	-List of identified environment-friendly enterprises to be adopted in the community; -Document showing		Yes, mostly ecotourism and mariculture	Yes, mostly aquaculture	Yes, mostly ecotourism and non-fishing livelihood	Yes, mostly aquaculture and seaweed culture

• Socio-economic baseline and monitoring indicators established • Environmental carrying capacity assessment initiated	mechanism or scheme to avail of this enterprise, counter-parting scheme, contributions, etc. -Baseline assessment report on the socio-economic profile of the community; Protocol for monitoring with established indicators are in-placed - Comprehensive Carrying-capacity study of the area					
Level 2: Successful coastal environment-friendly enterprises expanded • Environmental carrying capacity established and monitoring and control mechanisms set in place • Livelihood and enterprise development programs expanded employing fisherfolk/coastal communities in non-fishing livelihoods	- Identified thresholds per sector and ecosystems; - Monitoring, evaluation and regulation protocols are in-placed on each - Proof or				Yes with ecolodge managed by PO in Balibago	

	document showing livelihood and enterprise program expanded to include the employment of fisherfolk/coastal locals in a non-fishing livelihood					
Level 3: Coastal environment-friendly enterprises sustained showing positive impacts Livelihood and enterprise development programs sustained Monitoring shows measurable socioeconomic benefits to the fisherfolk/coastal communities	- Report or proof of livelihood and enterprise more than 1-2 years existing - Inventory or monitoring report on measurable (quantifiable) socio-economic benefits to the fisherfolk/coastal (e.g. income)					
Score		1	1	2	1	

Summary:

Level 1: Danajon Reef, South Negros and Calamianes Island Group,

Level 2: Verde Island Passage

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