

OFFICE OF EVALUATION

PROJECT EVALUATION SERIES

Final evaluation of the project  
**“Strategies for Trawl Fisheries  
Bycatch Management”  
(REBYC-II CTI Project)  
GCP/RAS/269/GFF**

Final Report  
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**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS  
OFFICE OF EVALUATION**

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## **Acronyms and abbreviations**

CTI	Coral Triangle Initiative
EAFM	Ecosystem Approach to Fisheries Management
FAO	Food and Agriculture Organization of the United Nations
FAORAP	FAO’s Regional Office for Asia and the Pacific (FAORAP)
GEF	Global Environment Facility
GEO	Global Environment Objective
LOA	Letter of Agreement
LTO	Lead Technical Officer
LTU	Lead Technical Unit
M&E	Monitoring and Evaluation
MTE	Mid-term Evaluation
NGO	Non-governmental Organization
NPC	National Project Coordinator
NTO	National Technical Officer
OED	FAO Office of Evaluation
PDO	Project Development Objective
PRC	Project Regional Coordinator
PSC	Project Steering Committee
	Reduction of Environmental Impact from Tropical Shrimp Trawling through the Introduction of Bycatch Reduction Technologies and
REBYC I	Change of Management project
REBYC-II CTI	Strategies for Trawl Fisheries Bycatch Management Project
RFU	Regional Facilitation Unit
SEAFDEC	Southeast Asian Fisheries Development Center
SO	Strategic Objective
TOC	Theory of Change

## Executive Summary

ES1 This report provides a final evaluation of the project *Strategies for Trawl Fisheries Bycatch Management* (REBYC-II Coral Triangle Initiative (CTI), GCP/RAS/269/GFF), which officially began on 1 November 2011 (with full implementation starting 23 April 2012) and ended on 31 December 2016. The project supported activities in five participating countries – the Republic of Indonesia, the Independent State of Papua New Guinea, the Republic of Philippines, the Kingdom of Thailand and the Socialist Republic of Viet Nam – as well as at the regional level.

ES2 The purpose of the evaluation was to i) provide accountability to the main donor, the Global Environment Facility (GEF), and the national governments of the implementing countries, and ii) generate lessons learned from project implementation. The intended users of the evaluation include the Food and Agriculture Organization of the United Nations (FAO), GEF and its implementing agencies, participating country and local governments, other stakeholders, civil society organizations and other donors.

ES3 The evaluation assessed the project over its full implementation period from January 2011 to June 2016, covering all project components and their activities. The evaluation answers the following evaluation questions: (i) to what extent were the project’s Global Environment Objective and Project Development Objective achieved?; (ii) what results, intended and unintended, did the project achieve across its four components?; (iii) what are the key lessons that can be learned from the project’s implementation?; (iv) how sustainable are the results achieved by the project likely to be?; and (v) to what extent did the project take into account gender and human rights issues in its design and throughout its implementation?

ES4 As part of the methodology, the evaluation re-constructed the project’s theory of change (TOC), based on the project’s logical framework. The TOC was useful in identifying additional elements that were not initially considered in the project design. The theory of change was tested through the main evaluation questions specified above, and by the elaboration of additional sub-questions. For all evaluation questions (and sub-questions), judgement criteria were articulated to determine the basis on which the questions would be answered, along with indicators (quantitative and qualitative) and the relevant evaluation methods and sources of information to be used for each indicator. The evaluation was informed by a wide range of primary and secondary data and information, and by a mission to the region in July 2016 by the two principal evaluators.

## Main findings

ES5 The Global Environment Objective (GEO) of the project was to achieve “*responsible trawl fisheries that result in sustainable fisheries resources and healthy marine ecosystems in the Coral Triangle and Southeast Asian waters by reduced bycatch, discards and fishing impact on biodiversity and the environment*”. The Project Development (PDO) Objective was “*effective public and private sector partnerships for improved trawl and bycatch management and practices that support fishery dependent-incomes and sustainable livelihoods*”. In relation to the achievement of these objectives, the evaluation found that: i) the project made significant contributions towards the project’s objectives being achieved in the longer term and after project completion, but did not fully realize the stated objectives during the lifespan of the project, as assessed against the indicators; ii) some aspects of the objectives

and indicators were poorly and inappropriately specified during the project design, making it difficult for the project to achieve the objectives; and iii) other factors impacting negatively on the achievement of objectives included the small size of the project budget compared with the intended impacts, and not revising the objectives and indicators once it had become clear that some co-financing expected during the design phase would not be available.

ES6 Partial progress was made in achieving the intended results across the four components<sup>1</sup>, and varied among the participating countries. Components 1, 2 and 3 only met some of the targets, based on performance as measured against the related indicators. For these three components, the project only partially achieved the intended results, although it was working successfully towards establishing policy, legal and institutional frameworks; developing improved management measures; and improving data resources to inform managerial decision-making, and to understand the role of bycatch in trawl profitability. A longer project time frame, and/or improved implementation performance could have resulted in the intended results being fully achieved. Component 4 was assessed as having achieved the intended results; project partners from both the public and private sectors had significantly increased awareness and knowledge about bycatch issues as compared with the beginning of the project, and were working together on devising bycatch policies and management strategies.

ES7 While capacity building was not an explicit expected outcome of REBYC-II CTI, considerable effort was dedicated to developing capacity at the individual and organizational levels, which in turn helped to create an enabling environment for trawl fisheries management in the partner countries. All four project components, and particularly component 4, contributed to significantly strengthening technical and managerial capacity in participating institutions. A notable achievement was the introduction of the Ecosystems Approach to Fisheries Management (EAFM) to national and local stakeholders, which resulted in a new generation of EAFM-trained local fisheries officers in the region. A major outcome of the project that was not envisaged during the project design was the strengthened capacity of the Southeast Asian Fisheries Development Center (SEAFDEC) to coordinate large-scale regional projects, technically support regional trawl fisheries projects, and provide EAFM training and training of trainers at the regional level. Project participants would have benefited from further and more dedicated capacity building initiatives, including in fisheries data analysis, development of the logframes, project management and administration, financial and progress reporting, and FAO and GEF procedures. A dedicated capacity building component within the project design would have also been useful.

ES8 The key lessons learned from project implementation (many of which adversely affected the project's ability to achieve its component results and higher level objectives) included: the complex institutional structure of the project; insufficient resourcing of staff (and in particular the part-time nature of the Regional Project Coordinator); the use of Letters of Agreement (LOA) as a new method of project implementation in participating countries, which were not always easily understood by stakeholders; and challenges faced

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<sup>1</sup> Component 1, Policy, legal and institutional frameworks. Component 2, Resource management and fishing operations. Component 3, Information management and communication. Component 4, Awareness and knowledge.

by the different language requirements and abilities in the five participating countries. These factors contributed to implementation delays and slow disbursement, especially over the first two years of the project, and ultimately had a significant bearing on the project's ability to achieve its intended component results and its goal and objective. Country ownership, stakeholder participation, and partnerships fostered during the project were however good, and supported progress in achieving the project component results and objective level impacts.

ES9 There are good prospects for sustaining the project's results at the environmental, social, financial and institutional levels, and significant potential for replication and upscaling of activities and outcomes. By engaging key regional, national and provincial institutions in the execution of activities and building their capacity for trawl fisheries management and EAFM, the project has established an effective institutional framework in most of the countries for achieving and sustaining its long-term impacts. Although it is too early to attribute clear environmental impacts to the project, implementation and enforcement of the bycatch management plans, along with addressing fishing over-capacity, should result in substantial and sustained environmental benefits in the longer term (provided that the ecosystems are resilient to external factors such as climate change and marine pollution). Some of the countries have already allocated funds from national budgets to sustain certain activities, indicating some degree of financial sustainability. This funding can be leveraged, for example, through uptake of the project's results in other bilateral initiatives in the region. The factors that could contribute to social sustainability include a high level of awareness and ownership among public and private sector stakeholders, and the provision of training in alternative livelihoods. This could have been enhanced by the identification of appropriate incentive packages for the private sector. The project generated valuable lessons and experiences from the pilot sites, particularly the Samar Sea site which has become a model for trawl fisheries management, EAFM and public-private partnerships. While some replication was taking place in targeted countries by the end of the project, sharing the project results more widely among the countries and in the region would increase the potential for replication.

ES10 Gender and human rights issues were not explicitly addressed in the REBYC-II CTI design. However, based on a mid-term evaluation (MTE) recommendation, socio-economic studies were conducted, providing a valuable baseline and raising awareness about the importance of these issues in trawl fisheries management. Women play an important role in the fisheries post-harvest sector in each country, but the socio-economic studies were conducted too late to include gender in the three management plans developed by the project. However, increasing livelihoods as an objective in all three plans and adoption of EAFM by the countries will help to promote gender considerations in the management of trawl fisheries. Although universal human rights related to the right to work and to adequate food are implicit in the project's PDO an in-depth analysis of the level of dependence on bycatch for food security and livelihoods was not undertaken. Evaluation findings indicate that the reduction of bycatch that occurred in pilot areas did not appear to significantly affect food security and livelihoods for the following reasons: installation of bycatch reduction devices had reportedly increased catch per unit of effort, and improved the quality and value of catches; much bycatch was destined for the fishmeal sector; and local communities may be able to adapt by adopting alternative sources of food and income.



## **Conclusions and recommendations**

ES11 The following **conclusions** were tailored to the evaluation questions and drawn from the findings discussed within this report:

ES12 **Conclusion 1:** Despite the various implementation challenges, the project made contributions towards achieving the GEO and PDO and delivered results that were highly valued by FAO and the countries. However, the project performance was more successful in laying the groundwork for the objectives to be realized in the future, rather than in actually achieving them.

ES13 **Conclusion 2:** The project achieved many of the intended results across its four components; at the time of the evaluation many of the intended project component results remained as works in progress. This was especially the case for component 1 (policy, legal and institutional frameworks) and component 2 (resource management and fishing operations). The project resulted in capacity developments of SEAFDEC, which will serve to support improvements in fisheries management in the future.

ES14 **Conclusion 3:** A number of operational issues related to the implementation of the project (such as the part-time nature of the Project Regional Coordinator, the Lead Technical Officer not being located in the region, and the lack of a dedicated editing and translation budget) had a negative impact on project outcomes and impacts.

ES15 **Conclusion 4:** There are good prospects for sustaining the project’s achieved results at the environmental, social, financial and institutional levels, and significant potential for replication and upscaling of some successful project activities, as well as the achieved outcomes.

ES16 **Conclusion 5.** Gender and human rights issues were not explicitly addressed in the REBYC-II CTI design. However, based on an MTE recommendation, socio-economic studies were conducted that provided a valuable baseline and raised awareness about the importance of these issues in trawl fisheries management.

ES17 **Recommendations** based on the findings and conclusions are as follows:

ES18 **Recommendation 1.** To FAO and the project management (Lead Technical Officer, budget holder, Regional Facilitation Unit): In order to facilitate the successful completion of the project, disseminate project information and support sustainability and replication. The evaluation team recommends that the project implement the following actions, and complete those already initiated, in the remaining time frame of the project: i) provision of a full-time (rather than part-time) contract for the Field Administrative Officer to provide inputs to support the project during its final months; ii) generate missing data for a number of indicators to be used in the project’s completion report; iii) finalize estimates of co-financing provided during the project; iv) finalize and publish a number of outstanding project technical reports; v) update the project website with all relevant project-related material; vi) Prepare short policy briefs for each country on key project objectives and activities, key achievements and key lessons learned about successes, to contribute to sustainability and replication; vii) prepare a specific and explicit exit strategy for the project to cover both the sustainability of project activities and replication/scaling up; and viii) finalize the component budget revision to reflect actual expenditures, and to comply with GEF rules as to allowable flexibilities in expenditures between components.

ES19 **Recommendation 2.** To the FAO project team and relevant project partners to ensure the sustainability of project results: Given the good momentum towards the end of the project and the groundwork that has been laid, the evaluation team recommends considering a follow-up activity that provides additional support for the improved governance and management of trawl fisheries in the region. In doing so, project partners and potential funders should move quickly to agree on such a future action, in order to minimize the gap between the cessation of the current project and a follow-up activity.

ES20 **Recommendation 3.** To the GEF Coordination Unit of FAO and FAO technical divisions, including the budget holder, to improve future GEF or donor-funded projects: Ensure a rigorous formulation and implementation process that takes into account the lessons learned drawn from this and other GEF project evaluations. Some relevant lessons to highlight and suggested considerations include:

- Prior to project approval, ensure there is sufficient funding and overall responsibility for managing and supporting the projects (unless there is certainty that existing staff numbers and workloads allow for adequate technical and financial management support), as sub-optimal performance in technical and financial management support threatens FAO's institutional reputation.
- Ensure that Chief Technical Advisers/Project Coordinators receive adequate training in the use of all necessary FAO management systems, and provide sufficient authority for approval of project outputs and the provision of the necessary implementation and management support.
- Ensure that Chief Technical Advisers/Project Coordinators have good technical and operational backgrounds, or otherwise ensure that a separate operational/administrative officer is put in place to deliver the project.
- Ensure that project objectives (and their related targets and indicators) included in the results framework of a project design are realistic and achievable when considering the project budget and time frame.
- In case a project undergoes a reduction in budget during the design stage or before project commencement, ensure the necessary adjustments (financial and operational, in terms of project scope, results framework and implementation modalities) are made during the project inception phase.
- Ensure a project results framework is adjusted based on the MTE or mid-term review recommendations, or during implementation if needed.
- In case of regional projects working in countries with different language capabilities:
  - Allocate sufficient funding for the translation and editing of reports;
  - Ensure regional project coordinators and Lead Technical Officers are based in the region; ideally, with the budget holder and Lead Technical Officer housed in the same institution.
- Ensure that sufficient guidance on implementation is provided in written form (ideally in a project implementation manual) to project-implementing

partners, not just verbally, and that inception periods are of sufficient length and with sufficient activities and levels of consultation to ensure that all project implementing partners fully understand the implementation requirements and arrangements.

- While recognizing that follow-up projects cannot be prepared too far in advance of the completion of ongoing projects (so as to ensure that lessons learned from one project can be fully considered in the design of any follow-up project, and the full justification for follow-up activities can be assessed), plan for the potential design of follow-up activities in order to minimize the long periods between the end of one project and the beginning of any new project.

## 1 Introduction

### 1.1 Purpose of the evaluation

1. The project *Strategies for Trawl Fisheries Bycatch Management* (REBYC-II Coral Triangle Initiative (CTI), GCP/RAS/269/GFF), funded by the Global Environment Facility (GEF), was scheduled to begin on 1 November 2011 and to end on 31 October 2015. Implementation actually started on 23 April 2012. The project ended on 31 December 2016 following two extensions approved by the donor, in October 2015 and June 2016.
2. The project covered five countries in Southeast Asia: the Republic of Indonesia, the Independent State of Papua New Guinea, the Republic of Philippines, the Kingdom of Thailand and the Socialist Republic of Viet Nam. Indonesia, Papua New Guinea and Thailand are members of the Coral Triangle Initiative. The GEF allocation was USD 3 million, with additional co-financing of approximately USD 8 million. Co-financing was provided by the participating governments, the private sector in the participating countries, the Food and Agriculture Organization of the United Nations (FAO), the Southeast Asian Fisheries Development Centre (SEAFDEC), Swedish International Development Cooperation Agency, Worldwide Fund for Nature, Sustainable Fisheries Partnerships and Marine Ingredients Organization.
3. This report presents the final independent evaluation of REBYC-II CTI, with the purpose of i) providing accountability to the donor (GEF) and the national governments of the implementing countries, and ii) identifying lessons learned from project implementation to inform future decision-making by FAO's project team and GEF.
4. The intended users and uses of the evaluation include:
  - The REBYC-II CTI project team will use the findings and lessons identified in the evaluation to finalize project activities and decide, jointly with the donor, on the way forward;
  - The government departments in the five countries will use the evaluation findings and conclusions for future management planning in the fisheries sector;
  - GEF, in consultation with FAO, will use the evaluation's conclusions and recommendations to inform future strategic decisions. Moreover, the evaluation will serve as an input for GEF's future assessments of the organization's interventions;
  - The management of the Fisheries and Aquaculture Resources Use and Conservation Division in FAO, including FAO's Regional Office for Asia and the Pacific (FAORAP): will consider the main evaluation findings for their future strategic planning;
  - Other GEF implementing agencies may use the evaluation findings and lessons learned to guide implementation of other GEF projects, as appropriate; and

- Other donors and organizations interested in supporting projects aimed at the sustainable management and development of trawl fisheries in the region.

## **1.2 Scope and objective of the evaluation**

5. The final evaluation assessed the project over its full implementation period from January 2011 to June 2016 (not including planned activities and outputs, and their resulting outcomes over the remainder of the project to December 2016), covering all project components and their activities. The evaluation examined the project’s achievements at regional, national and sub-national levels where pilot projects were conducted.
6. The evaluation’s objectives were to: (i) assess the results achieved by the project over its four years of implementation, and particularly the extent to which these contributed to the project’s objectives; (ii) assess the sustainability of the project intervention and its potential impact, if any, in the long-term; and (iii) identify lessons learned from project design, implementation and management. The evaluation also sought to provide recommendations for follow-up actions to the project team and partners, and where applicable to government counterparts in the five project countries.
7. The evaluation answered the evaluation questions presented in Box 1. Capacity development, partnerships and ownership of the project by stakeholders were considered as cross-cutting aspects.

### **Box 1 . Evaluation questions**

- (i) To what extent were the project’s global environment objective and project development objective achieved?
- (ii) What results, intended and unintended, did the project achieve across its four components?
- (iii) What are the key lessons that can be learned from the project’s implementation, including the ways in which the project fostered and established partnerships to achieve the intended results?
- (iv) How sustainable are the project’s achieved results at the environmental, social, financial and institutional level?
- (v) To what extent did the project take into account gender and human rights issues in its design and throughout its implementation?

8. The independent evaluation was managed by an evaluation officer from FAO’s Office of Evaluation (OED), and was conducted between July and September 2015 by an independent team of two evaluators (both evaluation and fisheries/environmental experts with prior experience working on FAO and GEF projects, and of working in the region).

### **1.3 Methodology**

9. The evaluation adhered to the United Nations Evaluation Group Norms and Standards<sup>2</sup> and followed the OED manual and methodological guidelines and practices. The evaluation focussed on results/outcomes and impacts, but also considered the implementation approach and challenges to the achievement of such results and impacts.
10. A Theory of Change' (TOC) for the project was formulated by the evaluation team to assess how the project intended to achieve its objectives and impacts (pathway of change). This TOC (provided in Figure 1) was based on the project's logical framework and captured other elements not considered initially by the project design. The TOC was tested through the main evaluation questions specified above, and by the elaboration of additional sub-questions.
11. For all evaluation questions (and sub-questions), judgement criteria were articulated to determine the basis on which the questions would be answered, along with indicators (quantitative and qualitative) and relevant evaluation methods and sources of information to be used for each indicator. All of this methodological preparation was completed prior to the evaluation mission, and is contained in the evaluation questions matrix presented in

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<sup>2</sup> <http://www.uneval.org/document/detail/21>

12. Appendix 2. The matrix also indicates how the evaluation questions relate to standard evaluation criteria such as impact, relevance, acceptability, effectiveness, efficiency, and sustainability, as well as to GEF evaluation criteria. For these GEF evaluation criteria, the evaluation rated the success of the project on a six-point scale (Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Marginally Unsatisfactory (MU), Unsatisfactory (U), and Highly Unsatisfactory (HU)) in order to facilitate comparison with routine reporting to GEF and contribute to the GEF programme learning process (IWLearn). The GEF criteria scorings are presented in Appendix 3.
13. Primary information from stakeholders was obtained using four main methods: (i) a questionnaire which was sent in advance of meetings to the Lead Technical Officer (LTO), budget holder, the Regional Facilitation Unit (RFU), and all five National Project Coordinators (NPCs); (ii) face to face interviews with project individuals during the mission; (iii) focus group discussions with stakeholders during the mission; and (iv) telephone/Skype and email communication after the mission. The use of questionnaires prepared by the evaluation team and their completion by stakeholders prior to meetings during the mission provided the evaluation team with a more nuanced and detailed understanding of the projects’ achievements and challenges, allowing a more detailed and targeted use of the meetings with stakeholders. Moreover, the questionnaires gave respondents<sup>3</sup> (project staff and government officials) time to digest the questions and consider their responses, especially considering that English was not the mother tongue for many people involved with the project. Face-to-face discussions with individuals and focus groups during the mission were structured around an interview guide prepared by the evaluation team.

**Stakeholder consultations to obtain primary information were conducted during visits between 14 July and 25 July to: Rome, Italy; Bangkok, Rayong and Trat in Thailand; Hanoi and Kien Giang in Viet Nam; and Manila, Calbayog, Santa Margarita, and Catbalogan in the Philippines. Project staff from Indonesia and Papua New Guinea travelled to meet the evaluation team in Bangkok and Manila, respectively. The visits by the evaluation team enabled consultations with the LTO and other staff in FAO’s Fisheries and Aquaculture Department in Rome, the budget holder and other FAO staff in the FAORAP office in Bangkok, staff of the RFU housed in SEAFDEC in Bangkok, project representatives from Indonesia and Papua New Guinea, and government, research, private sector and civil society organizations at both national and provincial/local level in the project pilot sites in Thailand, Viet Nam and the Philippines. Translators were contracted in Thailand and Viet Nam to work with the evaluation team during the field visits and interviews. A full mission schedule for the evaluation team with details of the persons met is provided in Appendix 4**

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<sup>3</sup> The term “respondent” is used in the report to express the views of the beneficiaries (government staff, fishers and implementing partners) and in some cases to the views of the project team. Government officials and implementing partners completed questionnaires, while fishers responded to questions posed during field visits and consultations.

### Appendix 3 : GEF Ratings

In order to facilitate comparison with routine reporting to GEF and contribute to the GEF programme learning process (IWLearn), the evaluation has rated the success of the project on the GEF six-point scale system: Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Marginally Unsatisfactory (MU), Unsatisfactory (U), and Highly Unsatisfactory (HU).

Ratings provided by the MTE are also provided by way of comparison, and provide a measure of change in performance since the MTE February to April 2014.

<b>Criteria</b>	<b>MTE Rating</b>	<b>Final Evaluation Rating</b>	<b>Corresponding section of evaluation report justifying the rating</b>
Impact (achievement of GEO)	MU	S	3.1
Achievement of objective (PDO)	MU	MS	3.1
Attainment of outputs and activities	MU	MS	3.2
Progress towards meeting GEF IV focal area priorities/objective	MS	MS	3.1, 3.2
Cost effectiveness	MU	MS/S*	3.3
Risk and risk management	S	S	3.3
Sustainability	MS	S	106
Stakeholder participation	MU	S	3.3
Country ownership	MS	S	3.3
Implementation approach	S	S	3.3
Financial planning	MU	MU	3.3
Replicability	MS	S	106
Monitoring and evaluation	S	MS	3.3
<b>Overall</b>	<b>MU</b>	<b>MS/S</b>	

Notes: \* In rating cost effectiveness the Evaluation Team considered both the achievement of objectives and outputs which were only partial, and the wider successes of the project given the relatively small budget (see paragraph 104)



14. Appendix 4. All stakeholders met displayed a high level of willingness to engage with the evaluation team, contributing to the credibility of the evaluation findings.
15. Secondary information (e.g. reports and presentations) and data (e.g. project financial data, data on trawl fisheries and bycatch) were obtained from project staff, and reviewed and assessed as part of the desk-based work completed by the evaluation team, in advance of, during and after the mission. The list of documents consulted is provided in Appendix 5 and includes: (i) background reports such as the project design document and related country reports, and the mid-term evaluation (MTE) report; (ii) technical and socio-economic reports and fisheries management plans produced by the project; (iii) annual project implementation review reports and semi-annual progress reports; (iv) project back to office reports; and (v) Letters of Agreement (LOAs).
16. The use of a variety of evaluation tools and sources of primary and secondary information/data, both quantitative and qualitative, enabled good triangulation of the evaluation findings. A debriefing session with the budget holder and Regional Facilitation Unit was organized at the end of the mission, and then with the Lead Technical Officer in Rome after the mission for validation of the emerging findings as well as clarification to the evaluation team on a number of issues for consideration during the preparation of this report.

#### **1.4 Limitations**

17. In terms of limitations, the evaluation experienced the following challenges:
  - Limited time to visit all countries involved in a regional project of this nature (although as noted, project stakeholders from Indonesia and Papua New Guinea met with the evaluation team in Bangkok and Manila, mitigating this problem to some extent during this evaluation), and all project pilot sites;
  - The evaluation team was not able to meet in person with the ex-Regional Project Coordinator (who was consulted instead via Skype and email) or with GEF country focal points in the countries visited during the mission.

#### **1.5 Structure of the report**

18. The report is structured as follows: Chapter 1 introduces the evaluation and presents its purpose, scope, objectives and methodology. Chapter 2 provides the context relevant to the evaluation and describes the project and the evaluation itself. The main findings of the evaluation are presented in Chapter 3, based on the evaluation questions. Chapter 4 provides the conclusions and recommendations of the report.

## 2 Background and context of the project

### 2.1 Description of the project

19. The REBYC-II CTI project was developed as a follow-on project to the FAO/UNEP/GEF global project *Reduction of Environmental Impact from Tropical Shrimp Trawling through the Introduction of Bycatch Reduction Technologies and Change of Management* (REBYC I), which was executed by the FAO Fisheries Department from 2002-2008. REBYC I aimed to: i) reduce bycatch from shrimp trawlers, in particular the capture of juveniles of commercially valuable species, by introducing appropriate fishing technologies; and ii) provide a better understanding of the impact of shrimp trawling on marine habitats. REBYC I was implemented in twelve countries around the world including Indonesia and the Philippines.
20. An important lesson from REBYC I was that solutions to the bycatch problem cannot be only technical in nature. The terminal evaluation of the project strongly recommended a second phase, using a more holistic approach that combined the gear technology aspects with management, economic and socio-economic considerations, as well as knowledge management for enhanced dissemination of results and greater awareness. Results from REBYC I were subsequently used as a basis for the formulation of REBYC-II CTI, which adopted the approach of managing bycatch within a wider framework of trawl fisheries management, and applied an Ecosystem Approach to Fisheries Management (EAFM). The concept note (Project Identification form) of the REBYC-II CTI project was developed in 2008 and the project entered the GEF work programme in 2009. The project document was developed together with the project countries in 2009-2010, and the project was endorsed by the GEF Chief Executive Officer on 7 July 2011.
21. The REBYC-II CTI project was structured around four interrelated components:
  - **Component 1.** Policy, legal and institutional frameworks: this component focused on the establishment of national or area-specific trawl fisheries bycatch management plans, and on building institutional capacity for their implementation. It also aimed to address the need for adequate legislation and regulations to support the implementation of improved management measures, to develop a regional bycatch policy/strategy, and to encourage project countries to adopt the *International Guidelines on Bycatch Management and Reduction of Discards*.
  - **Component 2.** Resource management and fishing operations: this component was intended to lead to the adoption of more selective fishing gear and practices, and to provide a basis for implementing zoning of fishing areas, developing spatial-temporal closure management measures, and generating better data on number of vessels as well as recommendations for fishing effort and capacity management. The management measures were to be supported by the identification of incentive packages that promote more responsible fishing.

- **Component 3.** Information management and communication: this component included bycatch data collection, mapping of fishing grounds, establishment of socio-economic monitoring procedures, and means for communicating bycatch data and information. It also aimed to promote the adoption of standardized methods for bycatch data collection across project countries.
  - **Component 4.** Awareness and knowledge: this component addressed the awareness of and knowledge on trawl fisheries bycatch management issues and how they relate to sustainability, and measures available to make fishing more responsible. This component focused on enhancing the knowledge of the private sector, fishers, policy makers, fisheries managers, officials, extension officers and non-governmental organizations (NGOs) on best management practices and responsible fisheries through trainings and workshops.
22. The intended outcomes, targets and indicators for each of the four components are presented in Section 3.
23. The project was conducted in five countries in the Coral Triangle region: Indonesia (Arafura Sea), Papua New Guinea (Gulf of Papua), Thailand (Gulf of Thailand at Chumphon-Prachuab Kiri Khan Provinces and Trat Province), the Philippines (Samar Province) and Viet Nam (Kien Giang Province). At the national and local levels, the beneficiaries of the project were the national and local governments of each country, commercial fishers, small-scale fishers and fishing communities, and local environmental and social/cultural NGOs. They were expected to benefit from all four project components and directly from capacity building and technical support. Among these, the key target beneficiaries were the fishers, particularly those in the selected project sites who directly participated in project activities, and fish workers as well as local communities who were dependent on fisheries and aquatic resources for their livelihoods and food security. Regional stakeholders included institutions and associations such as SEAFDEC, the Asia-Pacific Fisheries Commission, and the Association of Southeast Asian Nations, regional non-governmental organizations, and other projects and development agencies active in the region. Regional stakeholders were expected to derive the most benefit from components 1 and 4.
24. The project's duration was originally intended to be four years, with an expected implementation start date of 1 November 2011 and an end date of 31 October 2015. However, the actual implementation of the project started on 1 April 2012 (following an initial inception period) and the project end date was revised to 30 June 2016 through a no-cost extension. At the time of the final evaluation, another no-cost extension was granted extending the project to 31 December 2016; certain activities thus remained to be completed between July and December 2016. The project mid-term evaluation, which was conducted between February and April 2014, assigned an overall rating to the project of Marginally Unsatisfactory. It found that the project faced serious delays in implementation, and concluded that both efficiency and effectiveness had been

low. On the other hand, the MTE concluded that there were good prospects for improving the rating before the end of the project.

25. The management structure and resourcing of the project was such that the Fishing Operations and Technology Service / Fisheries and Aquaculture Resources Use and Conservation Division of the Fisheries and Aquaculture Department at FAO headquarters was the FAO Lead Technical Unit, within which a Lead Technical Officer was appointed to supervise and provide technical guidance to the project. FAO-RAP was designated as the budget holder of GEF resources. The budget holder, Lead Technical Officer, FAO Investment Center and technical staff from the Regional Office for Asia and the Pacific and FAO headquarters made up the Project Task Force. As per the project design and based on agreement by all parties including GEF, SEAFDEC was contracted by FAO as the technical executing partner, hosting the Regional Facilitation Unit and implementing a number of activities mostly at the regional level. A Project Regional Coordinator was assigned to lead the Regional Facilitation Unit. The costs for the Project Regional Coordinator were initially planned to be shared between the GEF contribution and co-financing from Deutsche Gesellschaft für Internationale Zusammenarbeit, but the latter did not materialize and the Project Regional Coordinator was assigned as part-time. SEAFDEC appointed and financed a Project Technical Advisor. SEAFDEC and the national fisheries authorities were the technical executing partners, with whom FAO signed individual letters of agreement. At the national level, a NPC was appointed and financed by each of the project countries as an in-kind contribution, and supported by a National Technical Officer (NTO) financed by the GEF resources.
26. The GEF grant was USD 3 000 000 and pledged co-financing amounted to USD 8 218 600, which together brought the original total project funding to USD 11 218 600. Total GEF grant disbursement as of June 30, 2015 was USD 2 284 559. Total estimated co-financing realized as of 30 June 2016 was USD 5 970 000. Financial information as at 30 June 2016 is shown in Appendix 7.

## **2.2 Project context**

27. Marine fisheries are important for exports, coastal livelihoods and food security in the Coral Triangle. Increasing human populations and economic development in the area has resulted in increasing demands for fish, which are used for local human consumption, export, and as aquaculture feed. The bottom trawl subsector constitutes an important part of the marine fisheries sector in the region and in the REBYC-II CTI project countries. Many trawl fisheries are poorly managed and reported on, especially with regard to bycatch and discards. This contributes to unsustainable resource utilization and threatens marine biodiversity. The decreasing average size of landed fish and declining catch per unit of effort data indicate that overfishing is a serious issue in several of the main trawl fishing grounds in the region. A trawl catch consists of low-value and trash fish. Much of this bycatch is comprised of juveniles of ecologically important and economically valuable finfish. On the other hand, landed bycatch provides an important source of livelihoods and protein,

especially for poor coastal communities, as well as for use on the manufacture of fish feed for the region’s growing aquaculture sector. Addressing the bycatch issue therefore needs to take into account the poverty and food security context in the project area, applying the EAFM approach. The REBYC-II CTI project document identified a set of barriers to improved trawl fisheries bycatch management in the region; the project was designed to support the five countries in managing their trawl fisheries and to generate learning and experiences of importance for the wider region.

28. The project was (and continues to be) relevant to the countries’ needs to establish sustainable fisheries and protect their marine ecosystems; addressing bycatch and overcapacity features prominently in national policies and plans (e.g. Gulf of Papua Prawn Fisheries Management Plan and Thailand’s Master Plan for Fisheries Management). Recognizing the adverse impacts of bottom trawling, Indonesia banned this activity since 1980 and after a lapse in the ban reimposed it in 2015. REBYC-II CTI was also consistent with the priorities for the fisheries sector as spelled out in the countries’ National Medium-Term Priority Frameworks and National Development Plans. The countries also confirmed their commitment to biodiversity conservation and sustainable aquatic resource utilisation – including fisheries management – through ratification of relevant international conventions and agreements and adoption of the FAO Code of Conduct.
29. There was no explicit mention of the link between REBYC-II CTI and the FAO Country Programming Framework in the project design, as the project was designed prior to their implementation in FAO. However, the project was highly coherent with the Country Programming Framework of the project countries, including priorities related to the sustainable use and management of natural resources and fisheries, and improving food and nutrition security. Regarding the project’s relevance to FAO’s Strategic Objectives (SOs), even though the SOs under FAO’s Reviewed Strategic Framework 2010-2019 were identified after REBYC-II CTI was designed, the project was relevant to two of the five new SOs: SO2 (Make agriculture, forestry and fisheries more productive and sustainable) and SO4 (Enable inclusive and efficient agricultural and food systems). This terminal evaluation can contribute to planned and ongoing evaluations of SO2 and SO4. At the time of this evaluation, no evaluations of any of the participating countries were planned by the OED.

### **2.3 The theory of change<sup>4</sup>**

30. Underpinning the project’s GEO (‘responsible trawl fisheries that result in sustainable fisheries resources and healthy marine ecosystems in the Coral Triangle and Southeast Asian waters by reduced bycatch, discards and fishing

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<sup>4</sup> The theory of change used during this evaluation is closely based on the logical framework for the project, but also includes other elements not considered during the project design and not included in the project logframe. As a result, the theory of change is constructed largely to test the intervention logic and to examine the outputs, outcomes and impacts of the project.

impact on biodiversity and the environment') is the recognition of the threat of unsustainable trawl practices (resulting in high quantities of bycatch and discards, as well as physical damage to habitats by bottom trawling) to the health of marine ecosystems and biodiversity, and in turn, to the sustainability of fisheries resources that support the trawl sub-sector. The PDO ("effective public and private sector partnerships for improved trawl and bycatch management and practices that support fishery dependent incomes and sustainable livelihoods") is linked to the GEO through the premise that increases in fisheries-dependent incomes and livelihoods, built upon good partnerships and management can increase sustainable practices. In the project region, poorly managed trawl fisheries result in sub-optimal livelihoods and income for millions of people dependent on trawl fisheries, and declining catch per unit of effort and size of fish caught.

31. While the project aimed to reduce the capture of bycatch through technical and management measures, and to control destructive fishing practices, it was recognized that technical measures alone would not be sufficient to achieve sustainable trawl fisheries, as highlighted in REBYC I. Therefore, REBYC II adopted a more holistic approach consistent with FAO's Code of Conduct for Responsible Fisheries and EAFM, with four mutually supportive components as described above. These four components addressed a number of key prerequisites for effective trawl fisheries management: adequate regional and national policy; legal and institutional frameworks; sufficient data and information on trawl fisheries, including socio-economic dimensions; identification of alternative livelihoods; strengthening capacity; and enhancing awareness and knowledge of the public and private sectors and other stakeholders. Establishing and strengthening public-private partnerships was seen as a critical element to support the management of trawl fisheries in the countries, and is consistent with the collaborative and participatory approach promoted by the EAFM.
32. The project operated at different levels. On the local level, activities were implemented in selected project sites in partnership with the public and private sectors and civil society. These were linked to the national level, where the fisheries authorities have overall responsibility for implementation. At the regional level the project conducted a series of regional workshops and meetings on longer term strategies for bycatch management, which were closely linked to other regional and global initiatives by international organizations, international NGOs and the private sector. In general the approach adopted was feasible to achieve the GEO and PDO in the longer term.
33. Component 1 on policy, legal and institutional frameworks and trawl fisheries bycatch management plans had one intermediate outcome (see

34. Appendix 6), but this was at the same results level as the outputs. The four outputs and associated activities of Component 1 were appropriate to achieve the stated outcome. These arrangements included public and private sector partnerships, which were an innovative element in the project design. Policy and institutional changes, especially at the regional level, are inherently time-consuming; although developing national or area-specific trawl fisheries management plans in line with international guidelines was feasible during the project's duration, their adoption combined with developing an agreed regional bycatch policy/strategy was overly ambitious and represented a weakness in the project design. Furthermore, developing a regional policy and strategy based on only five countries was an inappropriate goal.
35. Component 2 focused on resource management and fishing operations (e.g. more selective trawl gear, fishing zones for spatial and temporal closures, fishing capacity management) along with identifying appropriate incentive packages. The first intermediate outcome was relevant and on a higher results level than the outputs, but the second intermediate outcome was identical to output 4 and did not add a new level of result. The four outputs and respective activities were feasible to achieve the two intermediate outcomes. However, achieving some of the targets during the project was unrealistic (e.g. implementing the identified measures by at least half of the trawlers and in all the project countries, and achieving reduction of bycatch). Nevertheless, this outcome was critical for achieving the GEO and PDO in the longer term.
36. Component 3 on data collection and management and communication had four outputs and associated activities, which were relevant and feasible to achieve the expected overall outcome. The two intermediate outcomes followed logically from the activities and outputs, adding a new level of results. However, the first intermediate outcome was essentially the same as the component overall outcome and did not add a new level of results.
37. Component 4 on enhancing knowledge and understanding of responsible fishing by public and private sectors and other stakeholders had three outputs, which when combined were similar to the intermediate outcome. The latter was the same as the component overall outcome and did not add a new level of results. The associated activities were relevant and feasible to achieve the stated outputs.
38. As shown in the TOC diagram (Figure 1), the four components support the achievement of the intermediate outcomes and immediate objectives (responsible fishing leading to reduced bycatch, discards and fishing impact on biodiversity and the environment supported by effective public and private partnerships for improved trawl and bycatch management practices), and in the longer term, the impacts: sustainable fisheries and healthy marine ecosystems (GEO), which in turn should contribute to improved incomes and livelihoods (PDO). A number of assumptions needed to be met during project implementation, which were largely recognized and articulated in the project design, in order to achieve the GEO and PDO: i) engagement by all relevant stakeholders with the project; ii) project funds and co-financing provided as expected during design; and iii) capacities of staff sufficient to implement the

project. Another set of assumptions was needed for sustainability and impact: i) continued support in countries for trawl fisheries management; ii) other policy drivers and externalities do not negatively impact on desired policy and management changes; iii) implementation of policies; iv) effective surveillance and enforcement of regulations; and v) monitoring of impacts on marine ecosystems and fisheries resources, as well as dependent human communities, to inform adaptive management. The negative impact on the project results caused by the absence of many of these conditions, which were conceived as assumptions during the project design, is analysed in the findings section.

39. As stated in the MTE, the project's theory of change did not fully consider time constraints, and taking the project's duration into account, was over-ambitious in terms of the extent of the impacts stated as the GEO and the PDO. A more realistic aim would have been the results that were ultimately achieved by the project, as described later in this report.
40. Moreover, a cross-cutting element, which was not explicitly stated in the results framework and which the final evaluation captured in the theory of change, was capacity strengthening of local, national and regional stakeholders for management of trawl fisheries. Adequate individual and institutional capacity is an essential prerequisite for effectively addressing the key issues in the trawl sub-sector, and includes capacity for developing and implementing management plans using EAFM, data collection and monitoring, providing appropriate training (SEAFDEC), and developing alternative livelihoods.



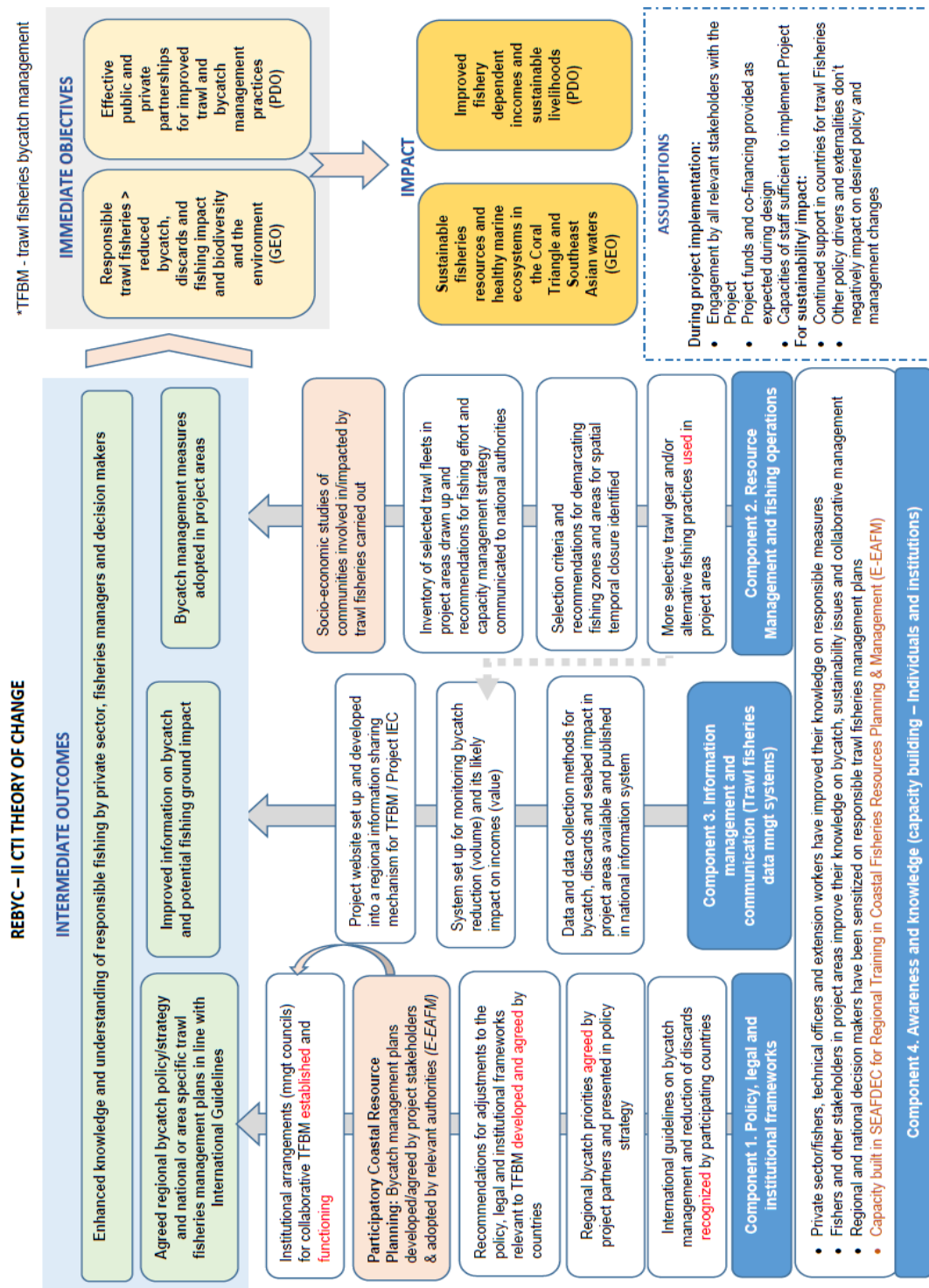


Figure 1. Reconstructed project theory of change

## 3 Findings

### 3.1 Achievement of the project objectives

41. This section answers the evaluation question 1: To what extent were the project's Global Environment Objective and Project Development Objective achieved?

#### **Key findings**

- The project made significant contributions towards objectives being achieved in the longer term and after project completion, but did not fully realize the stated objectives during the lifespan of the project as assessed against the indicators.
- Some aspects of the objectives and indicators were poorly and inappropriately specified during the project design, making it hard for the project to assess the achievement of the objectives throughout implementation, which was a contributing factor to the project not fully achieving its objectives.
- Other factors impacting negatively on the achievement of objectives included the small size of the project budget compared with the intended impacts, and not revising the objectives and indicators before the project started once it had become clear that some co-financing expected during the design phase would not be available.
- The specification of the four components and their intended outcomes was poorly conceived in terms of the actual contribution of the components to the achievement of the GEO and PDO. The different components were not distinct enough from each other; considering the strong emphasis on and need for capacity building, a dedicated component on capacity development would have more effectively served to support the GEO and PDO.

#### 3.1.1 Global Environment Objective

42. The GEO of the project was to achieve "*responsible trawl fisheries that result in sustainable fisheries resources and healthy marine ecosystems in the Coral Triangle and Southeast Asian waters by reduced bycatch, discards and fishing impact on biodiversity and the environment*". There were four project indicators for the GEO, and the performance of the project was evaluated separately with regard to each indicator.
43. **Indicator 1:** *Agreed regional bycatch policy/strategy is adopted by at least one relevant organization in the project region, and national or area-specific trawl fisheries bycatch management plans are adopted covering at least one-third of all trawlers in the project countries.* This indicator has two parts: first the adoption of regional policy, and second the adoption of bycatch management plans at national or area levels in the project countries.
44. The project design was poorly conceived in its assumption that a regional bycatch policy/strategy for only the five project countries was appropriate, or

indeed desired by them. The development of regional fisheries policy/strategy should take place through the the regional Association of Southeast Asian Nations-SEAFDEC Fisheries Consultative Group mechanism involving all countries in the region, not through the activities of a project involving only a few countries. Furthermore, the focus of the indicator specifically on a technical bycatch policy/strategy did not recognize the importance of managing bycatch within a broader fisheries management approach, if sustainable fisheries are to be ensured. It also did not reflect the nature of most trawl fisheries in the five participating countries, whereby bycatch is targeted largely for sale to the fish meal industry rather than being discarded. These limitations in the design of the objectives, and to some extent in the design of the four component activities, were recognized during project implementation (making the retention of the indicator by the project in its results framework curious); thus the project made no attempt to develop a regional bycatch policy/strategy. The project instead adapted its approach to contribute to: i) recognition by participating countries of international guidelines on bycatch management and reduction of discards<sup>5</sup> (and translation of key international documents into local languages); and ii) the development of the Asia-Pacific Fisheries Commission regional guidelines on trawl fisheries<sup>6</sup>. In addition project activities contributed to building common agreement among SEAFDEC countries, as reflected, for example, in the Regional Plan of Action for Managing Fishing Capacity<sup>7</sup>.

45. With respect to the national or area-specific trawl fisheries bycatch management plans required by the indicator, at the time of the evaluation mission, sub-national management plans focussing on bycatch as well as broader fisheries management issues had only been adopted for the Samar Sea in the Philippines; through project support, such plans were in the final stages of agreement and promulgation in Trat (Thailand) and Kien Giang (Viet Nam). The project also supported improvements to a pre-existing Gulf of Papua prawn fisheries management plan in Papua New Guinea. In Indonesia, as a result of the country's efforts to address illegal, unreported and unregulated fishing, a moratorium on foreign vessels was introduced in November 2014 and a national ban on trawl fisheries imposed in January 2015. The project continued to support management solutions for the shrimp trawl fishery as part of the Aru-Arafura Sea Fisheries Management Plan in Indonesia (which predated the project).
46. **Indicator 2:** *Measures that manage bycatch and reduce discards, and thereby improve fisheries resources, are implemented for 25% of all trawlers in the project countries. In these fisheries (covered by improved bycatch management measures), bycatch has been reduced by 20% compared to baseline data in year 1 of the project.* The project did not monitor progress towards meeting this indicator in terms of either the number of trawlers affected by measures or the resulting reductions in bycatch. As a result, assessing the extent to which the

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<sup>5</sup> <http://www.fao.org/docrep/015/ba0022t/ba0022t00.pdf>

<sup>6</sup> <http://www.fao.org/3/a-i3575e.pdf>

<sup>7</sup> [http://www.seafdec.org/documents/sc16\\_wp05.pdf](http://www.seafdec.org/documents/sc16_wp05.pdf)

indicator has been met in quantitative terms was problematic. At the national level, however, during the project a four centimetre cod-end mesh size was introduced in Thailand on all fish trawlers (in part based on and informed by project selectivity trials), along with a ban on pair trawlers and a freeze imposed on trawl vessel numbers in Viet Nam. While these measures were not solely attributable to the project (nor should the role of the project in contributing to them be overstated), the increased awareness created by REBYC-II CTI, as well as by its predecessor, contributed to these developments. The project also supported experiments with a square mesh cod-end in Viet Nam which informed national policy debate.

47. At the sub-national level, measures were introduced, or planned to be at the time of the evaluation, as part of the management plans supported by the project. These included a range of limitations, closed areas and seasons (to protect critical habitats and spawning areas), and technical gear measures, all of which have been informed by related studies completed by the project. However, due to the late introduction of these management plans, it is unlikely that the project directly contributed to significant reductions in bycatch during the project period (although the groundwork was laid for actual reductions in the future). Also uncertain is the extent to which the management measures agreed upon were or will be actually implemented, enforced and complied with. It is noteworthy that the project contained no provision for funds to support the enforcement of management plans. However at the national level there was significant emphasis on improved enforcement. For example, in Thailand strategies for improved enforcement were being implemented at the time of the evaluation as part of measures to address the European Union illegal, unreported and unregulated regulation 'yellow card'<sup>8</sup>, while in Indonesia steps were being taken to increase enforcement in order to reduce illegal, unreported and unregulated fishing.

48. **Indicator 3:** *Standardized data on at least three key bycatch and habitat indicators are available in all project countries and inform trawl fisheries and bycatch management planning and implementation at national and regional levels.* The inclusion in the project design of this indicator and related activities had low relevance to needs. There was no relevance or need by participating countries to have standardised data at the regional level, and all five countries already had their own standard operating procedures for data collection. However the project recognized the importance of having good national and sub-national level data to inform management planning. The project contributed to improvements in bycatch and socio-economic data and habitat information in the participating countries, which was used in all countries (except Indonesia, where no management plans have been supported due to the national-level trawl ban) to inform the management plans supported by the project. Improvements in routine data collection and reporting on bycatch issues at the national level were also supported by, and were at least to some extent the result of project-related activities. For example: i) the project trained

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<sup>8</sup> [http://europa.eu/rapid/press-release\\_IP-15-4806\\_en.htm](http://europa.eu/rapid/press-release_IP-15-4806_en.htm)

enumerators in socio-economic and biological data collection in Thailand, Philippines, Papua New Guinea and Viet Nam; ii) a trawl fisheries database including bycatch information was developed in Viet Nam; iii) trawler logbooks and observers are now in place in Papua New Guinea; and iv) Thailand's national data reporting on trawl fisheries has been improved.

49. **Indicator 4:** *Enhanced understanding of responsible fishing by private sector/fishers, fisheries managers and decision-makers are supporting participatory management arrangements in all project countries.* Although the project did not monitor progress towards this indicator, based on the qualitative findings and observations of the evaluation team during the mission and discussions with project stakeholders, the project made very positive contributions to both i) enhanced understanding of responsible trawl fishing practices, and ii) participatory management arrangements. The strong focus by the project on the EAFM contributed to the achievement of this indicator, and the project-supported data collection initiatives have also served to enhance understanding.

### *3.1.2 Project Development Objective*

50. The PDO of the project was *"effective public and private sector partnerships for improved trawl and bycatch management and practices that support fishery dependent incomes and sustainable livelihoods"*, and there were three associated indicators in the project results framework against which project success in achieving the PDO was assessed.
51. **Indicator 1:** *Institutional arrangements and processes for public and private sector partnerships are in place and supporting trawl fisheries bycatch management in all project countries.* The project helped to establish and re-enforce local planning and management arrangements involving the public and private sectors in Thailand, Viet Nam, the Philippines and Papua New Guinea, which were instrumental in the processes to develop sub-national level management plans and which will be used to implement the plans. The project also contributed to, and participated in, public and private sector partnerships for trawl sector management at the national level (e.g. through participation in the government round table discussions in Thailand with the fishmeal and trawl industry). While qualitative and subjective in nature, the observations of the evaluation team during the mission were that the project and lead government agencies in the management planning processes were more successful in engaging with other elements of the public sector and with research institutions than with the private sector, although the project was particularly successful in involving the private sector in the Philippines. Public and private sector partnerships necessary to support improved management remained variable at the time of the evaluation in project countries, in terms of structure and likely sustainability, and were not always inclusive of all relevant private sector parties (e.g. input suppliers, catching sector, downstream processing and marketing sectors). Nevertheless, the project increased private sector participation in management planning processes.

52. **Indicator 2:** *The role of bycatch in trawl profitability is understood and measures to ensure long-term economic sustainability of trawl fisheries are identified and incorporated into trawl fisheries bycatch management plans in all project countries.* Socio-economic studies completed towards the end of the project contributed to an improved understanding of the role of bycatch in overall profitability, in some cases (e.g. the Thailand report) quantifying the value of bycatch. The project's socio-economic study in Indonesia assessed the impact of the moratorium on foreign vessels and the trawl ban on catch per unit of effort (not profitability) of different vessel types. However, while project stakeholders reported that data from these studies informed the management plans in the project pilot sites, a review of the studies showed that their content was focused more on describing the current socio-economic situation than specifically on assessing the socio-economic impacts or financial impacts (using costs and earnings analysis) of different management strategies on vessel profitability (especially in the large scale commercial trawl sector). The extent to which the studies were used directly to assess the impacts of different management strategies – and to choose between them in the management planning process, rather than just providing some insights into the socio-economics of trawl fisheries and bycatch – was therefore questionable. The project did however (i) provide financial resources for SEAFDEC trawler energy audits as part of another project, with results disseminated through two workshops in Thailand, and (ii) explore the economic implications of changing to a four centimeter cod-end mesh size in Thailand.
53. **Indicator 3:** *Incentives for trawl operators to reduce bycatch are defined and implemented in all project countries and best practices communicated within relevant regional frameworks.* While recognising the importance and benefits of incentives for improved sustainability, the MTE agreed to a cessation of all related activities because of slow implementation progress over the first two years of the project, and the need for the project to focus on the outputs and outcomes considered most achievable. Although the project did not make meaningful progress towards this indicator, it did assess the economic viability of using alternatives to trawl gear, for example in Indonesia.

### 3.1.3 Impact of project design on achieving the GEO and PDO

54. This evaluation considered the achievement of the project objectives as assessed against the stated indicators. As stated previously, some of the indicators, and the related activities/outputs at the component level, appear to have low relevance to the needs of the participating countries. However, other aspects related to the project design (as distinct from project implementation, which is discussed later) also had a negative impact on the ability of the project to achieve its stated objectives.
55. When considering the objectives and intended impacts as stated in the indicators, the project was overly ambitious given the budget of USD 3 million from GEF (and USD 8 million of co-financing). This is especially so considering: i) the scale of the trawl sector in the participating countries and the number of vessels involved; ii) the challenges of introducing new management measures and changing behavior, and of identifying and implementing incentives in

support of bycatch management strategies; iii) the difficulties of working in five countries with different languages and abilities to communicate in a shared common language (a factor not properly considered or provided for during the design); and iv) that the budget is shared between five countries over 4-5 years, and also has to cover the activities of the Regional Facilitation Unit. Even without the slow start to the project’s implementation, achieving the stated objectives and indicators would have been very challenging given the budget provided.

56. Furthermore, the original project design assumed greater levels of co-financing, with some co-financing promised during the design phase being withdrawn (by Deutsche Gesellschaft für Internationale Zusammenarbeit) before the project started. Critically, the reduced funding was not reflected in any corresponding reductions in the project’s component outputs and intended outcomes/results, or the intended impacts at the objective level. The project was therefore evaluated against objectives and indicators which were specified when greater levels of funding were expected to be available. Perhaps most notable in this regard was the resulting inability of the project to hire a full-time Project Regional Coordinator (PRC) due to reductions in co-financing, with the PRC position having been a part-time one for the whole project implementation period. It would have been more sensible to have re-examined the project’s results framework before the project commenced and to have made necessary adjustments, even though doing so would have been difficult due to the necessary approvals, which would have led to delays.
57. The evaluators consider that the specification of the four components and their intended outcomes was poorly conceived. For a project with such a strong element of capacity building (see later discussion in Section 3.2.5), as reflected in the GEO and PDO indicators, a weakness of the project design was the lack of a dedicated capacity development component. Another weakness was that components 1 and 2, and components 3 and 4 were not distinct enough from each other. A more appropriate and clear component design would have allowed for improved implementation of the components, thereby better supporting achievement of the PDO and GEO.
58. Finally, while it was probably not realistic for the project design to have anticipated the trawl ban in Indonesia as a risk to project implementation, the ban had a significant bearing on the relevance of project activities, PDO and GEO for Indonesia. Later text in this report provides examples of how the project worked around these difficulties and continued to engage with activities in Indonesia in an attempt to support the PDO and GEO.

### **3.2 Component results**

59. This section presents the findings related to evaluation question 2: What results, intended and unintended, did the project achieve across its four components?

#### **Key findings**

- Progress in achieving the intended results across the four components was partial by component and varied between the participating countries;

- Components 1, 2 and 3 only met some of the targets based on performance, as measured against the related indicators. For these three components the project only partially achieved the intended results, although it was working successfully towards establishing policy, legal and institutional frameworks; developing improved management measures; and improving data resources to inform managerial decision-making, as well as to understand the role of bycatch in trawl profitability. A longer project time frame, and/or improved implementation performance (see Section 3.3) could have resulted in the intended results being fully achieved; and
- Component 4 was assessed as having achieved its intended results. Project partners from both the public and private sectors had significantly increased awareness and knowledge about bycatch issues as compared with the beginning of the project, and were working together on devising bycatch policies and management strategies.

### 3.2.1 Policy, legal and institutional frameworks component

60. The intended outcome of this component was “Regional bycatch priorities agreed and bycatch management plans for trawl fisheries in project areas are established and supported by appropriate legislation and institutional arrangements for public and private sector collaboration”. The associated project targets were:

- The International Guidelines on Bycatch Management and Reduction of Discards recognized by all five project countries and regional bycatch priorities agreed by project partners and presented in a published policy/strategy document;
- At least three national or area-specific trawl fisheries bycatch management plans in the project areas agreed by stakeholders and adopted by relevant authorities;
- Policy, legal and institutional frameworks relevant for trawl fisheries bycatch management reviewed and recommendations for adjustments developed with and agreed in principle by the competent national authorities; and
- Institutional arrangements (management councils) for collaborative trawl fisheries bycatch management established and functioning in accordance with agreed bycatch management plans

61. The project achieved the target of the *International Guidelines on Bycatch Management and Reduction of Discards* being recognized by all five project countries. Moreover, the guidelines were reflected in national policy (e.g. in Thailand’s Fisheries Master Plan and 2015 Fishery Law) and sub-national management plans, helped by the fact that the project took the initiative to translate the Guidelines into Thai and Vietnamese. Project stakeholders from all five project countries and from SEAFDEC also participated in the regional workshop to develop the Asia-Pacific Fisheries Commission Regional Trawl Fisheries Management Guidelines already referred to. Although the lack of relevance of a regional policy/strategy was noted, a project workshop approved by the 4<sup>th</sup> PSC meeting and planned for September 2016 was to be used to discuss regional bycatch priorities (rather than a regional policy/strategy).



62. Regarding the national or area-specific trawl fisheries bycatch management plans, the project achieved the adoption of the Samar Sea Management Plan in the Philippines, and sub-national management plans in Trat; national plans for mesh size management for trawl fisheries (Thailand) and Kien Giang (Viet Nam) were in the final stages of agreement and promulgation during the evaluation mission (with no major risks identified to them not being adopted before the end of the project), and a review was underway in Papua New Guinea of the existing Gulf of Papua prawn fisheries management plan and ways it could be improved. Despite the national ban on trawling in Indonesia, the project also successfully contributed to the Arafura Sea Fisheries Management Plan with regard to mapping of critical habitats, fishing gear selection to exploit major resources, and calculation of fishing vessel numbers. All of these plans were broader management plans<sup>9</sup> than pure trawl bycatch management plans specified in the indicator, recognising the importance of addressing bycatch issues within broader management planning frameworks and through the EAFM approach.
63. Policy, legal and institutional frameworks relevant for trawl fisheries bycatch management were reviewed as intended, with the exception of Philippines for which the report was still outstanding at the time of the evaluation mission. A direct link between recommendations made in these studies and agreement on those recommendations by national and sub-national competent authorities was not clear. However, the studies were used to inform the ongoing management planning processes at sub-national levels, and contributed in some (probably small) way to national policy and legal developments that took place during the project (e.g. the total allowable catch per trawler, 4 cm cod-end mesh, and pair trawl ban in Thailand were all included as part of Thailand’s Fisheries Master Plan and 2015 Fishery Law; input controls were reflected by the freeze on trawl numbers in Viet Nam<sup>10</sup>). The project also helped to increase policy discussion at the regional level on bycatch reduction specifically, and management of trawl fisheries more generally, through SEAFDEC’s involvement with the project (e.g. through discussion at the SEAFDEC Programme Committee Meetings).
64. The institutional arrangements for implementation of the Samar Sea management plan in the Philippines were working well, based on the evaluation mission’s observations. Although institutional arrangements for the implementation of management plans in Thailand and Viet Nam had been

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9 Best practice is for management plans not to focus on just one aspect of fisheries management in a particular fishery such as bycatch, but rather to encompass all necessary aspects of management for a particular fishery as whole, and to include: i) a description of the fishery in terms of its biological, ecological, economic and social status, the management rules, and any established user rights; ii) the management objectives (which would relate not just to bycatch issues but to objectives for the whole fishery); iii) how the objectives are to be achieved (e.g. detailed specification of specific management arrangements and tools); iv) how the plan is to be monitored on an ongoing basis and evaluated/reviewed periodically against stated performance criteria, and/or appealed, and the consultation process for review and appeal.

<sup>10</sup> Decision no. 9443/QD BNN TCTS

elaborated by the time of the mission, they were not functioning as the plans had not been finally agreed upon. The national working groups established by the project also served as an institutional framework for discussion and agreement about trawl fisheries bycatch management at the national level in both Thailand and Viet Nam.

### 3.2.2 Resource management and fishing operations component

65. The intended outcome of this component was *"Management measures, including environmentally friendly fishing gears and practices that reduce bycatch, discards and the impact on biodiversity and the environment, are identified, developed/adapted and implemented in project areas. And incentives for trawl operators to reduce bycatch are defined and implemented in the project areas"*. The related project targets were:

- More selective trawl gear and/or alternative fishing practices used by at least half of the trawlers in project areas;
- Selection criteria and recommendations for demarcating fishing zones and areas for spatial-temporal closures are identified in at least two project areas/countries;
- Inventory of selected trawl fleets in project areas drawn up and recommendations for fishing effort and capacity management strategy communicated to competent national authorities; and
- Agreement has been reached on appropriate incentive packages for all trawl fisheries in project areas.

66. Prior to the MTE the national project stakeholders completed gear trials in Thailand (cod-end mesh size) and Viet Nam (square mesh cod-end) that helped to identify more selective gears, as well as a study of the use of juvenile and trash-fish excluder devices in the Samar Sea in Philippines. SEAFDEC also participated in these activities. Based on the recommendation of the MTE (due to slow implementation progress at that stage) the project did not complete further selectivity trials after the MTE. Nevertheless, national policy developments already described resulted in more selective practices in both Thailand and Viet Nam (in part due to project trials and in part due to increased awareness about the need for bycatch management through improved gear that was generated through the project). In Indonesia, the project worked post-MTE to create awareness and consider the possibility for alternative gears to shrimp trawls, such as as trammel nets, traps, and gillnets. Underwater camera technology was also purchased under the project and deployed to show how fish escaped live from cod-ends (Thailand). The cameras were also used by project partners and other SEAFDEC member countries doing research on fish behavior in trawls.

67. The project was not able however to provide to the evaluation team data on the number of trawlers involved in project areas actually using improved fishing gears. The extent to which national requirements for improved selectivity were complied with by fishers and enforced by control agencies in project areas is also not clear (although the mission found that juvenile and trash-fish excluder devices (supported through REBYC I) were in widespread use in the Samar Sea in the Philippines). As noted, the project was only implementing (rather than

working to develop/agree upon) one management plan, the Samar Sea Management Plan, in a project area at the time of the evaluation mission.

68. The project fully achieved the second target for this component, with criteria and recommendations for demarcating fishing zones and areas for spatial-temporal closures made as part of the management planning processes for the Samar Sea (Philippines), Trat (Thailand), and Kien Giang (Viet Nam). Studies completed by the project on fishing grounds, concentrations of fish larvae, bycatch levels, endangered, threatened and protected species, and critical habitats served either to inform the area and seasonal closures proposed as part of the management plans developed by the project (in Thailand, Viet Nam and the Philippines), or to support the implementation and improvement of those plans already in existence (Indonesia and Papua New Guinea).
69. The project achieved the first part of the third project component target through dedicated studies, with inventories of trawl fleets completed in all project pilot sites and further supported through information contained in the socio-economic studies that were carried out. Some work was completed in Indonesia to develop guidelines on total allowable effort, and management plans contained notions of the need to manage capacity. Moreover, the project made repeated efforts to ensure that partner countries were fully aware of the need to limit capacity, which resulted in an increased awareness in participating countries (as evidenced by policy decisions in Thailand and Vietnam) about the need to limit vessel numbers and manage capacity. The project did not however generate concrete recommendations for fishing effort and capacity management, in terms of specific reductions in vessel numbers for competent national authorities based on the inventories and related justification (e.g. in the form of bio-economic models, which would have provided a scientific basis for recommendations about reduced capacity). The main reason the project did not generate concrete recommendations was due to a lack of capacity in the project countries to do so, and a perception during the project that funds did not allow for the recruitment of international consultants who could have provided the necessary advice.
70. It was also agreed as part of the MTE that the project should cease activities related to the fourth component target to define appropriate incentive packages for trawl fisheries in the project areas, and should explore whether other project partners might contribute to such activities. Prior to this agreement, project participants did however participate in a regional workshop on economic incentives, at which it became clear that the incentives the trawl fishing industry were willing to consider were limited to more subsidies for their fishing operations. This outcome made the project reconsider the whole issue and focus on more achievable issues. The project also continued post-MTE to conduct some limited activities related to alternative fishing gears. While perhaps necessary due to the need for the project to focus on realistic 'wins' over the remaining period of the project due to slow implementation progress prior to the MTE, the lack of progress post-MTE on this target was nevertheless regrettable – especially considering that economic incentives (as the MTE itself notes) are such a critical factor in reducing bycatch and improving trawl fisheries management. Indeed many comments from the private sector at the

third technical workshop to develop the Kien Giang fisheries management plan (Viet Nam), which the mission observed, centred around the importance of incentives and support packages to accompany the management measures to be introduced. The inability to fully reach this component target may ultimately reduce the willingness of fishers to buy in to compliance with management arrangements specified as part of the pilot site management plans, thereby threatening the long-term sustainability of project achievements related to the PDO and GEO.

### *3.2.3 Information management and communication component*

71. The intended outcomes of this component were *"Improved data on bycatch and potential fishing ground impact information are available from project areas and inform national/specific area trawl fisheries bycatch management plans"* and *"The role of bycatch in trawl profitability is understood and measures identified for how to ensure long-term economic sustainability of trawl fisheries in the project areas"*. The four related end-of-project targets were:

- Data and data collection methods for bycatch, discards and seabed impact in project areas available and published in relevant national and regional information systems;
- System set up for monitoring of bycatch reduction (volume) as a result of modified gear and improved management and its likely impact on incomes (bycatch value);
- Project website set up in Year 1 and developed into a regional information sharing mechanism for information on trawl fisheries bycatch management by end of project; and
- Project information, education, and communication materials available.

72. Prior to the start of REBYC-II CTI, all of the participating countries already had fisheries data collection systems in place, but these did not specifically cover bycatch data. The project supported partner countries in collecting and compiling baseline data on bycatch and discards, including species composition from sampling at fish landing sites as well as through onboard surveys on commercial trawlers and research vessels (Thailand). Stakeholders from both the public sector and private sector were involved in the data collection exercises, which also helped to build capacity for data collection, and stakeholders were exposed to the results of the surveys and analysis. Baseline studies at the pilot sites were completed for Indonesia, Philippines, Thailand and Viet Nam, but not in Papua New Guinea because of the late start of the project in the country. Other activities that provided important data for trawl fisheries management included coral reef surveys (Philippines), fish larvae distribution/diversity studies (Philippines, Thailand and Viet Nam), and mapping of trawling grounds and critical habitats (Indonesia, Philippines, Thailand and Viet Nam) to assess potential impacts of trawling. The fish larvae and mapping surveys were intended to contribute to determining temporal and spatial closures. Based on a MTE recommendation to collect socio-economic data, socio-economic surveys were conducted in the countries and workshops held to analyze the data at national and regional levels (e.g. regional data analysis and workshop on socio-economics in April 2016 in Thailand). A socio-economic specialist from

FAO headquarters supported the relevant activities in the partner countries. The socio-economic studies, however, were conducted too late to feed into the development of fisheries management plans during the project, but could be used when and if the management plans get revised.

73. As a result of these activities, improved data and information on the region's trawl fisheries were available and were applied in development of fisheries management plans in the Philippines, Thailand and Viet Nam. National fisheries data management systems were developed or updated to include trawl and socio-economic data, and data were reported to have been uploaded to national databases in Viet Nam, Philippines and Thailand (the evaluators were not able to verify this). A series of socio-economic reports and other studies were produced and disseminated by the project to stakeholders, and are now available to policy/decision-makers. Some of these products were still awaiting editing and clearance by FAO at the time of the final evaluation. Based on the foregoing, the first output of this component was satisfactorily achieved.
74. Because of institutional and ecological differences, it was not possible to standardize data collection methodologies across all five countries. Nevertheless, progress was made in improving bycatch data collection systems, methodologies, and capacities for data analysis in all countries, with the exception of Indonesia (due to trawl ban). To strengthen capacity for data collection and mapping, the project held national training workshops on data collection protocols and methodologies, including logbook use and port and onboard sampling (e.g. in Viet Nam and the Philippines), and on information production and dissemination (e.g. Indonesia). Guidelines for landings data collection in Viet Nam were published in English and Vietnamese. In addition, regional workshops were convened on data collection in trawl fisheries (May 2013 in Thailand) and application of resources mapping and geographic information systems (29th September to 3rd October 2014 in Indonesia). Training was also provided to national project participants in conducting socio-economic surveys using participatory approaches and socio-economic and gender mainstreaming. Mainstreaming data collection into national systems has allowed for increased analysis and use of data.
75. The second target of this component was also largely achieved. In order to facilitate monitoring of bycatch, existing national data collection systems were modified to include collection of bycatch (e.g. fishing log books in Papua New Guinea) and socio-economic data. Collecting and reporting on bycatch was implemented as part of the ongoing annual stock assessment/monitoring in the Gulf of Papua, and a monitoring and evaluation system that includes port and on-board sampling for trawl fisheries was developed in the Philippines and Thailand and proposed for Viet Nam. The trawl ban in Indonesia affected planned activities (output 3.2) in this country. In Thailand, studies on the impact of changing to a 4 cm mesh size generated important data and information, including on the impact of bycatch reduction on incomes. Whilst there were no analyses of the impact of bycatch reduction on incomes in the other project countries, the socio-economic studies conducted in the Philippines, Papua New Guinea, Thailand and Viet Nam demonstrated dependence on bycatch for nutrition, food security and livelihoods by different groups of stakeholders in

the project countries. Socio-economic monitoring of the trawl fisheries could contribute such information in the longer term. Feedback from respondents (fishers, project staff and government officials) during the evaluation mission indicated that fishers were now willing to share catch data, which is important for monitoring of the countries' trawl fisheries.

76. A project website was set up (<http://rebyc-cti.org/>) to share information on trawl fisheries bycatch management, achieving the third output. This website, which is attractive and user-friendly, provided access to a substantial volume of information, reports and news items in English. As noted later in this report, language abilities in the participating countries, and the fact that some stakeholders are not comfortable communicating in English, may have reduced the usefulness of the project website. At the time of the evaluation, it was clear that the website content needed to be updated to include other reports produced by the project, particularly those relevant at the regional level. At the national level, it was reported that Indonesia developed a dedicated REBYC-II CTI website (<http://rebyc-cti.go.id>) (which the evaluators were unable to access), and information on REBYC-II CTI activities in individual countries had been uploaded on the respective government websites in the Philippines, Thailand and Viet Nam. Including links to the national websites and databases would have enhanced the main project website (though data sensitivity issues may have precluded the latter). It is important that the website is maintained following closure of the project, which SEAFDEC indicated that it plans to do.
77. A range of project information, education, and communication material was produced by REBYC-II CTI, among which were five posters on trawl fisheries topics, three EAFM promotional videos (based on the Philippines pilot site), EAFM leaders, executives and decision-makers materials (translated into Thai and Vietnamese) and t-shirts. The evaluators were informed that Indonesia and the Philippines were producing awareness-raising materials, which they planned to translate into their respective national languages. While promotional and other materials were distributed at various events during the project, these materials should be uploaded on the REBYC-II CTI website for wider dissemination. To some extent, communication among the countries was constrained by language, particularly at the local level, a challenge that the project design underestimated as already noted. All the project countries planned to publish some of the national project reports (including in their respective national languages where appropriate), which represent valuable information products to inform trawl fisheries management within the countries. However, the regional materials may not have significant applicability at the national level.
78. In conclusion, while the first outcome of this component was satisfactorily achieved, the second outcome was achieved only to a limited extent with respect to identifying measures for ensuring long-term economic sustainability of trawl fisheries in the project areas. There were no specific targets on such measures, which was a project design weakness. In any case, the unavailability of appropriate data sets would have been a major constraint to achieving this outcome.

### 3.2.4 Awareness and knowledge component

79. The intended outcome of this component was “*Private sector/fishers, fisheries managers, local governments and other stakeholders have better knowledge on bycatch issues and participate in developing and implementing national/specific area bycatch management plans*”. The related end-of-project targets were:

- Fishers and other relevant stakeholders (e.g. fisheries managers, local government officials) in project areas have improved their knowledge on bycatch, sustainability issues and collaborative management through training, project information and/or participation in project activities.
- Regional and national policy and decision-makers have been sensitized with regard to responsible trawl fisheries management through project information and workshops.
- Private sector/fisher ‘champions’, technical officers and extension workers (government and NGOs) have improved their knowledge on bycatch reduction devices and other management measures through training (250 persons trained).

80. Assessing an increase in knowledge and awareness is difficult to quantify; although this could be done through surveys, it was not attempted by the project at the time of the evaluation and no routine data had been collected during the project. REBYC-II CTI adopted a multi-pronged approach to increasing knowledge and awareness about bycatch issues among stakeholders. This included: i) targeted awareness-raising and training workshops at regional, national and local levels; ii) directly engaging different groups of stakeholders from both public and private sectors and civil society in execution of project activities at the project sites; iii) regular stakeholder meetings; and iv) public consultations and round table discussions. Publication of material in national languages (such as the EAFM document in Thai) also helped to increase awareness.

81. Target 1 of this project component was judged by the evaluators (based on direct observations during the mission) as having been satisfactorily achieved. Although most stakeholders already had some knowledge about bycatch issues prior to the project (including through REBYC-I), REBYC-II CTI contributed to substantial increases in knowledge and awareness about bycatch management and sustainability issues. This was evident from questionnaire responses as well as interviews and focus group discussions conducted by the project evaluators at the project sites with representatives from the public and private sectors and other groups. Most respondents (including local trawl fishers, fish vendors and provincial government officials) considered that one of the biggest achievements of the project was to increase their knowledge and awareness about bycatch and sustainability issues, for example, on the implications of catching juveniles of commercially important species and of damage caused by trawling to bottom habitats, for the sustainability of their trawl fisheries. Although the project increased awareness and knowledge of national and provincial officials, it had less success with trawl fishers in some of the countries (Indonesia, Papua New Guinea and Viet Nam). The project targeted commercial trawl operators in the countries where these fleets were most important. The

project also included small-scale trawlers in countries (e.g. Philippines) where they operate in inshore waters and can potentially cause serious damage to sensitive habitats, as well as to juvenile fish and other fauna. Directly engaging local fishers in the project, including in technical activities (such as fish larvae sampling and habitat mapping in the Philippines and Thailand) contributed to improving their knowledge and awareness about the negative impacts of trawling, which in turn helped with building consensus around the need for improved management measures.

82. A notable achievement of REBYC-II CTI was the introduction of EAFM to national and local stakeholders, which for many of them was their first exposure to EAFM principles. The evaluators were impressed with the familiarity of stakeholders at all levels (government and private sector) about the EAFM. Through the project, stakeholders also gained more understanding about socio-economic aspects of the trawl fisheries and their importance in management.
83. Stakeholders learned about collaborative management through training in EAFM and co-management, as well as through hands-on experience during the project. Local and national working groups composed of representatives from the public and private sectors, NGOs, community based organizations and others, were established for trawl fisheries management in each country except Papua New Guinea. These partnerships were particularly strong at the local level in the Philippines, Thailand and Viet Nam, where public and private sector stakeholders and others were closely involved in the planning and implementation of project activities and formulation of the three trawl fisheries management plans (Samar Sea Fisheries Management Plan, Thailand Fisheries Management Plan and Kien Giang Trawl Fisheries Management Plan, respectively). The Samar Sea Alliance in the Philippines is an excellent example of collaboration between the public and private sectors, community based organizations, and others, which was initiated under the project and helped to implement the Samar Sea Fisheries Management Plan and sustain results.
84. Target 2 was satisfactorily achieved in most of the countries (especially the Philippines, Thailand and Viet Nam as discussed in the following two paragraphs), although project records were not available to quantify the indicator. Participation of national and provincial policy and decision-makers in regional workshops – including on lessons learned and on EAFM for leaders, executives and decision-makers, and production and dissemination of a range of information, education, and communication material aimed at sensitizing policy and decision-makers to EAFM – exposed them to trawl fisheries bycatch issues and management approaches. Political buy-in and awareness about trawl fisheries at the national level (through the NPCs) were judged by the evaluators as relatively high in each country (except Papua New Guinea, where the focus was on the more economically important tuna fisheries), which can be attributed to REBYC-II CTI. As a number of respondents stated, by generating in-depth knowledge and increasing awareness on key concerns in the trawl fisheries, the project succeeded in placing the issue of bycatch and the need to reduce it, on the public and policy agenda.



85. The impact of sensitizing national policy and decision-makers about trawl fisheries management was especially evident in the Philippines, Thailand and Viet Nam. For example, previously existing fisheries management plans had not explicitly covered management of bycatch. The project was a catalyst in getting partner countries to realistically look at bycatch and explore options on how to address this issue. The three countries developed fisheries management plans that covered trawl fisheries and integrated EAFM principles. In Viet Nam, for instance, the government froze the number of trawlers operating in Vietnamese waters in November 2015 and established a port sampling system to cover trawl fisheries throughout the country. Similarly, in the Samar region and in Thailand, specific regulations were developed for bycatch management (e.g. increase in trawl mesh sizes, closed areas and closed season). Countries also dedicated their own financial resources for certain related activities, which is another impact of increasing knowledge and awareness.
86. Sensitizing regional policy and decision-makers about responsible trawl fisheries management occurred through integration of the project with SEAFDEC, by engaging high-level officials through SEAFDEC council meetings. Other avenues for sensitizing regional policy and decision-makers included links with the Asia-Pacific Fisheries Commission. Links with CTI were not so strong due to the focus by the CTI on tuna and the live fish trade.
87. The target in indicator 3 was training 250 persons in bycatch reduction devices and other management measures. While the project was not able to provide data during the mission, it did support training through a series of training workshops in topics such as EAFM, inventory of fishing gears and boats, best management practices and alternative fishing gear, in which representatives from government, private sector, NGOs, community based organizations and others participated. Stakeholders in the participating REBYC I countries had already acquired some knowledge of bycatch reduction devices (specifically juvenile and trash-fish excluder devices, which they had adopted), so distinguishing between knowledge on bycatch reduction devices attributable to REBYC I and REBYC-II CTI was difficult. However, as was evident during the evaluation missions and questionnaire responses, through REBYC-II CTI stakeholders were sensitized to the need for a broader management approach using other measures; these approaches included closed areas and seasons, zoning of trawlers, and management of fishing capacity. Identification of closed areas and seasons was based on specific studies such as habitat mapping, fish larvae surveys and studies of fish spawning seasons, which provided the scientific basis and justification for these measures, thus contributing to their acceptance by fishers and government officials.
88. In conclusion, the evaluation assessed this outcome as having been achieved, although to varying degrees in the individual countries. The project contributed significantly to raising awareness and enhancing knowledge of trawl fisheries and bycatch management in the countries and region, and private sector/fishers, fisheries managers, local governments and other stakeholders participated in developing bycatch management plans as a result.

### 3.2.5 Project success in capacity building

#### **Key Findings**

- Although capacity building was not an expected outcome of REBYC-II CTI, considerable effort was dedicated to developing capacity at the individual and organizational levels, which in turn helped to create an enabling environment for trawl fisheries management in the partner countries. All four project components, and particularly component 4, contributed to significantly strengthening technical and managerial capacity in participating institutions;
- A notable achievement was the introduction of EAFM to national and local stakeholders, which resulted in a new generation of EAFM-trained local fisheries officers and NGO staff in the region;
- A major outcome of the project that was not foreseen during the project design phase was the strengthened capacity of SEAFDEC to coordinate large-scale regional projects, technically support regional trawl fisheries projects, and provide EAFM training and training of trainers at the regional level; and
- Project participants would have benefited from additional and more dedicated capacity building initiatives, including in fisheries data analysis, development of the logframes, project management and administration, financial and progress reporting, and FAO and GEF procedures. A dedicated capacity-building component within the project design would have been useful.

89. Capacity development is a core function of FAO, and involves strengthening capacity at three interconnected levels: individual, organizational, and enabling environment. While capacity building was not explicitly stated as an expected outcome in the REBYC-II CTI project design, a training needs assessment was conducted in October 2013 to determine areas where bycatch management capacity was most needed. As reported by the MTE, the study relied largely on the views of the NTOs and could have used other participatory means of identifying needs. The MTE also found that at the time of the evaluation, the project's capacity development had been at the regional rather than the national level, and recommended in-depth and longer-term technical training and facilitation of stakeholder engagement at site-level for EAFM-based management plan development. After the MTE, considerable effort was dedicated to developing capacity at the individual and organizational levels, which in turn helped to create an enabling environment for trawl fisheries management in the partner countries.

90. Capacity development was a cross-cutting element in REBYC-II CTI, with all four project components, and particularly component 4, contributing to strengthening different aspects of capacity. Many of the interview and questionnaire respondents considered that increased technical and managerial capacity in all of the participating institutions was one of the project's greatest achievements and legacies towards development of sustainable trawl fisheries in the region. The approach to capacity building included targeted training workshops at the local, national and regional levels and directly engaging stakeholders from both public and private sectors and civil society in the

execution of project activities at the project sites, as well as enhancing stakeholders' knowledge and awareness (as previously described under Component 4). Targeted training included EAFM, training of trainers (in EAFM), data collection at port landing sites and on board, development of fisheries management plans, socio-economic studies, alternative fishing gear and livelihoods, co-management, geographic information systems, and monitoring and evaluation. Capacity for collaborative management was strengthened through establishment of functioning partnerships between the public and private sectors and others at the project sites, as seen, for example, in the Philippines.

91. A notable achievement of REBYC-II CTI in terms of capacity development was the introduction of EAFM to national and local stakeholders, which resulted in a new generation of EAFM-trained local fisheries officers and NGO staff in the project countries (although to a lesser extent in Indonesia). The impact of EAFM training was transformational, as seen for example in the institutionalization of EAFM as a fisheries management tool by the Philippines, and increasing adoption by the other countries. In addition, EAFM was introduced as a mandatory course in undergraduate and graduate fisheries programmes at the Samar State University. A more enabling environment was also supported through the development of new policies and fisheries management plans to reduce the negative impacts of trawl fisheries in some countries (Philippines, Thailand and Viet Nam), and plans for stricter monitoring and regulation of trawl fishing in the Gulf of Papua. REBYC-II CTI has also contributed to the development of the Asia-Pacific Fisheries Commission's Regional Trawl Fisheries Management Guidelines.
92. One of the key outcomes that was not foreseen in the project results framework (though it was recognized in the project document), but which represented an organizational capacity development, was the strengthened capacity of SEAFDEC to coordinate large-scale regional projects (REBYC-II CTI was the first such project for SEAFDEC) and to technically support regional trawl fisheries projects through transformation of SEAFDEC training department towards a fisheries management planning and training unit. The capacity of SEAFDEC to provide EAFM training and training of trainers at the regional level has also been considerably strengthened. These transformations represent a positive change to SEAFDEC's traditional training portfolio.
93. Despite the advances made in capacity development by REBYC-II CTI, some respondents were of the view that more effort should have been made in capacity building (including for EAFM) from the very beginning of the project. Earlier text in Section 3.1.3 also suggested that a dedicated capacity building component would have been useful. Some also expressed that project staff and experts should have spent more time on the ground to improve capacity development at the project sites. Respondents also indicated that areas where further capacity building was needed included fisheries data analysis, development of the project logframe, project management and administration, financial and progress reporting, and FAO and GEF procedures. Consideration should also have been given to arranging exchange visits between the countries during the project so that they could have learned from each other. During the

third Project Steering Committee meeting in Calbayog, Philippines, participants had the opportunity to see firsthand the activities and achievements at this pilot site (which has become a model for EAFM and trawl fisheries management), but more dedicated cross-visits would have been of value. Important lessons learned have been generated during the execution of REBYC-II CTI, and will contribute to further capacity strengthening in the region. These lessons will be shared and discussed through a regional FAO/SEAFDEC workshop planned for September 2016.

### **3.3 Lessons from the project implementation**

94. The following section presents the findings derived from evaluation question 3: What are the key lessons that can be learned from the project's implementation? The primary aspects assessed under this question include the project's implementation approach, country ownership, stakeholder participation and partnerships, utility of the MTE, and project monitoring and evaluation (M&E).

#### **Key lessons learned from an operational perspective**

- The LTO not being located in the region and in the same office as the budget holder, along with the heavy workload of both the LTO and budget holder during the project, created challenges and contributed to delays that impacted negatively on project implementation, even though FAO displayed some adaptive management in the implementation arrangements to provide as much support to the project as possible;
- The decision was made to proceed with the project even once it was clear that Deutsche Gesellschaft für Internationale Zusammenarbeit co-financing would not be available for a fulltime PRC. As a result, a part-time PRC had to be hired, which was insufficient for effective management of the project and also contributed to unrealistic demands on the LTO, both of which impacted on implementation;
- The lack of a dedicated editing and translation budget resulted in the PRC and LTO spending undue amounts of time translating and editing documents in English. For example, LOAs needed to be translated into local languages so that participating countries could fully understand their contents and implications. This created project implementation delays;
- The PRC being a consultant to FAO rather than a full-time staff member, reduced his ability to provide clearance of project outputs specified in LOAs with participating countries. This increased the burden on the LTO and resulted in delays in technical clearances, financial payments to countries, and other administrative delays, and therefore in implementation;
- Over-reliance on verbal (rather than written) guidance to participating countries, the lack of a project implementation manual, and limited time spent by the PRC and other key project staff (LTO and SEAFDEC) on the ground in some of the countries (particularly Papua New Guinea) impacted negatively on implementation. A more informative inception period for project partners and more time spent in the countries by project personnel would have been beneficial in supporting subsequent implementation;

- The PSC was comprised of appropriate representation and provided guidance to the project that was generally useful. However in some instances representatives delegating their participation in meetings to NPCs reduced the potential policy impact of the project and the oversight controls one would expect of a PSC;
- NPCs were staff of, and housed within, executing institutions in the five project countries, which meant that they had regular line duties to complete in addition to the project-specific activities that were required of them. However, the challenges of combining routine functions with the requirements of the project were outweighed by the benefits that resulted from the integration of the project into the government executing institutions;
- Country ownership and stakeholder participation (which were both good) were crucial for achievement of project objectives at the national level and sustaining project impacts;
- While routine monitoring of project progress was good, the project did not revise the logframe based on the MTE recommendations;
- The delays and inefficiencies experienced during the project implementation likely reduced cost effectiveness. However, the results-based approach to implementation may have increased efficiency: local/regional consultants were used where necessary, representing good value for money; NPCs were generally not paid which saved costs; and the total project costs were not considered excessive when considering the achievements in building capacities in the region and progress towards improved bycatch/fisheries management measures.

95. Assessment of project implementation issues by the evaluators revealed a number of factors, both positive and negative, which had a strong bearing on the ability of the project to achieve its stated component results and objectives. Valuable lessons can be drawn from these factors about why the project’s outcomes and impacts were not greater, but lessons learned also have relevance for future projects. The overall implementation approach is considered below, in terms of the institutional structure, management, resourcing, and staffing.

96. REBYC I was a *global* project with a strong technical focus on fishing gear technology and the LTO was correspondingly based in the Fishing Technology Service Branch (and later the Fishing Operations and Technology Branch) of FAO’s headquarters in Rome. REBYC-II CTI was a *regional* project and had a much broader management approach, and which was further consolidated during implementation with the focus on the EAFM. The decision for the LTO for REBYC-II CTI to be located in FAO headquarters removed decision-making from within the region; placing an LTO in the FAORAP office would have been more logical considering that the budget holder was located there. The reason for the LTO being in Rome was primarily the existing workload of fisheries staff in the FAORAP office at that time, as well as insufficient recognition of the broader management approach which the project would support (i.e. there was no special requirement for the Fishing Technology Service Branch to house the LTO. Having the Lead Technical Officer based in Rome and the budget holder in the FAORAP office also created challenges for FAO in providing the

administrative support necessary, especially given the part-time nature of the PRC which placed an additional burden on both the LTO and the budget holder that had not originally been foreseen.

97. These delays were compounded by the part-time nature of the PRC. Promises of co-financing from Deutsche Gesellschaft für Internationale Zusammenarbeit made during the design process failed to materialize, but it was decided to proceed nevertheless with the project without any modifications to the design in terms of the intended objectives and results, or the management arrangements. For the first year or so of the project the role of the PRC was fulfilled on a part-time and temporary basis by a consultant based in Europe, who made periodic missions to the region. From 2014 a new PRC was recruited to be based in the region, but the reduced budget only allowed for part-time inputs of around 50%. This placed an undue burden on the LTO to cover for the PRC when the PRC was not working on the project. As a result, the PRC was insufficiently able to manage the project; this also resulted in project partners being unclear as to whether communications should be directed to the LTO or the PRC and in limited time spent in the countries by the PRC to provide much-needed support (especially in Papua New Guinea in the early years). The fact that the PRC was a recruited consultant and did not have full-time FAO staff member status also resulted in additional burden on the LTO and the budget holder. The PRC also had difficulties using the FAO operational and administrative systems, and was not able to fully conduct all operational functions, such as providing final clearance of outputs required for payments made under the LOAs with participating countries. This also resulted in administrative delays.
98. As noted earlier, the different language requirements and abilities of project executants in the five project countries created some challenges for the project. It significantly increased the time requirements for the PRC and the LTO in editing reports written in English because the RFU had no dedicated budget for editing, or to allow for reports to be written in mother tongue languages and translated into English. The need to translate the LOAs into local languages so that they could be fully assessed by participating countries also resulted in delays at the outset of the project. These delays were further compounded by the fact that the use of the LOAs (in line with FAO's results-based performance approach) was a new implementation vehicle for the participating countries. While some sensitisation of the LOA process was made at the beginning of the project, participants in the project countries felt that it was poorly explained, resulting in uncertainties and concerns over their obligations and how to implement the LOAs, which again caused delays while the LOA process was fully understood. Locating the FAO-hired NTOs in government offices with the NPCs had many advantages in enabling NTOs to provide technical and logistical support to the NPCs, however this arrangement weakened their link with, and the potential support from, FAO. By the end of the project the LOA process had however been fully understood, and the participating countries had put in place appropriate management structures in their countries to manage the LOAs. The lesson is that LOAs are not necessarily a poor implementation vehicle, but need to be better/fully explained, and their merit might be in having LOAs that span more than a single year.

99. The RFU, housed within SEAFDEC, supported the project activities in the partner countries and facilitated many aspects of project implementation well, holding annual work-planning meetings, and meetings on M&E and financial and administrative issues. However, the evaluators note that clearer written guidance (rather than verbal guidance provided at project meetings) – not just on the LOA process but on a number of other issues relating to project implementation and financial matters – would have been useful. The project had no overall project implementation manual, for example, and written guidance was largely confined to the contents of the LOAs to guide implementation. Considering variable language capabilities within the five countries, the ability of participants at meetings to really absorb and retain all verbal guidance provided to them may have been questionable. A more extensive and thorough inception period would also have been beneficial in allowing the RFU to better prepare project participants at the outset of the project.
100. The PSC was well constructed in terms of its membership of senior representatives from institutions in participating countries. A review of the meeting records of the PSC, and consultations during the evaluation mission, suggest that the PSC met regularly as intended and provided useful and sound guidance to the project. However there were several instances of PSC members delegating responsibility for attending meetings to the NPCs from their countries. This resulted in NPCs 'steering' themselves and in insufficient oversight controls. It also had a potentially negative impact on the policy impact of the project through reducing exposure to higher level members of governments about the project's activities and achievements in developing new fisheries management arrangements for trawl fishery bycatch.
101. As would be expected, the capabilities of the NPCs (and since 2014 assistant NPCs) and NTOs varied between countries; coupled with personnel changes over the duration of the project, as well as the competing workloads of the NPCs/assistant NPCs with their regular functions outside of the project, this presented challenges during implementation. In addition, NPCs received no additional financial benefits (as compared with the NTOs, who were recruited as consultants). However these challenges were, in the view of the evaluators, outweighed by the positive impacts from the NPCs being housed within participating institutions in the five countries and being staff members of those institutions; this helped greatly with the ability of the project to be implemented successfully when considering the intended component results, as discussed earlier.
102. The sub-optimal implementation of the project, and the delays caused by the factors discussed above, resulted in a poor disbursement profile for the project. Only 9% of the annual budget was spent in 2012, 11% in 2013, 31% in 2015, and 26% in 2015. By the end of 2014 there had been a cumulative expenditure of only 52%, when the project at that time was expected to close in October 2015 (see Appendix 7).
103. The evaluators were impressed with the level of ownership of the project shown by project participants and partners at national and local levels in the

five participating countries. This ownership was enhanced because the project was executed by, and for, the relevant participating institutions in the project countries. Good ownership was also partly the result of the proper functioning of the national working groups. However, while project design was to some extent demand driven, consultations suggest that ownership evolved during the project and could have been greater from the outset through i) increased participation by beneficiaries in the design process and ii) a more consultative and informative inception period so that participants were clearer from the outset about the project's intended results, impacts, and management arrangements.

104. Stakeholder participation was also good (or 'satisfactory' in terms of GEF evaluation performance ratings). The project was successful in building many partnerships during and for its implementation. This was especially the case in terms of partnerships between government institutions, research organizations, and in some cases (e.g. Viet Nam and the Philippines) universities. Engagement with the private sector was also an integral element of the project activities at the pilot sites (and in some cases also took place at the national level), although this was more variable across the countries. For instance, in the Samar region in the Philippines, private sector engagement was very strong through the Samar Sea Alliance and Technical Working Group, where the private sector had already seen the benefits of improved management measures supported through REBYC 1 and where the government was also providing strong incentives for private sector engagement. Observations in Viet Nam, where work in the pilot site had only commenced with REBYC-II CTI, indicated there could have been greater involvement of the private sector and local associations.
105. Project M&E focused on inputs, outputs and project components, and was conducted through the six-monthly project progress reports, annual project implementation review reports, and annual reports to the PSC, which all provided a good basis for monitoring of the project. The project did not however assess progress towards the project objectives using the stated indicators. Doing so would have provided a clearer idea by project stakeholders on an ongoing basis about how the project was intended to achieve the high level objectives and progress in moving towards those objectives, and could have been useful in ensuring greater impacts. The project did not have a functioning M&E system in place outside of, and underpinning, the reporting; more complete and regular updating of M&E data on the project website based on such a system would have enabled all project partners to more easily keep track of progress, and could also potentially have introduced an element of motivation and competition between participating countries over their performance, which could have resulted in implementation improvements. The MTE was considered useful by project participants in terms of some appropriate guidance and recommendations that were made to the project. The MTE (which proposed priorities for the remaining project period), however, did not propose specific amendments to the logframe resulting from its recommendations, for subsequent consideration and agreement by the project's management. In addition, while changing the results framework was discussed at the Project Steering Committee after the MTE, the PSC was not supportive of changing the framework, mainly because it would have potentially caused major delays in



each country (as the modified framework would have needed to have been approved by the countries).

106. It has not been within the scope of this evaluation, or indeed required in the terms of reference for the evaluation, to conduct a quantitative assessment of cost effectiveness. The cost effectiveness of the project in economic, social and environmental terms will only be demonstrated in the future when and if the fisheries management improvements initiated by the project bring about changes in the sustainability of fish stocks, which feed through into increased social and economic benefits for fishermen and those in upstream and downstream sectors. On a purely qualitative basis, cost effectiveness at the time of the evaluation may be considered low, given that the project only partially achieved its objectives, and had laid the groundwork for improved fisheries management rather than having seen improved management measures actually put into action and enforced, thereby bringing about improved stock status and increasing the value of catches. However, when considering the achievements of the project and the groundwork that was laid given the relatively small budget (and one smaller than had originally been envisaged), the cost effectiveness can be considered high.

107. Cost effectiveness is also likely to have been affected by issues related to efficiencies in project implementation. Many of the issues discussed above (for example the use of staff time by the LTO and PRC on editing, when this could have been done more cheaply by lower cost editors) must have impacted negatively on efficiency, and therefore on cost effectiveness. On the other hand, consultations with project participants did not reveal any consistent views that project costs on specific items were profligate or that the project could have been implemented more cheaply. For example, local/regional consultants were generally deployed to work on specific outputs, providing good value for money. Furthermore, the use of LOAs and a results-based approach to the project implementation whereby countries received funding once specific project outputs had been completed, could be considered as supporting cost-efficient project implementation. Finally it is noted that the total project costs were not that great when considering the work completed in helping the countries move towards improvement in trawl fisheries management and in building individual and institutional capacities.

### **3.4 Sustainability and replicability**

108. This section pertains to evaluation question 4: How sustainable are the project's achieved results at the environmental, social and institutional levels?

#### **Key findings**

- The likelihood of the project sustaining the results of institutional, environmental, financial and social changes is good (noting that the expected results were not fully achieved);
- By engaging key regional, national and provincial institutions in the execution of activities and building their capacity for trawl fisheries management and EAFM, the project left in place an effective institutional framework for achieving and sustaining its long-term impacts (exit strategy);

- Although it is too early to show environmental impacts resulting from the project, implementation and enforcement of the bycatch management plans, along with management of fishing over-capacity, are expected to result in substantial and sustained environmental benefits in the longer term;
- While the project made no provision for funds to support surveillance, monitoring and enforcement in the post-project period, some countries had already allocated funds from national budgets for certain activities by the end of the project. There are good prospects for increasing financial sustainability through other ongoing and planned bilateral initiatives in the region;
- Factors contributing to the high potential for social sustainability include the considerable level of stakeholder buy-in and ownership at political levels and among private sector stakeholders, provision of training in alternative livelihoods, and raising awareness. This could have been enhanced by the identification of appropriate incentive packages in the project areas.
- There are excellent prospects for replication and scaling up of the project's results. The project has generated valuable lessons and experiences from the pilot sites, particularly the Samar Sea site which has become a model for trawl fisheries management, EAFM and public-private partnerships. Some replication was already taking place in the project countries by the end of the project, and sharing the project results more widely among the countries and in the region should increase replication and scaling up.

#### 3.4.1 *Transition arrangements and likely sustainability of impacts*

109. The assessment of sustainability examines the extent to which transition arrangements to post-completion operation and maintenance arrangements, and the means of sustaining project reforms and institutional capacities, were put in place by the project (the exit strategy). It also analyses the actual and/or potential environmental, institutional, social and financial impacts of the project, and how sustainable they are likely to be. As shown in the theory of change, a number of assumptions must hold for achievement of long-term impact and sustainability. One of the project's long-term outcomes and impact indicators was '*Institutional arrangements and processes for public and private sector partnerships are in place and supporting trawl fisheries bycatch management in all project countries.*' The institutional arrangements were to be based on principles of participation and cooperation, and to encompass representatives of different ministries and local government agencies. It was anticipated that at the start of project implementation consultative groups would be set up for project management and stakeholder participation, and if found appropriate, these groups would form the basis for the subsequent more permanent management councils for collaborative trawl fisheries bycatch management in the countries (component 1). These institutional structures were intended to provide a platform for addressing trawl fisheries bycatch management at the time and in the future. At the regional level, this platform can be strengthened through integration of trawl bycatch management into SEAFDEC's and FAO RAP's regional work programmes, and by building on the regional networks of these two bodies. While these platforms represent the elements of an exit

strategy, the project design did not include an explicit exit strategy and no specific actions were taken to prepare one by the time of the evaluation. It is therefore recommended that in the remaining time the FAO and SEAFDEC project team prepares a specific and explicit exit strategy to cover both sustainability of project activities and replication/scaling up.

110. *Environmental sustainability.* The project's GEO was directly related to reducing the adverse impacts of trawling on the environment and biodiversity. Expected benefits included an increase in fishery productivity, rehabilitation of bottom habitats and restoration of marine biodiversity. Studies were completed by the project on fish larvae distribution and bycatch levels as well as endangered, threatened and protected species and mapping of critical habitats and fishing grounds. These studies informed the area and seasonal closures, and increase in cod-end mesh size proposed in the management plans developed by the project in the Philippines, Thailand and Viet Nam, and will support the improvement of existing plans in Indonesia and Papua New Guinea. It is too early to show clear environmental impacts resulting from REBYC-II CTI. However, in the longer term, adoption of more responsible fishing practices such as use of juvenile and trash-fish excluder devices, zoning of trawlers, and area and seasonal closures (to protect critical habitats and juvenile fish as well as endangered, threatened and protected species, in addition to reducing user conflicts) are expected to result in substantial environmental benefits when the management plans are fully implemented and enforced.
111. Trawl fishers in the Philippines who installed juvenile and trash-fish excluder devices under REBYC I experienced an improvement in catch rates and in the quality of the catches, which attests to the positive environmental impacts of adopting more responsible trawling practices. Samar Sea fishers using other gear types, such as gillnets and longlines, also reported improvement in their catches which they attributed to better management of the trawl fisheries. Bycatch management alone, however, is not sufficient to achieve the project's GEO. A fundamental problem of major concern in Southeast Asian trawl fisheries is fishing over-capacity. Without addressing over-capacity, the GEO and sustainability cannot be achieved. At the time of the evaluation, SEAFDEC was developing a Regional Plan of Action for Managing Fishing Capacity (RPOA-Capacity), based on the FAO International POA-Capacity, and was supporting Association of Southeast Asian Nations countries to develop national POAs for fishing capacity management. Indonesia, Philippines, Thailand and Viet Nam had already taken some steps to control capacity in the trawl sub-sector. Post-project environmental impact assessments of the implementation of the management measures, as well as impact assessments of the Indonesian trawl ban, were encouraged to determine the actual environmental impacts accruing from the various management measures.
112. Another factor that can promote environmental sustainability is the international and national pressure on Southeast Asian countries to adopt more sustainable trawling practices. The project's results should continue to influence policy changes into the future, as countries look to reduce the impact of trawling on their marine living resources. Factors that could undermine environmental sustainability include climate change (which could potentially

have a dramatic impact on fisheries resources) and marine pollution. These factors are among the externalities that could influence long-term environmental impact and sustainability (as mentioned in the theory of change), but were outside the scope of REBYC-II CTI. Nevertheless, these and other factors need to be considered in developing integrated coastal management strategies in the region.

113. *Institutional sustainability.* Strengthening the national/provincial and regional institutional framework for trawl fisheries management was one of the project’s most notable achievements. Moreover, this framework provided an essential foundation and mechanism for sustaining the project’s outcomes and achieving long-term impacts. Key elements of this framework at the national/provincial level include the government agencies responsible for fisheries in the five countries, which the project engaged as key executing partners; provincial fisheries departments and other local government agencies; the fisheries private sector (including fishers’ organizations); NGOs; and others. Noteworthy was the establishment of public and private sector partnerships by the project (for example, Samar Sea TWG and Samar Sea Alliance of local government units, Provincial Fisheries Committee in Trat, working group for the development and implementation of Kien Giang trawl fisheries management plan, and National Working and Advisory Groups or Management Councils in all the countries). Continued support to these groups should be encouraged in all project countries (for example by SEAFDEC, and FAO if needed) to help sustain the project’s impacts.
114. Building institutional and individual capacities and creating an enabling environment for trawl fisheries management in the countries and the region (see section 3.2.5 on capacity building) was among the project’s greatest impacts, and increases the prospects for sustainability.
115. Preparation and eventual implementation of policies and management plans is instrumental for sustainability and forms part of an exit strategy. Development of national policies and fisheries management plans that include trawl fisheries management (see component 1), and importantly the adoption or legal enactment of specific measures through government resolutions or administrative order (mainstreaming), occurred in some of the countries and had positive impacts on national policy and legal frameworks. In the Philippines, for example, the Bureau of Fisheries and Aquatic Resources mainstreamed the Samar Sea Fisheries Management Plan in its programs and issued an ordinance that institutionalizes EAFM for management of the country’s fisheries; a closed season was implemented through a resolution by the Samar Sea Alliance, which has also adopted the Samar Sea Fisheries Management Plan. The Bureau of Fisheries and Aquatic Resources, Philippines also integrated bycatch measurements in national stock assessments. In Viet Nam, an official document was issued to freeze the number of trawlers operating in Vietnamese waters, while in Thailand a 4 cm minimum cod-end mesh size became national law. The International Guidelines on Bycatch Management and Reduction of Discards was recognized by all the project countries and reflected in national policy (e.g. in Thailand’s Fisheries Master Plan and 2015 Fishery Law) and provincial management plans.

116. At the regional level, integration of the REBYC-II CTI in SEAFDEC and FAORAP's regional program increased the prospects for sustainability at the regional level. The project significantly strengthened the role of SEAFDEC as the coordinating body for regional trawl fisheries management and EAFM training. Other regional bodies, such as the Asia-Pacific Fisheries Commission, will also enhance institutional sustainability.
117. While in general there are good prospects for institutional sustainability, certain assumptions must hold for this to be realized, as illustrated in the theory of change. Among these assumptions are continued support in the countries for trawl fisheries management, other policy drivers and externalities not negatively impacting on desired policy and management changes, and implementation of policies and effective surveillance and enforcement of regulations. Despite the uncertainty about the extent to which management measures will be actually implemented, enforced and complied with, at the national level there is increasing attention to improved enforcement and compliance (see social sustainability below). Other risks to achieving long-term impact and sustainability include changes in political regime and in government priorities in the countries, lack of political will to take adequate management actions, and little consideration of sustainability issues in political decision-making. But in view of the socio-economic importance of trawl fisheries in the Southeast Asian region and ongoing international scrutiny and requirements, it is expected that making the fisheries sector more sustainable will remain a priority well into the future in the project countries.
118. *Financial sustainability.* Although the availability of financial resources for surveillance, monitoring and enforcement can affect sustainability, the project made no provision for funds to support these activities in the post-project period. Furthermore, resource allocation to fisheries management is still quite limited in the countries, though by the end of the project some of them had already allocated funds from national budgets for implementation, enforcement and other activities. For example, the evaluators learned that the Bureau of Fisheries and Aquatic Resources allocated one million Philippine pesos from its annual budget to each of the eleven Samar municipalities for alternative livelihoods, capacity building, surveillance and support to quarterly meetings of the Alliance; in some provinces in Viet Nam commitment from local authorities was made (at least in the short-term) to support the legislative process for new regulations, laws or policies that were drafted. Respondents from Papua New Guinea and Thailand indicated that these countries can support continuing work on their respective fishery management plans and their implementation. Nevertheless, countries will need additional financial resources in the longer term. Indonesia may require additional support to assess the impact of its trawl ban, and possibly the reintroduction of trawl fisheries to some areas.
119. Financial support from external donors for sustainable fisheries in the Southeast Asian region is currently substantial and there are good prospects for enhancing financial sustainability of the project's outcomes through some of these bilateral initiatives, which can build on its results and contribute to the achievement of long-term impacts. Among these initiatives are the Commonwealth Scientific and Industrial Research Organisation project in Papua

New Guinea for trash excluder device/bycatch reduction device sea trials and other technical support; the GEF/World Bank Coastal Resources for Sustainable Development project in Viet Nam; SEAFDEC/Sweden initiative for support of fisheries and habitat management, climate change and social well-being in Southeast Asia; and SEAFDEC/CTI/USAID Oceans and Fisheries Partnership to combat illegal, unreported and unregulated fishing.

120. From the fishing industry's perspective, reduction in the quantity of bycatch may have immediate negative impacts on the income of some groups, but in the longer term they should benefit from the recovery of fisheries resources. As previously mentioned, trawl fishers who have installed juvenile and trash-fish excluder devices on their vessels have reported an increase in catch per unit of effort and in the quality and value of their catches. This phenomenon is expected to be self-sustaining, as the resulting increase in income will encourage wider and continued adoption of responsible trawling practices.
121. *Social sustainability.* To a large extent social sustainability depends on the level of buy-in, ownership and acceptance of management measures by the key stakeholders, particularly trawl fishers, which in turn will determine the degree of compliance with these measures. The evaluators noted a considerable level of stakeholder buy-in and ownership of the project at political levels as well as among private sector stakeholders, particularly in the Philippines, Thailand and Viet Nam. In Papua New Guinea the trawl fishery is overshadowed by the more economically important tuna fishery and in Indonesia the trawl ban has limited the extent of project activities in this country. Adoption of the EAFM approach to trawl fisheries management by the project promoted stakeholder dialogue to arrive at acceptable courses of action. This is a fundamental issue in attaining sustainability in the Southeast Asian trawl fishery. A risk factor is low commitment of the private fishing sector to sustainable development, which is reflected in poor compliance with fisheries regulations. This is an area where much more work is needed. Through strong stakeholder engagement and awareness-raising the project "opened eyes and minds", in the words of one respondent in the Philippines. In addition, the project provided training in alternative livelihoods. As a result, there was a change in the behavior of some trawl fishers towards greater acceptance and willingness to comply with regulations, at least in the Philippines.
122. Social sustainability could have been enhanced by the project through identification of appropriate incentive packages for trawl fisheries in the project areas. Respondents recognized that economic incentives are a critical factor in improving trawl fisheries management, and the absence of such incentives may ultimately reduce the willingness of fishers to comply with management measures, thereby threatening the sustainability of project achievements related to the PDO and GEO. Based on an MTE recommendation, activities to identify incentive packages were halted, although the project continued in the post-MTE period to provide some capacity building on the use of alternative fishing gears such as gillnets and other forms of livelihoods (Philippines). The participating countries are urged to continue activities to identify and provide appropriate incentives to private sector stakeholders in the post-project period.

### 3.4.2 Likelihood of replication

123. There were a range of project activities, approaches and results that had high potential for replication/scaling-up. These included (i) institutional structures such as public and private sector partnerships; (ii) capacity building (including in EAFM for collaborative development and implementation of trawl fisheries bycatch management plans at national level and within SEAFDEC), training of trainers and production of EAFM training materials; (iii) identifying policies and strategies to address the bycatch issue in a selected number of pilot areas in close collaboration with local fishers, with relatively modest investments but including a variety of possible management measures with a high potential for replication throughout the countries and the region, and for management of other fisheries; (iv) developing and implementing methods for bycatch data collection and conducting surveys and habitat mapping; (v) providing training in alternative livelihoods that can be replicated in other communities; and (vi) generating and sharing knowledge, data, results and lessons learned for parallel and future initiatives.
124. Some replication of specific elements was already taking place in the project countries at the time of the evaluation. For example, in the Philippines, the Bureau of Fisheries and Aquatic Resources endorsed EAFM as a nationwide strategy and training in EAFM and alternative livelihoods was being extended to other municipalities. In fact, the Samar Sea pilot site had become a model for trawl fisheries management and EAFM, and had also been used in a video on EAFM. This video was being used by FAO and others to promote EAFM. Project results from the Gulf of Thailand had been shared with the provinces on the Andaman coast in Thailand and new regulations were applicable to all fish trawlers in Thailand. In Viet Nam, neighboring provinces to Kien Giang had adopted EAFM planning frameworks for coastal resources management.
125. The project design did not include a replication strategy or effective common tools to share lessons during the implementation period (e.g. no provisions were made for exchange visits between the countries, and the project website needed updating). One respondent expressed that at times one had the impression that REBYC-II CTI was not a regional project but five individual national projects, and it was difficult to really know what was being done in other countries. The potential for replication could be enhanced by more widely sharing the project's results and lessons (including preparation and dissemination of project briefs with lessons from the pilot sites) both within the countries and in the wider region. The central role of SEAFDEC will ensure that experiences and lessons learned are shared with all the Southeast Asian countries and that EAFM training can be extended to others by SEAFDEC. A regional SEAFDEC workshop is planned for September 2016, which will identify actions to further develop a regional trawl fisheries management framework in Southeast Asia and share the key REBYC-II CTI lessons and experiences. The LTO will contribute to the development of any follow-on project by participating in this workshop.
126. The final evaluation found that it was not realistic to expect replication would occur during the project implementation, considering the project's

limited financial resources and time frame, but that there is a high likelihood for replication of the project's results in other areas of the participating countries and elsewhere in the region, if resources are made available.

### 3.5 Gender and human rights issues

127. In this section the assessment related to evaluation question 5 is presented: To what extent did the project take into account gender and human rights issues in its design and throughout its implementation?

#### Key findings

- Gender was not explicitly addressed in the REBYC-II CTI design, despite the fact that women play an important role in the fisheries post-harvest sector in all the countries;
- Socio-economic studies conducted by the project (based on an MTE recommendation) provided an important baseline on the role of women in trawl fisheries, and helped the countries to recognize the need to integrate gender in managing this sub-sector;
- These studies were conducted too late to include gender in the three management plans developed. However, increasing livelihoods as an objective in all three plans and adoption of EAFM by the countries will help to promote gender considerations in the management of trawl fisheries;
- Universal human rights of relevance to the project included the right to work and to adequate food, which were implicit in the project's PDO. Reduction in the quantity of bycatch could potentially threaten income, food security and livelihoods of local communities, but there was no in-depth analysis of the level of dependence on bycatch for food security and livelihoods;
- Findings by the evaluation indicated that a reduction in bycatch (where it had occurred, such as in the Philippines) had had no major negative impact on food security and livelihoods, as installation of bycatch reduction devices had reportedly increased the catch per unit of effort as well as the quality and value of catches, and local communities appeared to adapt by turning to alternative sources of food and income. Training was provided in alternative livelihoods to mitigate some of the potential adverse effects of reducing bycatch;
- The impact of the implementation of fisheries management plans on gender and the human rights were not monitored in such a way as to mitigate potential negative impacts. It is however now common practice for GEF and FAO projects to include specific consideration of gender and human rights issues in project design and monitoring.

#### 3.5.1 Gender

128. Gender was not explicitly addressed in the REBYC-II CTI design, possibly because gender was not part of GEF IV design requirements. On the other hand, since 2009 FAO has had guidelines on the human dimension of the ecosystem approach to fisheries, which provides the basis for inclusion of gender issues in the project design. In each project country, women played an important role in the post-harvest sector (e.g. as fish sorters, buyers and sellers including of



bycatch, and in fish processing). In Vietnam, the majority of workers in the seafood processing industry are women. Therefore, trawl fisheries management plans to reduce bycatch are likely to adversely affect the women who are involved in the trawl sub-sector. Mitigating any potential adverse impact on women requires information on the specific roles of women and the level of their dependency on trawl fisheries for livelihoods and food security in each pilot area. In addition, women should be involved in the formulation of any management plan through organized stakeholder groups. Nevertheless, prior to the MTE, the project focused on technical and biological issues, with little attention paid to understanding the human dimension of trawl fisheries.

129. This was highlighted by the MTE, which found that greater attention and concerted steps were required in the remaining life of the project to gather and analyze data on the involvement of women in the trade, and how they may be affected by reducing bycatch. One of the MTE's recommendations to the project team was to urgently assess what extent socio-economic (including gender) data gathering was initiated in each of the countries, and to take action to ensure that adequate and relevant data were gathered and analyzed to understand the potential impacts of bycatch reduction on different groups, and incorporated in fisheries management planning. This recommendation was accepted by the PSC at its second meeting in 2014, following which all national project work plans were modified to include socio-economic studies of the stakeholders involved in trawl fisheries. A socio-economic expert from FAO headquarters in Rome was assigned to provide technical support to the countries for the socio-economic activities.
130. Socio-economic surveys that included the role of women were conducted in each country except Indonesia (in Indonesia an initial assessment of the socio-economic impact of the national trawl fishing ban was carried out by a consultant) to understand the dependence on trawl fisheries for livelihoods along the supply chain and the role of women in trawl fisheries, and to understand potential future impacts of trawl fisheries management measures. The studies were supported by regional and national workshops on socio-economics and gender mainstreaming as well as 'write-shops'.
131. This evaluation reviewed the socio-economic questionnaires and national reports, and found them to be very comprehensive, providing an important baseline on the dependence on trawl fisheries for livelihoods and the role of women in trawl fisheries. They also contributed to raising awareness in the partner countries about the importance of gender issues. However, these studies were conducted too late for inclusion of gender considerations in the three management plans developed (Samar Sea Fisheries Management Plan, Kien Giang and Trat), although women were involved (to a limited extent) in consultations held for development of the plans. While the need to include socio-economic considerations was recognized in the plans, no specific actions related to women were specified. All three plans, however, included increasing or maintaining livelihoods as an objective, so gender is implicit in this objective. In addition, adoption of EAFM by the countries will help to promote consideration of the human dimensions including gender in management of the trawl fisheries. Papua New Guinea plans to use the findings of the socio-

economic study in a Commonwealth Scientific and Industrial Research Organisation bycatch reduction project in this country.

132. In terms of the involvement of women in project activities, while the project did not maintain any gender disaggregated data, this evaluation found that in general women were outnumbered by men. For example, in the Samar Sea area, only 15-20% of persons involved in the project were female, including six as members of the 15-member Technical Working Group.
133. From interviews conducted for the evaluation, it appears that reduction in bycatch is not expected to have a significant negative impact on women and vulnerable groups in terms of livelihoods and food security. In Calbayog, for example, one stakeholder who sorts and sells the catch from her spouse's trawler informed the evaluators that she is happy about the reduction in bycatch (achieved through REBYC I in the Philippines), as it has reduced the amount of sorting required and improved the quantity, quality and value of the catch. In the Samar Sea area, the Alliance plans to provide capacity building to women for value-added products, which will help to reduce any potential negative impacts of bycatch reduction on their livelihoods. In addition, in many of the trawl fisheries in the region, bycatch is destined for the fishmeal sector and not directly traded by women.
134. In conclusion, REBYC-II CTI helped the countries to recognize the role of women in trawl fisheries and the need to integrate gender in managing this sub-sector. Importantly, the socio-economic studies provided a valuable baseline to inform trawl fisheries management in the countries. It is recommended that the countries monitor the effects of the fisheries management plans on women and other dependent groups, and identify appropriate measures to mitigate any negative impacts. Any follow up projects should explicitly consider gender and include specific related activities in the design as part of a gender strategy.

### 3.5.2 Human rights

135. In 2003, the United Nations adopted the *United Nations Statement of Common Understanding on Human Rights-Based Approaches to Development Cooperation and Programming* (the Common Understanding). In particular, the Common Understanding underlines, *inter alia*, that all programmes of development cooperation, policies and technical assistance should: i) further the realization of human rights as laid down in the Universal Declaration of Human Rights and other international human rights instruments; and ii) be guided by human rights standards contained in, and the principles derived from, the Universal Declaration of Human Rights and other international human rights instruments, in all sectors and in all phases of the programming process.
136. Universally recognized human rights of relevance to REBYC-II CTI included the right to work and the right to a standard of living adequate for health and well-being, including adequate food. Human rights considerations were implicit in the formulation of the project's PDO ("Effective public and private sector partnerships for improved trawl and bycatch management and practices that

support fishery dependent incomes and sustainable livelihoods”), which related to improvement in incomes and livelihoods resulting from sustainable fisheries resources and healthy marine ecosystems through bycatch reduction and other management measures (GEO). The project design, however, did not explicitly consider the implications of bycatch reduction for food security and livelihoods of coastal communities. The degree of dependence on bycatch for food and livelihoods can be considerable in the project countries, and in most cases very little of the bycatch is discarded. Bycatch is also used for fishmeal and aquaculture feed and given to crew members for their own consumption. In Papua New Guinea, high value fish bycatch is exported at USD 3 per kg. Therefore, reduction in the quantity of bycatch could potentially threaten income, food security and livelihoods of certain sectors of the local communities.

137. This gap was also recognized by the MTE, which concluded that the information and data collection conducted by the project did not include vital socio-economic indicators on the use of bycatch, the role of fisher folk in the utilization of bycatch, the role of bycatch for income and nutrition in poor households, and potential impact on these groups, including women, of fisheries management plans with bycatch reduction elements. The MTE recommended that the project should ensure that adequate and relevant data was gathered and analyzed to understand the potential impacts of bycatch reduction on different groups, and incorporate this information in fisheries management planning. Furthermore, the MTE found that the project had given little consideration to how improved rural development outside of the fisheries sector could provide livelihood alternatives to trawl fisher households or others dependent upon the bycatch trade. Other relevant and pressing social issues in the Southeast Asian trawl fisheries such as labour (illegal migrants and human trafficking) – which came under intense international scrutiny in 2015 – and safety on fishing boats and in processing were overlooked in the original project design and were not flagged in the MTE report. These two latter issues (labour and safety) were however outside the scope of REBYC-II CTI’s objectives.
138. To address this gap and following the MTE recommendation, socio-economic studies were conducted in the project countries to better understand the human dimensions of the trawl fisheries. While some information relevant to the importance of bycatch was provided in the socio-economic reports (Papua New Guinea, Thailand and Viet Nam, e.g. quantity landed and price), there was no in-depth analysis of the level of dependence on bycatch for food security and livelihoods and implications of bycatch reduction (although the Papua New Guinea report includes some narrative on the importance of bycatch to local communities). This was a missed opportunity, and the socio-economic surveys could have easily covered these aspects. Nevertheless, the Thai and Vietnamese studies included some relevant recommendations. The Thai study, for example, recommends compensation to reduce the impacts of proposed bycatch reduction measures and consideration of any potential reduction of income from bycatch due to enlargement of trawl cod-end mesh size, while the Viet Nam study included recommendations to manage the fishing labour pool to mitigate risks for crew and vessel owners, improve conditions on vessels and fishing ports and processing plants, and assist fishers

to set up organizations and platforms to be able to raise their voices in the development of fisheries policy and in implementing existing regulations. While these studies represented a useful start, they should have included more comprehensive coverage of human rights issues related to trawl fisheries management.

139. Questionnaire responses and interviews at project sites indicated that reduction in bycatch may have no major negative impact on food security and livelihoods, as local communities appear to adapt to bycatch reduction by turning to alternative sources of food and income. Moreover, as previously noted much bycatch is destined for fishmeal to be used in aquaculture. Respondents in the Philippines also informed the mission that installation of bycatch reduction devices (under REBYC I) had increased the catch per unit of effort of target species as well as the quality and value of the catch of trawls and other gears. On the other hand, there have been some negative outcomes; for example, one fish buyer revealed that she had to release three fish sorters since the amount of sorting required was reduced with the use of juvenile and trash-fish excluder devices. The frequency of this kind of adverse situation is unknown.
140. Under REBYC-II CTI, training was provided in alternative fishing gear in the Samar Sea region, and the Bureau of Fisheries and Aquatic Resources provided gillnets to trawl fishers as an incentive for them to comply with provincial trawl fishing regulations and to mitigate some of the adverse effects. The Bureau of Fisheries and Aquatic Resources and the Samar Sea Alliance intend to continue capacity building efforts for alternative livelihoods, including non-fishers, among the local communities in Samar.

## **4 Conclusions and recommendations**

### **4.1 Conclusions**

**Conclusion 1. Despite the various implementation challenges, the project made contributions towards achieving the GEO and PDO and delivered results that are highly valued by FAO and the countries. However, the project performance was more successful in laying the groundwork for the objectives to be realized in the future rather than in actually achieving them.**

141. Analysis of success in achieving the GEO and PDO, as assessed by the extent to which the project met the stated indicators, reveals that the project only partially achieved the objectives. Moreover, consultations with project partners revealed that while some effective public and private sector partnerships had been created, these had not yet led to actual reductions in bycatch, discards and fishing impact on biodiversity and the environment, or improved fishery-dependent incomes and livelihoods. This is because management improvements had only been specified/agreed by the end of the project in some pilot sites, not implemented. In addition, while the project logframe generally provided a rational linkage between inputs, outputs, outcomes and objectives, the ability of the project to achieve the objectives was compromised by objectives that were overly ambitious considering the relatively small project budget and time frame.

**Conclusion 2. The project achieved many of the intended results across its four components; at the time of the evaluation many of the intended project component results remained as works in progress. This was especially the case for component 1 (policy, legal and institutional frameworks) and component 2 (resource management and fishing operations). The project resulted in the capacity development of SEAFDEC, which will serve to support improvements in fisheries management in the future.**

142. Assessment of progress in meeting the stated indicators for the four components shows that performance across the different components was variable. The project had resulted in agreement over one pilot site management plan (Samar Sea Fisheries Management Plan) with two others were expected to be agreed (Thailand and Viet Nam), and had engaged with the revision of a fourth management plan to include bycatch (Papua New Guinea). These plans included more selective fishing gear and practices, and zoning of fishing areas and spatial-temporal closure management measures, which once implemented will represent a more enabling environment for better management. The project was successful in building individual and institutional/organizational capacities around an increased awareness of the need for managing bycatch as part of broader fisheries management arrangements and the EAFM; strengthened technical and management capacity; increased knowledge and improvements in bycatch data collection; integration into national data collection systems; and use of data to inform management decisions. By the end of the project, the capacity of SEAFDEC to manage and support regional projects and provide EAFM training had been significantly increased.

**Conclusion 3. A number of operational issues related to the implementation of the project (such as the part-time nature of the Project Regional Coordinator, the Lead Technical Officer not being located in the region, and the lack of a dedicated editing and translation budget) had a negative impact on project outcomes and impacts.**

143. Factors hampering implementation and thus success in achieving component results and higher level objectives included the complex institutional structure of the project; insufficient resourcing of staff (and in particular the part-time nature of the PRC), the use of LOAs as a new method of project implementation in participating countries, which took time to be understood; no modification of the logframe based on the recommendations of the MTE; and challenges faced by the different language requirements and abilities in the five participating countries. These factors contributed to implementation delays and slow disbursement, especially over the first two years of the project, and ultimately had a significant bearing on the project's ability to achieve its intended component results, goal and objective. Country ownership, stakeholder participation and partnerships fostered during the project were however good, and supported progress in achieving the project component results and objective level impacts.

**Conclusion 4. There are good prospects for sustaining the project's achieved results at the environmental, social, financial and institutional levels, and significant potential for replication and upscaling of some successful project activities, as well as the achieved outcomes.**

144. By engaging key regional, national and provincial institutions in the execution of activities and building their capacity for trawl fisheries management and EAFM, the project left in place a solid institutional framework for achieving and sustaining its long-term impacts, although more capacity strengthening would have been beneficial. Other factors that will promote institutional sustainability include integration of REBYC-II CTI in SEAFDEC and FAORAP's regional program. Although clear positive environmental impacts of the project are not yet evident, implementation and enforcement of the bycatch management plans, along with addressing fishing overcapacity, are expected to result in substantial and sustained environmental benefits in the longer term, providing that the ecosystems are resilient to external factors such as climate change and marine pollution. Some of the countries have already allocated funds from national budgets to sustain certain activities. Financial sustainability can also be enhanced through uptake of the project's results in other ongoing and planned bilateral initiatives in the region, for which there are good prospects. The high level of buy-in and ownership among public and private sector stakeholders, provision of training in alternative livelihoods, and raising awareness are among the factors that contributed to high potential for social sustainability. This could have been enhanced by identification of appropriate incentive packages for the private sector in the project areas. There are excellent prospects for replication and scaling up of the project's achieved results (as stated in section 3.4.2). The project generated valuable lessons and experiences from the pilot sites, particularly the Samar Sea site which has become a model for trawl fisheries management, EAFM and public-private

partnerships. Some replication was already taking place at the time of the evaluation in the countries, and sharing the project results more widely among the countries and in the region will increase the potential for replication.

**Conclusion 5. Gender and human rights issues were not explicitly addressed in the REBYC-II CTI design. However, based on an MTE recommendation, socio-economic studies were conducted that provided a valuable baseline and raised awareness about the importance of these issues in trawl fisheries management.**

145. Although women play an important role in the fisheries post-harvest sector in each of the project countries, the socio-economic studies were conducted too late for the inclusion of gender in the three management plans developed. However, the inclusion of increasing livelihoods as an objective in all three plans and adoption of EAFM by the countries will help to promote gender considerations in the management of the trawl fisheries. Universal human rights of relevance to the project included the right to work and the right to a standard of living adequate for health and well-being, including adequate food; these were implicit in the project's PDO. Reduction in the quantity of bycatch could potentially threaten income, food security and livelihoods of local communities, but no in-depth analysis of the level of dependence on bycatch for food security and livelihoods was carried out by the project. Site visits indicated that reduction in bycatch (in the places where it had already occurred, such as the Philippines) was not expected to have a major negative impact on food security and livelihoods. This was due to the installation of bycatch reduction devices, which reportedly increased catch per unit of effort and improved the quality and value of catches, as well as the potential for local communities to adapt through alternative sources of food and income. Under REBYC-II CTI, training was provided in alternative livelihoods to mitigate some of the potential adverse effects of reducing bycatch. The countries should monitor the impacts of the implementation of fisheries management plans on gender and human rights and take appropriate measures to mitigate any potential negative impacts.

## **4.2 Recommendations**

146. The following recommendations aim to provide guidance for the closure of the REBYC-II CTI project, and to improve future FAO and GEF projects.

147. The evaluation mission took place six months prior to the project completion. This enabled the evaluation team to identify a number of issues that required action prior to the end of the project. Recommendation 1, together with the suggested actions, was made to FAO and the project management during the de-briefing sessions at the end of the evaluation mission, so that they could be acted on before the publication of this report.

**Recommendation 1. To FAO and the project management (LTO, budget holder, RFU) to facilitate the successful completion of the project, disseminate project information and support sustainability and replication:** The evaluation team recommends for the

project to implement the following necessary actions and complete those already initiated in the remaining time frame of the project.

- Provision of a full-time (rather than part-time) contract for the Field Administrative Officer to provide inputs to support the project during its final months;
- Generate missing data for a number of indicators to be used in the project’s completion report;
- Finalize estimates of co-financing provided during the project;
- Finalize and publish a number of outstanding project technical reports;
- Update the project website with relevant project-related material;
- Prepare short policy briefs for each country on i) key project objectives and activities, ii) key achievements and iii) key lessons learned about successes, to contribute to sustainability and replication;
- Prepare a specific and explicit exit strategy for the project to cover both the sustainability of project activities and replication/scaling up; and
- Finalize the component budget revision to reflect actual expenditures, and to comply with GEF rules as to allowable flexibilities in expenditures between components.

**Recommendation 2. To the FAO project team and relevant project partners to ensure the sustainability of project results:** Given the good momentum towards the end of the project and the groundwork that has been laid, the evaluation team recommends considering a follow-up activity that provides additional support for the improved governance and management of trawl fisheries in the region. In doing so, project partners and potential funders should move quickly to agree on such a future action, in order to minimize the gap between the cessation of the current project and a follow-up activity.

148. Some areas that would merit support include:

- *Governance:* Policy improvements requiring improved trawl fisheries management; mainstreaming of the EAFM into trawl fisheries management planning; and assessing and recommending specific levels of fishing capacity/effort appropriate for the state and level of fisheries resources.
- *Technical fisheries development interventions:* Establishing reference points and harvest control rules; resource mapping; improved understanding of ecosystem impacts of trawling; dissemination of best management practices; fuel consumption and emission reductions; technical gear improvements and/or use of alternative gears.
- *Socio-economic issues:* Support for appropriate participation in developing trawl fisheries management plans and sensitisation around the need for improved management arrangements based on the EAFM; understanding incentives for improved practices; assessing and putting in place measures to address any impacts of new management practices on livelihoods (e.g. alternative livelihoods); marketing and handling/quality improvements; and value-chain analyses.



**Recommendation 3. To the GEF Coordination Unit of FAO and FAO technical divisions, including the budget holder, to improve future GEF or donor-funded projects:** Ensure a rigorous formulation and implementation process that takes into account the lessons learned drawn from this and other GEF project evaluations.

149. Some relevant lessons to highlight and suggested considerations include:

- Prior to project approval, ensure there is sufficient funding and overall responsibility for managing and supporting projects, unless there is certainty that existing staff numbers and workloads allow for adequate technical and financial management support. This is important because sub-optimal performance in technical and financial management support threatens FAO's institutional reputation.
- Ensure that Chief Technical Advisers/Project Coordinators receive adequate training in the use of all necessary FAO management systems, and provide sufficient authority for approval of project outputs and the provision of the necessary implementation and management support.
- Ensure that Chief Technical Advisers/Project Coordinators have good technical and operational backgrounds, or otherwise ensure that a separate operational/administrative officer is put in place to deliver the project.
- Ensure that project objectives (and their related targets and indicators) included in the results frameworks of the project design are realistic and achievable when considering the project budget and time frame.
- In case a project undergoes a reduction in budget during the design stage or before project commencement, ensure the necessary financial and operational adjustments (in terms of project scope, results framework and implementation modalities) are made during the project inception phase.
- Ensure a project results framework is adjusted based on the MTE or mid-term review recommendations, or during implementation if needed.
- In case of regional projects working in countries with different language capabilities:
  - allocate sufficient funding for the translation and editing of reports;
  - ensure regional project coordinators and LTOs are based in the region, and ideally, have the budget holder and LTO housed in the same institution.
- Ensure that sufficient guidance on implementation is provided in written form (ideally in a project implementation manual) to project implementing partners, not just verbally; and that inception periods are of sufficient length and with sufficient activities and levels of consultation to ensure that all project implementing partners fully understand implementation requirements and arrangements.
- While recognizing that follow-up projects cannot be prepared too far in advance of the completion of ongoing projects (so as to ensure that lessons learned from one project can be fully considered in the design of any follow-up project, and

the full justification for follow-up activities can be assessed), plan for the potential design of follow-up activities in order to minimize the long periods between the end of one project and the beginning of any new project.

## Appendices

### Appendix 1. Evaluation Terms of Reference

#### Background and Context of the Project

1. The project “Strategies for trawl fisheries bycatch management” (REBYC-II CTI, GCP/RAS/269/GFF) was conceived as a follow-up to an earlier FAO/UNEP/GEF project, “Reduction of environmental impact from tropical shrimp trawling through the introduction of bycatch reduction technologies and change of management”, or REBYC, implemented between 2002 and 2008. The REBYC-II CTI project began on 31 October 2011, and was scheduled to end on 31 October 2015. Real implementation, however, started in April 2012 and is now scheduled to end on 30 December 2016, after two extensions approved by the donor (October 2015, June 2016).
2. The project, funded by the GEF, covers five countries in Southeast Asia, namely: Indonesia, Papua New Guinea, Philippines, Thailand and Viet Nam, the first three of which are members of the Coral Triangle Initiative (CTI). The GEF allocation is USD 3.000.000 and the total co-financing approximately USD 8 million. Co-financing has been provided by the participating governments, the private sector in the countries, FAO, Southeast Asian Fisheries Development Centre (SEAFDEC), Swedish International Development Cooperation Agency, World Wide Fund for Nature, Sustainable Fisheries Partnerships and Marine Ingredients Organization.
3. The project’s Global Environment Objective was to achieve “*responsible trawl fisheries that result in sustainable fisheries resources and healthy marine ecosystems in the Coral Triangle and Southeast Asian waters by reduced bycatch, discards and fishing impact on biodiversity and the environment*”. Its Development Objective was to establish “*effective public and private sector partnerships for improved trawl and bycatch management and practices that support fishery dependent incomes and sustainable livelihoods*”.
4. The direct project beneficiaries are fishers, fish workers and communities in the selected project sites that are part of the fleets directly participating in project activities. The main stakeholders of the project can be grouped at three levels on which the project operates, as follows:
  - At regional level: intergovernmental regional organizations such as SEAFDEC as the regional project facilitator, ASEAN, among others, as well as NGOs, other projects and development agencies active in the region.
  - At national level: national and state government agencies, civil society organizations, NGOs, private sector organizations and foundations, and academic institutions in each country.
  - At local level: civil society, local government agencies, commercial fishers and fishing communities, other users of aquatic resources for their livelihoods and food security, including fish processors and fish meal producers.

5. At the local level the project works at selected project sites, where the practical activities are implemented in partnership between the public and private sectors and civil society. These are then linked to the national level, where the fisheries authorities have the overall responsibility for implementation. At the regional level, the project works through workshops and meetings on longer term strategies for bycatch management closely linked to other regional as well as global initiatives by international organizations, international NGOs and the private sector. A complete list of project stakeholders can be found in Annex 2.

6. The geographic areas covered by the project and implementing partners include:

Country	Geographic area/fisheries	Partners
Indonesia	Arafura Sea	Department of Capture Fisheries (DGCF), Indonesia
Papua New Guinea	Gulf of Papua	National Fisheries Authority (NFA) PNG.
Philippines	Samar Sea	Bureau of Fisheries and Aquatic Resources, (BFAR) Philippines.
Thailand	Gulf of Thailand	Department of Fisheries, Thailand
Viet Nam	Kieng Giang Province	The Directorate of Fisheries, Vietnam
Regional level	SE Asia and Coral Triangle	Southeast Asia Fisheries Research and Development Center, (SEAFDEC)

7. To achieve its set objectives the project identified and has worked on four inter-related components/outcomes. The project’s results framework is available in Annex 3.

**Component 1: Policy, legal and institutional framework:** Agreed regional bycatch policy/strategy and national or area specific trawl fisheries bycatch management plans that are in line with the International Guidelines on Bycatch Management and Reduction of Discards are adopted and supported by institutional arrangements and processes for public and private sector partnerships.

**Component 2. Resource management and fishing operations:** Measures that manage bycatch and reduce discards, and thereby improve fisheries resources and ensure long-term economic sustainability of trawl fisheries, are implemented in combination with incentives in all project countries. In these fisheries (covered by improved bycatch management measures) bycatch has been reduced.

**Component 3: Information management and communication:** Standardized data for key indicators, including on economic performance, are available in all project countries and inform trawl fisheries and bycatch management planning and implementation at national and regional levels.

**Component 4: Awareness and knowledge:** Enhanced knowledge and understanding of responsible fishing by private sector/fishers, fisheries managers and decision-makers are supporting participatory management arrangements in all project countries.

8. Thus far, the project has achieved the following main milestones:

### **Component 1: Policy, Legal & Institutional Frameworks**

- International Guidelines on Bycatch Management and Reduction of Discards recognized by all five project countries and regional bycatch priorities agreed by project partners.
- National or area specific trawl fisheries bycatch management plans in the project areas agreed by stakeholders and adopted by relevant authorities
- Policy, legal and institutional frameworks relevant for trawl fisheries bycatch management reviewed in 3 countries.
- Institutional arrangements (Management Councils) for collaborative trawl fisheries bycatch management established and functioning in 3 countries

### **Component 2. Resource management and fishing operations**

- More selective trawl gear and/or alternative (e.g. including actions in 2.2 and/or -2.3) fishing practices used by 2 countries.
- Selection criteria and recommendations for demarcating fishing zones and areas for spatial-temporal closures are identified in 4 countries
- Inventory of selected trawl fleets in project areas drawn up in all countries

### **Component 3: Information management and communication**

- Data and data collection methods for bycatch, discards and seabed impact in project areas available and published in relevant national and regional information systems in 3 countries
- System set up for monitoring of bycatch reduction (volume) as a result of modified gear and improved management and its likely impact on incomes in 3 countries.
- Project website set up in Year 1 and developed into a regional information sharing mechanism for information on trawl fisheries bycatch management.
- A range of Project IEC material developed

### **Component 4: Awareness and knowledge**

- Fishers and other relevant stakeholders in all countries/project areas have improved their knowledge on bycatch, sustainability issues and collaborative management through training, project information and/or participation in project activities
- Regional and national policy and decision-makers have been sensitized with regard to responsible trawl fisheries management through project information and workshops.
- Private sector/fisher 'champions', technical officers and extension workers (government and NGOs) have improved their knowledge on BRDs and other management measures through EAFM training.

9. Project management and implementation: The SEAFDEC Training Department in Samut Prakan Thailand, hosts the Regional Facilitation Unit that manages the project, supported by a part-time Project Regional Coordinator, with administrative oversight

from FAORAP and technical oversight from FAO HQ. Regular project activities are guided by a Project Steering Committee<sup>11</sup> which meets on an annual basis.

10. Under FAO's Strategic Framework, the REBYC-II CTI project contributes to Strategic Objective 2: Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner and Strategic Objective 4: Enable more inclusive and efficient agricultural and food systems.
11. As per GEF requirements, a mid-term evaluation (MTE) of the project was conducted between 7 February and 20 April 2014, to determine progress towards the achievement of objectives, outcomes and outputs, and to identify corrective actions as needed. The final independent evaluation is also foreseen and will take place between May-September 2016.

### **Evaluation purpose**

12. The purpose of the final evaluation is to provide accountability to the donor (GEF) and the national governments of the implementing countries, and to learn from project implementation to inform future decision-making by FAO's project team.
13. The intended users and uses of the evaluation include:
  - REBYC-II CTI project team: who will use the findings and lessons identified in the evaluation to finalize project activities and decide, jointly with the donor, on the way forward.
  - Government Departments in the five countries: who will use the evaluation findings and conclusions for future planning in the fisheries sector.
  - GEF (the donor): who will use, in consultation with FAO, the evaluation's conclusions and recommendations to inform any strategic decisions on the way forward. Moreover, the evaluation will serve as an input for the GEF's future assessments of their interventions.
  - Management of the Fisheries and Aquaculture Resources Use and Conservation Division in FAO, including FAO's Regional Office for Asia and the Pacific (RAP): who will consider the main evaluation findings for their future strategic planning.
  - Other donors and organisations interested in supporting projects aimed at the sustainable management and development of trawl fisheries in the Region.

### **Evaluation scope**

14. The final evaluation will assess the full implementation period of the project from January 2011 to June 2016, covering activities in all project components. The evaluation will examine the project's achievements at national and regional levels.
15. Regarding geographical coverage, activities in all five participating countries will be considered. Missions for data collection purposes will be undertaken in Thailand, Viet Nam and Philippines. Representatives from Papua New Guinea will be interviewed in

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<sup>11</sup> SEAFDEC, senior representatives from institutions in five countries, FAO RAP and FAO HQ.

Philippines and if necessary via phone or skype; and representatives from Indonesia will participate in the team’s briefing session in Bangkok at the beginning of the mission. Activities at the regional level will also be covered by the evaluation.

## Evaluation objective and key questions

16. The evaluation has the following objectives:

- Assess the results achieved by the project in its four years of implementation, in particular, the extent to which these contributed to the project’s objectives. In doing so, the evaluation will assess the progress made in the implementation of the mid-term evaluation recommendations;
- Assess the sustainability of the project intervention and potential impact, if any, in the long-run;
- Identify lessons learned from project design, implementation and management.

17. The evaluation will seek to provide recommendations for follow-up actions to the project team and partners, and where applicable to government counterparts in the five countries.

## Evaluation questions

18. The evaluation will be guided by the following key evaluation questions:

- a. To what extent has the project’s global environment objective and project development objective been achieved?<sup>12</sup>
- b. What results, intended and unintended, did the project achieve across its four components? In particular, how did the project contribute to:
  - Under the **policy, legal and institutional frameworks component**:
    - An agreed regional bycatch policy/strategy for trawl fisheries bycatch management
    - The development and implementation of national or area specific trawl fisheries bycatch management plans
    - Strengthening the capacities of regional, national and local institutions for responsible fisheries<sup>13</sup>
    - Fostering the creation of an enabling environment for responsible fisheries through policy and legal support
  - Under the **resource management and fishing operations component**
    - The adoption of more selective fishing gear and practices, providing a basis for implementing the zoning of fishing areas and developing spatial-temporal closure management measures
    - The generation of better data on the number of vessels and recommendations for fishing effort and capacity management
    - A reduction (*change*) in bycatch in the fisheries areas covered by the project

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<sup>12</sup> To look at risk and risk management mitigation measures.

<sup>13</sup> Endorsed in FAO’s Corporate Strategy on Capacity Development: <http://www.fao.org/3/a-k8908e.pdf>

- and where bycatch management measures have been implemented
- Building the capacities of fishers on the use of alternative fishing practices and gears
- Under the **information management and communication component**
  - Improved data on bycatch and potential fishing ground impact
- Under the **awareness and knowledge component**
  - creating awareness and enhancing the knowledge on bycatch issues and best management practices for the responsible trawl fisheries of the project stakeholders and beneficiaries?
- c. What are the key lessons that can be learned from the project’s implementation, including the ways in which the project fostered and established partnerships to achieve the intended results?
- d. How sustainable are the project’s achieved results, at the environmental, social, financial and institutional level, and are the project’s activities replicable?
- e. To what extent did the project take into account gender and human rights issues, especially the socio-economic impact of bycatch reduction in different groups, among others, in its design and throughout its implementation?<sup>14</sup>

## Methodology

19. The evaluation will adhere to the United Nations Evaluation Group (UNEG) Norms & Standards<sup>15</sup> and will be in line with the OED Manual and methodological guidelines and practices. The evaluation will be *results-focused* and will develop and use the Theory of Change of the project to inform the design of the evaluation and as basis of analysis of the contribution’s made by the project to the expected project outcomes (see annex 5 for the project’s Theory of Change). Key evaluation questions will be used to guide the overall assessment, and sub-questions will be further elaborated in an *evaluation matrix* to answer the main questions in a comprehensive manner.
20. To answer the evaluation questions, the following tools will be used to collect primary data and evidence:
  - desk-review of existing project documents and reports, including the mid-term evaluation, to better understand the context and structure of the project and identify the reported project achievements (see annex 4 for the preliminary list of documents to be consulted);

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<sup>14</sup> On the question related to gender, the evaluation will assess, in particular, the level of improvement the project made in implementing the MTE findings related to this area.

<sup>15</sup> <http://www.uneval.org/document/detail/21>



- semi-structured interviews with key informants, stakeholders and project participants, including the GEF operational focal points in the participating countries. Face to face interviews will be carried out in the visited countries, while phone or skype interviews will be carried out for those not visited by the evaluation team. Interviews will be supported by check lists and/or interview protocols to be developed at the beginning of the evaluation mission (see annex 3 for a list of project stakeholders) ;
  - Focus group discussions with participants and stakeholders in the project sites (fishers, fishers managers, local government authorities, private sector partners, regional and national policy-decision makers, NGOs) and that were involved in the project's trainings and awareness raising workshops ; and
  - Surveys and/or questionnaires to all relevant stakeholders with whom face-to-face interviews and/or skype calls or phone interviews can't be conducted.
21. Information and evidence related to question 1 will be collected through the stakeholder questionnaire completed by the Lead Technical Unit in FAO HQ, the Regional Facilitation Unit (RFU) in Bangkok and the National Technical Officers (NTOs) and National Project Coordinators (NPC) in each of the participating countries. Interviews with key stakeholders, documentation review and the analysis of the project's results (evaluation question 2) by the evaluation team will also contribute to answering this question.
22. For question 2, multiple tools will be combined to answer the different sub questions. Information for the *policy, legal and institutional frameworks component* will be mostly gathered through documentation review and interviews with government authorities and partners involved in the policy process. Evidence on the *resource management and fishing operations component* will be collected through interviews with trawlers and local partners in visited project sites, direct observation during the field mission and review of available data on bycatch fisheries. Information on the *information management and communication component* will be collected through interviews with trawlers and partners involved in the data collection process, confirmation of existing project products, and review of existing monitoring documents produced by the project. Finally, for the *awareness and knowledge component*, evidence will be collected through interviews and/or surveys of participants involved in the project trainings and awareness raising workshops, and documentation review.
23. Relevant information to answer question 3 will be collected through the stakeholder questionnaires and a subsequent coding and analysis of satisfaction levels, focus group discussions and interviews at project sites, and desk-based review of secondary information (project documents and MTE). Question 4 and 5 will be mainly answered through semi-structured interviews with the project team, government officials, NTOs and some local level beneficiaries in each country, and desk review of available project documents (e.g. exit strategy, expression of interest from other donors or agencies to continue the work, socio-economic and gender analysis, if any).
24. Considering that all project components are related to *capacity development*, emphasis will be placed on assessing this dimension in the design, implementation

and results of the project, at individual, organizational and enabling environment levels. As mentioned in section 4.1, the basis for this assessment will be FAO's Capacity Development Framework.

25. The evaluation will adopt a consultative and transparent approach with internal and external stakeholders throughout the evaluation process. In this sense, the evaluation team will discuss in detail with the key stakeholders of the project and will take into account their perspectives and opinions. Key stakeholders will include: The National Working Groups (NWG), PSC members, NPC and NTO at the national level, Regional facilitation Unit(RFU), Ministries and department of Fisheries, national and international partners, CSOs and coastal communities, the GEF focal point, FAO country and regional offices.
26. Triangulation of evidence and information gathered will underpin its validation and analysis and will support conclusions and recommendations. At the end of the data collection mission, if possible, one debriefing session will take place in Bangkok to present and validate the preliminary findings and triangulate evidence. Colleagues from the Rome office will be invited to join via videoconference. Conclusions and recommendations will be drafted after the debriefing sessions and will be shared in the first draft of the report for feedback and comments of the PSC members. The report will be finalized after the comments are received; suggestions will be incorporated as considered appropriate by OED/evaluation team.
27. In order to facilitate comparison with routine reporting to GEF and contribute to the GEF programme learning process (IWLearn), the evaluation will rate the success of the project on the GEF six-point scale system: Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Marginally Unsatisfactory (MU), Unsatisfactory (U), and Highly Unsatisfactory (HU). All the items listed below will be rated separately and will include comments.
  - Achievement of objectives
  - Attainment of outputs and activities
  - Progress towards meeting GEF-4 focal area priorities/objectives
  - Cost-effectiveness
  - Impact
  - Risk and Risk management
  - Sustainability
  - Stakeholder participation
  - Country ownership
  - Implementation approach
  - Financial planning
  - Replicability
  - Monitoring and evaluation
28. Furthermore, the evaluation will be undertaken in-line with GEF principles of: independence, impartiality, transparency, disclosure, ethical, partnership, competencies and capacities, credibility and utility.

### **Roles and responsibilities**

29. The **Office of Evaluation (OED)**, in particular the Evaluation Manager responsible for developing the first draft ToR with inputs from Project Task Force. This ToR

includes the Theory of Change (ToC) (Annex 5), developed by the Evaluation Manager based on document review and discussions with Project Task Force.

30. The BH and LTO assists the Evaluation Manager in drafting the ToR, in the identification of the consultants and in the organization of the mission. The Evaluation Manager is responsible for the finalization of the ToR and of the identification of the evaluation team members<sup>16</sup>. The Evaluation Manager will brief the evaluation team on the evaluation methodology and process and will review the final draft report for Quality Assurance purposes in terms of presentation, compliance with the ToR and timely delivery, quality, clarity and soundness of evidence provided and of the analysis supporting conclusions and recommendations in the evaluation report.
31. OED also has a responsibility in following up with the BH for the timely preparation of the Management Response and the Follow-up to the MR.
32. The **Project Task Force (PTF)**, which includes the FAO Budget Holder (BH) – Field Programme Officer - based in FAO RAP, the Lead Technical Officer (LTO) – Fishery Industry Officer - based in the Fisheries and Aquaculture Department in FAO HQ, the project team (Regional Facilitation Unit based in the SEAFDEC office in Bangkok, Thailand, including the Project Regional Coordinator), is responsible for initiating the evaluation process, providing inputs to the first version of the Terms of Reference, especially the description of the background and context chapter, and supporting the evaluation team during its work. They are required to participate in meetings with the evaluation team, make available information and documentation as necessary, and comment on the terms of reference and report. Involvement of different members of the PTF will depend on respective roles and participation in the project. The BH is also responsible for leading and coordinating the preparation of the FAO Management Response and the Follow-up Report to the evaluation, fully supported in this task by the LTO and others members of the PTF. OED guidelines for the Management Response and the Follow-up Report provide necessary details on this process.
33. The **Evaluation Team (ET)** is responsible for further developing and applying the evaluation methodology, for conducting the evaluation, and for producing the evaluation report. All team members, including the Evaluation Team Leader (ETL), will participate in briefing and debriefing meetings, discussions, field visits, and will contribute to the evaluation with written inputs for the final draft and final report. The evaluation team will agree on the outline of the report early in the evaluation process, based on the template provided in Annex 1 of this ToR. The ET will also be free to expand the scope, criteria, questions and issues listed above, as well as develop its own evaluation tools and framework, within time and resources available and based on discussions with the Evaluation Manager, consults the BH and PTF where necessary. The ET is fully responsible for its report which may not reflect the views of the Government or of FAO. An evaluation report is not subject to technical

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<sup>16</sup> The responsibility for the administrative procedures for recruitment of the team, will be decided on a case-by-case basis.

clearance by FAO although OED is responsible for Quality Assurance of all evaluation reports.

34. The ET will maintain close liaison with: the FAO Office of Evaluation, the Project Task Force members and Project staff at FAO RAP, GEF focal points and FAO country level management and focal points. Although the mission is free to discuss with the authorities concerned anything relevant to its assignment, it is not authorized to make any commitment on behalf of the Government, the donor or FAO.
35. The ETL guides and coordinates the ET members in their specific work, discusses their findings, conclusions and recommendations and prepares the final draft and the final report, consolidating the inputs from the team members with his/her own.

### **Evaluation team composition and profile**

36. The evaluation team will comprise the best available mix of skills that are required to assess the project, and as a whole, will have expertise in all the following subject matters:
  - Demonstrated experience in the conduct of evaluations of large/complex, regional technical assistance projects;
  - Familiarity with the objectives of the GEF International waters and biodiversity program, particularly as it relates to Trawl Fishery Management plans;
  - Understanding of the governance, political, economic and institutional issues associated with trawl fisheries in the South East Asia and CTI region;
  - Knowledge of approaches to marine fisheries management including habitat and ecosystem services, (e.g. EAFM), and an understanding of the issues relating to small-scale fisheries;
37. The evaluation team will have had no previous involvement in the formulation, implementation or backstopping of the project. All will sign the Declaration of Interest form of the FAO OED. To the extent possible, the evaluation team will be balanced in terms of geographical and gender representation to ensure diversity and complementarity of perspectives.

### **Evaluation products (deliverables)**

38. The evaluation will produce the following deliverables:
  - Evaluation Matrix – to be produced before the main mission scheduled in July,
  - Final Theory of change of the project, after consultation and validation with project stakeholders,
  - Draft evaluation report—OED will review the zero draft of the evaluation report submitted by the evaluation team to ensure it meets OED's quality standards and criteria. The draft evaluation report will then be circulated to the project and stakeholders for comments before finalisation; suggestions will be incorporated as deemed appropriate by the evaluation team.

- Final evaluation report: should include an executive summary and illustrate the evidence found that responds to the evaluation questions listed in the ToR. The report will be prepared in English, with numbered paragraphs, following the OED template for report writing. Supporting data and analysis should be annexed to the report when considered important to complement the main report. Translations in other languages of the Organization, if required, will be FAO’s responsibility.

### **Evaluation time frame**

39. The evaluation will take place between May-September 2016. The main evaluation mission will last between 2 weeks, tentatively from 16-30 July.

<b>Task</b>	<b>Dates</b>	<b>Duration</b>	<b>Responsibility</b>
ToR finalization	05 July		EM with BH and PTF
Team identification and recruitment	9-27 May	3 weeks	EM with BH and PTF
Mission organization and travel arrangements	30 May - 30 June	4 weeks	ETL with EM and PTF
Reading background documentation	June	1 week	EM for ToR development; ETL and ET for preparation of the evaluation
Briefing of evaluation team (ET) by skype/phone	July	1 day	EM, when necessary supported by PTF
Mission to 3 countries	15-25 July	1.5 week	ET, with support from the EM
Zero draft for review by OED	26 September		ET
Review by OED before circulation	27 September - 3 October	1 week	EM and ET to respond to comments
Internal OED quality assurance before circulation	4-10 October	1 week	OED peer reviewer
First draft for circulation and comments	11-25 October	2 weeks	PTF and other stakeholders
Revision of comments by ET and EM	26 October	1 day	ET and EM
Final draft for circulation & response to evaluation matrix comments	27 Oct - 3 Nov	1 week	ET and EM
Validation of the recommendations	4-11 November	1 week	EM and TL
Final Report	14-15 November		OED

## Appendix 2 : Evaluation questions matrix

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
<b>Evaluation Question 1: To what extent has the project’s global environment objective and project development objective been achieved?</b>				
<p>1. <b>To what extent was the project’s Global Environment Objective (GEO) achieved?</b></p>	<ul style="list-style-type: none"> <li>Stated objective realised</li> </ul>	<ol style="list-style-type: none"> <li>Qualitative stakeholder views</li> <li>‘Quantitative’ analysis of 6 scoring levels of satisfaction indicated by stakeholders for the 4 GEO indicators</li> <li>Associated logframe indicators</li> </ol>	<ol style="list-style-type: none"> <li>Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires)</li> <li>Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires) and subsequent coding and analysis of satisfaction level</li> <li>Desk review of secondary information (project M&amp;E records)</li> </ol>	<p>Impact</p>

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
<p>2. <b>To what extent was the Project Development Objective (PDO) achieved?</b></p>	<ul style="list-style-type: none"> <li>Stated objective realised</li> </ul>	<ol style="list-style-type: none"> <li>Qualitative stakeholder views</li> <li>'Quantitative' analysis of 6 scoring levels of satisfaction indicated by stakeholders for the 3 PDO indicators</li> <li>Associated logframe indicators</li> </ol>	<ol style="list-style-type: none"> <li>Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires)</li> <li>Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires) and subsequent coding and analysis of satisfaction level</li> <li>Desk review of secondary information (project M&amp;E records)</li> </ol>	<p>Impact</p>

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
<p><b>3. Did the project design allow for and provide a good likelihood of the project achieving its GEO and PDO?</b></p>	<ul style="list-style-type: none"> <li>• Project design addressed the key needs for the participating countries</li> <li>• Project design correctly identified risks and effective mitigation measures</li> <li>• Time frame for project was realistic</li> <li>• Project was not overly complex or ambitious</li> <li>• Project logframe provided rational linkage between inputs, outputs, outcome and objectives</li> </ul>	<p>7. Qualitative stakeholder views</p> <p>8. Qualitative assessment</p>	<p>7. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires)</p> <p>8. Desk review of secondary information (project design documents). TOC/ROtI analysis?</p>	<p>Project design/Relevance</p> <p>Risks and risk management mitigation measures</p>



<b>Evaluation Question 2: What results, intended and unintended, did the project achieve across its four components?</b>				
<b>Sub-questions</b>	<b>Judgement criteria</b>	<b>Suggested indicators</b>	<b>Methods (sources)</b>	<b>Evaluation criterion / comments</b>
<p><b>1. Has the policy, legal and institutional frameworks component achieved its stated outcomes?</b></p>	<ul style="list-style-type: none"> <li>The Project contributed to an agreed regional bycatch policy/strategy for trawl fisheries bycatch management</li> <li>the Project succeeded in establishing national or area specific trawl fisheries bycatch management plans and built institutional capacity and environment for their implementation</li> <li>The project strengthened the capacities of regional, national and local institutions for responsible fisheries</li> <li>The project achieved the expected outputs/targets under this component (see</li> </ul>	<p>9. Qualitative stakeholder views</p> <p>10. Associated logframe indicators and qualitative assessment</p>	<p>9. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites)</p> <p>10. Desk review of secondary information (project M&amp;E records, and project documents/reports, strategies, and management plans)</p>	<p>Effectiveness</p> <p>Attainment of intended outputs and activities</p>

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
	<p>project logframe)</p> <ul style="list-style-type: none"> <li>The project provided all the expected inputs/activities under this component</li> </ul>			
<p><b>2. Has the resource management and fishing operations component achieved its stated outcomes?</b></p>	<ul style="list-style-type: none"> <li>the Project led to the adoption of more selective fishing gear and practices, providing a basis for implementing the zoning of fishing areas and developing spatial-temporal closure management measures</li> <li>The Project generated better data on the number of vessels and recommendations for fishing effort and capacity management</li> <li>Bycatch has been reduced in the fisheries areas covered by the project and</li> </ul>	<ol style="list-style-type: none"> <li>Qualitative stakeholder views</li> <li>Associated logframe indicators and qualitative assessment</li> </ol>	<ol style="list-style-type: none"> <li>Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites, examination of fishing gear promoted by the project at project sites, demonstration of sustainable practices- if possible)</li> <li>Desk review of secondary information (project M&amp;E records, project documentation, government records of bycatch)</li> </ol>	<p>Effectiveness Attainment of intended outputs and activities</p>

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
	<p>bycatch management measures have been implemented</p> <ul style="list-style-type: none"> <li>• The project has built the capacities of fishers on the use of alternative fishing practices and gears</li> <li>• The project achieved the expected outputs/targets under this component (see project logframe)</li> <li>• The project provided all the expected inputs/activities under this component</li> </ul>			
<p><b>3. Has the information management and communication component achieved its stated outcomes?</b></p>	<ul style="list-style-type: none"> <li>• The Project led to improved bycatch data collection, the mapping of fishing grounds, the establishment of socio-economic monitoring procedures, and the means for communicating</li> </ul>	<p>13. Qualitative stakeholder views</p> <p>14. Associated logframe indicators and qualitative assessment</p>	<p>13. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites)</p> <p>14. Desk review of secondary information (project M&amp;E records)</p>	<p>Effectiveness Attainment of intended outputs and activities</p>

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
	bycatch data and information <ul style="list-style-type: none"> <li>The project achieved the expected outputs/targets under this component (see project logframe)</li> <li>The project provided all the expected inputs/activities under this component</li> </ul>		and project website, government bycatch records, communication and outreach materials)	
<b>4. Has the awareness and knowledge component achieved its stated outcomes?</b>	<ul style="list-style-type: none"> <li>the Project contributed to creating awareness and enhancing the knowledge on bycatch issues and best management practices for the responsible trawl fisheries of the project stakeholders and beneficiaries</li> <li>The project achieved the expected outputs/targets under this component (see</li> </ul>	15. Qualitative stakeholder views 16. Associated logframe indicators and qualitative assessment	15. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites) 16. Desk review of secondary information (project M&E records, project reports/outputs, and communication and outreach materials including project website)	Effectiveness Attainment of intended outputs and activities

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
	project logframe) <ul style="list-style-type: none"> <li>• The project provided all the expected inputs/activities under this component</li> </ul>			
<b>Evaluation Question 3: What are the key lessons that can be learned from the project’s implementation, including the ways in which the project fostered and established partnerships to achieve the intended results?</b>				
Sub-questions	Judgement criteria	Suggested indicators	Methods (sources)	Evaluation criterion / comments
<b>1. How satisfactory was the overall ‘implementation approach’?</b>	Assessment of <ul style="list-style-type: none"> <li>• Institutional structure for the project</li> <li>• Project administrative and technical support by FAO</li> <li>• Project oversight</li> <li>• The work of the Regional Facilitation Unit</li> <li>• The work of the National Working Groups</li> <li>• The work of the National</li> </ul>	17. ‘Quantitative’ analysis of 6 scoring levels of satisfaction indicated by stakeholders for each judgement criteria  18. Quality of outputs, staffing and guidance documentation provided by implementation partners	17. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites) and subsequent coding and analysis of satisfaction levels  18. Desk-based review of secondary information related to outputs, staffing and guidance documentation (project documents)	Effectiveness  Implementation approach  Qualitative information to be provided supporting quantitative indicator

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
	<p>Project Coordinators (NPC) and National Technical Officers (NTO)</p> <ul style="list-style-type: none"> <li>• Project decision-making processes</li> <li>• Staffing types, levels and capacities</li> <li>• The level of guidance and supporting documentation for implementation</li> </ul>			
<p><b>2. How satisfactory was the country ‘ownership’ of the project?</b></p>	<ul style="list-style-type: none"> <li>• Countries feel it is their project, relevant to their needs, and being implemented by them</li> </ul>	<p>19. ‘Quantitative’ analysis of 6 scoring levels of satisfaction indicated by stakeholders</p>	<p>19. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires) and subsequent coding and analysis of satisfaction levels</p>	<p>Effectiveness Country ownership Qualitative information to be provided supporting quantitative indicator</p>
<p><b>3. How satisfactory was stakeholder participation in the project?</b></p>	<ul style="list-style-type: none"> <li>• government, private sector, civil society, research institutions, etc have all participated in the</li> </ul>	<p>20. ‘Quantitative’ analysis of 6 scoring levels of satisfaction indicated by stakeholders</p>	<p>20. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups</p>	<p>Effectiveness Stakeholder participation Qualitative information to be</p>

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
	project	21. Evidence of stakeholder participation in project documents	at project sites) and subsequent coding and analysis of satisfaction levels 21. Desk-based review of secondary information (project documents)	provided supporting quantitative indicator
<b>4. How useful was the Mid Term Evaluation?</b>	<ul style="list-style-type: none"> <li>• Recommendations for specific groups were acted on</li> <li>• Action to implement recommendations following the MTE improved project performance</li> <li>• Impact of MTE recommendations on project performance</li> </ul>	22. Qualitative stakeholder views 23. Number of relevant recommendations implemented	22. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires) 23. Review of MTE and secondary information on actions taken (project documentation)	Effectiveness M & E implementation
<b>5. How satisfactory was the project in fostering partnerships necessary to support successful</b>	Partnerships were fostered with <ul style="list-style-type: none"> <li>• other donor projects</li> <li>• Between countries</li> <li>• national government</li> <li>• local/district/regional</li> </ul>	24. ‘Quantitative’ analysis of 6 scoring levels of satisfaction indicated by stakeholders for different types of partnerships	24. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites) and subsequent coding and analysis of satisfaction	Effectiveness Implementation approach /stakeholder participation

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
<b>implementation</b>	government <ul style="list-style-type: none"> <li>• the private sector</li> <li>• the research institutions</li> <li>• the civil society/NGOs institutions</li> </ul>		levels	
<b>6. How effective was the projects M&amp;E</b>	<ul style="list-style-type: none"> <li>• M&amp;E in the project design was satisfactory</li> <li>• Implementation of M&amp;E during the project was satisfactory</li> </ul>	25. ‘Quantitative’ analysis of 6 scoring levels of satisfaction indicated by stakeholders for M&E design and implementation	25. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires) and subsequent coding and analysis of satisfaction levels	Effectiveness M & E design and implementation
<b>7. How cost effective was the project</b>	Project implementation satisfactory in terms of: <ul style="list-style-type: none"> <li>• Budget allocations per component</li> <li>• Disbursement processes and timeliness</li> <li>• Procurement</li> <li>• Yearly budget/financial planning</li> <li>• Financial safeguards</li> </ul>	26. ‘Quantitative’ analysis of 6 scoring levels of satisfaction indicated by stakeholders for judgement criteria	26. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires) and subsequent coding and analysis of satisfaction levels	Efficiency Financial planning and management



Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
	<ul style="list-style-type: none"> <li>Financial management guidance/guidelines</li> </ul>			
<b>Evaluation Question 4: How sustainable are the project’s achieved results, at the environmental, social, financial and institutional level?</b>				
Sub-questions	Judgement criteria	Suggested indicators	Methods (sources)	Evaluation criterion
<b>1. Are transition arrangements to post-completion operation and maintenance arrangements, and the means of sustaining project reforms and institutional capacities, in place</b>	<ul style="list-style-type: none"> <li>steps have been taken to ensure that project activities or impacts are sustained once the project has finished</li> <li>risks to sustainability of project impacts are minimal and being mitigated</li> </ul>	27. Qualitative stakeholder views 28. Documented exit strategy	27. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites) 28. Desk review of secondary information (project documents)	Sustainability
<b>2. To what extent are project activities and outcomes likely to be replicated in project countries or further afield?</b>	<ul style="list-style-type: none"> <li>Governments in region are interested in replication of project activities, outputs and outcomes</li> </ul>	29. Qualitative stakeholder views	29. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites)	Sustainability Replication

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
<b>3. What are the actual and/or potential short and long-term environmental, institutional, social and financial impacts of the project and how sustainable are they likely to be</b>	<ul style="list-style-type: none"> <li>Extent to which the project created impacts in these four domains as anticipated in the project document, or otherwise, and how they may be sustainable</li> </ul>	30. Qualitative stakeholder views	30. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites)	Sustainability
<b>Evaluation Question 5: To what extent did the project take into account gender and human rights issues throughout its implementation?</b>				
<b>1. Does the project include specific gender indicators/targets or activities at country or project/regional level.</b>	<ul style="list-style-type: none"> <li>Activities and indicators/targets included on gender</li> </ul>	31. Qualitative stakeholder views 32. Qualitative assessment by evaluation team	31. Primary information collection from face to face, telephone and email consultation (stakeholder questionnaires and focus groups at project sites)  32. Desk review of secondary information (project documents, FAO policy on gender)	Acceptability
<b>2. Does the project include specific</b>	<ul style="list-style-type: none"> <li>Activities and indicators/targets included</li> </ul>	33. Qualitative stakeholder views	33. Primary information collection from face to face, telephone and	Acceptability

Sub-questions	Judgement criteria	Indicators	Methods (sources)	Evaluation criteria / comments
<p><b>human rights indicators/targets or activities at country or project/regional level</b></p>	<p>on human rights</p>	<p>34. Qualitative assessment by evaluation team</p>	<p>email consultation (stakeholder questionnaires and focus groups at project sites)</p> <p>34. Desk review of secondary information (project documents, FAO/UN docs on human rights based approach)</p>	

### Appendix 3 : GEF Ratings

In order to facilitate comparison with routine reporting to GEF and contribute to the GEF programme learning process (IWLearn), the evaluation has rated the success of the project on the GEF six-point scale system: Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Marginally Unsatisfactory (MU), Unsatisfactory (U), and Highly Unsatisfactory (HU).

Ratings provided by the MTE are also provided by way of comparison, and provide a measure of change in performance since the MTE February to April 2014.

<b>Criteria</b>	<b>MTE Rating</b>	<b>Final Evaluation Rating</b>	<b>Corresponding section of evaluation report justifying the rating</b>
Impact (achievement of GEO)	MU	S	3.1
Achievement of objective (PDO)	MU	MS	3.1
Attainment of outputs and activities	MU	MS	3.2
Progress towards meeting GEF IV focal area priorities/objective	MS	MS	3.1, 3.2
Cost effectiveness	MU	MS/S*	3.3
Risk and risk management	S	S	3.3
Sustainability	MS	S	106
Stakeholder participation	MU	S	3.3
Country ownership	MS	S	3.3
Implementation approach	S	S	3.3
Financial planning	MU	MU	3.3
Replicability	MS	S	106
Monitoring and evaluation	S	MS	3.3
<b>Overall</b>	<b>MU</b>	<b>MS/S</b>	

Notes: \* In rating cost effectiveness the Evaluation Team considered both the achievement of objectives and outputs which were only partial, and the wider successes of the project given the relatively small budget (see paragraph 104)

#### Appendix 4 : Mission schedule and people consulted

Place/date	Activity/persons met
<b>Rome, Italy (Graeme Macfadyen)</b>	
13 July	<u>Travel</u> and arrival in country.
14 July	<u>Meeting</u> with: Dr. Petri Suuronen (LTO/FAO), Dr. Simon Funge-Smith (FAO); Dr. Susana Siar (FAO); and Dr. Ari Gudmundsson (FAO). <u>Briefing</u> by Ms. Natalia Acosta (FAO OED) and discussions on logistics for mission.
<b>International travel (Graeme Macfadyen and Sherry Heileman)</b>	
15th July	<u>Travel</u> to Thailand for both members of the evaluation team.
<b>Thailand (Graeme Macfadyen and Sherry Heileman)</b>	
16 July	<u>Travel</u> and arrival in Bangkok. <u>Meeting</u> with: Mr. C.M. Muralidharan, REBYC-II CTI Field Administrative Officer.
17 July	<u>Evaluation team planning</u> . <u>Meeting</u> with: Mr. C.M. Muralidharan, REBYC-II CTI Field Administrative Officer. <u>Meeting</u> with: Mr Ir. Endroyono, NPC Indonesia.
18 July	<u>Meeting</u> at SEAFDEC with: Mr. Kom Silapajarn, Secretary General and Chief of Training Department; Mr. Bundit Chokesanguan, Retired Deputy Head of Training Department; Mr. Isara Chanrackij, Head of Capture Fishery Technology Division; Ms. Nathacha Sornvaree, Regional Administrative Officer for REBYC-II CTI project; and Mr. C.M. Muralidharan, REBYC-II CTI Field Administrative Officer. <u>Meeting</u> at FAORAP with: Mr Liao Chongguang (Project Budget Holder); and Dr. David Brown Fisheries Consultant to FAO.
<b>Thailand (Rayong, Trat) consultations (Graeme Macfadyen)</b>	
19 July	<u>Travel</u> from Bangkok. <u>Meeting</u> at the Eastern Marine Fisheries Research Development Centre (EMDEC) in Rayong with: Mr. Suchart Saenghan, Fisheries Biologist; Mrs. Thiwarat Sinanun, Fisheries Biologist; Mr. Suchart Saengchan, NPC; Dr. Mala Supongpan (NTO). <u>Meeting</u> in Trat with: 5 representatives of village conservation groups, 1 representative of larger scale vessels (Trat Fisheries Society), 2 staff from Provincial Fisheries Office, and NPC/NTO/EMDEC staff as additional observers/participants. <u>Briefing</u> by Dr. Mala Supongpan (NTO) and Mr. Suchart Saengchan, NPC about project activities.
20 July	<u>Visit</u> to Lam Tien fishing village, with observations and discussions on community conservation efforts with village leaders and members of the village conservation group. <u>Travel</u> back to Bangkok.

<b>Viet Nam (Hanoi and Kien Giang) consultations (Graeme Macfadyen)</b>	
21 July	<p><u>Travel</u> from Bangkok to Hanoi.</p> <p><u>Meeting</u> with: Ms. Nguyen Thi Trang Nhung, deputy director general of the international cooperation department of D-FISH and NPC; Mr. Nguyen Phu Quoc, deputy director general of the capture fisheries department of D-FISH; Mr. Nguyen Viet Anh, NTO and staff of the capture fisheries department; Mr. Nguyen Viet Thanh, national university of Hanoi; Mr. Nguyen Ba Thong, Sustainable Fisheries Partnership and project consultant; Mr. Nguyen Van Minh, department of conservation and development of fisheries resources, D-FISH; Ms. Pham Thu Ngan Hoa, FAO country office; Mr. Pham Huy, department of capture fisheries.</p> <p><u>Travel</u> to Ho Chi Minh City.</p>
	<p><u>Travel</u> to Kien Giang Province.</p> <p><u>Meeting</u> at the office of the sub-directorate for fisheries affairs of the Department of Agriculture and Rural Development with: Mr. Duong Xuan Thung, deputy director of sub-directorate for fisheries affairs; Mr. Vu Van Thuan, manager of the department for fishing vessels and logistics; Mr. Thai Thanh Lap deputy manager of the same department; and Mr. Truong Nguyen Duy, officer of the department of capture fisheries and fisheries resources.</p> <p><u>Observation</u> of 3rd technical workshop to develop a trawl fisheries management plan for Kien Giang Province (25 participants from different sub-directorates of a variety of departments in the province, representatives of other provinces, city officials, officers of port authority and border guard, and representatives from the fishermen's association).</p> <p><u>Meeting</u> with: Mr. Nguyen Van Than, Chairperson of the Kien Giang Fishermens Association.</p>
23 July	<u>Travel</u> from Kien Giang to Hi Chi Minh City and Bangkok.
<b>Philippines (and Papua New Guinea) consultations (Sherry Heileman)</b>	
19 July	<p><u>Travel</u> from Bangkok to Manila.</p> <p><u>Meeting</u> at FAO with Mr. Aris Portugal, Assistant FAOR for Programme (courtesy visit).</p> <p><u>Meeting</u> at FAO with: Mr. Jonathan Dickson (NTO, REBYC-II CTI); Mr. Ronnie Romero (BFAR, Technical staff, REBYC-II CTI); Ms Myrna B. Ramos (BFAR, Technical staff, REBYC-II CTI); Mr. Rafael Ramiscal (Officer-in-charge, Capture Fisheries Division, BFAR); Mr. Napoleon Salvador J. Lamarca (BFAR, Technical Project Staff, REBYC-II CTI); and Mr. Juan Fidel Rodriguez (AAP Officer, FAO, Philippines).</p>

20 July	<p><u>Travel</u> Manila to Calbayog, Samar, Philippines (air).  <u>Travel</u> to Sta Margarita (road).  <u>Focus group discussion</u> in Sta Margarita with Ms Angelica Realino (City Government Assistant Head, Calbayog Agriculture Office, REBYC-II CTI TWG Member); Marcos Sabido (Aquaculturist 2, Calbayog Agriculture Office, REBYC-II CTI TWG Member); Ms Maridel Bulawit (Fish Vendor, REBYC-II CTI TWG Member, Sta. Margarita); Mr. Constantino Ginay (Agricultural Technician, Local Government Unit, Sta. Margarita); Mr. Marcelo C. Camarines (Western Samar Municipal Agriculture and Fishery Council President, Burabod Hook and Line Association, REBYC-II CTI TWG); Mr. Apolinario Catarus (President of Calbayog Commercial Trawl Fisheries Association, REBYC-II CTI TWG Member); Mr. Ronnie Romero (BFAR, Technical staff, REBYC-II CTI); and Ms Myrna B. Ramos (BFAR, Technical staff, REBYC-II CTI).  <u>Meeting</u> with Ms Angelica Realino (City Government Assistant Head, Calbayog Agriculture Office, REBYC-II CTI TWG Member); and Marcos Sabido (Aquaculturist 2, Calbayog Agriculture Office, REBYC-II CTI TWG Member) following focus group discussion.  <u>Travel</u> to Calbayog from Sta Margarita (road).  <u>Meeting</u> with Mr. Virgilio G. Tomnob (Executive Assistant, Office of the City Mayor, Calbayog City).  <u>Meeting</u> with Mr. Pol Cataruz (trawler owner at Calbayog Fish Port, REBYC-II CTI TWG member) and visit aboard trawler to see JTED.</p>
21 July	<p><u>Travel</u> from Calbayog to Catbalogan (road).  <u>Meeting</u> with: Prof. Renato Diocton (Samar State University) and Ms. Katherine Pacampara (Research Assistant).  <u>Meeting</u> with: Mr. Rudolfo Ybañez (President, Samar Commercial Trawl Operators Assoc., Catbalogan).  <u>Meeting</u> with: Mr. Norberto Berida (Training Center Director, BFAR Regional Office No. 8, Tacloban City, REBYC-II CTI TWG co-chair) and Mr. Juan Meniano (Provincial Agricultural and Fishery Council Coordinator, Catbalogan City).  <u>Meeting</u> with: Eng. Rolando Ay Ay (BFAR Fisheries Director, Western Samar, Catbalogan City, TWG Member).  <u>Meeting</u> with: Mr. Cecilio Talagon (Religious priest, TWG member, Catbalogan City)  <u>Meeting</u> with: Ms Lolita Cupido (Fish processor–drying, Catbalogan).  <u>Travel</u> Catbalogan to Calbayog (road).</p>
22 July	<p><u>Travel</u> Calbayog to Manila (air).  <u>Meeting</u> with: Mr. Joseph Posu (National Fisheries Authority/ Papua New Guinea)</p>
23 July	<p><u>Travel</u> Manila to Bangkok.</p>
<b>Thailand (Graeme Macfadyen and Sherry Heileman)</b>	
23 July	<p><u>Evaluation team discussions</u> following field visits, document review and preparation for mission debriefing.</p>
24 July	<p><u>Evaluation team discussions</u> following field visits, document review and preparation for mission debriefing.  <u>Skype interview</u> with: Dr. Richard Gregory, ex-PRC.</p>

25 July	<u>De-briefing meeting</u> of SEAFDEC and FAORAP with: Dr. David Brown Fisheries Consultant to FAORAP; Cassandra de Young, FAO fisheries officer; Mr. Mr Daniele Salviani, Country Support Group Leader, FAORAP; Mr. Bundit Chokesanguan, Retired Deputy Head of Training Department, Seafdec; Mr. Isara Chanrackij, Head of Capture Fishery Technology Division, Seafdec. <u>Travel</u> and departure from Thailand.
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## **Appendix 5 : Documents consulted**

### **Project design and administrative documents**

- Project design document
- Country National Reports prepared for the project design
- Letters of Agreement (LOAs) between FAO and project countries
- Back To Office Report, Rick Gregory, FAO Consultant & Robert Lee, FAORAP; Visit to Papua New Guinea, 18-25th January 2015

### **Project outputs**

- Fisheries management plans
- Socio-economic studies
- Technical reports (e.g. trawl surveys, studies on biodiversity)
- Lessons learned powerpoint presentations made at workshop June 2016

### **Project M&E documents**

- FAO, 2014. Mid-term Evaluation of the “Strategies for Fisheries Bycatch Management Project” GCP/RAS/269/GFF (main report, appendices, and annexes). Office of Evaluation.
- Mid Term Evaluation Annexes
- Management response to the Mid Term Evaluation
- Annual Project Implementation Review Reports
- Semi-annual Project Progress Reports
- Back to Office Reports by the LTO, PRC and Socio-economic adviser
- Project Steering Committee meeting reports
- REBYC-II CTI-CTI Inception Workshop report

### **Other**

- FAO, 2014. APFIC/FAO Regional Expert Workshop on “Regional guidelines for the management of tropical trawl fisheries in Asia”. Phuket, Thailand, 30 September–4 October 2013. FAO Regional Office for Asia and the Pacific, Bangkok, Thailand. RAP Publication 2014/01.
- ASEAN/SEAFDEC, 2013. Resolution on sustainable fisheries for food security for the Asean Region towards 2020.
- Regional Plan of Action for Managing Fishing Capacity. SEAFDEC Secretariat. [http://www.seafdec.org/documents/sc16\\_wp05.pdf](http://www.seafdec.org/documents/sc16_wp05.pdf)
- FAO Country Programming Frameworks for the 5 project countries.

- REBYC-II CTI-CTI website: <http://rebyc-cti.org/>
- EAFM video
- The Human Rights Based Approach to Development Cooperation Towards a Common Understanding Among UN Agencies. [https://undg.org/wp-content/uploads/2015/05/6959-The\\_Human\\_Rights\\_Based\\_Approach\\_to\\_Development\\_Cooperation\\_Towards\\_a\\_Common\\_Understanding\\_among\\_UN1.pdf](https://undg.org/wp-content/uploads/2015/05/6959-The_Human_Rights_Based_Approach_to_Development_Cooperation_Towards_a_Common_Understanding_among_UN1.pdf)

## Appendix 6 : Project Results Framework

Impact	Baseline (2010)	Outcomes and outcome indicators
<p><u>Global Environment Objective (GEO):</u> Responsible trawl fisheries that result in sustainable fisheries resources and healthy marine ecosystems in the Coral Triangle and Southeast Asian waters by reduced bycatch, discards and fishing impact on biodiversity and the environment</p>	<p>No regional policy or strategy for trawl fisheries bycatch management but overall regional commitment to sustainable fisheries.</p> <p>Ineffective trawl fisheries management, in particular with regard to bycatch. Where management and regulatory frameworks exist that are specific to trawl fisheries and bycatch (Gulf of Papua Trawl Fisheries Management Plan/Papua New Guinea; draft Fisheries Administrative Order on JTEDs/Philippines; Master Plan for Marine Fisheries/Thailand), provisions are general, focus on turtles and/or not implemented.</p> <p>Limited data on bycatch composition and volumes and the potential impact of trawl fishing on bottom habitats.</p>	<p>Agreed regional bycatch policy/strategy is adopted by at least one relevant organization in the project region<sup>17</sup> and national or area specific trawl fisheries bycatch management plans<sup>18</sup> are adopted covering at least a third of all trawlers in the project countries<sup>19</sup>.</p> <p>Measures that manage bycatch and reduce discards, and thereby improve fisheries resources, are implemented for 25% of all trawlers in the project countries. In these fisheries (covered by improved bycatch management measures), bycatch has been reduced by 20% compared to baseline data in year 1 of the project<sup>20</sup>.</p> <p>Standardized data on at least 3 key bycatch and habitat indicators are available in all project countries and inform trawl fisheries and bycatch management planning and implementation at national and regional levels.</p>

<sup>17</sup> The project region implies the project countries as well as neighbouring countries in the Coral Triangle and Southeast Asia region.

<sup>18</sup> A “trawl fisheries bycatch management plan” is understood to be an agreed framework for implementing trawl fisheries management and bycatch reduction measures, including for reduced impact on bottom habitats. This could be, for example, a fishery specific management plan that includes provisions for bycatch and discards, a national regulation or decree on bycatch and discards management applicable more widely, or a local government regulation/management rule that applies to fisheries in a specific region. The appropriate framework will depend on the country and case specific circumstances and can also be a combination of different provisions as long as the overall result provides the necessary policy, legal and institutional provisions for trawl fisheries bycatch management implementation.

<sup>19</sup> The project countries are Indonesia, Papua New Guinea, Philippines, Thailand and Viet Nam.

<sup>20</sup> Baseline data will also include clear definition of what type of bycatch the reduction refers to.

	Inadequate knowledge and awareness of responsible trawl fishing and the measures available for improving management and supporting sustainability.	Enhanced understanding of responsible fishing by private sector/fishers, fisheries managers and decision-makers are supporting participatory management arrangements in all project countries.
<p><u>Project Development Objective (PDO):</u> Effective public and private sector partnership for improved trawl and bycatch management and practices that support fishery dependent incomes and sustainable livelihoods</p>	<p>Management responsibilities for coastal resources are increasingly being decentralized to local governments and collaborative management arrangements are generally being encouraged in project countries. However, capacities for and systematic approaches to management planning and implementation are lacking.</p> <p>Little or no data and information available on bycatch and its importance for incomes and livelihoods.</p>	<p>Institutional arrangements and processes for public and private sector partnerships are in place and supporting trawl fisheries bycatch management in all project countries.</p> <p>The role of bycatch in trawl profitability is understood and measures for how to ensure long-term economic sustainability of trawl fisheries are identified and incorporated into trawl fisheries bycatch management plans in all project countries.</p> <p>Incentives for trawl operators to reduce bycatch are defined and implemented in all project countries and best practices communicated within relevant regional frameworks.</p>

Intermediate outcomes	Intermediate outcome indicators	Assumptions	Use of intermediate outcome monitoring
<b>Component 1: Policy, legal and institutional frameworks</b>			

<p>Regional bycatch priorities agreed and bycatch management plans for trawl fisheries in project areas<sup>21</sup> are established and supported by appropriate legislation and institutional arrangements for public and private sector collaboration.</p>	<p>Project partners (countries and SEAFDEC) have agreed on regional bycatch priorities that are in line with the principles of the forthcoming International Guidelines on Bycatch Management and Reduction of Discards (FAO)<sup>22</sup> and these have been formally presented to the SEAFDEC membership and other relevant regional organizations.</p> <p>At least half of all selected trawl fisheries in project areas are covered by comprehensive trawl fisheries bycatch management plans.</p> <p>Institutional arrangements and processes for public and private sector collaboration on management are in place and the trawl fisheries bycatch management plans have been formally approved by representatives from central and local governments and the private sector/fishers.</p>	<p>Political support for regional bycatch policy/strategy.</p> <p>Buy-in from all concerned stakeholders (private sector/fishers, fisheries managers, local governments, etc) to the need for trawl fisheries bycatch management.</p> <p>Capacity available to develop and subsequently implement trawl fisheries bycatch management plans.</p>	<p><u>Year 1 and 2:</u> Assess the level of agreement among countries on regional bycatch policy/strategy contents and priorities, and provide more opportunities for experience sharing/learning/discussions if required. Assess the need for changes in policy, legal and institutional frameworks to support trawl fisheries bycatch management plans and include activities accordingly in years 3-4.</p> <p><u>Year 3:</u> Draft regional bycatch policy/strategy and draft bycatch management plans for trawl fisheries in project areas should be available.</p> <p><u>Midterm review:</u> Assess level of agreement on regional bycatch policy/strategy and interest of relevant regional organizations to adopt. Review progress on establishing trawl fisheries bycatch management plans and suggest solutions/actions for possible barriers/bottlenecks.</p>
<p><b>Component 2: Resource management and fishing operations</b></p>			
<p>Management measures, including environmentally friendly fishing gears and practices that reduce bycatch,</p>	<p>At least one gear modification (e.g. mesh size and/or BRD application, or alternative gear) is developed, tested and agreed appropriate with private sector/fishers, or at least one additional</p>	<p>Private sector/fishers are willing to participate and appreciate the long-term benefits of more responsible</p>	<p><u>Year 1:</u> Assess the progress on identifying possible management measure solutions and ensure that plans for testing and developing more selective gear in collaboration with private sector/fishers in</p>

<sup>21</sup> The project areas include selected geographic regions and trawl fisheries in each project country. See description in section 2.1 and Appendix 6.

<sup>22</sup> On the request by the 28<sup>th</sup> Session of the FAO Committee on Fisheries (COFI), and supported by United Nations General Assembly (UNGA) Sustainable Fisheries Resolutions 64/72 and 61/105, FAO is leading the development of forthcoming International Guidelines on Bycatch Management and Reduction of Discards (an FAO held Technical Consultation is planned for December 2010).

<p>discards and the impact on biodiversity and the environment, are identified, developed/adapted in project areas.</p> <p>Incentives for trawl operators to reduce bycatch are defined in the project areas.</p>	<p>management measure (for example, closed areas/seasons or general effort restrictions) identified and included in the trawl fisheries bycatch management plans. Testing and analysis of these gear modifications/management measures show that they can reduce bycatch by at least 20% (for defined bycatch components and compared with baseline data in Year 1 of the project).</p> <p>Trawl private sector/fishers in project areas have agreed from at least one type of positive incentive in relation to changes in trawl fisheries bycatch management (e.g. reduced – fuel or labour – costs, and/or market based incentives such as price premiums or niche markets).</p>	<p>fishing over short-term impacts.</p> <p>Monitoring, control and surveillance (MCS) and enforcement structures are in place supporting implementation of management measures.</p> <p>Incentives for applying responsible fishing are available and feasible to implement in project areas.</p>	<p>years 2 and 3 are in place.</p> <p><u>Year 2:</u> Evaluate the possibilities of incentives for more responsible fishing and make plans for incentive package implementation in years 3 and 4 accordingly.</p> <p><u>Year 3:</u> Assess progress towards having recommended management measures and incentive packages finalized and ensure their inclusion in trawl fisheries bycatch management plans.</p> <p><u>Midterm review:</u> Assess coherence between draft trawl fisheries bycatch management plans and recommended gear modifications/management measures and incentive packages. Evaluate threats and opportunities for their implementation and propose supporting activities as required. Make recommendations for how project results can be reflected in regional bycatch policy/strategy.</p>
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Intermediate outcomes	Intermediate outcome indicators	Assumptions	Use of intermediate outcome monitoring
<b>Component 3: Information management and communication</b>			
<p>Improved data on bycatch and potential fishing ground impact information – collected through standardized methods across all project countries – are available from project areas and inform national/specific area trawl fisheries bycatch management plans.</p> <p>The role of bycatch in trawl</p>	<p>Basic bycatch and discards data (e.g. total catch composition by main species/species groups, share of low-value and trash fish in total catch, incidence of turtle or similar catches, discards, etc) are available for at least half of all trawl fisheries in project areas.</p> <p>Maps of trawl fishing grounds indicating seabed types and critical bottom habitats available for at least two trawl fisheries in the project areas.</p>	<p>Private sector/fishers are willing to share information and IUU fishing does not influence the completeness or distort data.</p> <p>Enforcement mechanisms are in place and effective for data related regulations (log book etc).</p>	<p><u>Year 1:</u> Assess progress on identifying key data needs and indicators and related data sources and collection methods. Adjust work plans for years 2-4 accordingly as required.</p> <p><u>Year 2 and 3:</u> Assess progress on data collection, verify suitability and cost-effectiveness of methods and choice of indicators and, if needed, adjust the scope and processes for future data collection.</p> <p><u>Midterm review:</u> Review progress on data collection and the feasibility to make processes permanent. Compare data and indicators across countries and evaluate their regional relevance. Assess the relevance</p>

<p>profitability is understood and measures identified for how to ensure long-term economic sustainability of trawl fisheries in the project areas.</p>	<p>Data are available on bycatch values (and its relative share in total revenues) and utilization for all trawl fisheries in project areas.</p> <p>At least 3 indicators, critical for trawl fisheries bycatch management, are identified and processes established for collecting the related data on a regular basis.</p> <p>Project communication material is available and distributed in the project region.</p>		<p>of existing communication material and channels. Make recommendations for how to turn project results into best practice for project countries and region (to be reflected in regional bycatch policy/strategy).</p>
<p><b>Component 4: Awareness and knowledge</b></p>			
<p>Private sector/fishers, fisheries managers, local governments and other stakeholders have better knowledge on bycatch issues and participate in developing and implementing national/specific area bycatch management plans.</p>	<p>Trawl fisheries bycatch management plans have been developed in consultation with key stakeholders.</p> <p>Higher degree of compliance by fishers to existing regulations and less registered violations.</p>	<p>Increased awareness and improved knowledge can be turned into positive action leading to reduced bycatch and fishing impact.</p> <p>Private sector/fishers are willing and have the time and capacity to work with the project.</p>	<p><u>Year 1:</u> Assess needs for awareness raising, training and capacity building. Design activities accordingly to be implemented in years 2-4.</p> <p><u>Year 2 and 3:</u> Assess progress of awareness and capacity building activities and compare results with expectations. Adjust future activities accordingly as required.</p> <p><u>Midterm review:</u> Review impact of capacity building activities and assess if capacities created are likely to be sufficient for stakeholders to participate in management planning and implementation. Propose corrective actions as required.</p>

## Appendix 7 : Financial Information

**Table 1 : Commitments and disbursements by source**

Name of Partner or Contributor (including the Private Sector)	Amount committed in Project Document	Additional amounts committed after Project Document finalization	Estimated Total Disbursement to 30 June 2016	Expected Total Disbursement by end of project
<b>GEF Contribution</b>	<b>USD 3.00 m</b>	<b>0</b>		<b>USD 3.00 m</b>
<b>Cash Co-financing</b>				
• Indonesia	USD 0.29 m		USD 0.12 m	
• Papua New Guinea	USD 0.16 m		USD 0.25 m	
• Philippines	USD 0.12 m		USD 0.23 m	
• Thailand	-		USD 0.24 m	
• Vietnam	USD 0.02 m		USD 0.56 m	
• SEAFDEC	-		USD 0.18 m	
• FAO	USD 0.16 m		USD 0.00 m	
• CIM (Germany)	USD 0.25 m		USD 0.00 m	
• Sida (Sweden)	USD 2.10 m		USD 0.00 m	
<b>In-kind Co-financing</b>				
• Indonesia	USD 0.34 m		USD 0.16 m	
• Papua New Guinea	USD 0.05 m		USD 0.06 m	
• Philippines	USD 0.56 m		USD 0.18 m	
• Thailand	USD 0.22 m		USD 0.44 m	
• Vietnam	USD 0.18 m		USD 0.40 m	
• SEAFDEC	USD 0.80 m		USD 0.50 m	
• FAO	USD 0.14 m		USD 1.15 m	
• Sida	-		USD 0.30 m	
• WWF	USD 0.09 m		USD 0.02 m	
• SFP	USD 0.08 m		USD 0.04 m	
• IFFO	USD 0.05 m		USD 0.01 m	
• Private industry	USD 2.06 m		USD 1.13 m	
• others	USD 0.30 m		USD 0.00 m	
<b>Total Co-financing</b>	<b>USD 8.22 m</b>		<b>USD 5.97 m</b>	

Source: 2016 Project Implementation Report

**Table 2 : Expenditure by component and year of GEF budget**

Year	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Total	Yrly	Cum
<b>2012</b>	32,720				238,750	271,470	9%	9%
<b>2013</b>	93,340	139,017	114,821	82,009	-91,612	337,575	11%	20%
<b>2014</b>	228,404	201,200	160,314	269,528	79,176	938,622	31%	52%
<b>2015</b>	220,255	109,806	89,375	338,294	9,444	767,174	26%	77%
<b>2016</b>	-20,189	176,546	93,602	152,040	-546	401,453	13%	91%
<b>Subtotal</b>	554,530	626,569	458,112	841,871	235,212	2,716,294	91%	
<b>Project GEF budget</b>	<b>451,900</b>	<b>980,600</b>	<b>501,100</b>	<b>796,400</b>	<b>270,000</b>	<b>3,000,000</b>	100%	

Source: BH. Notes: 1/ Comp 5 represents management costs rather than costs directly attributable to one of the 4 project components. 2/ The reduction in 2013 under Comp 5 was due to the fact that all the costs of the PRC and NTOs were charged to Comp 5 for management in 2012, but corrected in 2013. 3/ The reductions under Comp 1 and Comp 4 in 2016 was due to different understanding over the activities and also to reduce deficits of these two components.