Final Report

Mid-Term Review of the project

Standardised methodologies for carbon accounting and ecosystem services valuation of Blue Forests

GEF Project ID:4452

Dr. Ines Freier / Benjamin Kiersch

09/2018

Content

Abbreviations

AGEDI	Abu Dhabi Global Environmental Data Initiative
CI	Conservation International
COP	Conference of Parties
DAC	Development Assistance Committee
EU	European Union
KMFRI	Kenyan Marine and Fisheries Research Institute
LULUCF	Land Use, Land-Use Change and Forestry
MMFA	Ministry for Marine Affairs and Fishery of Indonesia
NAMA	Nationally Appropriate Mitigation Actions
NDC	Nationally Determined Contributions
PCU	Project Co-ordination Unit
REDD+	Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
UN Environment ROLAC	UN Environment Regional Office for Latin America and the Caribbean
TEEB	The Economics of Ecosystems and Biodiversity
UBO	Université de Bretagne Occidental, France
UNFCC	United Nations Framework Convention on Climate Change

Disclaimer

This report has been prepared by independent consultants and is a product of GRID-Arendal on behalf of UN Environment. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UN Environment Senior Management.

Acknowledgements

The team of the Mid-term Review of the Blue Forest Project would like to thank all project partners for their support for the Mid-term Review, particularly for their time for the interviews and the open discussions. We would especially like to thank Montserrat Alban and her colleagues of Conservation International Ecuador for the excellent planning and management of the mission logistics and sharing their insights into the policies for coastal management in Ecuador. We would also like to thank all other stakeholders met in Ecuador.

Likewise, we would like to thank the project managers of GRID-Arendal Tiina Kurvits and Steven Lutz for their support and guidance in the Mid-term Review and Mona E. Edvardsen for her excellent support in all financial issues.

Short biography of the consultants

Dr. Ines Freier and Benjamin Kiersch have more than 15 years of experience in planning and evaluation of environmental projects in developing countries. Among the assignments were planning and management of the PPG process of GEF projects as well as evaluation of projects using a theory of change approach (DAC criteria for evaluation, EU log frame and GIZ capacity works). Methods of evaluation included literature reviews, personal and telephone interviews, e-mail questionnaires and visits to projects consulting beneficiaries of the project and advising to governments and stakeholders. Our working experience covers Latin America, Africa and Asia. Several of the assignments focused on climate change adaptation issues including integrated water management and carbon accounting. Both consultants have worked with valuation of ecosystem services including a UNEP TEEB study.

Project Title:	Standardized methodologies for carbon accounting and ecosystem services valuation of Blue Forests

Executing Agency:	GRID-Arendal

Project partners:	Blue Ventures, Charles Darwin University, Conservation International-Ecuador, Counterpart International, Duke University, Environment Agency-Abu Dhabi, Indonesian Ministry of Marine Affairs and Fisheries, IUCN, Kenya Marine and Fisheries Research Institute, South African Institute of International Affairs, Stockholm University, The Ocean Foundation, University of West Brittany, UNEP-WCMC, UNEP-ROLAC, US NOAA, US Forest Service, WWF-Mozambique

Geographical Scope:	Global

Participating Countries:	Dominican Republic, Ecuador, Indonesia, Kenya, Madagascar, Mozambique, Thailand, United Arab Emirates, United States of America

GEF project ID:	4452	**IMIS number*:**	GFL-5060-2730
Focal Area(s):	International Waters	**GEF OP #:**	N/A
GEF Strategic Priority/Objective:	IW3	**GEF approval date*:**	20 February 2014
UNEP approval date:	26 June 2014	**First Disbursement*:**	26 August 2014
Actual start date:	1 January 2015	**Planned duration:**	48 months
Intended completion date*:	30 June 2018	**Actual or Expected completion date:**	31 December 2018
Project Type:	Full-size project	**GEF Allocation*:**	$4.5 million USD
PDF GEF cost*:	$75,000 USD	**PDF co-financing*:**	$70,000 USD
Expected MSP/FSP Co-financing*:	$23,268,215 USD	**Total Cost*:**	$27,768,215 USD
Mid-term review/eval. (planned date):	October 2017	**Terminal Evaluation (actual date):**	TBD
Mid-term review/eval. (actual date):	June - September 2018	**No. of revisions*:**	N/A
Date of last Steering Committee meeting:	27 January 2017	**Date of last Revision*:**	N/A
Disbursement as of 30 June 2017*:		**Date of financial closure*:**	TBD
Date of Completion*:	TBD	**Actual expenditures reported as of 30 June 2017:**	$2,276,493 USD
Total co-financing realized as of 30 June 2017:	18,793,883	**Actual expenditures entered in IMIS as of 30 June 2017*:**	
Leveraged financing:	N/A		

Executive Summary

The four-year Blue Forests Project “Standardised methodologies for carbon accounting and ecosystem services valuation of Blue Forests” aims to address the challenge of climate change in coastal ecosystems through coordinated on-the-ground demonstrations where better coastal ecosystem management is achieved by harnessing the values associated with carbon and ecosystem services, addressing key knowledge gaps, and providing experience and tools for greater global application. The implementing agency of the GEF project is UN Environment and the main executing agency GRID-Arenal - a Norwegian foundation and UN Environment Collaborating Centre.

The following table presents the most important information about the project.

Project-Type and ID	Full-sized project GEF Project ID:4452.
Funding source	GEF - Trust Fund
GEF focal area	International waters
GEF-period	5
Countries	worldwide (small-scale intervention sites in Abu Dhabi, Ecuador, Kenya, Madagascar, Mozambique and Indonesia)
year of approval	2012
start/end dates (project duration)	1.1.2015- 31.12.2018 (4 years)
implementing partners	GRID-Arendal. UN-WCMC, UN Environment ROLAC, IUCN, Conservation International Ecuador, AGEDI, KMFRI, WWF Mozambique, Ministry of Marine Affairs and Fishery Indonesia, Stockholm University, Charles Darwin University, University de Bretagne Occidental, The Ocean Foundation, South African Institute of International Affairs, US NOAA, US Forest Service, Counterpart International (in total 19 partners)
Total Secured Budget	GEF funds: US $4.5 million Partner Co-finance: US $23.2 million

Long-term goal: To provide coastal scientists, ecosystem managers and decision-makers with essential scientific, ecosystem management and economic tools leading to the better protection of coastal and marine ecosystems globally. It will also serve to further enable the inclusion of blue forests ecosystems in global carbon accounting frameworks.

Project Objective: To apply methodologies and approaches for carbon accounting and ecosystem service valuation in blue forests so as to provide evidence-based experience that supports replication, up-scaling and adoption of blue forests concepts by the international community and the GEF.

Project outcomes

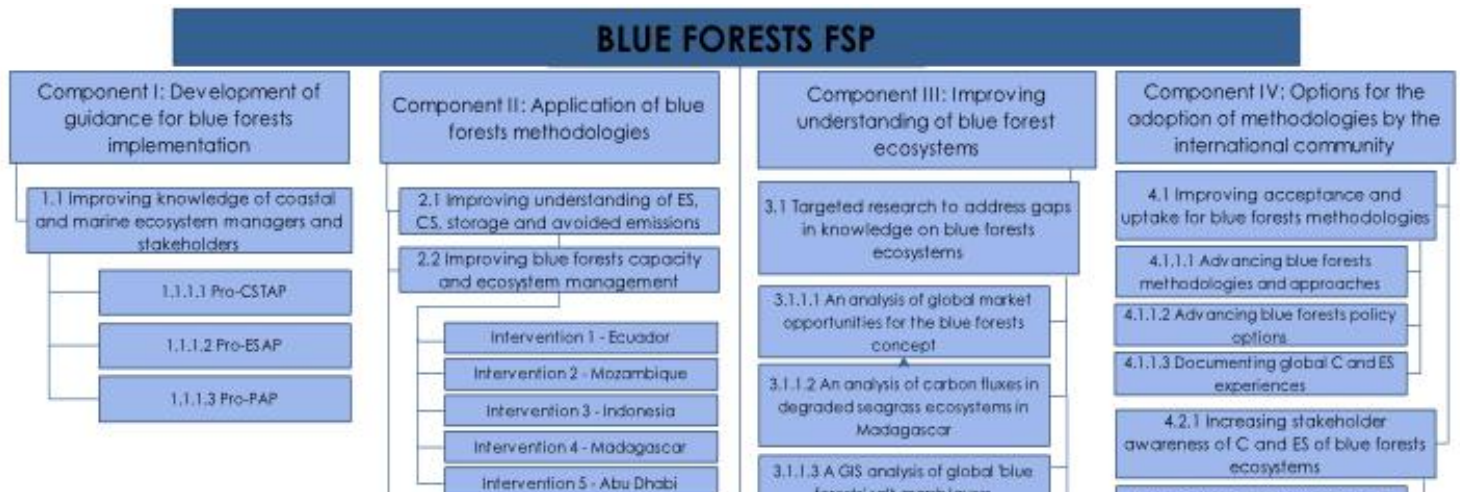
1. **Improved knowledge and capacity** of coastal and marine ecosystem managers and stakeholders on carbon sequestration, storage, possible greenhouse gas emissions as well as ecosystem services in blue forests ecosystems and on possible policy and economic instruments that may be applied to sustainable coastal and marine habitat management.

2. **Improved and replicable ecosystem management** based on improved understanding of the values of blue forests ecosystems at the site level – in Ecuador, Mozambique, Madagascar, Indonesia, United Arab Emirates and Kenya covering at least 368,400 ha.

3. **Improved understanding** of ecosystem services and carbon storage and sequestration, possible greenhouse gas emissions, sequestration and fluxes for blue forests ecosystems through targeted research and peer-reviewed literature.

4. **Improved acceptance and awareness** of blue forests values, methodologies and approaches in international policy and markets related to climate change and ecosystem service valuation.

5. **Improved information exchange** with the international blue forests community in cooperation with IW-Learn.



Purpose and Scope of the Mid-term Review

This Mid-term Review (MTR) provides an independent assessment of project performance at mid- term, to analyze whether the project is on track, what problems and challenges the project is encountering, and which corrective actions are required so that the project can achieve its intended outcomes by project completion in the most efficient and sustainable way. In addition, it verifies information gathered through the GEF tracking tools. The review is be carried out using a participatory approach whereby parties that may benefit or be affected by the project are be consulted.

This Mid-term Review has the following *purposes:*

1. to provide evidence of results to meet accountability requirements,

2. and to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment and main project partners.

Coverage of the evaluation:

It assesses the project according to four of the five DAC criteria for evaluation being in line with the requirements of the UN Environment evaluation policy and the requirements of the GEF.

This Mid-term Review was commissioned in January 2018 - after three year of project duration- to explore options for closing the project in time. It was conducted between June and September 2018 with a field visit to the small-scale intervention site in Ecuador between 19th and 27th July 2018.

Project results

T*he project activities are delayed with a spending rate of 60 % of budget after three and a half years of project duration.* The project has spent 60% of its financial budget; 91% of pledged co-funding was provided.

1. Strategic Relevance

The strategic relevance of the project of the project is considered as “satisfactory” due to the following reasons: The project objective is consistent with UN Environments` Mid-term Strategy and GEF International Waters focal area 3 strategic priorities. The project responds to the global needs related to blue carbon forests (e.g., how the values of “blue carbon” and other coastal and marine ecosystem services can support improved ecosystem management). The project objectives are very consistent with project partners objectives and strategies. The complex project implementation structure with many project partners and project implementation sites contributes to the relevance of the project in bringing Blue forests as a policy issue forward, especially at the national level in different countries.

2. Quality of Project Design

The project design is considered as “satisfactory”.

The strength of the project design is that it involves committed project partners having a broad and long-term experience in academic research or project implementation in coastal zones. Most of the project partners have several on-going projects for Blue forests or Blue carbon. All academic project partners have research experience in the respective region and partly also capacity building experience for research. Three of small-scale implementation sites might be considered as the leading pilot projects in their respective region which are ready and willing for knowledge sharing and replicating their experience. During the project planning phase, emphasis was placed on small-scale intervention sites and on facilitation of knowledge exchange.

The main weakness of the project design is partnerships and governance: The project is implemented by a high number of actors from different backgrounds like universities, NGOs and governmental research institutions. Many of them have never co-operated before in the same project. Therefore, is has been time consuming to developed structures for project management and monitoring.

3. Effectiveness

The effectiveness of the project is rated as “satisfactory”.

3.1. Delivery of outputs

Component 1: The three project-level scientific and technical advisory panels (Carbon Science, Ecosystem services and Policy advice) which were planned to support the small-scale site interventions only worked to a certain degree. They were planned for facilitating knowledge transfer to the small-scale intervention sites. The planned toolkits for carbon assessments, ecosystem service assessment and policy advice have been produced and distributed to the project partner at the small-scale intervention sites however the products have only met the needs of the small-scale intervention sites in some aspects.

Component 2:

Small-scale Intervention Sites	
Ecuador (41.000 ha)	65% of outputs achieved (payments completed) all studies for mangrove concessions commissioned, capacity building and policy related work in progress because it is a continuous process
Madagascar (26 000 ha)	all planned outputs so far achieved studies and capacity building for income generation mangrove projects in progress
Mocambique (25 000 ha)	outputs regarding carbon sequestration studies completed, policy and capacity-building related work pending
Indonesia (100 000 ha)	all outputs pending
Abu Dhabi (176 000 ha)	outputs achieved as a baseline for the project, Methodologies and legal framework were transferred within UAE, AGEDI prepares transfer of methodology to East Africa
Kenya (0 ha) was added as small-scale intervention site due to a altered theory of change	implementation of community -based carbon-credit programme in Vanga bay, replication of community based carbon credit programme to a second site is planned

The global blue forests data tool has been partly finished because not all small-scale intervention sites contributed the required data Documented evidence has been collected from other sites, the envisioned white paper on blue carbon has not been finished, yet.

Component 3: The outputs of component 3 have been mainly delivered in time because they are targeted research to knowledge gaps undertaken by universities / WCMC and IUCN. The experienced research institutions were able to publish the results as papers and shared the results in workshops. As one project partner was not able to obtain a research permit from Indonesia, the location of the research had to switch to Thailand casing a delay in implementing the research activities. They are planned to start in December 2018

Component 4 The Activities of component 4 have been delayed due to the delays in implementation at small-scale intervention sites. The planned toolkits for carbon and ecosystem service accounting methodologies, policy options, and the documented experience of the interventions build on the generated knowledge in the small-scale intervention sites are work in progress.

Component 5 he outputs of the component 5 have been delivered mainly in time because the project partners have put emphasis on this component of the project. The project has many stakeholders which requires crafting different messages to different stakeholders. Some of its outputs are mainly directed to academic stakeholders to generate knowledge and need translation into policy-related communication material. GRID-Arendal has used opportunities to present solutions in other databases directed to policy makers than only GEF related knowledge sharing sites like the Panorama Solutions. The knowledge products like brochures about Blue carbon are tailored to the needs of the general public interested in Blue forests and Blue carbon.

3.2. Achievements of outcomes

Project component 1 This project outcome has partly been reached. “*Improved knowledge of coastal and marine ecosystem managers and stakeholders in selected regions on carbon sequestration, storage, possible greenhouse gas emissions as well as ecosystem services in blue forests ecosystems and on possible policy/economic instruments that may be applied to sustainable coastal habitat management.”* SMART Indicators are developed guidelines by advisory panels and the request and application of methodologies by external parties. This outcome can only be partly measured by the proposed indicators. The guidelines have been developed and all project partners at the intervention sites have access to them.

External requests for the guidelines have not been reported so far but the project partner have distributed the guidelines within their research networks.

Project components 2: The outcomes have been reached in three of the six intervention sites. In the small-scale intervention sites in Abu Dhabi, Kenya and Ecuador successful interactions with the target group have been undertaken which have led to discussions of policy options with policy makers. Management practices for coastal ecosystems have improved in four intervention sites in Abu Dhabi, Kenya (mangroves), Ecuador (mangroves) and Madagascar.

Project Component 3: This project component has partly reached the intended outcome. The research products have already been presented in workshops and scientific conferences despite that the peer-reviewed publications still take time to finish.

Project Component 4 This component has already reached the intended outcome for the project duration. Project partners present regularly their experiences in workshops and conferences like in the project workshop with UN Environment Regional Office for Latin America and the Caribbean where Ministers of serval Latin American and Caribbean countries have been present. Project partners of AGEDI in UAE have established measures to improve their management of mangroves. At global climate change events, direct outcomes have also been reported. A publication about the performance of countries to include blue forests into NDCs has gained much attention in a side event of UNFCC COP 22.

Project Component 5 This project component has reached the intended outcomes by year 3.

3.3. Impact

Blue carbon and blue forests - the ecosystem services of coastal and marine areas - have faster been recognised at the international level than planned in the design state of the project. Activities of project partners financed by the project have contributed to this development. The activities of the project at three small-scale intervention sites contribute to long-term changes in policies and in management practices because they are embedded in local culture, support the implementation of national policies and are implemented by actors with long-term goals.

4. Financial management

Financial management is highly satisfactory because project finances are constantly monitored. The project has spent 60% of its financial budget and 91% of pledged co-funding was provided. The actual co-funding of the project is higher than the spent budget because some co-funded activities took place in the PPG Stage of the project. Further the Ministry of Fishery and Marine Affairs Indonesia could not accept funding from the project but provided in-kind co-funding in terms of staff time. Financial information is complete and available. Figure were available broken down to activities at the time of review.

5. Efficiency The overall effectiveness of the project is rated as moderately satisfactory. The project started in time. Some components are delivered in time and some components are delayed. Most of the project partners reported delays in implementation for different reasons, mainly administrative procedures. Overall, the project activities are delayed with a spending rate of 60 % of budget after three years of project duration. This Mid-term review was commissioned in January 2018 - after three year of project duration- to explore options for closing the project in time. The project has used existing partnerships and synergies and complementarities with other projects whenever possible like building on existing data for mangrove cover.

6. **Monitoring and reporting** is rated as highly satisfactory. Indicators for outputs and activities are SMART. Indicators for Outcomes exist. A system for Monitoring and Reporting is in place. A monitoring system for financial and technical data of the project was designed and is working The PCU regularly monitors the financial and technical performance of the project.

7. Sustainability

The sustainability of the project is rated as satisfactory. The main external driver for the project performance is that blue forests are on the international agenda. In all countries with small-scale intervention sites, the socio-political conditions create a favourable environment for sustaining the direct outcomes of the project. There is sufficient stakeholder engagement in project implementation and knowledge generation and diffusion to sustain the project results after the closure of the project. The project has created trust and mutual interest in the work of project partners from different backgrounds like INGOs, universities and research institutions and Ministries as several interview partner reported.

8. Factors affecting Project Performance

Preparation and readiness: The project design has been an important factor affecting the performance of the project. Project design has not been always clear and consistent. Project partners were involved in the beginning of the project due to their willingness to participate in the project but their capability to implement varies.

Project implementation arrangement have been adapted in the project: in the project design phase, only one project manager was employed for this complex project. Later on, an additional project manager was assigned to the project. Project management and implementation of selected activities due to drop out of a project partner are intertwined so that communication with project partners is not always the focus of project managers at GRID-Arendal, but mainly technical tasks, M+E and communication and outreach. After an initial phase of discussion in the project, the roles of project partners are clearly defined. The main internal drivers for achieving the project objectives were that some project partners were not used to collaboration which hampered the timely delivery of some outputs. The number of stakeholders is high so that interactions with stakeholders are limited due to time and resources in the project.

Country-drivenness: As there is much interest at the international level in Blue forests, governments and local actors are interested in bringing Blue forest policies forward for different reasons like climate change and improving livelihoods of coastal communities.

Communication and public awareness: The project has a strong component on communicating and advocacy. The PCU as well as project partners communicate the results of the project to a wide range of stakeholders. The project has many stakeholders which requires crafting different messages to different groups of stakeholders

Criterion	Summary Assessment	Rating
A. Strategic Relevance	**S**	**HS → HU**
B. Quality of Project Design	**S**	**HS → HU**
C. Nature of External Context	HS	**HF → HU**
D. Effectiveness	S	**HS → HU**
1. Delivery of outputs	**MS**	HS → HU
2. Achievement of direct outcomes	S	HS → HU
3. Likelihood of impact	S	HL→ HU
E. Financial Management	**HS**	**HS → HU**
F. Efficiency	**MS**	**HS → HU**
G. Monitoring and Reporting	**HS**	**HS → HU**
H. Sustainability	**S**	**HL → HU**
I. Factors Affecting Performance	**S**	**HS → HU**
Overall Project Rating	**S**	**HS → HU**

Conclusions:

1. The project is a research-based knowledge generation and exchange project targeting global and national policy makers and managers of coastal ecosystems. It can be considered a pilot project due to its focus on knowledge generation and exchange. The project involves 16 executing project partners from NGOs, universities, UN Environment and the private sector creating a diverse and complex structure. All partners in the research component have a strong track record in coastal and marine management related academic or policy-oriented research.

Most project partners at small-scale intervention sites have a strong record in projects related to coastal management and fishery. They use synergies with other on-going projects and build upon previous experience in coastal and marine management and fisheries. A delivered co-financing of 91% proves that the participating organisations are committed to achieve the project results. The project builds on this strong baseline.

2. As the political environment at the global level turned out to be very favourable, and project outcomes of component 4 have been almost reached by year 4 of the project; supporting the small-scale intervention sites has become a priority of the project for the last months.

3. Most project partners will be able to finish their activities without further technical support if the project is extended. The project partners in Indonesia and Mozambique had not much experience in Blue forest related projects in small-scale intervention sites so the implementation of their activities has been delayed and implementation arrangements and work plans have to be adapted. In Mozambique the work plan has already be adapted to finish the studies of component 2.1 focusing on creating knowledge about blue forests. In Indonesia, the transfer of funds has been hampered by administrative guidelines so the implementation arrangements for project activities have to be adapted and the work plan has to be adapted accordingly.

4. The project has a very good baseline however performance could have been much better as several project partner reported. The above described characteristics of the project have several implications for the project performance: In the project design phase of the project, not all project partners were used to collaboration and structures for collaboration had to be established. Bringing many different project partners into a project, requires resources for project management, especially for internal communication. The complex project structure and the numerous activities have not supported project effectivity, because they required too much resources for communication, steering and monitoring and reporting.

5. The advisory panels were planned as an instrument to support the small-scale intervention sites with technical knowledge and to generate knowledge. During the project implementation it turned out that the project advisory groups could not fulfil their role to support small-scale intervention sites. The involvement of academic research partners means also that national Ministries for Research have to be included as stakeholders (granting research permits) as long as international universities or consultants do the research which caused delays in the project.

6. The “technical” and administrative support by the PCU needed to the small-scale intervention sites with less experience has been underestimated in the assumptions of the theory of change.

Lessons:

1. The assumption that all project partners are able to execute the projects shows trust in partners and facilitates access to projects however in the project design phase a mandatory check of the administrative procedures (if and how the project agencies can obtain the necessary registration and permits, in this case research permits which are issued by the Ministry of Research and encourage the support by local research partners) should have been conducted.

2. Knowledge generation and lobbying at the international level are less necessary than expected during the project design phase due to favourable external environment so that outcomes have almost reached by year 4. This has allowed to change the focus of the project to support the small-scale intervention sites lagging behind. As the most important driver of the project is the favourable international environment, it would be more efficient to focus on a specific target group for communication and outreach at the national and international levels which can support the sustainability of outcomes in the small-scale intervention sites.

3. Knowledge generation and sharing projects for carbon accounting are necessary to promote the fast application of methodologies however they can only supplement existing initiatives or projects. So, project partners need a certain amount of activities and experience to bring into the project to be

able to make full use of the resources of a project. The assumption that pilot projects can be implemented by actors without experience should be questioned.

4 For knowledge creation and sharing, interactions between actors from different fields are important. The project needs structures to create trust between actors. Even advanced actors need knowledge exchange and building a community of practice: In project design, not only resources but also specific instruments need to be allocated to this purpose. As the project shows it is challenging for project partners to bridge the gap between academic research and policy and projects, so more policy-oriented and applied research is needed in addition to academic research driven by the need for publications.

5. In general, knowledge exchange and the building of a community of practice among the actors in the small-scale intervention sites has not been fully conceptualised in the project design phase. There are only limited ideas about how to facilitate the knowledge exchange in the project in the theory of change at design and evaluation. The theory of change at project design emphasised bringing the issue of blue carbon forward at the international level than rather than creating a community of practice which actively creates and uses the tools.

6.Knowledge transfer from advanced actors is possible however their experience cannot be used as a blueprint like the tools from Abu Dhabi. It is necessary to explain the usefulness of the tools to potential users even if they have been successfully used in the advanced small-scale intervention sites. One of the assumptions of the project was that the yearly meetings provide sufficient opportunities to produce knowledge products like guidelines or toolkits which can be diffused to other GEF projects and the public.

Recommendations

1. Request the no cost- extension of the project for one year in order to allow all project partners to finish their activities and deliver the planned outputs. As the gaps in implementation between the more advanced small-scale intervention sites and the sites in Mozambique and Indonesia are considerable, it makes more sense to adjust the expected outcomes for Mozambique and Indonesia than to give them time to finish all planned activities. In both countries, other actors deliver similar projects so that the pilot function of the project in countries with a high mangrove cover cannot be used as a criterion to justify the extension. It also makes more sense to limit the extension to one year, because there are other 14 project partners having completed their activities which would be affected by administrative procedures for an extension of more than one year.

2. Time-saving measures are needed to maximise the results within the secured budget and extended project timeframe. The PCU prioritises target groups for communication at international conferences and climate change negotiations to present the knowledge products taking into account to support the small-scale interventions as much as possible.

The PCU focuses its work on capacity building at the small-scale intervention sites in the following months. Additionally, as the products of Component 4 depend on outputs of all of the intervention sites, the PCU will have to allocate resources to finish the products of Component 4 and ensure that the experiences from Mozambique and Indonesia are included in the project’s final products, which will be delayed until the project is completed.

3. If the necessary administrative procedure for establishing the project in Indonesia cannot be finished until the end of September 2018, the Ministry needs to seek local partnerships with experienced actors for conducting and finishing knowledge generation activities in the country. The feasibility of activities for training and capacity building for implementing better management needs to be assessed. The PCU and the project partner need to assess the work plan of the small-scale intervention site in Mozambique.

4. Project partners need to finish the knowledge products of component 2 and 4 like the white paper or the toolkit for community-based interventions (component 4) as a community of practice with inputs from all partners at the small-scale interventions.

5. The PCU considers facilitating knowledge exchange between the partners at the small-scale intervention sites by regular calls between smaller groups for generating the best practices.

6. As not all small-scale intervention sites did prioritise the needs for the global data toolkit, it needs to be assessed whether finishing the output makes sense because finishing the data toolkit would be not cost neutral.

1. Introduction

This report presents the findings of the Mid-term Review of the project “Standardised methodologies for carbon accounting and ecosystem services valuation of Blue Forests” GEF Project ID:4452. The implementing agency of the GEF project is UN Environment and the main executing agency GRID-Arenal - a Norwegian foundation and UN Environment Collaborating Centre. GRID-Arendal was established in 1989 to support environmentally sustainable development by working with UN Environment and other partners. It communicates environmental knowledge that strengthens management capacity and motivates decision-makers to act. GRID-Arendal transform environmental data into credible, science-based information products, delivered through innovative communication tools and capacity building services. Its vision is a society that understands, values and protects the environment on which it depends. The project contributes to UN Environment programme of work “Healthy and productive ecosystems”.

Project Information

The following table presents the most important information about the project.

Project-Type	Full-sized project
Funding source	GEF - Trust Fund
GEF focal area	International waters
GEF-period	5
Countries	world wide
year of approval	2012
start/end dates (project duration)	1.1.2015- 31.12.2018 (4 years)
implementing partners	GRID-Arendal. UN-WCMC, UN Environment ROLAC, IUCN, Conservation International Ecuador, AGEDI, KMFRI, WWF Mozambique, Ministry of Marine Affairs and Fishery Indonesia, Stockholm University, Charles Darwin University, Université de Bretagne Occidental, The Ocean Foundation
Total Secured Budget	GEF funds: US $4.5 million Partner Co-finance: US $23.2 million
other evaluations	non

Purpose and Scope of the Mid-term Review

This Mid-Term Review (MTR) provides an independent assessment of project performance at mid- term, to analyze whether the project is on track, what problems and challenges the project is encountering, and which corrective actions are required so that the project can achieve its intended outcomes by project completion in the most efficient and sustainable way. In addition, it verifies information gathered through the GEF tracking tools. The review is be carried out using a participatory approach whereby parties that may benefit or be affected by the project are be consulted.

This mid-term evaluation has the following *purposes:*

1. to provide evidence of results to meet accountability requirements,

2. and to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment and main project partners.

Coverage of the evaluation:

It assesses the project according to four of the five DAC criteria for evaluation being in line with the requirements of the UN Environment evaluation policy and the requirements of the GEF.

- Strategic relevance;
- Attainment of objectives and planned result, which comprises the assessment of outputs achieved, (effectiveness);
- Possible sustainability and replication;
- Efficiency;

This means to assess whether the project is on-track, what challenges the project is encountering, and what corrective actions are required.

The fifth DAC-criteria impact can only be forecasted based on the current project design and performance and the likelihood that the intended outcomes can be achieved.

The Mid-term review identifies factors affecting the project performance. This exercise builds upon the theory of change of the project which is constructed during the process of the Mid-term review.

Further, the Mid-term review assesses the monitoring and reporting of the project including the financial reporting according to the requirements of UN Environment evaluation policy.

The Mid-term review identifies lessons of operational relevance for future project formulation and implementation in order to enable knowledge sharing and learning. Factors and processes affecting project performance are assessed- including project preparation and readiness, project implementation and management, stakeholder participation and UN Environment / GRID-Arendal supervision and backstopping and project monitoring and evaluation. The scope of the evaluation is limited to the GEF contributions to the overall project activities.

The target audience of the findings are the project partners and stakeholders which can use the results to improve their own action in the second half of the project to achieve the project goal.

2. Evaluation Methods

2.1. Theory of change at Mid-term review and research questions

The theory of change was developed and refined in the course of the evaluation. The consultants elaborated the theory of change at the design of the project for the inception report. The team of consultants and the project manager held a one -day- personal meeting to discuss the inception report and the evaluation matrix in June 2018 in Potsdam, Germany. They discussed the theory of change at the design of the project and the changes made in the project. Those changed lead to the adaption of the implementation of the project but not to a fundamental change of the theory of change. The team of consultants and the project manager elaborated an evaluation matrix containing research questions and data sources to answer those questions. Specific questions were designed for each group of stakeholders. The research questions based on the theory of change at the time of the Mid-term review have been defined by the evaluation team and the project management team according to the ToR of the Mid-term review. The research questions are based upon UN Environment evaluation policy using the suggested templates. The main question for the midterm -review is to determine success factors for implementing policies for blue forests at the small-scale intervention sites and how to implement a successful knowledge management in the project.

2.2. Data gathering

The Mid-term review is designed to use a mixed methods approach. It comprises different methods for data gathering, mainly qualitative tools. The data a triangulated to ensure that the results are valid. Further, the evaluation is conducted in a participative way. The final results of the evaluation have been shared with the core project partners which were invited to comment on them.

The research comprises of three different phases:

1. *Desk research and personal interviews* with the project management team,
2. *telephone interviews with key project partners using a semi-structures interview guideline*
3. *visit of small-scale intervention* in Ecuador with qualitative semi-structured interviews of stakeholders, group discussions and a visit to the location of the intervention and participation in a regional conference on coastal zone management.

Desk research.

The desk research comprises of a revision of project documents, publications and websites of the project as well as documents of stakeholders and related projects. The desk research was carried out in June / July 2018. The method used was counting project outputs using the SMART indicators in order to determine the state of project implementation. Further the quality of selected outputs like publications was assessed. The financial information necessary for the Mid-term review was provided by GRID-Arendal´s financial manager.

Interviews

Semi-structured- **personal Interviews** with the project manager were conducted to prepare the inception report and the telephone interviews with the key project partners and the visit to the small-scale intervention site.

The i**nterviews** with the key stakeholders involved in the implementation of the project are based upon a semi-structured questionnaire. The semi-structured questionnaire leaves room for additional remarks and feedback of the interview partners. A semi-structured interview was necessary because the project comprises of 20 project partners from different sectors spreading different time zones and continents. So the question had to be adapted to each group of project partner in order to obtain the necessary information. A more quantitative internet-based survey was not considered as appropriate because the interviews contained questions about collaboration and project performance in the project which would have not been answered in a survey. Interviews or surveys with other stakeholders than project partners were discussed with the PCU. As the target group of the project is so diffuse and widespread, a survey of selected stakeholders is not feasible due to the limited resources of the Mid-term review.

Most of the interviews were held over skype, one personal interview was conducted in Berlin, Germany because the consultants live in Berlin and preferred a personal interview. Interviews could not be conducted in a personal meeting. e.g. in a project workshop because there is only one workshop per year. The project manager invited the project partners for the interview per e-mail and telephone calls so that the response to the invitation for the interview was very good. The interviews lasted about 60 min leaving some time at the end of the interview for questions of the project partners to the consultant. These interviews were conducted in before and after the visit to the small-scale intervention site in July and August 2018 due to the holiday season. The list of interviewed persons and interview questions can be found in the annex. In total, 11 interviews with project partners have been conducted.

Visit to the small-scale intervention site in Ecuador

Ecuador was selected for the site visit out of the four small-scale intervention sites for the following reasons:

1. for accessibility of the site during a short visit and
2. the progress made within the given timeframe of the project and the lessons learnt which can be transferred to the other small-scale intervention sites to improve the implementation of their interventions.

The visit was planned with the project manager and the project representative of Conservation International Ecuador. The site visit took place between 19th and 26th of July 2018 in Ecuador. The lead consultant, the project manager and the project assistant participated in the site visit. A detailed agenda of the visit can be found in the annex.

Personal interviews and group discussions have been conducted with key stakeholders. The first meeting was held with the management team of CI to discuss the purpose of the Mid-term review, the theory of change of the project and the itinerary of the visit. Personal interviews were conducted with stakeholders including other implementing agencies, representatives from the local administration in Guayaquil, and representatives from the

Ministry of Fisheries. Interviews and a group discussion with representatives of the three associations of local fishermen and a transect walk took also place in the intervention area in El Morro near Guayaquil / Ecuador during a visit to the local community.

The team of the Mid-term review took part in a two-day regional workshop on local management strategies for the conservation of mangroves on the East coast of the Pacific Ocean. The workshop was financed by the project and the GEF-ETPS project. The participants of the workshop identified the need for a regional knowledge exchange about policies and management practices for mangrove forests and ideas about its implementation. During the workshop, the results of the policy-oriented studies of the project were presented. The consultant discussed the study with a representative of the local University ESPOL which conducted the study about the impact of mangrove conservation on the livelihoods of the local population. The field trip of the conference offered an opportunity to discuss the local management of mangroves with participants of different countries.

2.3. Findings, learning, communication and outreach

The preliminary findings of the small-scale intervention sites were discussed with the PCU in the end of the visit to the small-scale intervention site.

During the interviews, the coding of the material started and was finished after the last interview. Scoring of the answers was conducted when applicable.

During the field work, the theory of change and results of the interviews were regularly discussed with the PCU in Skype calls. The theory of change at the Mid-term review was discussed with project partners when appropriate and adapted during the interviews. The results of the results of the visit to the small-scale intervention site were discussed with the project manager of CI Ecuador after the mission in August 2018. The preliminary results of the Mid-term review were shared in a Power-Point -Presentation with the project manager and assistant after the site visit in early August 2018.

Learning, communication and outreach is an integral part of this Mid-term Review. The main preliminary results of the Mid-term evaluation were communicated to relevant project partners by circulating the draft report in September 2018 asking for comments and feedback.

3. The Project

3.1. Context

The importance of carbon storage and ecosystem services provided by coastal ecosystems was underlined in two reports by UNEP and IUCN in 2009. These reports presented the baseline science, identified the major problems that need to be addressed and identified gaps in knowledge and policy for blue forests. Marine vegetated habits: Mangroves, salt marshes, seagrasses and seaweed consist the so-called blue forests. Blue forests cover less than 0.5% of the seabed.

The reports found that 55% of atmospheric carbon captured by living organisms is captured by marine organisms. Marine vegetated habits capture of this between 50-71%. Coastal vegetated habitats sequester between 114 and 328 Teragrams of carbon per year. The rate of loss of these marine and coastal ecosystems is among the highest of any ecosystem on the planet, with currently between 2-7% lost annually.

The reports, however, highlighted the considerable uncertainty surrounding estimates and the level of understanding of carbon storage in these ecosystems, including the emissions of greenhouse gases from degraded habitats.

The reports further identified the following challenges:

a) the sparse knowledge of the carbon sequestration and ecosystem services potential of blue forest ecosystems,

b) the lack of internationally standardized and independently approved protocols for carbon accounting and ecosystem services valuation for blue forest ecosystems as well as

c) the lack of adequate and appropriate management actions as critical impediments in moving forward.

The UNEP Blue Forest Initiative has been developed with the aim of addressing the gaps in knowledge and policy and halting the decline of coastal ecosystems, thus protecting the valuable ecosystem services they provide to coastal communities as well as their potential for climate change mitigation.

1. International policy environment

The international policy environment for the protection of blue forests and the recognition of the importance of blue carbon has changed rapidly for the last years. On a global level, a number of initiatives – REDD+, Nationally Appropriate Mitigation Actions (NAMAs), the Paris Agreement, the SDGs — bring blue carbon into play. And from the establishment of the International Partnership for Blue Carbon at the 2015 Global Landscapes Forum in Paris to the inclusion of coastal ecosystems and wetlands in 2016 and 2017 COP talks, it's clear that momentum is being gained. Blue Forests were presented in side events at the COP in 2016 by the project. These experiences show opportunities for further refinement as well as replication and expansion in other countries. More and more efforts now link the mitigation and adaptation benefits of these systems, and direct the appropriate management and policy responses through national development goals as well as coastal planning efforts.

Partners of the international Partnership for Blue Carbon include governments, international organisations, NGOs and research institutions. The project and some of its project partners are also members of the Partnership, with GRID-Arendal representing the project as a founding member of the IPBC. The Partnership is not a funding body, but instead aims to better connect the efforts of governments, research organisations and non-government organisations. It also aims to build on the significant initiatives already under way in this areas, research organisations and non-government organisations.

Further, most of the project partners are also members of the Blue Carbon Initiative and take part in the working groups advancing then issue of blue carbon at the global level. The Blue Carbon Initiative is a global program working to mitigate climate change through the restoration and sustainable use of coastal and marine ecosystems. The Initiative currently focuses on mangroves, tidal marshes and seagrasses. The Blue Carbon Initiative brings together governments, research institutions, non-governmental organizations and communities from around the world. The Initiative is coordinated by Conservation International (CI), the International Union for Conservation of Nature (IUCN), and the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization (IOC-UNESCO).

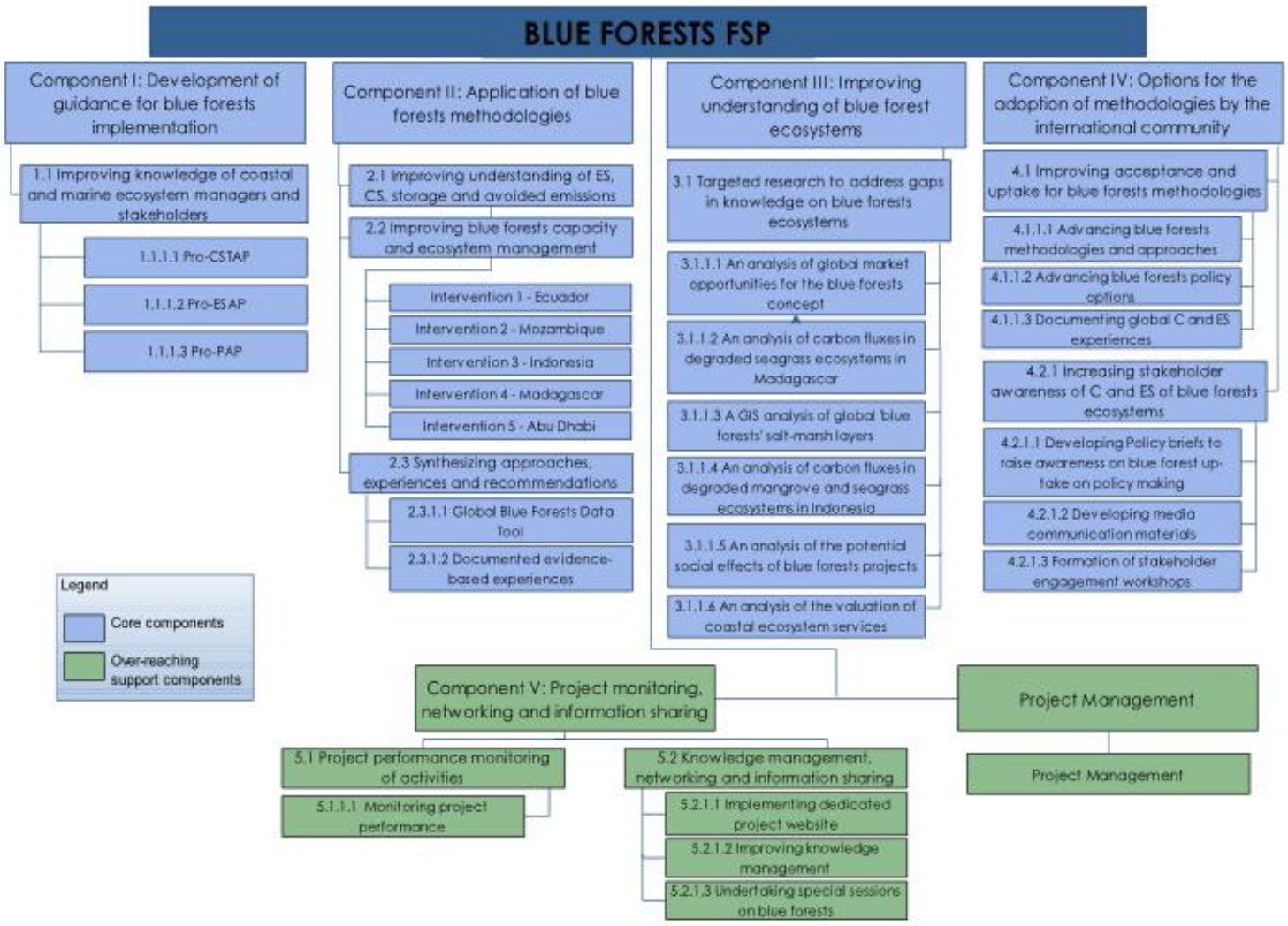
2. Pilot projects for coastal ecosystems, carbon, and ecosystem services

In order to address the lack of scientific knowledge and standardized methodologies for measuring carbon and ecosystem services in blue forest ecosystems, UNEP is coordinating a number of projects around the world focusing on measuring and protecting carbon and ecosystem services in blue forest ecosystems. Among those projects have been:

- Carbon and ecosystem services assessments in Central Africa (Cameroon, Gabon, Democratic Republic of Congo and Republic of Congo) in order to make recommendations for the inclusion of mangroves in national REDD+ plans as well as pilot projects in the region;
- The GEF Carbon Benefits Project which focuses on the development of standardised tools for quantification and assessment of carbon, including carbon accounting and greenhouse gas benefits, in terrestrial soil types;
- Lifeweb and Canary Current Large Marine Ecosystem projects on mangrove conservation incorporating economic valuation of ecosystem services including carbon in Guinea Bissau.
- Economic valuation of mangrove ecosystem services in the Southeast Pacific supported by the Swedish International Development Agency (SIDA);
- Ecosystem services valuation of mangrove ecosystems, in some cases including carbon values, in the completed GEF-funded South China Sea and WIO-Lab (Addressing land-based activities in the Western Indian Ocean) projects;
- The GEF-funded ProEcoServe project which pilots the bundling of ecosystem services and the integration of ecosystem services approaches in resource management and decision-making;

- The Millennium Development Goal-funded 'Development of Ecotaxation Scheme' which contributes to the reduction of poverty through a sustainable management of forest ecosystems services by ensuring a better knowledge of their Total Economic Value, and setting up a participative model of equitable management and valorization of forest ecosystem services through the design of eco-taxation schemes;
- A Spanish-funded project supporting integrated coastal management with special emphasis on the sustainable management of mangrove forests in Guatemala, Honduras and Nicaragua and;
- An EU-funded Climate Change Adaptation and Disaster Risk Reduction Project, which includes an important component on coastal rehabilitation, including mangrove restoration in Jamaica.

Initiatives for research about carbon accounting methodologies in the countries with small-scale intervention sites is undertaken by CIFOR in Indonesia which was presented in a Blue Carbon session at the Asia-Pacific Rainforest Summit in 2018. Other activities include research by GIZ, UNIQUE and the Livelihoods Fund of Groupe Danone on Sundarbans Islands / India, Bangladesh and Aceh / Indonesia, Vietnam and Senegal.



Project components

3.2. Objective and Components

Long-term goal: Through a better understanding and consistent methodologies of blue forests ecosystems, this project will provide ecosystem managers and decision-makers essential economic tools for better protection of coastal and marine ecosystems around the globe.

Global environment objective: The project consists of six components and will strive to achieve global environmental benefits through five small-scale blue forests interventions as well as facilitate adoption of blue forests carbon and ecosystem services valuation methodologies, toolkits, and lessons learned into the larger international community and future GEF IW projects. These projects results will lead to more robust and socio-economically driven decision making by coastal communities and governments to ensure sustainable and long-term conservation of critical blue forests ecosystems across the globe.

Project Objective: To develop, enhance and apply methodologies for standardised and replicable carbon accounting and ecosystem services valuation in blue forests ecosystems to be recognized by the international community and the GEF.

SMART Indicator: Better appreciation of the value/benefits of globally important coastal and marine ecosystems through the application of blue forests methodologies and approaches in 5 small-scale intervention sites, covering at least 200,000 ha by end of Year 3, relevant GEF IW projects applying Blue Forests tools, methods and approaches

Component 1: Development of guidance for carbon accounting and valuation of ecosystem services for blue forest ecosystems.

Outcome 1: *Improved knowledge of coastal and marine ecosystem managers and stakeholders in selected regions on carbon sequestration, storage, possible greenhouse gas emissions as well as ecosystem services in blue forest ecosystems and on possible policy/economic instruments that may be applied to sustainable coastal habitat management.*

SMART Indicator:

- *At least 1 guidance document per Advisory Panel for all Blue Forests ecosystem (3 in total) by Y2 of the project, At least 5 applications within the project and a further 2 external requests by Y4 of the project*

Output 1) Three project-level Advisory Panels established to focus on: 1) scientific and technical aspects related to C sequestration, storage, emission and fluxes; 2) blue forests policy options, and; 3) valuation of ecosystem services other than C, to fine-tune methodologies and approaches for regionally adapted implementation

Component 2: Application of blue forests methodologies for carbon accounting and ecosystem services valuation

Outcome 1: Improved understanding of ecosystem services, carbon sequestration, storage, avoided emissions and management in at least 3 ecosystem types (mangroves, seagrass, saltmarsh) in 5 sites (including 2 GEF-IW project sites) covering at least 200,000ha quantification of sequestration, mangrove mapping cover, ecosystem services assessment, financial evaluation under REDD+, REED+ development, capacity building (conferences, workshops for partners) replication and policy intervention

SMART Indicator: At least 5 applications within the project and a further 2 external requests by Y4 of the project:

- BF tools successfully integrated in management approaches in 5 sites and for three different BF ecosystem types (≤368,400 ha) by Y4 of the project,
- BF methodologies incorporated in at least 1 country's relevant national policy by Y4 of the project

Output 1) Five (5) documented small-scale interventions (achievement reports) where methodologies developed in component 1 are applied and with at least 2 interventions using current GEF-IW project sites, and focussing on both C sequestration and on ecosystem services valuation at every site- By year 4 of the project.

***Outcome 2*:** Improved ecosystem management as a result of the application of methodologies developed under Component 1 in the same 5 sites (including 2 GEF-IW project sites) covering at least 200,000ha.

SMART indicator:

- ES management tools applied by the BF small-scale interventions lead to maintaining ES and C storage and sequestration potential in the targeted ecosystems [P, ES, SR] At least 1 report and best practice study on BF-based ES management per small-scale site by Y4 of the project
- BF methodologies incorporated into relevant national policy [P, SR] BF methodologies incorporated in at least 1 country's relevant national policy by Y4 of the project

Output 1) Five (5) documented small-scale interventions (achievement reports) where methodologies developed in component 1 are applied and with at least 2 interventions using current GEF-IW project sites, and focussing on both C sequestration and on ecosystem services valuation at every site- By year 4 of the project.

Outcome 3: *Approaches, experiences and recommendations are available for the replication and up-scaling of interventions*

SMART Indicator

- Approaches, experiences and recommendations are made available for the replication and up-scaling of interventions (Y4 of the project).

Output 1) Documented report on carbon storage, possible greenhouse gas emissions and ecosystem services valuation for improved management of carbon sinks and ecosystem services.

A Global Blue Forests Data Tool is developed, focusing on both carbon storage and sequestration and on ecosystem services valuation and additional evidence-based experiences resulting from existing baseline initiatives are documented (incl. 2 GEF-IW project sites)

Component 3: Improving the understanding of carbon storage and sequestration and ecosystem services of blue forests Filling gaps in knowledge

Outcome 1: *Improved understanding of ecosystem services and carbon storage, possible greenhouse gas emissions, sequestration and fluxes for blue forest ecosystems through targeted research and peer-reviewed literature*.

SMART Indicator: Improved understanding of ecosystem services and carbon storage, possible greenhouse gas emissions, sequestration and fluxes for blue forests ecosystems through targeted research and peer-reviewed literature, with a particular focus on ecosystems lacking knowledge (seagrass and salt marshes).

- Knowledge on C storage, emissions, sequestration and fluxes as well as ES management in at least three different BF ecosystems is increased by Y4 of the project

Output 1) Global synthesis of Blue Forest carbon storage, possible greenhouse gas emissions, sequestration, fluxes and ecosystem services knowledge. Collation of methodologies, and analysis of knowledge gaps prepared by year 2.

Output 2) At least 3 research programmes supported by year 4 of the project in order to fill key identified gaps in knowledge for blue forest ecosystem services and carbon storage, possible greenhouse gas emissions, sequestration and fluxes identified by the global synthesis.

Output 3) At least 6 papers with equal attention to C sequestration and ecosystem services valuation submitted for peer review in high impact scientific journals by year 4.

Output 4) At least 1 special session on Blue Forests at a high-profile international science symposium and at the GEF International Waters science conference by year 4 of the project.

Component 4: Options for the adoption of Blue Forest methodologies by international stakeholders

Outcome1: *Improved acceptance of developed methodologies through independent and internationally-recognized institutions responsible for ensuring quality standards for international climate frameworks, such as the IPCC, UNFCC and LULUCF/AFOLU processes.*

SMART Indicator: At least 1 additional MEA or science-policy platform includes the importance of coastal ecosystems for climate change mitigation and adaptation by Y4 of the project

Output 1) Documented process for international and independent approval for methodologies developed under component 1 for carbon accounting and ecosystem services valuation for at least 3 Blue Forest ecosystems. By year 4.

Output 2) Policy briefs, media communications materials and strategies, report launches and interviews targeted to strategic media outlets, international fora and major international conferences at least once per year.

Outcome 2: *Increased awareness of stakeholders of the ecosystem services and carbon values of Blue Forest ecosystems.*

SMART Indicator At least 3 additional targeted stakeholders (national governments) and 1 international. policy instrument show measurable increase in including BF in ES management considerations by Y4 of the project

Output 1) Documented process for international and independent approval for methodologies developed under component 1 for carbon accounting and ecosystem services valuation for at least 3 Blue Forest ecosystems.

Output 2) Policy briefs, media communications materials and strategies, report launches and interviews targeted to strategic media outlets, international fora and major international conferences at least once per year.

Component 5 Knowledge management, networking and information sharing

Outcome 1: Effective project monitoring and evaluation

SMART Indicator

- Project management structures (PCU, PSC, AP, ICUs) are established by Y1 of the project;
- Successful rating in PIRs and in mid- and end-term evaluations (Y1-4)

Output 1) timely review and reporting on project performance including IW Tracking Tool

Outcome 2: Improved access to and sharing of information in cooperation with IW:LEARN in integration of climate change adaptation and climate resilience into IW projects as well as capacities to facilitate knowledge exchange

SMART Indicator: BF methodologies and best practices are referenced and sought after via knowledge management platforms (Y1-4)

Output 2) Improved knowledge management

Project Component 4

Project partners present regularly their experiences in workshops and conferences like in the project workshop with UN Environment Regional Office for Latin America and the Caribbean where Ministers of serval Latin American and Caribbean countries have been present.

Project partners of AGEDI in UAE have established measures to improve their management of mangroves.

At global climate change events, direct outcomes have also been reported. A publication about the performance of countries to include blue forests into NDCs has gained much attention in a side event of COP 18.

Project Component 5 This project component has reached the intended outcomes by year 3

The project has presented its experience in knowledge management platforms of IW:LEARN of GEF or Panorama Solutions of GRID-Arendal / GIZ

Impact

Blue carbon and blue forests - the ecosystem services of coastal and marine areas - have faster been recognised at the international level than planned in the design state of the project. Activities of project partners financed by the project have contributed to this development. The activities of the project at three small-scale intervention sites contribute to long-term changes in policies and in management practices because they are embedded in local culture, support the implementation of national policies and are implemented by actors with long-term goals.

Financial Management

The project has spent 60% of its financial budget and 91% of pledged co-funding was provided. The actual co-funding of the project is higher than the spent budget because some co-funded activities took place in the PPG Stage of the project. Further the Ministry of Fishery and Marine Affairs Indonesia could not accept funding from the project but provided in-kind co-funding in terms of staff time.

Financial information is complete and available broken down to activities at the time of review.

Efficiency

The overall effectiveness of the project is rated as moderately satisfactory.

The project started in time and some components are delivered in time and some components are delayed. Overall, t*he project activities are delayed with a spending rate of 6 % of budget after three years of project duration.* This Mid-term review was commissioned in January 2018 - after three year of project duration- to explore options for closing the project in time. Most of the project partners reported delays in implementation

The project has used *existing partnerships and synergies and complementarities* with other projects whenever possible like building on existing data for mangrove cover.

Monitoring and reporting

Monitoring and reporting is rated as highly satisfactory.

Indicators for outputs and activities are SMART. Indicators for Outcomes exist. A system for Monitoring and Reporting is in place. A monitoring system for financial and technical data of the project was designed and is working The PCU regularly monitors the financial and technical performance of the project.

Sustainability

The sustainability of the project is rated as satisfactory.

The main external driver for the project performance is that blue forests are on the international agenda. In all countries with small-scale intervention sites, the socio-political conditions create a favourable environment for sustaining the direct outcomes of the project. There is sufficient stakeholder engagement in project implementation and knowledge generation and diffusion to sustain the project results after the closure of the project. The project has created trust and mutual interest in the work of project partners from different backgrounds like INGOs, universities and research institutions and Ministries as several interview partner reported.

Preparation and readiness: The project design has been an important factor affecting the performance of the project. As it was explained before, project design has not been always clear and consistent.

The most influencing factors on project set-up: project partners were involved in the beginning of the project due to their willingness to participate in the project but their capability to implement varies.

Project implementation arrangement have been adapted in the project: in the project design phase, only one project manager was employed for this complex project. Later on, an additional project manager was assigned to the project. Project management and implementation of selected activities due to drop out of a project partner are intertwined so that communication with project partners is not always the focus of project managers at GRID-Arendal, but mainly technical tasks, M+E and communication and outreach.

After an initial phase of discussion in the project, the roles of project partners are clearly defined. The main internal drivers for achieving the project objectives were that some project partners were not used to collaboration which hampered the timely delivery of some outputs. The number of stakeholders is high so that interactions with stakeholders are limited due to time and resources in the project.

Country-drivenness: As there is much interest at the international level in Blue Forests, governments and local actors are interested in bringing blue forest policies forward for different reasons like climate change and improving livelihoods of coastal communities.

Communication and public awareness: The project has a strong component on communicating and advocacy. The PCU as well as project partners communicate the results of the project to a wide range of stakeholders. The project has many stakeholders which requires crafting different messages to different groups of stakeholders

3.3. Stakeholder Analysis

A stakeholder analysis was conducted in the project preparation stage. The results are shown in the table below. There are a number of national and international stakeholders focused on blue forests ecosystems. It was planned to engaged many stakeholders in project implementation which makes the project complex.

The table shows various stakeholder clusters, examples of particular stakeholders and identifies how they were intended to be engaged in project implementation.

Stakeholder cluster	Examples	Engagement in project design and implementation
Resource users	Local coastal communities living around blue forests that depend on them for livelihoods and food security.	Engaged through 'local governance and management and engagement' and capacity building activities in all GEF funded small-scale interventions of Component 2. This will include local scale stakeholder engagement and capacity building.
Private sector	*Tourism / recreation* – Coastal tourism and ecotourism, hotels, cruise ship industry that gain revenue from healthy blue forests ecosystems; (such as Sustainable Travel International, an NGO which facilitates sustainable travel initiatives for the tourism business sector, the United Nations World Tourism Organization (UNWTO), and the Abu Dhabi Tourism Development & Investment Company (TDIC)); *Fisheries / food security* – fisheries organizations and food security stakeholders that rely on blue forests ecosystem health (e.g., FAO, Acadian Seaplants ltd., Seaweed Energy Solutions Ltd., etc.); *Flood / storm protection* – insurance agencies, disaster relief agencies (such as Aviva, a multinational insurance company and the primary sponsor for the project's co-finance activities in Kenya (KMFRI's Gazi Bay project)); *Carbon market* - companies and bodies that buy carbon credits or pay for ecosystem services or facilitate such markets (such as Livelihoods Fund, Plan Vivo Foundation, Gold Standard, VCS, Sustainable Travel International, and Abu Dhabi National Oil Company (ADNOC)); *Development / investment* - bodies involved in other aspects of coastal development that may impact blue forests ecosystems such as Mubadala Development Company (engaged through the U.A.E. intervention).	Engaged through the PPG stage and during project implementation, where applicable, through the small-scale interventions of Component 2 (e.g., local and national stakeholder engagement activities, ES valuation activities, and 'carbon finance feasibility assessment' related activities for all interventions), Component 2's 'additional documented evidence-based experiences resulting from existing baseline initiatives', and Component 4's stakeholder engagement and communication activities. Private sector stakeholder engagement will include, where applicable, the tourism and recreation, fisheries and food security, flood and storm protection, carbon market, and development and investment sectors.
Science and academia	International Blue Carbon Science Working Group (managed by IOC-UNESCO, Conservation International and IUCN).	Engaged through the PPG stage and 'project-level training and capacity building in blue forests concept' and 'carbon finance feasibility assessment' activities in all GEF funded small-scale interventions of Component 2.
	Indonesian Blue Carbon Scientific Working Group.	Engaged through the PPG stage and the Indonesia Blue Forests Project of Component 2.
	Wetlands Technical Working Group (managed by Restore America's Estuaries).	Engaged through 'media and communication' activities of Component 4 and the 'project portal' of Component 5.

	UNEP Blue Carbon Initiative.	Engaged through the PPG stage and the 'additional documented evidence-based experiences resulting from existing baseline initiatives' activity of Component 2.
	IPCC Wetlands group for the Supplement to the 2006 Guidelines for National Greenhouse Gas Inventories: Wetlands.	Engaged through the PPG stage and in implementation through Component 2 (the U.A.E. intervention and 'additional documented evidence-based experiences resulting from existing baseline initiatives' sub -activity activity), potential Advisory panel membership of Component 1, and through 'policy engagement' activities of Component 4.
Policy and decision-making	International Blue Carbon Policy Working Group (managed by UNESCO-IOC, Conservation International and IUCN).	Engaged through the PPG stage and the Pro-PAP of Component 2 (managed by IUCN) and the 'policy engagement' activities of Component 4.
	Blue Climate Coalition (managed by Blue Climate Solutions, a project of The Ocean Foundation).	Engaged through the PPG stage and the 'additional documented evidence-based experiences resulting from existing baseline initiatives' activity of Component 2.
	UNEP Blue Carbon Initiative.	Engaged through the PPG stage and the 'additional documented evidence-based experiences resulting from existing baseline initiatives' activity of Component 2.
	UN-REDD.	Engaged through the PPG stage and the 'policy engagement' activities of Component 4.
	NOAA Blue Carbon working group.	Engaged through the PPG stage and the 'additional documented evidence-based experiences resulting from existing baseline initiatives' activity of Component 2.
	National Governments (e.g., USA, Kenya, Indonesia, and UAE).	Engaged through the PPG stage and the 'policy engagement' activities of Component 4.
	UNFCCC.	Engaged through 'policy engagement' activities of Component 4.
Economics	Nicholas Institute for Environmental Policy Solutions, Duke University; Forest Trends.	Engaged through the PPG stage and the 'analysis of global market opportunities for the blue forests concept' targeted research activity of Component 3.
Project developers	Coastal Madagascar (managed by Blue Ventures); Coastal Indonesia (managed by the Indonesian Blue Carbon Scientific Working Group); Saloum Mangrove Reforestation, Senegal (managed by Face the Future and WAAME); Blue Carbon - Arabian Peninsula Project (managed by AGEDI Abu Dhabi and facilitated by GRID-Arendal); Mikoko Pamoja, Kenya (managed by KMFRI); Capacity of tropical seagrass meadows as blue carbon sinks, East Africa (managed by Stockholm University and the University of Gothenburg); Rehabilitating Blue Carbon Habitats (RBCH Programme), Indonesia and Australia (managed by UNEP, Mangrove Action Project (MAP), Operation Wallacea, Charles Darwin University, and the Alfred Wegner Institute (AWI)); Central Africa mangroves and REDD+ research (managed by UNEP); Bangladesh (Danone Livelihoods Fund).	Engaged through the PPG stage and the small-scale interventions and 'additional documented evidence-based experiences resulting from existing baseline initiatives' activity of Component 2; through the targeted research activities of Component 3; and through 'media and communication' activities of Component 4 and the 'project portal' of Component 5.

It was outlined in the PPG document to develop a stakeholder engagement strategy as part of the project inception phase. The strategy was planned to identify specific activities for engagement with each stakeholder cluster and to be presented to the PSC. Additionally, it was planned to document the experiences of engagement with international partners that contribute to the global baseline for the blue forests concept through component 2 and included in a project report.

The project aims at influencing the development of blue forests policy initiatives at a global level interacting with as many stakeholders as possible in the emerging field of blue carbon. During the project, a number of project partners including a small-scale site intervention were added to the project.

The stakeholder analysis does distinguish between different cluster of stakeholder regarding their functions like coastal communities, research and policy makers. It is not clearly analysed

1. which stakeholders comprise the core actors of the project, i.e. actors implementing project activities,

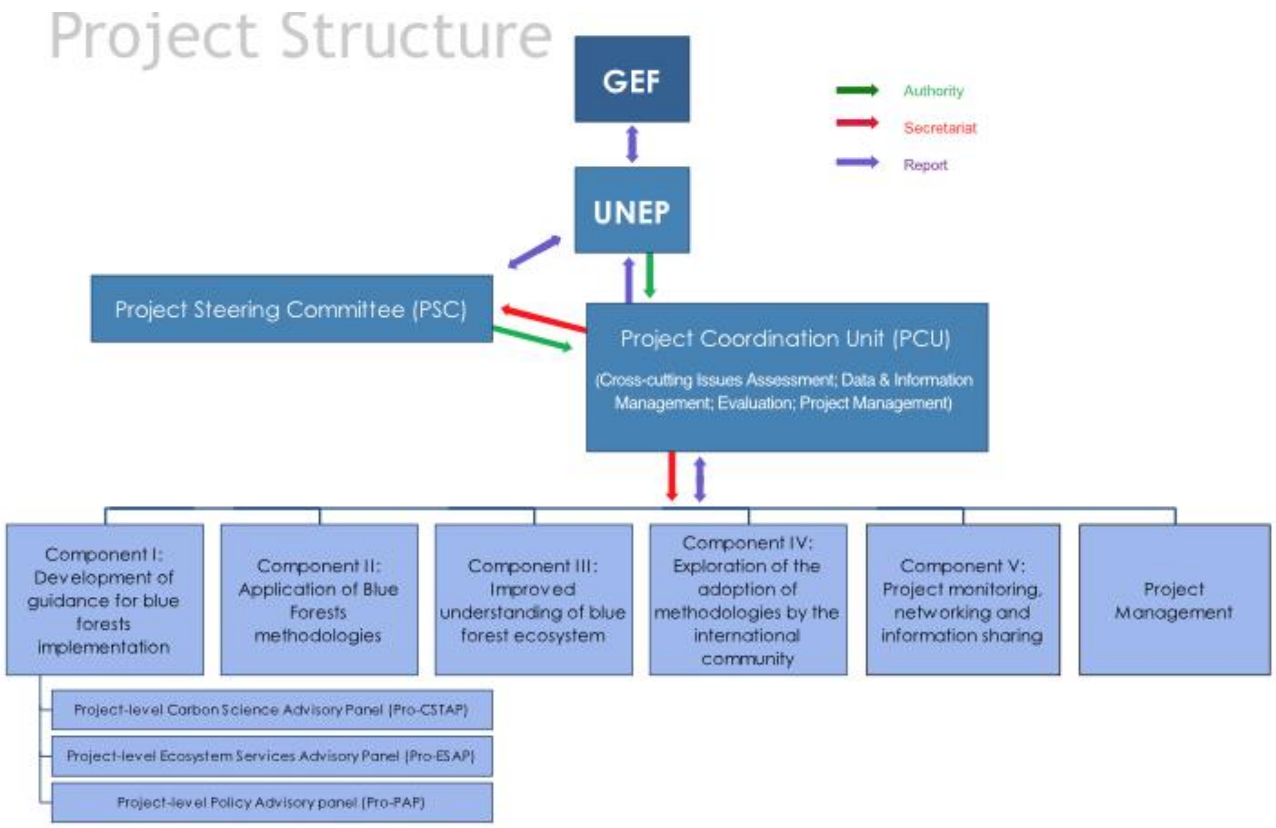
2. target groups for those actions like coastal communities as direct beneficiaries or researchers using the standardised measures for carbon accounting or

3. actors being able to influence the project like national and local governments receiving knowledge how to design and implement blue forest projects and policies.

Stakeholder analysis and policy analysis for the small-scale intervention sites, have been conducted.

The stakeholders are not differentiated according to their potential to influence the outcome of the project in the stakeholder analysis of the PPG or regarding the relevance of reaching the goals at the global level. A clearly defined target group was not identified as part of the stakeholder analysis or the PPG document.

3.4. Project implementation structure and partner



A complex set of actors executes the project. The project comprises 20 project partners which have different roles in executing the project. The following chart gives an overview about the project implementation structure.

Partner	Role in the project
UNEP	Implementing agency
GRID-Arendal	Executing agency, PCU, lead agency for Ecosystem services advisory panel of project component 1 lead executing agency project component 5
UNEP-WCMC	Project partner, development of a global blue forest data toolkit
UNEP-ROLAC	Project partner, Workshop knowledge exchange with Integrated coastal management with special emphasis on the Sustainable Management of Mangrove forests in Guatemala, Honduras and Nicaragua
Blue Ventures	Project partner, Implementation of small-scale intervention site Madagascar
WWF-Mozambique	Project partner, Implementation of small-scale intervention site Mozambique
Kenya Marine and Fisheries Research Institute (KMFRI)	Project partner, Implementation of small-scale intervention site Kenya and co-financing
Conservation International-Ecuador	Project partner, Implementation of small-scale intervention site Ecuador
Indonesian Ministry of Marine Affairs and Fisheries	Project partner, Implementation of small-scale intervention site Indonesia
AGEDI Environment Agency-Abu Dhabi	Project partner, Implementation of small-scale intervention site Indonesia and Co-financing
IUCN	Project partner, lead agency for Policy advisory panel
University of West Brittany / University of Bretagne Occidental	Project partner Lead agency for Carbon Scientific and Technical Advisory Panel,
Stockholm University	Project partner, targeted research
Charles Darwin University	Project partner, targeted research

Partner	Role in the project
South African Institute of International Affairs	Project partner, collating additional documented evidence from existing baseline initiatives
US NOAA	Project partner, collating additional documented evidence from existing baseline initiatives
US Forest Service	Project partner
The Ocean Foundation / Blue climate solutions	Project partner, co-financing
Counterpart International	Project partner collating additional documented evidence from existing baseline initiatives NAMA Dominican Republic
Distant Imagery	Project partner, mapping of interventions sites in Abu Dhabi and UAE

3.5. Changes in design during implementation

UNEP DEPI dropped out of the project in the first quarter of project implementation (official date of withdrawal 19.3.2015) due to legal reasons. Counterpart International and Distant Imagery entered the project in 2016.

3.6. Finances

Budget at design and expenditure by components, including co-finance

Budget per Components					
	Original Budget	Revised Budget	Variance	Actual 31 March 18	Ratio to reporting date
C1 - Guidance	475.000	475.000	-	392.418	0,83
C2 - Small-Scale Interventions	2.335.000	2.365.000	(30.000)	1.247.402	0,53
C3 - Improved understanding	680.000	680.000	-	501.207	0,74
C4 - Adoption of methodologies and approaches	530.000	500.000	30.000	261.667	0,52
C5 - Monitoring and Evaluation	255.000	255.000	-	149.344	0,59
C6 - Project Management	225.000	225.000	-	169.702	0,75
Totals	4.500.000	4.500.000	-	2.721.740	0,60
		Reported 30 June 18			
	Pledged	Cash	In-kind	Total	Ratio
Co-financing	23.268.215	9.488.888	11.730.382	21.219.270	0,91

Budget at design PIF and PPG phase

Budget per Component - Summary Table - Blue Forests FSP					Cost breakdown as in PIF for comparison purpose		
	Project Components/Sub-components/Outputs/ Activities/Sub-activities	GEF Funding	Co-Financing	Total Project Cost	GEF Funding	Co-Financing	Total Project Cost
Component 1	Development of guidance for carbon accounting and ecosystem services valuation for blue forests ecosystems	475.000	1.097.509	1.572.509	100.000	3.477.500	3.577.500
Component 2	Application of blue forests methodologies for carbon accounting and ecosystem services valuation	2.335.000	17.948.686	20.283.686	2.475.000	8.380.000	10.855.000
Component 3	Improving the understanding of carbon storage and sequestration and ecosystem services of blue forests	680.000	1.957.500	2.637.500	1.200.000	4.987.500	6.187.500
Component 4	Options for the adoption of methodologies and approaches by the international community	530.000	954.520	1.484.520	400.000	645.000	1.045.000
Component 5	Project monitoring, networking and knowledge management	255.000	270.000	525.000	100.000	100.000	200.000
	Project Management	225.000	1.040.000	1.265.000	225.000	1.000.000	1.225.000
	Effective project management	225.000	1.040.000	1.265.000			
	Overall Day to Day Project Management through the PCU	225.000	1.040.000	1.265.000			
	TOTAL PROJECT COST ($)	4.500.000	23.268.215	27.768.215	4.500.000	18.590.000	23.090.000

4. Theory of change at evaluation

The project is mainly a knowledge generation and sharing project for developing methodologies for carbon accounting and ecosystem services valuation in blue forests. The aim of the project is to bridge the science -policy gap on carbon accounting and ecosystem services assessment for blue forests (mainly mangroves, salt marsh and sea weed) at a global level. The international community and the GEF will use those methodologies and project results to improve coastal management practices and policies.

The analysis of the theory of change will be undertaken in four steps. In a first step the theoretical background of the theory of change is presented because not all readers of this report might be familiar with it. In a second step, the intended outcomes of the project are presented and commented. In a third step, a simplified theory of change is presented as a chart. In the fourth step, the theory of change at the time of the evaluation of the project is presented. It will be discussed how the theory of change has evolved during the implementation of the project.

1. Definition of the main categories of the theory of change according to the UN Environment Evaluation office.

In the following the main categories of the theory of change will be defined:

- **Outputs**: services and products delivered directly by the intervention e.g. guidance material, policy advice, a local pilot project;
- **Outcomes**: changes in stakeholder capacity resulting from outputs e.g. increased awareness, improved knowledge or skills, positive attitudinal and motivational changes, institutional or policy changes, availability of financing;
- **Impact**: long term changes in environmental benefits and human living conditions e.g. reduced human-caused global warming, conserved biodiversity, improved water quality;
- **Intermediate states**: changes required in between project outcomes and impact, e.g. wide-scale adoption of improved natural resource management practices, country-wide shift towards renewable energy sources;
- **Drivers**: external conditions necessary for project results to lead to next-level results, over which the project has a certain level of control e.g. strong support from other development partners in-country, public pressure on policy makers and;
- **Assumptions**: external conditions necessary for project results to lead to next-level results, over which the project has no control e.g. turn-over of government officials, global financial situation, technological advances.

2. Intended outcomes of the project are:

1. **Improved knowledge and capacity** of coastal and marine ecosystem managers and stakeholders on carbon sequestration, storage, possible greenhouse gas emissions as well as ecosystem services in blue forests ecosystems and on possible policy and economic instruments that may be applied to sustainable coastal and marine habitat management. SMART Indicators in Theory of change at project design: project level methodology guidelines are published and requested by project partners and the scientific community and other external stakeholders

2. 1. I**mproved understanding** of ecosystem services and carbon storage and sequestration, possible greenhouse gas emissions, sequestration and fluxes for blue forests ecosystems through targeted research and peer-reviewed literature. SMART Indicator in Theory of change at project design: Improved understanding of ecosystem services, carbon sequestration, storage, avoided emissions and management in at least 3 ecosystem types (mangroves, seagrass, saltmarsh) in 5 sites (including 2 GEF-IW project sites) covering at least 368,400 ha. Methodologies are referred to in national planning instruments = applicated in five sites and in one country relevant policy

2.2. **Improved and replicable ecosystem management** based on improved understanding of the values of blue forests ecosystems at the site level – in Ecuador, Mozambique, Madagascar, Indonesia, United Arab Emirates, and Kenya and other sites in Central America in the same 5 sites (including GEF-IW project sites) covering at least 354,400 ha. SMART Indicators in Theory of change at project design: Management tools are implemented in each small-scale intervention site and incorporated in at least one country´s national policy. Kenya was explicitly added as a 6th small-scale intervention site during the project and treated by project management as such.

3. **Improved understanding of ecosystem services and carbon storage,** possible greenhouse gas emissions, sequestration and fluxes for blue forests ecosystems through targeted research and peer-reviewed literature, with a particular focus on ecosystems lacking knowledge (seagrass and salt marshes) The target group of this outcome is not defined. It is assumed that it is the scientific community conducting academic research on ecosystem services in blue forests. SMART Indicator in Theory of change at project design: Increased knowledge

4. 1. **Improved acceptance and awareness** of blue forests values, methodologies and approaches in international policy and markets related to climate change and ecosystem service valuation. Improved acceptance of blue forests methodologies and approaches through independent and internationally recognized institutions responsible for ensuring quality standards for carbon accounting and ecosystem service valuation, such as international climate frameworks (IPCC, UNFCCC, LULUCF/AFOLU processes) and ecosystem service markets. SMART Indicator in Theory of change at project design: At least 1 additional. MEA or science-policy platform includes the importance of coastal ecosystems for climate change mitigation and adaptation by Y4 of the project

4.2 **Increased stakeholder awareness of the ecosystem** services and carbon values of blue forests ecosystems. SMART Indicator in Theory of change at project design: At least 3 additional targeted stakeholders (national governments) and 1 international. policy instrument show measurable increase in including BF in ES management considerations by Y4 of the project

5. **Improved information exchange** with the international blue forests community in cooperation with IW:LEARN. Improved access to and sharing of information in cooperation with IW:LEARN in integration of climate change adaptation and climate resilience into IW projects as well as capacities to facilitate knowledge exchange. SMART Indicator in Theory of change at project design: methodologies and best practices are referenced and sought after via knowledge management platforms (Y1-4)

The outcomes relate to each of the five components of the project for which is a specific theory of change including actors, drivers and target groups developed.

The outcomes of first two components are located at the national level mainly in the countries where the small-scale intervention sites are located. One target group is on the meso level dealing directly with ecosystem management. The target group of coastal managers and other stakeholders of coastal ecosystems improve their knowledge about ecosystem services like carbon sequestration in blue forests and about policy instruments to improve ecosystem services. Instruments can be payments for ecosystem services like REDD+. They also improve their management practices for management of ecosystem services (examples are how to design and implement processes for the control of the minimum size of catches in Ecuador or the implementation of mangrove concessions in Ecuador). Policy makers at the national level are also a target group which needs to improve its knowledge about options for policy instruments like payments for blue carbon.

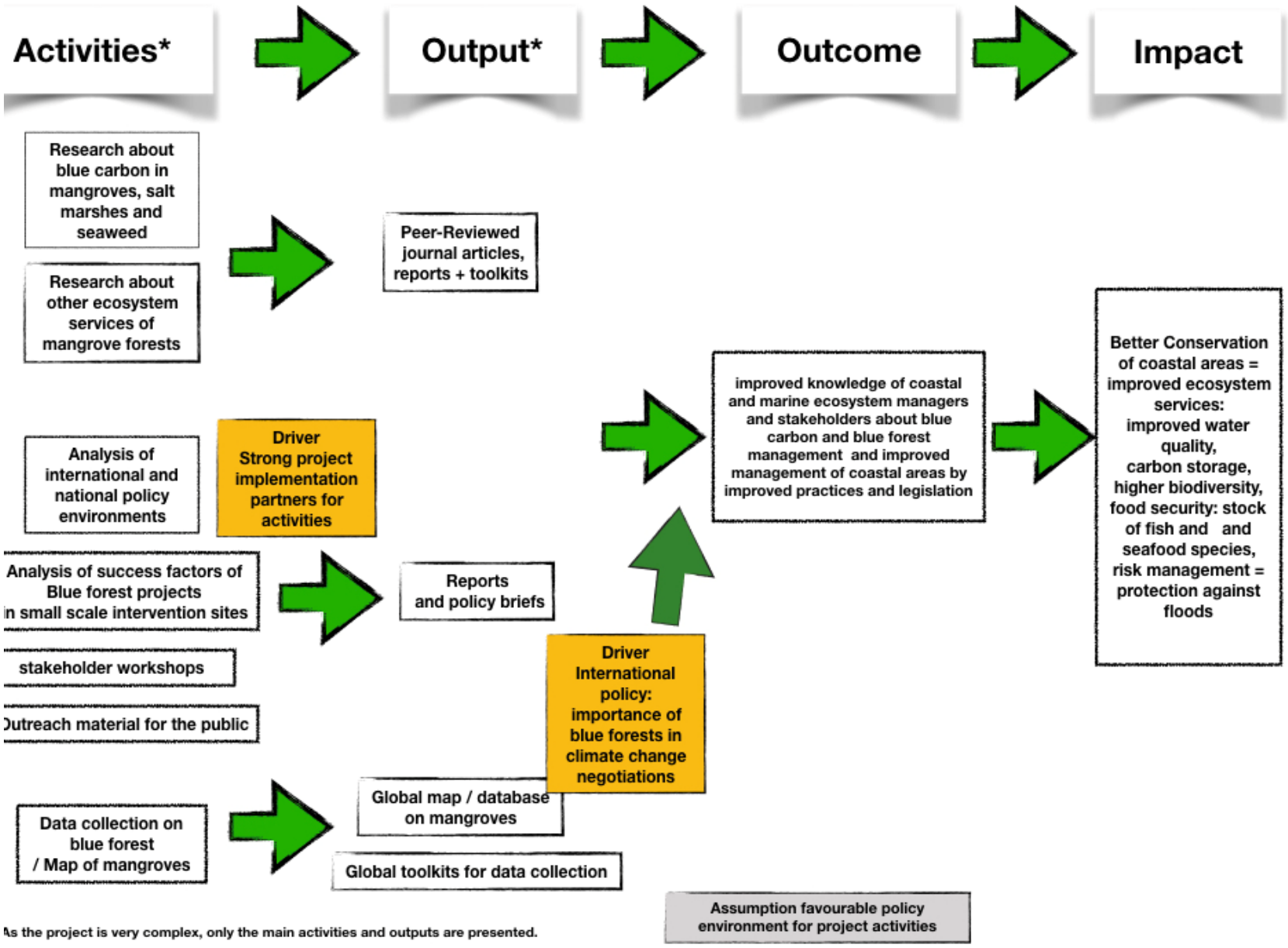
The target group of the third and fourth component is less well defined. They are scientists, international and national policy makers improving their understanding of ecosystem services and carbon storage and sequestration of blue forests which will lead to a higher awareness and acceptance of blue forests in international climate change negotiations and for climate funding like REDD+.

The fifths outcome will be at the international level the improve knowledge exchange and learning within the community of practice for blue forests mainly related to GEF IW learn activities.

3. Chart: Theory of change at Mid-term Review

The following charts shows a simplified version of the theory of change at the time of the Mid-term Review.

As already explained, each of the five components has a different target group and different outcomes at different levels. It would be too difficult to present these change processes at different levels in a single chart because it will become too complex. The chart tries to summarise the logical



Theory of change (Mid-Term Review)

pathway and to show the main pattern of the theory of change.

4. Verbal description: Explanation of the theory change at the time of the midterm-review

The project addressed the problem of lacking methods for carbon accounting from blue forests. The project partners undertake activities which lead to outputs which are used by the target group. The main activities in the knowledge generation components (3 and 4) are targeted research about carbon sequestration and storage and other ecosystem services provided by coastal ecosystem (mangroves, seagrass and salt marshes). Mainly universities undertake these activities and produce peer-reviewed journal articles, conference papers and toolkits. They contribute to an international consensus about approved methodologies for carbon accounting. Actors in the private sector or in international organisations or national policy makers can be use the standardised methodologies in voluntary carbon markets to determine payments as well as in international financial mechanisms as REDD+.IUCN undertakes policy research activities producing policy papers about blue carbon policies like blue forests in NDCs in different countries. The target group uses these knowledge products and improves its understanding of the ecosystem services and the recognise the value provided by blue forests by including them in respective international agreements. Drivers for this process at the international level are activities of other actors or activities of project partners in other projects or their day to day activities. The importance of blue forests has been recognised much faster at the international level as assumed in the theory of change at the beginning of the project. It has created a favourable environment for outcomes in the countries with the small-scale intervention sites.

The envisioned change process at the national and subnational levels in the counties with the small-scale intervention sites is mainly similar to the above described change process at the international level. This justifies to summarise the theory of change in one chart. Project partner produce studies on ecosystem services like carbon sequestration and storage in blue forests which are presented to national policy makers = improving their knowledge about the topic. Thus, awareness for blue forests rises at the national level. Those policy -oriented studies are quite unique in GEF because GEF projects are normally more focused on implementing new management practices or support the implementation of existing

management practices. Those studies explore opportunities for REDD+ payments or payments from private carbon markets at the small-scale intervention sites.

Project partners conduct stakeholder workshops to discuss options for improving the management of blue forests like mangroves and train managers of coastal and marine ecosystems like employees of national parks and the environmental ministries and association of local fishermen to implement these options. The assumption was that the political environment in the countries where the small-scale intervention sites are located is favourable to those interventions.

Drivers for project implementation are cooperation with different local actors like the national Ministries for Research which grants permits for conducting research, co-operation with local universities supporting the implementation of the studies and the organisations responsible for conducting the administrative processes for GEF projects. These drivers were almost not considered in the design phase of the project. It was also assumed that project partners are able to conduct the intervention with minimal support from the project.

Linkages between the two levels of intervention have been considered in the project design phase. They are not presented in the chart of the theory of change because they are not so present in the theory of change at design and at evaluation. It was assumed that the small-scale intervention sites need support in the theory of change at design. The global project advisory panels were planned to provide this support. Knowledge exchange between the small-scale intervention sites was part of the theory of change at the design of the project and is still considered necessary by project partners at the small-scale intervention sites. Knowledge exchange is understood as capturing knowledge from the small-scale intervention sites and from other projects/ interventions and develop global toolkits using this knowledge.

5. Findings

5.1. Strategic Relevance

The strategic relevance of the project of the project is considered as “satisfactory” for the following reasons:

The project objective is consistent with UN Environments` Mid-term Strategy and GEF International Waters focal area 3 strategic priorities. The project builds on the commitments of member countries to meet their obligations under the UNEP Regional Seas conventions and action plans, as well as the UNEP Global Program of Action for the Protection of the Marine Environment from Land-Based Activities. This project is in direct response to the priority identified in the Global Environmental Facility Fifth (GEF-5) Strategy under the International Waters Focal Area which states that, “stopping the loss of the ocean’s blue forests (which some studies show exceed carbon absorption of the land) is an urgent priority for coastal management to protect these important carbon sinks”. Objective 3 under the International Water programme a core output is identified as ‘demo-scale local action implemented… to restore/protect coastal —blue forests”.

The project responds to the global needs related to blue forests (e.g., how the values of “blue carbon” and other coastal and marine ecosystem services can support improved ecosystem management). The global relevance of the topics of blue forests and blue carbon has increased since the design of the project becoming the main external driver for achieving the project outcome: Blue carbon is part of international climate change negotiations and opportunities for climate finance (NDCs, Green Climate Fund). Considering the favourable project environment, the project objectives are relevant and realistic.

The project objectives are very consistent with project partner’s objectives and strategies. Many of the project partners are members of international alliances and have brought blue forests to the international agenda in the design and early stages of the project contributing to the favourable project environment. The project set up has contributed to drive change at the international level because it has created linkages and trust between project partners from science, NGOs and governments.

The complex project implementation structure with many project partners and project implementation sites contributes to the relevance of the project in bringing blue forests as a policy issue forward especially at the national level in different countries. The PRC recommended in the project design phase to focus he project on small-scale intervention sites and multiple ecosystem services including blue carbon. This broad focus turned out to be very relevant meeting the needs of local communities at small-scale intervention sites.

The project contributes to the role of UN Environment as a science-policy-policy bridge in the new field of blue forests where results from research have to be transferred into global and national policies to achieve global goals for climate change. The Midterm review found that the function of the project as science-policy bridge is highly relevant for bringing the issue of blue forests into national and international policies. In the site visit to Ecuador it was especially appreciated that the project provided an opportunity for applied research about analysing the benefits and ecosystem services from coastal ecosystems showing the relevance of ecosystem services for society and livelihoods of the local population in coastal areas.

The project is relevant because it covers countries for which mangroves and other coastal ecosystems are essential and the national governments are willing to invest in the protection of coastal ecosystems. As these national governments still have limited capacity for learning about blue forests and about the opportunities for climate finance at the global level, the research component analysing the policy environment for blue forests projects at the national level are especially necessary. However, this research has to be demand-driven and policy-oriented. The project has a strong focus and resources related to academic research on carbon accounting methodologies which made it in some areas less relevant to the activities at small-scale intervention sites.

5.2. Quality of the Project Design

The project design is considered as “satisfactory”.

The strength of the project design is that it involves committed project partners having a broad and long-term experience in academic research or project implementation in coastal zones. Most of the project partners have several on-going projects for Blue forests or Blue carbon. All academic project partners have research experience in the respective region and partly also capacity building experience for research. Three of small-scale implementation sites might be considered as the leading pilot projects in their respective region which are ready and willing for knowledge sharing and replicating their experience. During the project planning phase, emphasis was put on small-scale intervention sites and on facilitation of knowledge exchange.

The main weakness of the project design is partnerships and governance: The project is implemented by a high number of actors from different background like universities, NGOs and governmental research institutions. Many of them have never co-operated before in the same project. UNEP dropped out as project partner due to legal reason and its work activities had to reassigned to other project partners mainly GRID-Arendal. Two project partners were added later.

The project partners were not assessed during the PIF-State regarding their capacity to execute the project. As explained above, most of the partners have strong experience in coastal zone management, fishery and blue forests but not necessary on the sites they are working on. Two of the small-scale intervention sites had limited experience as an executing agency in international projects and more specific in blue forest projects. The project governance and supervision structures and the budget were designed to give those lesser experienced project partners support in capacity-building, with a focus on enhancing capacity at the small-scale intervention sites.

Efficiency: The project has five different components for knowledge generation and diffusion. Each of the project components has its own project partners and stakeholders (target group), outputs and outcomes including causal pathways. This complexity makes it difficult to execute the project. It is not fully explained in the TOC at design how those components can work together to achieve impact. A systemic approach could help to understand the intended changes and to determine the action necessary to achieve them.

Logical framework and monitoring: However, outcomes were planned with indicators, not all indicators can be measures in a quantitative way or indicators and outcome do not logically relate to each other (SMART).The question is how to measure outcomes like outcome 1 of component 1 „

increased knowledge of coastal managers…“ The respective indicator is “guidance documents per advisory panel“ which is an indicator for an output = knowledge product, and not for an output

5.3. Nature of the External Context

In Mozambique, the access to the foreseen small-scale intervention site where measurements were taken is restricted due to political upheaval in some regions, so the intervention site has changed to the Bay of Maputo.

5.4. Effectiveness

The effectiveness of the project is rated as “satisfactory”.

5.4.1. Delivery of outputs

Quantity and timeliness of outputs:

In the first step of analysis the delivery of outputs will be presented. In a second step, the TOC at evaluation will be used to explain the change processes induced by the project’s outputs.

The following table provides a detailed overview about the delivery of output.

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Output 1.1.1: Three project-level Advisory Panels established to focus on: 1) scientific and technical aspects related to C sequestration, storage, emission and fluxes; 2) blue forests policy options, and; 3) valuation of ecosystem services other than C, to fine-tune methodologies and approaches for regionally adapted implementation.			
Activity 1.1.1.1 Formation and operation of the Project Level Carbon Scientific and Technical Advisory Panel (Pro-CSTAP)			
Sub-Activity 1.1.1.1.1: Pro-CSTAP Project Support	Dec 2018	80% - N.B. These are Q1 numbers	
Sub-Activity 1.1.1.1.2: Pro-CSTAP meetings (Y1-4)	Oct 2018	75%	
Sub-Activity 1.1.1.1.3: Coastal Carbon Technical Science Workshop (Y1)	Oct 2015	100%	Needs further review and validation by the small-scale interventions and other project partners.
Sub-Activity 1.1.1.1.4: Assessment of carbon methodologies and approaches	March 2015	100%	
Sub-Activity 1.1.1.1.5: Production of carbon methodologies and approaches synthesis/toolkit necessary for the interventions (Y2)	June 2015	100%	
Activity 1.1.1.2 Formation and operation of the Project Level Ecosystem Services Advisory Panel (Pro-ESAP)			
Sub-Activity 1.1.1.2.1: Pro-ESAP Project Support	Dec 2018	60%	
Sub-Activity 1.1.1.2.2: Pro-ESAP meetings (Y1-4)	Oct 2018	50%	
Sub-Activity 1.1.1.2.3: ES Approaches Workshop (Y1)	July 2016	100%	
Sub-Activity 1.1.1.2.4: Assessment of ES methodologies and approaches	May 2017	100%	
Sub-Activity 1.1.1.2.5: Production of synthesis/toolkit necessary for interventions (Y2)	Sept 2017	100%	
Activity 1.1.1.3 Formation and operation of the Project Level Policy Advisory Panel (Pro-PAP)			
Sub-Activity 1.1.1.3.1: Pro-PAP Project Support	Dec 2018	70% - N.B. these are Q1 numbers	
Sub-Activity 1.1.1.3.2: Pro-PAP meetings (Y1-4)	Oct 2018	50%	

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Sub-Activity 1.1.1.3.3: Policy Workshop (Y2)	March 2016	100%	
Sub-Activity 1.1.1.3.4: Assessment of policy approaches	Dec 2016	100%	
Sub-Activity 1.1.1.3.5: Production of synthesis of policy approaches necessary for the interventions (Y3)	March 2017	100%	
Activity 1.1.1.4 Facilitating knowledge management for Project Level Advisory Panels	Dec 2018	85%	
Output 2.1.1: Application of blue forests methodologies and approaches in five documented small-scale interventions focusing on both carbon storage and sequestration and on ecosystem services valuation at each site (Y4 of the project).			
Activity 2.1.1.1: Small-scale intervention 1 – improved understanding Ecuador (41,000 ha)			
Sub-Activity 2.1.1.1.1: Ecosystem Services Assessment	Dec 2016	100%	
Sub-Activity 2.1.1.1.2: Mangrove Concessions	March 2018	80%	
Sub-Activity 2.1.1.1.3: Communication and Outreach	Dec 2018	70%	
Sub-Activity 2.1.1.1.4: Project-level Training and Capacity Building in Blue Forests Concept	Dec 2018	60%	
Sub-Activity 2.1.1.1.5: Coordination and Reporting	Dec 2018	80%	
Activity 2.1.1.2: Small-scale intervention 2 – improved understanding Mozambique (25,000 ha)			Means to achieve original intervention objectives were unrealistic, work plan revised in June 2016.
Sub-Activity 2.1.1.2.1: Mangrove Carbon Assessment	June 2016	100%	This had previously been reported as 100% complete in error. The revised completion date is Sept 2018.
Sub-Activity 2.1.1.2.2: Mangrove Mapping and Change Analysis	June 2016	100%	This had previously been reported as 100% complete in error. Summary document in Portuguese to be translated. The revised completion date is April 2018.
Sub-Activity 2.1.1.2.3: Ecosystems Services Assessment	Dec 2016	100%	
Sub-Activity 2.1.1.2.4: Carbon and Ecosystem Services Market Feasibility Analysis	June 2018	10%	N.B. this activity was previously reported as being 80%
Sub-Activity 2.1.1.2.5: Communications and Outreach	Dec 2018	60%	N.B. this activity was previously reported as being 80%
Sub-Activity 2.1.1.2.6: Project-level Training and Capacity Building in Blue Forests Concept	Dec 2018	30%	
Sub-Activity 2.1.1.2.7: Coordination and Reporting	Dec 2018	65%	

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Activity 2.1.1.3: Small-scale intervention 3 – improved understanding Indonesia (100,000 ha)			Continuing issue with transfer of funds delaying initiation of project work. Amendment signed with MMAF to bring in third party to assist with transfer of funds. Work plan for 2018 and 2019 (extension scenario) have been prepared by Indonesia. The process for accommodating transfer fund is nearing completion.
Sub-Activity 2.1.1.3.1: Carbon Stock and Sequestration Assessment	March 2018	18 %	
Sub-Activity 2.1.1.3.2: Ecosystem Services Assessment	March 2017	16 %	
Sub-Activity 2.1.1.3.3: Communication Strategy	Dec 2018	0%	
Sub-Activity 2.1.1.3.4: Mapping, data collection, ground truthing	March 2017	17 %	
Sub-Activity 2.1.1.3.5: Project-level Training and Capacity Building in Blue Forests Concept	Dec 2018	0%	
Sub-Activity 2.1.1.3.6: Coordination and Reporting	Dec 2018	0%	
Activity 2.1.1.4: Small-scale intervention 4 – improved understanding Madagascar (26,000 ha)			
Sub-Activity 2.1.1.4.1: Quantification of Mangrove Carbon Sequestration	Dec 2017	90%	
Sub-Activity 2.1.1.4.2: Mangrove REDD+ Mapping and Change Analysis	Dec 2016	100%	
Sub-Activity 2.1.1.4.3: Ecosystem Services Assessment	June 2018	85%	
Sub-Activity 2.1.1.4.4: Financial Valuation of Mangrove REDD+	Dec 2018	90%	
Sub-Activity 2.1.1.4.5: Mangrove REDD+ Development	June 2018	90%	
Sub-Activity 2.1.1.4.6: Communication Strategy	Dec 2018	85%	
Sub-Activity 2.1.1.4.7: Project-level Training and Capacity Building in Blue Forests Concept	Dec 2018	100%	
Sub-Activity 2.1.1.4.8: Coordination and Reporting	Dec 2018	90%	
Activity 2.1.1.5: Small-scale intervention 5 – improved understanding U.A.E. (176,400 ha)			This intervention is 100% co-financing.
Sub-Activity 2.1.1.5.1: Baseline Carbon Assessment	March 2015	100%	
Sub-Activity 2.1.1.5.2: Ecosystem Services Assessment	March 2015	100%	
Sub-Activity 2.1.1.5.3: Policy Assessment	March 2015	100%	
Sub-Activity 2.1.1.5.4: Communication, Outreach and Knowledge Capture	Dec 2018	80%	
Sub-Activity 2.1.1.5.5: Mapping and Ground Truthing	March 2015	100%	
Sub-Activity 2.1.1.5.6: Carbon Finance Feasibility Assessment Component	June 2015	100%	
Sub-Activity 2.1.1.5.7: Project Coordination	Dec 2018	75%	

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Activity 2.1.1.6: Facilitating knowledge management on carbon storage and sequestration and ecosystem services	Dec 2018	85%	IW: LEARN Community platform no longer available so switched to Basecamp.
Output 2.2.1: Blue forests methodologies and approaches incorporated into ecosystem management in all five small-scale intervention sites.			
Activity 2.2.1.1: Small-scale intervention 1 – improved capacity and ecosystem management Ecuador (41,000 ha)			
Sub-Activity 2.2.1.1.1: Carbon and ES Mangrove Policy and Management Engagement and Report	Dec 2018	100%	
Sub-Activity 2.2.1.1.2: Replication Strategy	Dec 2018	10%	
Activity 2.2.1.2: Small-scale intervention 2 – improved capacity and ecosystem management Mozambique (25,000 ha)			Means to achieve original intervention objectives were unrealistic and the work plan was revised accordingly in June 2016.
Sub-Activity 2.2.1.2.1: Scientific Capacity Building	Dec 2016	10%	Previous PIR reported at 40%
Sub-Activity 2.2.1.2.2: Policy and Management Engagement	Dec 2018	70%	
Sub-Activity 2.2.1.2.3: Replication Strategy	Oct 2018	0%	Previous PIR reported at 30%
Activity 2.2.1.3: Small-scale intervention 3 – improved capacity and ecosystem management Indonesia (100,000 ha)			Continuing issue with transfer of funds delaying initiation of project work. Amendment signed with MMAF to bring in third party to assist with transfer of funds. Work plan for 2018 and 2019 (extension scenario) have been prepared by Indonesia. The process for accommodating transfer fund is nearing completion.
Sub-Activity 2.2.1.3.1: Scientific and ES capacity building	Dec 2018	0%	
Sub-Activity 2.2.1.3.2: National Policy and Management Engagement	Dec 2018	0%	
Sub-Activity 2.2.1.3.3: Local Governance and Management Engagement	Dec 2018	2%	
Sub-Activity 2.2.1.3.4: Replication Strategy	Dec 2017	0%	
Activity 2.2.1.4: Small-scale intervention 4 – improved understanding Madagascar (26,000 ha)			
Sub-Activity 2.2.1.4.1: Scientific Capacity Building	June 2017	100%	
Sub-Activity 2.2.1.4.2: Policy and Management Engagement	Dec 2018	90%	
Sub-Activity 2.2.1.4.3: Replication Strategy	June 2018	90%	

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Activity 2.2.1.5: Small-scale intervention 5 – improved capacity and ecosystem management U.A.E. (176,400 ha)			This intervention is 100% co-financing.
Sub-Activity 2.2.1.4.1: Scientific Capacity Building	Dec 2018	60%	
Sub-Activity 2.2.1.4.2: Policy and Management Engagement	Dec 2018	90%	
Sub-Activity 2.2.1.4.3: Replication Strategy	Dec 2018	80%	
Activity 2.2.1.6: Facilitating knowledge management to improve capacity and ecosystem management	Dec 2018	85%	IW: LEARN Community platform no longer available so switched to Basecamp.
Output 2.3.1: A Global Blue Forests Data Tool is developed, focusing on both carbon storage and sequestration and on ecosystem services valuation and additional evidence-based experiences resulting from existing baseline initiatives are documented (incl. 2 GEF-IW project sites)			
Activity 2.3.1.1: Development of a Global Blue Forests Data Tool focusing on both carbon storage and sequestration and on ecosystem services valuation (WCMC)			
Sub-Activity 2.3.1.1.1: Training workshop	Jan 2017	100%	
Sub-Activity 2.3.1.1.2: Updating of data tool	Aug 2017	95%	Still awaiting the base maps for the implementation sites.
Sub-Activity 2.3.1.1.3: Coordination of on-line uploading and sharing of data	October 2018	20%	Relies upon Sub-Activity 2.3.1.1.2. Expected completion date changed from Oct 2017 to Oct 2018.
Sub-Activity 2.3.1.1.4: Manual/guide for greater GEF IW application	October 2018	0%	Relies upon Sub-Activity 2.3.1.1.2. Expected completion date changed from Oct 2017 to Oct 2018.
Activity 2.3.1.2: Collating additional documented evidence-based experiences from existing baseline initiatives			
Sub-Activity 2.3.1.2.1: Learning and cross training with existing global baseline initiatives	Dec 2018	95%	
Sub-Activity 2.3.1.2.2: UNEP - Blue Carbon Initiative	Dec 2018	0%	UN Environment Blue Carbon Initiative formally withdrew from the project in 2015 due to internal contracting issues. Their other project responsibilities relating to Activity 1.1.1.2 were transferred to GRID-Arendal.
Sub-Activity 2.3.1.2.3: UNEP ROLAC - Integrated Coastal Management project	Dec 2018	95%	
Sub-Activity 2.3.1.2.4: Kenya Maritime and Fisheries Research Institute (KMFRI) - Mangrove Carbon Projects	Dec 2018	93%	

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Sub-Activity 2.3.1.2.5: Abu Dhabi Global Environmental Data Initiative (AGEDI) - Blue carbon initiatives	Dec 2018	75%	UAE incorporated BF policy at national to international scale (including in INDC submitted to the UNFCCC)
Sub-Activity 2.3.1.2.6: The Ocean Foundation - Blue carbon projects	Dec 2018	90%	
Sub-Activity 2.3.1.2.7: South African Institute of International Affairs (SAIIA) - Blue Carbon Policy Project	Dec 2018	85%	
Sub-Activity 2.3.1.2.8: United States National Oceanic and Atmospheric Administration (NOAA) - Blue carbon programs	Dec 2018	100%	
Sub-Activity 2.3.1.2.9 Counterpart International-Blue Carbon program for Dominican Republic	Dec 2018	70%	This is a new leveraged co-finance partner.
Activity 2.3.1.3: Facilitating knowledge management for replication and up-scaling	Dec 2018	85%	IW: LEARN Community platform no longer available so switched to Basecamp.
Output 3.1.1: At least 6 papers with equal attention to carbon storage and sequestration and ecosystem services valuation submitted for peer-review in high impact scientific journals, enabled through targeted support of research in order to fill key knowledge gaps (Y4).			
Activity 3.1.1.1: Targeted Research 1 - An Analysis of Global Market Opportunities for the Blue Forests Concept			
Sub-Activity 3.1.1.1.1: Targeted Research	July 2018	85% N.B. These are Q1 numbers	The analysis is near finalized but due to schedules of the researchers, final write-up somewhat delayed. The new expected completion date was revised from March 2018 to July 2018. There is no expected impact on project outcomes.
Sub-Activity 3.1.1.1.2: Drafting and layout	July 2018	60%	The expected completion date had been incorrectly recorded as Dec 2017
Sub-Activity 3.1.1.1.3: Submissions and dissemination at science symposia and conferences	December 2018	10%	The expected completion date had been incorrectly recorded as March 2017
Activity 3.1.1.2: Targeted Research 2 - An Analysis of Carbon Fluxes in Degraded Seagrass Ecosystems in Madagascar			
Sub-Activity 3.1.1.2.1: Targeted Research	Dec 2017	80%	
Sub-Activity 3.1.1.2.2: Drafting and layout	March 2017	0%	
Sub-Activity 3.1.1.2.3: Submissions and dissemination at science symposia and conferences	March 2017	0%	
Activity 3.1.1.3: Targeted Research 3 - A GIS Analysis of a Global 'Blue Forests' Salt-marsh Layer			
Sub-Activity 3.1.1.3.1: Targeted Research	October 2016	100%	

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Sub-Activity 3.1.1.3.2: Drafting and layout	October 2016	100%	
Sub-Activity 3.1.1.3.3: Submissions and dissemination at science symposia and conferences	~ Dec 2017	100%	Presented at "World Conference on Marine Biodiversity" (13-16 May 2018)
Activity 3.1.1.4: Targeted Research 4 - An Analysis of Carbon Fluxes in Degraded Mangrove and Seagrass Ecosystems in Thailand			
Sub-Activity 3.1.1.4.1: Targeted Research	Sept 2017	50%	Delays in carrying out research due to processing of permits. New forms required to be resubmitted. Pending approval, fieldwork is now anticipated to begin in November 2018. Extension to complete work has been formally requested.
Sub-Activity 3.1.1.4.2: Drafting and layout	Dec 2017	0%	
Sub-Activity 3.1.1.4.3: Submissions and dissemination at science symposia and conferences	Dec 2017	0%	
Activity 3.1.1.5: Targeted Research 5 - An Analysis of the Potential Social Effects of Blue Forests Projects			
Sub-Activity 3.1.1.5.1: Targeted Research	March 2017 N.B. This info is from Q1	90% N.B. This info is from Q1	
Sub-Activity 3.1.1.5.2: Drafting and layout	March 2018	60%	The research in this activity is progressing well, the write-up is delayed due to the overwhelming schedule of the researchers in the Q4. The new expected completion date was revised from Dec 2017 to March 2018. There is no expected impact on project outcomes.
Sub-Activity 3.1.1.5.3: Submissions and dissemination at science symposia and conferences	March 2018	15%	As above.
Activity 3.1.1.6: Targeted Research 6 - An Analysis of the Valuation of Coastal Ecosystem Services (other than Carbon)			
Sub-Activity 3.1.1.6.1: Targeted Research	Dec 2017	100%	
Sub-Activity 3.1.1.6.2: Drafting and layout	March 2018	100%	
Sub-Activity 3.1.1.6.3: Submissions and dissemination at science symposia and conferences	December 2018	0%	This sub-activity should start in March 2017 and last until the end of the project.
Activity 3.1.1.7: Facilitating knowledge management for targeted research	Dec 2018	85%	IW: LEARN Community platform no longer available so switched to Basecamp.

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Output 4.1.1: At least 1 carbon accounting and ecosystem services toolkit is produced; at one blue forests policy options report is produced; at least one documented global carbon and ecosystem services report is produced; all in support of advancing blue forests methodologies, policies and approaches (Y4)			
Activity 4.1.1.1: Advancing blue forests methodologies and approaches			
Sub-Activity 4.1.1.1.1: C-Accounting & ES Methodologies toolkit analysis	September 2018	80%	As agreed in UBO Research Plan, the completion date has been changed to Sept 2018. There is no expected impact on project outcomes.
Sub-Activity 4.1.1.1.2: Toolkit drafting and layout	April 2018	80%	Drafting and layout is nearing completion
Sub-Activity 4.1.1.1.3: Publication	September 2018	0%	Publication will be delayed because activity 4.1.1.1.1 has been delayed
Activity 4.1.1.2: Advancing blue forests policy options			
Sub-Activity 4.1.1.2.1: Policy research and analysis based on lessons learned from small-scale interventions	Oct 2018	40%	Collecting lessons learned from the SSIs is taking more time than originally envisioned, partly due to the delay of implementation of the activities in the interventions. The expected completion date is changed from Dec 2017 to Oct 2018 to capture as many lessons learned as possible.
Sub-Activity 4.1.1.2.2: Policy recommendations publication - Drafting and Layout	Dec 2018	30%	The new expected completion date was revised from March 2018 to Dec 2018 (see above).
Activity 4.1.1.3: Documenting global carbon and ecosystem experiences based on the small-scale interventions			
Sub-Activity 4.1.1.3.1: Global C and ES report research	June 2018	60%	Delays partly due to lack of feedback from interventions. Expected completion date has been changed from Dec 2017 to June 2018 but no expected impact on project outcome. CSTAP chair will lead this activity in 2018.
Sub-Activity 4.1.1.3.2: Global C and ES report drafting	September 2018	20%	Delayed because of delay on activity 4.1.1.3.1
Sub-Activity 4.1.1.3.3: Global C and ES report publishing and dissemination (Y4)	Dec 2018	0%	

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Activity 4.1.1.4: Facilitating knowledge management for improving acceptance	Dec 2018	85%	IW: LEARN Community platform no longer available so switched to Basecamp.
Output 4.2.1: At least two policy briefs are produced (Y1-Y4); one media and communications strategy is developed and implemented (Y1); and at least two stakeholder engagement workshops are held (coordinated with IW:LEARN) to share lessons learned and promote carbon storage and sequestration and ecosystem services in natural resource management (Y1 and Y4)			
Activity 4.2.1.1: Developing policy briefs to raise awareness on blue forests opportunities and on blue forests uptake in policy making			
Sub-Activity 4.2.1.1.1: Policy research and analysis	Dec 2018	70%	Lack input from Indonesia small-scale intervention
Sub-Activity 4.2.1.1.2: Policy technical support	Oct 2018	60%	
Sub-Activity 4.2.1.1.3: Policy briefs publication - Drafting and layout	Oct 2018	50%	
Sub-Activity 4.2.1.1.4: Policy stakeholder engagement	Dec 2018	65%	
Activity 4.2.1.2: Developing media communication materials and strategies			
Sub-Activity 4.2.1.2.1: Strategy development	June 2015	100%	
Sub-Activity 4.2.1.2.2: Interaction with relevant media outlets (subscriptions, etc.)	Dec 2018	25%	
Sub-Activity 4.2.1.2.3: Publications (information sheets, press releases, etc.)	Dec 2018	50%	
Sub-Activity 4.2.1.2.4: Dissemination and outreach	Dec 2018	80%	
Activity 4.2.1.3: Formation of stakeholder engagement workshops			
Sub-Activity 4.2.1.3.1: Project Inception Workshop (Y1)	June 2015	100%	
Sub-Activity 4.2.1.3.2: Project Showcase Workshop (Y4)	Dec 2018	0%	
Sub-Activity 4.2.1.3.3: Outreach	Dec 2018	75%	
Activity 4.2.1.4: Facilitating knowledge management for increasing stakeholder awareness	Dec 2018	80%	IW: LEARN Community platform no longer available so switched to Basecamp.
Output 5.1.1: Project performance reviewed and reported, including IW Tracking Tool, in a timely manner, and MTE and FE completed and submitted on time.			
Activity 5.1.1.1: Monitoring project performance			
Sub-Activity 5.1.1.1.1: Project monitoring and review	Dec 2018	85%	
Sub-Activity 5.1.1.1.2: Project reporting	Dec 2018	85%	
Sub-Activity 5.1.1.1.3: Coordination of PSC meetings	March 2018	75%	
Sub-Activity 5.1.1.1.4: Mid-term evaluation	Jan 2018	25%	Date for MTR changed from Jan 2018 to June 2018

Outputs	Expected completion date	Implementation status as of 30 June 2018 (%)	Comments if variance. Describe any problems in delivering outputs
Sub-Activity 5.1.1.1.5: Final evaluation	Dec 2018	0%	
Output 5.2.1: Improved knowledge management through documented cooperation and knowledge exchange, including a dedicated project website connected with IW:LEARN (Y1-Y4); development of joint strategy with IW:LEARN and GEF-STAP (Y1-Y4); at least 1 special session on blue forests at a high-profile science symposium and at the GEF IW Conference (Y4).			
Activity 5.2.1.1: Implementing a dedicated project website connected with IW:LEARN and other GEF knowledge management systems			IW: LEARN Community platform no longer available so switched to Basecamp.
Sub-Activity 5.2.1.1.1: Design of layout and launch, including coordination of design with project partners	June 2015	100%	
Sub-Activity 5.2.1.1.2: Layout and publishing	June 2015	100%	
Sub-Activity 5.2.1.1.3: Technical web site maintenance	Dec 2018	75%	
Sub-Activity 5.2.1.1.4: Content maintenance and coordination with BF project and other platforms and data hubs	Dec 2018	75%	
Activity 5.2.1.2: Improving knowledge management through documented cooperation and knowledge exchange with IW:LEARN and STAP in support of its climate resilience work			
Sub-Activity 5.2.1.2.1: Development of joint knowledge management strategy between BF, IW:LEARN and GEF-STAP	Dec 2015	100%	
Sub-Activity 5.2.1.2.2: Establishment of exchange and cooperation	Dec 2018	50 %	
Sub-Activity 5.2.1.2.3: Presence at least one COP	Dec 2017	100%	
Sub-Activity 5.2.1.2.4: Preparation of at least two experience notes	June 2018	0%	
Sub-Activity 5.2.1.2.5: Dissemination of at least two experience notes	Oct 2018	0%	
Activity 5.2.1.3: Undertaking special sessions on blue forests at a high-profile science symposium and at the GEF IW Conference			
Sub-Activity 5.2.1.3.1: Outreach to science platforms	June 2018	75%	Expected completion date changed from June 2018 to Dec 2018 to accommodate further outreach. No expected impact on project outcomes.
Sub-Activity 5.2.1.3.2: Preparations and participation at science symposium and/or IW Conference	Dec 2018	75%	Blue Forests will be presented again at the International Waters Conference in Nov 2018. Expected completion date changed from June 2018 to Dec 2018. No expected impact on project outcomes.
Sub-Activity 5.2.1.3.3: Stakeholder outreach and dissemination	Dec 2018	75%	
Sub-Activity 5.2.1.3.4: Follow-up strategy	Dec 2018	40 %	

Analysis of outputs of project component 1 and 2

Component 1 activities provide „guidance for carbon accounting and ecosystem services in the form of advisory panels for the small-scale intervention sites which are the focus of component 2. Thus, project components 1 and 2 are partly intertwined because the project advisory panels were planned to support the implementation of small-scale intervention sites activities. The project advisory panels provide less support to the small-scale intervention sites than planned due to their structure. The planned toolkits have been produced and distributed to the project partner at the small-scale intervention sites. The project advisory panels which were planned to support the small-scale site interventions only worked to a certain degree. They were planned for facilitating knowledge exchange. One example for the successful work of the project advisory panels is the co-operation of IUCN international and CI Ecuador. Both organisations developed a proposal for a NAMA in a country visit resulting in a draft of a project proposal to national policy makers.

Analysis of outputs in the small-scale intervention sites component 2

Abu Dhabi, Ecuador, Kenya and Madagascar: Project partners implementing these small-scale interventions have several years' experience in blue forest and marine protection projects and execute several projects in different sites. As mentioned above, AGEDI in Abu Dhabi sets the baseline for blue forest and blue carbon projects and already has scaled up the policies in UAE. Thus, the intended outputs of the project have been reached. Blue Ventures has been working in Madagascar for 15 years and has the organisational capacity for implementing the foreseen activities and deliver the outputs in challenging natural and political environment. KMFRI in Kenya has implemented a small-scale intervention and plans a second similar project in Kenya. In Ecuador, CI supports local and national policy makers and ecosystem managers to implement the very advanced national legislation regarding mangrove protection. All the sites implemented the activities with minimal technical support from PCU and other project partners so that the assumption of the project design is true that the project partners are able to implement activities with limited support.

Indonesia: The official project partner is the Ministry of Maritime Affairs and Fisheries. The Research Centre for Coastal and Marine Resources of the Ministry of Marine Affairs and Fisheries undertakes the activities of the project and was involved in negotiating the project design. Even though the project received high level support during the design phase, during the early stages of project implementation, administrative procedures of registering the project within the Ministry were not properly followed[1]: This can be partly explained to the political environment in Indonesia. The political priorities of the Minister for Maritime Affairs and Fisheries, a relatively small Ministry, are fighting illegal fishery despite that is the lead Ministry for blue carbon. The Ministry of Forests is responsible for forest legislation and climate change related policies. Thus, the project could not properly be registered and executed despite that the research institute of the Ministry - the project partner- undertakes research activities regarding blue forests like collecting samples for analysis and takes part in international working groups. Currently, the project is in the process of registering the bank account. If this would not been possible, the activities have to be undertaken by other actors being able to receive the funds in collaboration with the research centre of the Ministry for Maritime Affairs and Fisheries in Indonesia.

Mozambique: The project partner has limited experience in research-based and policy-oriented projects and also limited experience in projects for mangrove protection. Staff turnover has delayed the timely delivery of the projects. Thus, the organisational capacity of the project partner has been limited which is contrary to the assumptions in the project. Since the PCU supported the project partner by advice and implemented activities 2.1.1.6. and 2.2.1.6. foreseen in the Project Document, project activities at the small-scale intervention site are implemented.

The needed amount of "technical" support to the small-scale intervention sites by the PCU has been underestimated in the assumptions of the theory of change. It was a part of the assumptions in the theory of change, that the knowledge from the Abu Dhabi project could be easily transferred to the other sites. However, it turned out that the small-scale intervention sites had different needs for knowledge and support.

Knowledge exchange between small-scale intervention sites is implemented in personal meetings as foreseen in the project document. It was expressed by the interview partners that they wish more personal communication and opportunities for knowledge exchange in personal meetings or telephone conferences. Best practices for project set-up and implementation have not been sufficiently discussed between all small-scale intervention sites on a regular basis.

The planned Global blue forest data tool has not been finished so far. The data tool builds upon the experience of Abu Dhabi where the data tool was developed and needs the input of the small-scale intervention sites. Planned resources have been spent to explain the need for the data tool to the small-scale intervention sites to external partners.

The knowledge generation activities from other GEF-sites have been mostly interactions inn a meeting without following-up: e.g. a meeting was held with GEF Projects from Latin America and the Caribbean which was organised by UN Environment ROLAC. Delays in reporting from the Panama meeting were experienced. The white paper as an envisaged knowledge product needs to be finished by the PCU.

Analysis of outputs Component 3 Research

The outputs of component 3 have been mainly delivered in time because they are targeted research to knowledge gaps undertaken by universities / WCMC and IUCN. The experienced research institutions were already able to publish some results as papers and shared the results in workshops. As one project partner was not able to obtain a research permit from Indonesia, the location for the research had to switch Thailand which caused a delay in implementing the research activities. They are planned to start in December 2018.

Although project activities focus on coastal blue forests ecosystems, other potential ecosystems have been identified through partner co-finance. These include coastal Sabkha, algal mats, kelp forests and ocean life.

Analysis of Component 4 *and 5* Options and knowledge sharing

[1] In February 2010, Dr. Fadel Muhammad (Minister of Marine Affairs and Fisheries) and Mr. Achim Steiner (UNEP Executive Director) launched the global scientific assessment on Blue Carbon during the UNEP Governing Council / Global Ministerial Environment Forum in Bali. A blue carbon centre in the The Research Centre for Coastal and Marine Resources was planned.

The Activities of component 4 have been delayed due to the delays in implementation at small-scale intervention sites. The planned toolkits for carbon and ecosystem service accounting methodologies, policy options and the documented experience of the interventions build on the generated knowledge in the small-scale intervention sites.

The outputs of the component 5 have been delivered mainly in time because the project partners have put emphasis on this component of the project. The project has many stakeholders which requires crafting different messages to different stakeholders. Some of its outputs are mainly directed to academic stakeholders to generate knowledge and need translation to policy-related communication material. GRID-Arendal has use the opportunities to present solutions in other databases directed to policy makers like the Panorama Solutions[2]. The knowledge products like brochures about blue carbon are tailored to the needs of the general public interested in Blue forests and blue carbon.

Knowledge sharing with IW Learn and other actors has been conducted on the IW meetings and via the website.

Quality and Sequence of outputs:

The quality of the outputs varies: As this is a knowledge generation project, the main outputs are publications and meetings / training. In the main knowledge generation component 3 products range from articles in peer-reviewed journals, presentation at scientific workshops and conferences or global policy conferences to grey literature based on internet publications. In the component 1 guidance tools are mainly master thesis from university students and collected documents. The products have only partly met the demands of the potential users as it was reported in the interviews. Knowledge products from component 2 have a high quality and are oriented to the needs of potential users for analysis of policies and field work like the study on ecosystem services from mangroves in Mozambique. Knowledge products from component 4 and 5 meet the „standards" for web-based publications. Newsletters and updates of the project website have been submitted a little bit irregularly.

To what extend is the project likely to achieve its planned outputs?

The project is likely to achieve its main planned outputs if the project is extended. As the implementation of the foreseen activities in the small-scale intervention site Indonesia is lacking, the work plan has to be adapted. In Mozambique the work plan has been adapted in 2016. Some actors need more time to implement their activities due to reasons explained above. The project is likely to achieve its main planned outputs because the PCU has focused on supporting the project partners in the small-scale intervention sites for the last year. Project partners have taken the necessary actions to implement their activities.

Main internal drivers for achieving goals: 1) The complex project structure has not supported project effectiveness. Communicating with 19 project partners and other stakeholders and steering the project including monitoring and reporting requires more resources for project management and facilitation of knowledge transfer. Leadership and community building were missed in the project as some partner interviews reported.

5.4.2 Achievement of direct outcomes

The project has already contributed to the improved knowledge of coastal and marine ecosystem managers and stakeholders by developing best practices for blue carbon related to carbon sequestration, ecosystem valuation and policy options. As the project has many stakeholders and most interactions with them are one-time interactions in conferences or workshops or online interactions, it is difficult to assess to which degree the project has reached its direct target group. Indicators for project outcomes have been planned, however are not measured so far. So, the feedback from the interviews and the review of publications is the only source of validation how the target group has been reached.

Project component 1 This project outcome has already been reached.

Outcome 1 Improved knowledge of coastal and marine ecosystem managers and stakeholders in selected regions on carbon sequestration, storage, possible greenhouse gas emissions as well as ecosystem services in blue forests ecosystems and on possible policy/economic instruments that may be applied to sustainable coastal habitat management.

SMART Indicators are:

1) *developed guidelines by advisory panels and the request and application of methodologies by external parties.* This outcome can only be partly measured by the proposed indicators.

The guidelines have been developed and all project partners at the intervention sites have access to them. External requests for the guidelines have not been reported so far but the project partner have distributed the guidelines within their research networks

Project components 2: The project outcomes have only partly been reached in four out of six small-scale intervention sites.

Outcome 2.1. Improved understanding of ecosystem services, carbon sequestration, storage, avoided emissions and management in at least 3 ecosystem types (mangroves, seagrass, saltmarsh) in 5 sites (including 2 GEF-IW project sites) covering at least 200,000 ha.

SMART Indicators

1) BF tools successfully integrated in management approaches in 5 sites and for three different BF ecosystem types (≤200,000 ha) by Y4 of the project

2) BF methodologies incorporated in at least 1 country's relevant national policy by Y4 of the project

In the small-scale intervention sites in Abu Dhabi, Kenya and Ecuador successful interactions with the target group have been undertaken which have led to discussions of policy options with policy makers. In the interview was mentioned that policy makers in Abu Dhabi and the UAE have improved knowledge about mangrove ecosystems (They learnt that replanting mangroves is not enough to compensate for the loss of ecosystems services). In Kenya, the project partner reported that policy makers in the Ministry of the Environment are interested in to include mangrove forests into NDCs. In Ecuador, the project brought policy makers from different Units of the Ministry for the Environment together to start planning to include mangroves in international climate change projects. So planned outcomes in improved knowledge of managers of costal ecosystems have been already achieved except for the small-scale intervention sites in Mozambique and Indonesia.

[2] https://panorama.solutions/en/solution/incentivized-participatory-approach-mangrove-conservation

Outcome 2.2. Improved capacity and ecosystem management as a result of the application of methodologies and approaches advanced under Component 1 in the same 5 sites (including GEF-IW project sites) covering at least 200,000 ha.

SMART Indicators

1) At least 1 report and best practice study on BF-based ES management per small-scale site by Y4 of the project This indicator does not measure the outcome at the small-scale intervention site, only describes the output from the project partners at the small-scale intervention site. The best practice could also be caused by other actors than the project and only be captured in a report by project partners.

2) *BF methodologies incorporated in at least 1 country's relevant national policy by Y4 of the projec*t

Management practices for coastal ecosystems have improved in four intervention sites in Abu Dhabi (like replanting practices for mangroves, Kenya (mangrove protection and planting), Ecuador (improved practices for harvesting crabs in mangroves) and Madagascar (improved practices for fishery).

Outcome 2.3. Approaches, experiences and recommendations are made available for the replication and up-scaling of interventions (Y4 of the project).

SMART Indicators:

1) At least 1 overall report on BF experiences published by Y4 of the project

2) Blue Forests Data Tool is to be published by Y2 of the project

A global Blue Forest Data Tool has been developed for external users, however it needs specific input from some small-scale intervention sites to be useful at the national level.

Project Component 3 This project component has partly reached the intended outcome.

Improved understanding of ecosystem services and carbon storage, possible greenhouse gas emissions, sequestration and fluxes for blue forests ecosystems through targeted research and peer-reviewed literature, with a particular focus on ecosystems lacking knowledge (seagrass and salt marshes) (A target group is missing for this outcome)

Indicator: Knowledge on C storage, emissions, sequestration and fluxes as well as ES management in at least three different BF ecosystems is increased by Y4 of the project. This indicator is not quantified.

The research products have already been presented in workshops and scientific conferences despite that the peer-reviewed publications still take time to finish.

Project Component 4 This component has already reached the intended outcomes for the project duration.

Outcome 1 Improved acceptance of blue forests methodologies and approaches through independent and internationally recognized institutions responsible for ensuring quality standards for carbon accounting and ecosystem service valuation, such as international climate frameworks (IPCC, UNFCCC, LULUCF/AFOLU processes) and ecosystem service markets.

SMART Indicator At least 1 additional MEA or science-policy platform includes the importance of coastal ecosystems for climate change mitigation and adaptation by Y4 of the project

At global climate change events, direct outcomes have also been reported. A publication about the performance of countries to include blue forests into NDCs has gained much attention in a side event of COP 18.

Project partner from Kenya and Madagascar have presented their experience at the Global Landscape Forum, a science-policy platform, in a side event African Mangrove Forum, in Nairobi 2018.

Outcome .2 Increased stakeholder awareness of the ecosystem services and carbon values of blue forests ecosystems

SMART Indicator At least 3 additional targeted stakeholders (national governments) and 1 international. policy instrument show measurable increase in including BF in ES management considerations by Y4 of the project

Project partners present regularly their experiences in workshops and conferences like in the project workshop with UN Environment Regional Office for Latin America and the Caribbean where Ministers of serval Latin American and Caribbean countries have been present.

Project partners of AGEDI in UAE have established measures to improve their management practices of mangroves.

REDD+ allows the application of mangrove forests projects.

Project Component 5 This project component has reached the intended outcomes by year 3

Outcome 2) Improved access to and sharing of information in cooperation with IW:LEARN in integration of climate change adaptation and climate resilience into IW projects as well as capacities to facilitate knowledge exchange

Indicator: BF methodologies and best practices are referenced and sought after via knowledge management platforms (Y1-4)

The project has presented its experience in knowledge management platforms of IW:LEARN of GEF or Panorama Solutions of GRID-Arendal / GIZ.

5.4.3. Likelihood of impact

Blue carbon and blue forests - the ecosystem services of coastal and marine areas - have faster been recognised at the international level than planned in the design state of the project. Activities of project partners financed by the project have contributed to this development.

The project partners working in research (universities) will publish the methodologies for carbon accounting in peer-reviewed journals which will contribute to create a global knowledge base for blue carbon projects and policies.

The catalytic role of the project in capacity building on small-scale intervention sites is much more limited than it was planned. The project supported existing strong organisations (INGOs, universities, CI Ecuador, Abu Dhabi, Kenya), which rely on other financial sources for their work so that a direct impact of the project is difficult to attribute however it is clear that impacts are generated. The project partner in Indonesia was already able to acquire projects for blue forests to continue its work.

The activities of the project at three small-scale intervention sites contribute to long-term changes in policies and in management practices because they are embedded in local culture, support the implementation of national policies and are implemented by actors with long-term goals. Mangroves are considered a part of the cultural heritage in Abu Dhabi. This creates a favourable environment for implementing the policies and changing the management practices in the long run. The institutional environment is similar in Ecuador where a legislation protecting mangroves was created in the late 1990s and the government is willing to implement it. The project has supported the implementation of a good management practice in community-based mangrove management which will improve the livelihoods of the local population and the protection of the mangrove ecosystem and selected species (red crabs). The good management practices and community-based institutions have already created tangible improvements of local livelihoods in the small-scale intervention site in Kenya.

5.5. Financial Management

The project has spent 60% of its financial budget and 91% of pledged co-funding was provided. The actual co-funding of the project is higher than the spent budget because some co-funded activities took place in the PPG stage of the project and the co-funded activities are implemented in time. Further the Ministry of Fishery and Marine Affairs Indonesia could not accept funding from the project but provided in-kind co-funding in terms of staff time.

Financial Management Table

Financial management components:		**Rating**	**Evidence/ Comments**
1. Completeness of project financial information:			
Provision of key documents to the evaluator (based on the responses to A-G below)		HS	
A.	Co-financing and Project Cost's tables at design (by budget lines)	Yes	excel table provided
B.	Revisions to the budget	Yes	
C.	All relevant project legal agreements (e.g. SSFA, PCA, ICA)	Yes	
D.	Proof of fund transfers	Yes	
E.	Proof of co-financing (cash and in-kind)	Yes	
F.	A summary report on the project's expenditures during the life of the project (by budget lines, project components and/or annual level)	Yes,	Excel table
G.	Copies of any completed audits and management responses *(where applicable)*	n/a	
H.	Any other financial information that was required for this project (list):	Yes	
Any gaps in terms of financial information that could be indicative of shortcomings in the project's compliance with the UN Environment or donor rules		NO	
Project Manager, Task Manager and Fund Management Officer responsiveness to financial requests during the evaluation process		HS	
2. Communication between finance and project management staff		HS:HU	
Project Manager and/or Task Manager's level of awareness of the project's financial status.		HS	
Fund Management Officer's knowledge of project progress/status when disbursements are done.		S	
Level of addressing and resolving financial management issues among Fund Management Officer and Project Manager/Task Manager.		S	
Contact/communication between by Fund Management Officer, Project Manager/Task Manager during the preparation of financial and progress reports.		S	
Overall rating		HS	

In this section, an integrated analysis of all dimensions evaluated under financial management: is provided. The financial management rates as *highly satisfactory.*

The *completeness* of financial information is highly satisfactory

The tables of co-financing at design (PIF and PPG state) were provided and ca be found in section 3.7 finances of the project.

Revisions of the financial budget and storage of the relevant agreements / Proof of fund transfer: GRID-Arendal stores all financial information in its financial management system as obliged under Norwegian Law. The financial and project assistant of the PCU provided all financial information and reports on requests. A financial report per activity until March 2018 was provided and can be found in the annex of this report. The information in this table was analysed. It is complete. The project was not audited until August 2018.

Communication between finance and technical stuff: The observed communication between the financial management and the technical management of the PCU is excellent.

5.6. Efficiency

The overall effectiveness of the project is rated as moderately satisfactory.

The project started in time and some components are delivered in time and some components are delayed. Overall, t*he project activities are delayed with a spending rate of 60 % of budget after three years of project duration.* The tender for this Mid-term review was published in January 2018 - after three year of project duration- to explore options for closing the project in time.

Most of the project partners reported delays in implementation. See overview of attainment of objectives 5.2.

The three activities facing *major delays* are:

Component 2 Application of blue forest methodologies for carbon accounting and ecosystem services valuation

Subcomponent 1

2.1.1.3. Small-scale intervention 3 Indonesia Improved understanding of blue forest carbon storage and sequestration and ecosystem services

Subcomponent 2 improved capacity and ecosystem management as a result of application of methodologies facilitated by component 1

2.2.1.3. Small-scale Intervention Indonesia Improved capacity and ecosystem management

The activities at the small-scale intervention site Indonesia are severely delayed due to administrative processes after signing the MoU. The project partner faces difficulties to open a bank account for the project. It is planned to register the bank account the end of September 2018. As the projects ends in December 2018, a project extension would be needed to implement the most important activities which are still needed under the changed national and international political environment. The funds are not disbursed yet, so a no-cost extension of the project would be necessary with a renewed in-kind contribution (staff time) of the Ministry of Fishery and Marine Affairs in order to achieve the foreseen outcomes.

2.1.1.2. Small-scale intervention 3 Indonesia Improved understanding of blue forest carbon storage and sequestration and ecosystem services

Subcomponent 2 improved capacity and ecosystem management as a result of application of methodologies facilitated by component 1

2.2.1.2. Small-scale Intervention Indonesia Improved capacity and ecosystem management

The activities at the small-scale intervention site in Mozambique are delayed as described in 5.2. Causes for delay are staff turnover and political unrest A renewed work plan was submitted in 2016. Project activities of both subcomponents will not be finished until the end of December 2018. Not finishing the activities will affect the outcome. As the funds are not fully disbursed to the project partner, a cost-neutral extension is possible. Co-funding will not increase during the project extension time.

2.3.1.1. Development of a global blue forest data kit focusing on both carbon sequestration and ecosystem services

The implementation of the toolkit has not been finished yet due the need of informing project partners about the need of the data toolkit and their collaboration and to incomplete information provided by the small-scale intervention sites. An extension of the project is necessary and the disbursement of additional funds to finish the data tool kit. It has to be assessed by project partners if the data toolkit is necessary for achieving the outcomes at the intervention sites and at the global level.

Component 3

Subcomponent 3.1. Targeted research to address knowledge gaps on blue forests

Activity 3.1.1.4 An Analysis of Carbon Fluxes in degraded mangroves and seagrass ecosystems in Indonesia

The activity is delayed due to a withdrawal of the research permit for Indonesia after the start of the project. Charles-Darwin-University changed the site for the research to Thailand where a local university as co-operation partner supports the research. The research permit for a site in Thailand was granted in August 2018, field work will be undertaken in December 2018 and the results will be submitted to peer-review journals in the end of 2019. A cost-neutral project extension is possible because the funds for this activity have not been fully disbursed, yet.

Further delays are reported in project component 3 by UBO and Stockholm University due to changes in the organisation of the research activities of both universities. The delay has no influence on the project outcome. A no cost extension is possible to achieve the outputs.

The delays were discussed with the project partners and PCU during the Mid-term Review, mainly in interviews. PCU and project partners have recognised the causes for the delay and developed feasible solutions allowing to implement the planned activities.

The project has used *existing partnerships and synergies and complementarities* with other projects whenever possible like building on existing data for mangrove cover. In Ecuador, the project partner uses synergies with other GEF projects on marine protection areas for regional knowledge exchange. Blue Ventures in Madagascar also uses synergies with other projects for knowledge generation and sharing. UBO, Stockholm University and IUCN also built on synergies with existing research projects using knowledge from other activities for the project and vice versa.

The extent to which the management of the project minimises *UN Environment's environmental footprint* (direct environmental effects) is not measured in the project. The climate impact of flights is not compensated. Activities like meetings and travel undertaken are not planned ahead considering synergies in travel to different events or small-scale intervention sites to minimise the environmental footprint of the project.

5.7. Monitoring and Reporting

Monitoring and reporting is rated as highly satisfactory.

Indicators for outputs and activities are SMART. Indicators for Outcomes exist. A system for Monitoring and Reporting is in place. A monitoring system for financial and technical data of the project was designed and is working The PCU regularly monitors the financial and technical performance of the project. The monitoring comprises the timely execution of planned the activities and the outputs and the disbursement of funds. All necessary data were provided for the Mid-Term Review. As the number of project partners is higher than in other projects, the resources needed for monitoring and reporting are also considerable

The PCU keeps an internal internet-based archive (Dropbox) with all products and reports of the project. The database is regularly updated. The database includes for example detailed lists where and when research activities have been presented. The consultants had access to this database since the visit to the small-scale intervention site. These data are not fully shared with all project partners or the public in an internet database.

Monitoring data from the project activities like timely disbursement of funds are used to identify delays in project execution and to support the respective project partners in developing activities.

Project reporting to the GEF is in time and the reports contain all the necessary technical and financial data. The PCU advises project partners when and how to report financial and technical data and advises project partners during the reporting. This on-going Mid-term review has been delayed by 18 months, reasons for this delay were not explained.

5.8. Sustainability

The sustainability of the project is rated as satisfactory.

In the following section, the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes are identified and discussed:

- Socio-political Sustainability

The main external driver for the project performance is that blue forests are on the international agenda like in climate change negotiation and climate finance. The project has produced a report how blue forests are included in NDCs which was presented in a site event of COP. International and national policy makers showed interest in how their countries performed in the reports according to the interviews.

In some countries with small-scale intervention sites, the socio-political conditions create a favourable environment for sustaining the direct outcomes of the project.

In Ecuador, the socio-political conditions are very favourable for sustaining the project results because of the existing political and legal framework for mangrove protection. In Abu Dhabi, the project was implemented due to a high interest and political support for mangrove protection in the country. In Indonesia, a high-level meeting about blue Forests took place in 2018, where the main political actors like Ministries and research institutions discussed policies and research for blue forests.

- Financial Sustainability

Financial: To what extend further support is needed to implement the results of this pilot project and how could scaling up look like? At a global level, potential users of the knowledge products can still have access to the products of the project online and as scientific publications. In Kenya, KMFRI plans to replicate the project at a second site. AGEDI has already diffused the project results to UAE and plans to diffuse it to the region using its own funds.

- Institutional Sustainability (including issues of partnerships)

There is sufficient stakeholder engagement in project implementation and knowledge generation and diffusion to sustain the project results after the closure of the project. Project partners at the small-scale intervention sites will continue their work in blue forests and continue to interact with the target groups enlarging their knowledge on blue forests. As already mentioned, all executing partners have embedded Blue Forest activities in their respective programs of work in order to ensure follow-up activities beyond the timeframe of the project.

The project has created trust and mutual interest in the work of project partners from different backgrounds like INGOs, universities and research institutions and Ministries as several interview partner reported. Some of the project partners will continue to collaborate after the closure of the project like IUCN and university of Bretagne.

5.9. Factors Affecting Performance

In this section the main external and internal factor affecting project performance are briefly presented which are rated in the section "performance" in the chapter Conclusions.

Preparation and readiness: The project design has been an important factor affecting the performance of the project. As it was explained before, project design has not been always clear and consistent.

The most influencing factors on project set-up: project partners were involved in the beginning of the project due to their willingness to participate in the project but their capability to implement varies. Not all project partners were aware of formal procedures to register the project. The project was composed of different sets of actors which have never co-operated before which required building trust between the partners before implementing collaborative activities.

Quality of project management and supervision: Project implementation arrangement have been adapted in the project: in the project design phase, only one project manager was employed for this complex project. Later on, an additional project manager was assigned to the project. Project management and implementation of selected activities due to drop out of a project partner are intertwined so that communication with project partners is not always the focus of project managers at GRID-Arendal, but mainly technical tasks, M+E and communication and outreach.

Stakeholder participation, more specific project partners involvement in the project: After an initial phase of discussion in the project, the roles of project partners are clearly defined. The main internal drivers for achieving the project objectives were that some project partners were not used to collaboration which hampered the timely delivery of some outputs. The number of stakeholders is high so that interactions with stakeholders are limited due to time and resources in the project.

Country-drivenness: As there is much interest at the international level in Blue Forests, governments and local actors are interested in bringing blue forest policies forward for different reasons like climate change and improving livelihoods of coastal communities.

Communication and public awareness: The project has a strong component on communicating and advocacy. The PCU as well as project partners communicate the results of the project to a wide range of stakeholders. The project has many stakeholders which requires crafting different messages to different groups of stakeholders like communicating the project results in international conferences, academic conferences or in a blog. Communicating the project results to these target groups is a strength of the project.

6. Conclusions and recommendations

6.1. Conclusions

The first part of the conclusions presents a narrative about the strengths and weaknesses of the project, in the second part the table with the rating of the evaluation criteria will be presented.

1. The project is a research-based knowledge generation and exchange project targeting global and national policy makers and managers of coastal ecosystems so it does not match all the characteristics a of an implementation-oriented project. It can be considered a pilot project due to its focus on knowledge generation and exchange. The projects involves 16 executing project partners from NGOs, universities, UN Environment and the private sector creating a diverse and complex structure. All partners in the research component have a strong track record in coastal and marine management related academic or policy-oriented research.

Most project partners at small-scale intervention sites have a strong record in projects related to coastal management or fishery or blue forests. They use synergies with other on-going projects and built upon previous experience in coastal and marine management and fisheries. A delivered co-financing of 91% proves that the participating organisation are committed to achieve the project results. The project builds on this strong baseline.

2. As the political environment at the global level turned out to be very favourable, and project outcomes have been almost reached by year 4 of the project, supporting the small-scale intervention sites has become a priority of the project for the last months.

3. Most project partners will be able to finish their activities without further technical support if the project is extended. The project partners in Indonesia and Mozambique had not much experience in Blue forest related projects in small-scale intervention sites so the implementation of their activities has been delayed and implementation arrangements and work plans have to be adapted. In Mozambique the work plan has already be adapted to finish the studies of component 2.1 focusing on creating knowledge about blue forests. In Indonesia, the transfer of funds has been hampered by administrative guidelines so the implementation arrangements for project activities have to be adapted and the work plan has to be adapted accordingly.

4. The project has a very good baseline however performance could have been much better as several project partner reported. The above described characteristics of the project have several implications for the project performance: In the project design phase of the project, not all project partners were used to collaboration and structures for collaboration had to be established. Bringing many different project partners into a project, requires resources for project management, especially for internal communication. The complex project structure and the numerous activities have not supported project effectivity, because they required too much resources for communication, steering and monitoring and reporting.

5. The advisory panels were planned as an instrument to support the small-scale intervention sites with technical knowledge and to generate knowledge. During the project implementation it turned out that the project advisory groups could not fulfil their role to support small-scale intervention sites. The involvement of academic research partners means also that national Ministries for Research have to be included as stakeholders (granting research permits) as long as international universities or consultants do the research which caused delays in the project.

6. The “technical” and administrative support by the PCU needed to the small-scale intervention sites with less experience has been underestimated in the assumptions of the theory of change. It was assumed in the theory of change, that all small-scale intervention sites need the same knowledge and have the same capabilities to successfully implement the project activities.

.

Ratings table

Criterion	Summary Assessment	Rating
A. Strategic Relevance	**S**	**HS → HU**
1. Alignment to MTS and POW	S	HS → HU
2. Alignment to UN Environment / Donor/GEF strategic priorities	S	HS → HU
3. Relevance to regional, sub-regional and national environmental priorities	S	HS → HU
4. Complementarity with existing interventions	HS	HS → HU
B. Quality of Project Design	**S**	**HS → HU**
C. Nature of External Context	HS	**HF → HU**
D. Effectiveness	S	**HS → HU**
1. Delivery of outputs	**MS**	HS → HU
2. Achievement of direct outcomes	S	HS → HU
3. Likelihood of impact	S	HL→ HU
E. Financial Management	**HS**	**HS → HU**
1.Completeness of project financial information	HS	HS → HU
2.Communication between finance and project management staff	HS	HS → HU
F. Efficiency	**MS**	**HS → HU**
G. Monitoring and Reporting	**HS**	**HS → HU**
1. Monitoring design and budgeting	HS	HS → HU
2. Monitoring of project implementation	HS	HS → HU
3.Project reporting	HS	
H. Sustainability	**S**	**HL → HU**
1. Socio-political sustainability	S	HL → HU
2. Financial sustainability	S	HL → HU
3. Institutional sustainability	HS	HL → HU
I. Factors Affecting Performance	**S**	**HS → HU**
1. Preparation and readiness	S	HS → HU
2. Quality of project management and supervision	S	HS → HU
3. Stakeholders participation and cooperation	S	HS → HU
4. Responsiveness to human rights and gender equity	S	HS → HU
5. Country ownership and driven-ness	S	HS → HU
6. Communication and public awareness	S	HS → HU
Overall Project Rating	**S**	**HS → HU**

6.2. Lessons Learned

1. The assumption that all project partners are able to execute the projects shows trust in partners and facilitates access to projects however in the project design phase a mandatory check of the administrative procedures (if and how the project partners can obtain the necessary registration and permits, in this case research permits which are issued by the Ministry of Research and encourage the support by local research partners) should have been conducted.

2. Knowledge generation and lobbying at the international level are less necessary than expected during the project design phase due to favourable external environment so that outcomes have almost reached by year 4. This has allowed to change the focus of the project to support the small-scale intervention sites lagging behind. As the most important driver of the project is the favourable international environment. It would be more efficient to focus on a specific target group for communication and outreach at the national and international levels which can support the sustainability of outcomes in the small-scale intervention sites.

3. Knowledge generation and sharing projects for carbon accounting are necessary to promote the fast application of methodologies however they can only supplement existing initiative or projects. So, project partners need a certain amount of activities and experience to bring into the project to be able to make full use of the resources of a project. The assumption that pilot projects can be implemented by actors without experience should be questioned.

4 Interactions between actors from different fields are important for knowledge creation and sharing. The project needs structures to create trust between actors. Even advanced actors need knowledge exchange and building a community of practice: in the project design, not only resources but also specific instruments need to be allocated to this purpose. As the project shows it is challenging for project partners to bridge the gap between academic research and policy and projects, so more policy-oriented and applied research is needed in addition to academic research driven by the need for publications.

5. In general, knowledge exchange and the building of a community of practice among the actors in the small-scale intervention sites has not been fully conceptualised in the project design phase. There are only limited ideas about how to facilitate the knowledge exchange in the project in the TOC at design and evaluation. The theory of change at project design emphasised bringing the issue of blue carbon forward at the international level rather than creating a community of practice which actively creates and uses the tools.

6. A knowledge transfer from advanced actors is possible however the experience cannot be used as a blueprint like the tools from Abu Dhabi. It is necessary to explain the usefulness of the tools to potential users even if they have been successfully used in other sites. One of the assumptions of the project was that the yearly meetings provide sufficient opportunities to produce knowledge products like guidelines or toolkits which can be diffused to other GEF projects and the public.

6.3. Recommendations

1. Request the no cost-extension of the project for one year in order to allow all project partners to finish their activities and deliver the planned outputs. As the gaps in implementation between the more advanced small-scale intervention sites and the sites in Mozambique and Indonesia are considerable, it makes more sense to adjust the expected outcomes for Mozambique and Indonesia than to give them time to finish all planned activities. In both countries, other actors deliver similar projects so that the pilot function of the project in countries with a high mangrove cover cannot be used as a criterion to justify the extension. It also makes more sense to limit the extension to one year, because there are other 14 project partners having completed their activities which would be affected by administrative procedures for an extension of more than one year.

2. Time-saving measures are needed to maximise the results within the secured budget and extended project timeframe. The PCU prioritises target groups for communication at international conferences and climate change negotiations (COP, Global Landscape Forum, REDD+) to present the knowledge products taking into account to support the small-scale interventions as much as possible.

The PCU focuses its work on capacity building at the small-scale intervention sites in the following months. The PCU needs to dedicate more staff time to the support of the intervention sites in Mozambique and Indonesia in order to finish the project. Additionally, as the products of Component 4 depend on outputs of all of the intervention sites, the PCU will have to allocate resources to finish the products of Component 4 and ensure that the experiences from Mozambique and Indonesia are included in the project's final products, which will be delayed until the project is completed.

3. If the necessary administrative procedure for establishing the project in Indonesia cannot be finished until the end of September 2018, the Ministry needs to seek local partnerships with other Ministries, experienced actors and NGOs (which have obtained all the necessary permits and have similar activities) for conducting and finishing knowledge generation activities in the country. The feasibility of activities for training and capacity building for implementing better management need to be assessed. The PCU and the project partner need to assess the work plan of the small-scale intervention site in Mozambique.

4. Project partners need to finish the knowledge products of component 2 and 4 like the white paper or the toolkit for community-based interventions (component 4) as a community of practice with inputs from all partners at the small-scale interventions.

5. The PCU considers facilitating knowledge exchange between the partners at the small-scale intervention sites by regular calls between smaller groups for generating the best practices.

6. As not all small-scale intervention sites prioritised the need for the mangrove data toolkit, it needs to be assessed whether finishing the output makes sense because finishing the data toolkit would not be cost-neutral.

Annex

1. Response to stakeholder comments received but not (fully) accepted by the evaluators
2. Evaluation itinerary, containing the names of locations visited and the names (or functions) and of people met/interviewed. *(A list of names and contact details of all respondents should be given to the Evaluation Manager for dissemination of the report to stakeholders, but contact details should not appear in the report, which is publicly disclosed on the EOU website).*
3. Summary of co-finance information and a statement of project expenditure by activity
4. List of documents consulted
5. Response from Project Partners to MTR, Jakarta Workshop, September 2018
6. Evaluation Bulletin
7. Brief CVs of the consultants
8. Evaluation TORs (without annexes)

1. Response of stakeholder comments not fully accepted by the consultants

None

1. List of interviews

List of interviews for final report

Organisation	Person	Date	Topics	Remarks
Funded Partners				
Charles Darwin University Australia	Clint Cameron	2 July 2018 10 a.m.	selected questions from evaluation matrix	skype
WWF international / University of Bretagne Occidental	Linwood Pendleton	16th July 7:30 pm	selected questions from evaluation matrix	skype
University of Stockholm	Martin Gulström	6th July 11 am	elected questions from evaluation matrix	skype
UNEP WCMC	Chris Mc Cowen	17th July 11 a.m.	elected questions from evaluation matrix	skype
IUCN	Dorothee Herr	3rd July 10 am	selected questions from evaluation matrix	policy outreach, personal interview
Small-scale Intervention Sites				
CI Ecuador	Montserrat Alban	20th July, 16th of August	selected questions from evaluation matrix	personal interview and group discussion
Blue Ventures Madagascar	Leah Glass	10th August 3:00 pm	selected questions from evaluation matrix	skype
WWF Mozambique	Delila Sequeira	16th July 10am	selected questions from evaluation matrix	skype
Ministry of Maritime Affairs and Fishery Indonesia	Novi Susetyo Adi	6th July 1 pm	selected questions from evaluation matrix	skype
KMFRI Kenya	James Kairo	7th of August	selected questions from evaluation matrix	
AGEDI Abu Dhabi	Jane Claire Glavan	9th July 10 am	selected questions from evaluation matrix	skype
Co-Financed partners				
Blue Climate Solutions	Angela Martin	8th August 3 pm.	selected questions from evaluation matrix	skype
Counterpart International				not necessary
Distant Imagery				not necessary
Project management	Steven Lutz, Tiina Kurvits	21st of July 10 a.m.	selected questions from evaluation matrix	

2. Itinerary of field visit

Blue Forests - Mid-Term Review

Visit to small-scale intervention site implemented by CI-Ecuador

- Review the implementation of the Blue Forests project in Ecuador according to UNEP evaluation policy using the five criteria: relevance in the political context of Ecuador, effectiveness (achievement of goals), financial effectivity, and impact at local level and sustainability.

Timeframe	Location	Participants	Purpose
Thursday, July 19th	Travel to Quito		
Friday, July 20th Morning	Meeting at CI Office	Discussion with the CI staff Meeting with Luis Suárez, Vice president Meeting with María Isabel Diaz, Operation Manager, Meeting with Technical staff: Montserrat Albán, Raul Carvajal, Christian Martinez, Belén Vallejo	Presentation of the Mid-term Review and the Evaluation team, discussion of evaluation agenda, Semi-Structured interviews according to the questionnaires with CI staff,
Afternoon	Meetings at Quito offices of other organisations	Meeting with GIZ (Ines Freier) Meeting with IUCN regional office (evaluation team)	Discussion of other projects in the field of marine protection areas and community -based approaches
Saturday July 21st	Hotel	Meeting of the evaluation team	Discussion of open questions of evaluation
Sunday July 22nd	travel to Guayaquil		Visit to Guayaquil mangrove areas
Monday July 23rd	Meetings at Guayaquil offices of other organisations		
morning		• Meeting with SGMC Subsecretaria de Gestión Marina y Costera (Ecuador) Undersecretary of Marine and Coastal Management (MAE), officers	Semi-Structured interview about relevance, effectivity impact and sustainability of the project intervention, synergies with other GEF projects (implementation of Marine Strategic Plan of Ecuador Mainland Marine and Coastal Protected Areas Network)
afternoon		• Meeting with Escuela Superior Politécnica del Litoral (ESPOL) staff	support to project activities in small-scale intervention

Timeframe	Location	Participants	Purpose
		• Meeting with GEF FAO representatives and other CI-Ecuador staff.	discussion context of the project and other activities of CI Ecuador related to mangrove protection in the GEF-FAO project
Tuesday July 24th	• Visit to the protected area El Morro	• Meeting with fishermen association representatives • Meeting with women • Meeting with local government / municipalidad	Semi-Structured interview about context/ relevance, effectivity impact and sustainability of the project intervention
Wednesday July 25th	Hotel Radisson Guayaquil	Mangrove Week: Workshop Workshop objective: Promote the discussion on mangrove conservation mechanisms in the region based on local development strategies and encourage the application of good practices that can also be extended to other sites.	Presentation in mangrove conservation
Thursday July 26th	El Morro protected area	Workshop participants	Discussion with local fishermen association and workshop participants about conservation benefits and challenges
evening	Guayaquil	CI Staff, evaluation team	presentation of the results of the Mid-term review

3. List of Co-finance and summary per activity

Table 3: Co-financing Table *(GEF projects only)*

Co-financing (Type/Source)	UN Environment own Financing (US$1,000)		Government (US$1,000)		Other* (US$1,000)		Total (US$1,000)		Total Disbursed (US$1,000)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
– Grants									
– Loans									
– Credits									
– Equity investments									
– In-kind support									
– Other (*) -									
Totals									

* This refers to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

Budget per Component - Summary Table - Blue Forests FSP								
Project Components/Sub-components/Outputs/Activities/Sub-activities			GEF Funding	Co-Financing	Total Project Cost	Revised budget	Remaining 2018 Budget	Actual 31 Dec 17
Component 1	Development of guidance for carbon accounting and ecosystem services valuation for blue forests ecosystems	Partners	475.000	1.097.509	1.572.509	475.000	69.270	405.730
Sub-Component 1.1	Improving the knowledge of coastal / marine ecosystem managers and stakeholders on carbon storage and sequestration and ecosystem services in blue forests small-scale interventions sites		475.000	1.097.509	1.572.509	475.000	69.270	405.730
Activity 1.1.1.1	Formation and operation of the Project Level Carbon Scientific and Technical Advisory Panel (Pro-CSTAP)	DUKE	105.000	262.500	367.500	105.000	890	104.110
Sub-Activity 1.1.1.1.1	Pro-CSTAP Project Support		20.000	50.000	70.000			
Sub-Activity 1.1.1.1.2	Pro-CSTAP meetings (Y1-4)		20.000	50.000	70.000			
Sub-Activity 1.1.1.1.3	Coastal Carbon Technical Science Workshop (Y1)		20.000	50.000	70.000			
Sub-Activity 1.1.1.1.4	Assessment of carbon methodologies and approaches		15.000	37.500	52.500			
Sub-Activity 1.1.1.1.5	Production of carbon methodologies and approaches synthesis/toolkit necessary for the interventions (Y2)		30.000	75.000	105.000			
Activity 1.1.1.2	Formation and operation of the Project Level Ecosystem Services Advisory Panel (Pro-ESAP) - UNEP	GRID	125.000	500.009	625.009	125.000	12.524	112.476
Sub-Activity 1.1.1.2.1	Pro-ESAP Project Support		20.000	50.009	70.009			
Sub-Activity 1.1.1.2.2	Pro-ESAP meetings (Y1-4)		20.000	125.000	145.000			
Sub-Activity 1.1.1.2.3	ES Approaches Workshop (Y1)		20.000	125.000	145.000			
Sub-Activity 1.1.1.2.4	Assessment of ES methodologies and approaches		20.000	150.000	170.000			
Sub-Activity 1.1.1.2.5	Production of synthesis/toolkit necessary for interventions (Y2)		45.000	50.000	95.000			
Activity 1.1.1.3	Formation and operation of the Project Level Policy Advisory Panel (Pro-PAP)	IUCN	165.000	235.000	400.000	165.000	36.308	128.692
Sub-Activity 1.1.1.3.1	Pro-PAP Project Support		20.000	50.000	70.000			
Sub-Activity 1.1.1.3.2	Pro-PAP meetings (Y1-4)		30.000	40.000	70.000			
Sub-Activity 1.1.1.3.3	Policy Workshop (Y2)		20.000	45.000	65.000			
Sub-Activity 1.1.1.3.4	Assessment of policy approaches		60.000	55.000	115.000			
Sub-Activity 1.1.1.3.5	Production of synthesis of policy approaches necessary for the interventions (Y2-3)		35.000	45.000	80.000			
Activity 1.1.1.4	Facilitating knowledge management for Project Level Advisory Panels	GRID	80.000	100.000	180.000	80.000	19.548	60.452
						2.365.000		

Component 2	Application of blue forests methodologies for carbon accounting and ecosystem services valuation		2.335.000	17.948.686	20.283.686	2.365.001	1.200.514	1.164.487
Sub-Component 2.1	Improving the understanding of blue forests carbon storage and sequestration and ecosystem services		1.576.338	4.435.945	6.012.283	1.561.475	899.928	661.547
Activity 2.1.1.1	Small-scale intervention 1 - Improved understanding - Equador (41,000 ha)	CI	381.338	235.545	616.883	379.975	209.772	170.203
Sub-Activity 2.1.1.1.1	Ecosystems Services Assessment		52.242	204.545	256.787			
Sub-Activity 2.1.1.1.2	Mangrove Concessions		163.009	31.000	194.009			
Sub-Activity 2.1.1.1.3	Communication and Outreach		14.445	0	14.445			
Sub-Activity 2.1.1.1.4	Project-level Training and Capacity Building in Blue Forests Concept		25.000	0	25.000			
Sub-Activity 2.1.1.1.5	Coordination and Reporting		126.642	0	126.642			
Activity 2.1.1.2	Small-scale intervention 2 - Improved understanding - Mozambique (25,500 ha)	WWF	335.000	1.062.000	1.397.000	315.000	184.362	130.638
Sub-Activity 2.1.1.2.1	Mangrove Carbon Assessment		25.000	677.000	702.000			
Sub-Activity 2.1.1.2.2	Mangrove Mapping and Change Analysis		30.000	40.000	70.000			
Sub-Activity 2.1.1.2.3	Ecosystems Services Assessment		25.000	35.000	60.000			
Sub-Activity 2.1.1.2.4	Carbon and Ecosystem Services Market Feasibility Analysis		140.000	165.000	305.000			
Sub-Activity 2.1.1.2.5	Communications and Outreach		25.000	45.000	70.000			
Sub-Activity 2.1.1.2.6	Project-level Training and Capacity Building in Blue Forests Concept		25.000	35.000	60.000			
Sub-Activity 2.1.1.2.7	Coordination and Reporting		65.000	65.000	130.000			
Activity 2.1.1.3	Small-scale intervention 3 - Improved understanding - Indonesia (100,000 ha)	MHAF	360.000	900.000	1.260.000	360.000	349.200	10.800
Sub-Activity 2.1.1.3.1	Carbon Stock and Sequestration Assessment		229.000	200.000	429.000			
Sub-Activity 2.1.1.3.2	Ecosystems Services Assessment		45.000	100.000	145.000			
Sub-Activity 2.1.1.3.3	Communication Strategy		20.000	100.000	120.000			
Sub-Activity 2.1.1.3.4	Mapping, data collection, ground truthing		21.000	200.000	221.000			
Sub-Activity 2.1.1.3.5	Project-level Training and Capacity Building in Blue Forests Concept		25.000	200.000	225.000			
Sub-Activity 2.1.1.3.6	Coordination and Reporting		20.000	100.000	120.000			
Activity 2.1.1.4	Small-scale intervention 4 - Improved understanding - Madagascar (32,500 ha)	BV	415.000	438.000	853.000	405.500	122.312	283.188
Sub-Activity 2.1.1.4.1	Quantification of Mangrove Carbon Sequestration		100.000	183.000	283.000			
Sub-Activity 2.1.1.4.2	Mangrove REDD+ Mapping and Change Analysis		25.000	75.000	100.000			
Sub-Activity 2.1.1.4.3	Ecosystem Services Assessment		40.000	70.000	110.000			
Sub-Activity 2.1.1.4.4	Financial Valuation of Mangrove REDD+		100.000	50.000	150.000			
Sub-Activity 2.1.1.4.5	Mangrove REDD+ Developement		25.000	25.000	50.000			
Sub-Activity 2.1.1.4.6	Communication Strategy		10.000	25.000	35.000			
Sub-Activity 2.1.1.4.7	Project-level Training and Capacity Building in Blue Forests Concept		25.000	0	25.000			
Sub-Activity 2.1.1.4.8	Coordination and Reporting		90.000	10.000	100.000			
Activity 2.1.1.5	Small-scale intervention 5 - Improved understanding - U.A.E. (176,400 ha)	AGEDI	0	1.630.000	1.630.000			
Sub-Activity 2.1.1.5.1	Baseline Carbon Assessment		0	720.000	720.000			
Sub-Activity 2.1.1.5.2	Ecosystem Services Assessment		0	150.000	150.000			
Sub-Activity 2.1.1.5.3	Policy Assesment		0	65.000	65.000			
Sub-Activity 2.1.1.5.4	Communication, Outreach and Knowledge Capture		0	60.000	60.000			
Sub-Activity 2.1.1.5.5	Mapping and Ground Truthing		0	150.000	150.000			
Sub-Activity 2.1.1.5.6	Carbon Finance Feasibility Assessment Component		0	175.000	175.000			
Sub-Activity 2.1.1.5.7	Project Coordination		0	310.000	310.000			
Activity 2.1.1.6	Facilitating knowledge management on carbon storage and sequestration and ecosystem services	GRID	85.000	170.400	255.400	101.000	34.282	66.718
Sub-Component 2.2	Improve capacity and ecosystem management as a result of the application of methodologies facilitated by Component 1 at the same 5 sites (including 2 GEF-IW project sites) covering at least 200,000ha.		358.662	1.229.185	1.587.847	403.526	219.082	184.444
Activity 2.2.1.1	Small scale intervention 1 - Improved capacity and ecosystem management - Equador (41,000 ha)	CI	43.662	204.185	247.847	45.026	7.233	37.793
Sub-Activity 2.2.1.1.1	Carbon and ES Mangrove Policy and Management Engagement and Report		38.662	204.185	242.847			
Sub-Activity 2.2.1.1.2	Replication Strategy		5.000	0	5.000			
Activity 2.2.1.2	Small scale intervention 2 - Improved capacity and ecosystem management - Mozambique (25,000 ha)	WWF	90.000	115.000	205.000	110.000	66.454	43.546
Sub-Activity 2.2.1.2.1	Scientific Capacity Building		25.000	50.000	75.000			
Sub-Activity 2.2.1.2.2	Policy and Management Engagement		50.000	50.000	100.000			
Sub-Activity 2.2.1.2.3	Replication Strategy		15.000	15.000	30.000			
Activity 2.2.1.3	Small scale intervention 3 - Improved capacity and ecosystem management - Indonesia (100,000 ha)	MHAF	100.000	500.000	600.000	100.000	100.000	0
Sub-Activity 2.2.1.3.1	Scientific and ES capacity Building		10.000	200.000	210.000			
Sub-Activity 2.2.1.3.2	National Policy and Management Engagement		70.000	100.000	170.000			
Sub-Activity 2.2.1.3.3	Local Governance and Management Engagement		10.000	100.000	110.000			
Sub-Activity 2.2.1.3.4	Replication Strategy		10.000	100.000	110.000			
Activity 2.2.1.4	Small scale intervention 4 - Improved capacity and ecosystem management - Madagascar (26,000 ha)	BV	45.000	120.000	165.000	54.500	14.189	40.311
Sub-Activity 2.2.1.4.1	Scientific Capacity Building		25.000	65.000	90.000			
Sub-Activity 2.2.1.4.2	Policy and Management Engagement		15.000	45.000	60.000			
Sub-Activity 2.2.1.4.3	Replication Strategy		5.000	10.000	15.000			
Activity 2.2.1.5	Small scale intervention 5 - Improved capacity and ecosystem management - U.A.E. (176,400 ha)	AGEDI	0	170.000	170.000			
Sub-Activity 2.2.1.5.1	Capacity Building and Knowledge Transfer Component		0	75.000	75.000			
Sub-Activity 2.2.1.5.2	Policy and Management Engagement		0	45.000	45.000			
Sub-Activity 2.2.1.5.3	Geographic Tools Component		0	50.000	50.000			
Activity 2.2.1.6	Facilitating knowledge management to improve capacity and ecosystem management	GRID	80.000	120.000	200.000	94.000	31.206	62.794
Sub-Component 2.3	Synthesizing approaches, experiences and recommendations for replication and up-scaling of blue forests interventions		400.000	12.283.556	12.683.556	400.000	81.504	318.496
Activity 2.3.1.1	Development of a Global Blue Forest Data Tool focusing on both carbon sequestration and on ecosystem services valuation	WCMC	100.000	220.000	320.000	100.000	41.215	58.785
Sub-Activity 2.3.1.1.1	Training workshop		10.000	10.000	20.000			
Sub-Activity 2.3.1.1.2	Updating of data tool		55.000	180.000	235.000			
Sub-Activity 2.3.1.1.3	Coordination of on-line uploading and sharing of data		30.000	20.000	50.000			
Sub-Activity 2.3.1.1.4	Manual/guide for greater GEF IW application		5.000	10.000	15.000			
Activity 2.3.1.2	Collating additional documented evidence-based experiences from existing baseline initiatives		250.000	12.013.556	12.263.556	250.000	25.200	224.800
Sub-Activity 2.3.2.1.1	Learning and cross training with existing global baseline initiatives	GRID	55.000	15.000	70.000	55.000	-3.744	58.744
Sub-Activity 2.3.2.1.2	UNEP - Blue Carbon Initiative	UNEP	0	500.000	500.000			
Sub-Activity 2.3.2.1.3	UNEP ROLAC - Integrated Coastal Management with Special Emphasis on the Sustainable Management of Mangrove Forests in Guatemala, Honduras and Nicaragua project	ROLAC	50.000	1.396.968	1.446.968	50.000	148	49.852
Sub-Activity 2.3.2.1.4	Kenya Maritime and Fisheries Research Institute (KMFRI) - Mangrove Carbon Projects	KMFRI	145.000	536.588	681.588	145.000	28.796	116.204
Sub-Activity 2.3.2.1.5	Abu Dhabi Global Environmental Data Initiative (AGEDI) - Blue carbon initiatives	AGEDI	0	3.715.000	3.715.000			
Sub-Activity 2.3.2.1.6	The Ocean Foundation - Blue carbon projects	TOF	0	250.000	250.000			
Sub-Activity 2.3.2.1.7	South African Institute of International Affairs (SAIIA) - Blue Carbon Policy Project	SAIIA	0	100.000	100.000			
Sub-Activity 2.3.2.1.8	United States National Oceanic and Atmospheric Administration (NOAA) - Blue carbon programs	NOAA	0	5.500.000	5.500.000			
Activity 2.3.1.3	Facilitating knowledge management for replication and up-scaling	GRID	50.000	50.000	100.000	50.000	15.089	34.911

Component 5	Project monitoring, networking and knowledge management		255.000	270.000	525.000	255.000	105.928	149.072
Sub-Component 5.1	Project performance monitoring of activities		140.000	80.000	220.000	145.000	92.080	52.920
Activity 5.1.1.1	Monitoring project performance	GRID	140.000	80.000	220.000	145.000	92.080	52.920
Sub-Activity 5.1.1.1.1	Project monitoring and review		15.000	20.000	35.000			
Sub-Activity 5.1.1.1.2	Project reporting		15.000	20.000	35.000			
Sub-Activity 5.1.1.1.3	Coordination of PSC meetings		30.000	40.000	70.000			
Sub-Activity 5.1.1.1.4	Mid-term evaluation		30.000	0	30.000			
Sub-Activity 5.1.1.1.5	Final evaluation		50.000	0	50.000			
Sub-Component 5.2	Knowledge management, networking and information sharing		115.000	190.000	305.000	110.000	13.848	96.152
Activity 5.2.1.1	Implementing a dedicated project website connected with IW:LEARN and other GEF knowledge management systems	GRID	45.000	75.000	120.000	45.000	8.839	36.161
Sub-Activity 5.2.1.1.1	Design of layout and launch, including coordination of design with project partners		10.000	10.000	20.000			
Sub-Activity 5.2.1.1.2	Layout and publishing		10.000	20.000	30.000			
Sub-Activity 5.2.1.1.3	Technical web site maintenance		15.000	20.000	35.000			
Sub-Activity 5.2.1.1.4	Content maintenance and coordination with BF project and other platforms and data hubs		10.000	25.000	35.000			
Activity 5.2.1.2	Improving knowledge management through documented cooperation and knowledge exchange with IW:LEARN and STAP in support of its climate resilience work	GRID	35.000	40.000	75.000	30.000	-2.991	32.991
Sub-Activity 5.2.1.2.1	Development of joint knowledge management strategy between BF, IW:LEARN and STAP		5.000	10.000	15.000			
Sub-Activity 5.2.1.2.2	Establishment of exchange and cooperation		5.000	10.000	15.000			
Sub-Activity 5.2.1.2.3	Presence at at least one CoP		10.000	5.000	15.000			
Sub-Activity 5.2.1.2.4	Preparation of at least two experience notes		10.000	10.000	20.000			
Sub-Activity 5.2.1.2.5	Dissemination of at least two experience notes		5.000	5.000	10.000			
Activity 5.2.1.3	Undertaking special sessions on blue forests at a high-profile science symposium and at the GEF IW Conference	GRID	35.000	75.000	110.000	35.000	8.000	27.000
Sub-Activity 5.2.1.3.1	Outreach to science platforms		5.000	20.000	25.000			
Sub-Activity 5.2.1.3.2	Preparations and participation at science symposium and IW science conference		20.000	40.000	60.000			
Sub-Activity 5.2.1.3.3	Stakeholder outreach and dissemination		5.000	10.000	15.000			
Sub-Activity 5.2.1.3.4	Follow-up strategy		5.000	5.000	10.000			
	Project Management		225.000	1.040.000	1.265.000	225.000	69.680	155.320
	Effective project management		225.000	1.040.000	1.265.000	225.000	69.680	155.320
	Overall Day to Day Project Management through the PCU	GRID	225.000	1.040.000	1.265.000	225.000	69.680	155.320
	TOTAL PROJECT COST ($)		4.500.000	23.268.215	27.768.215	4.500.000	1.914.037	2.585.962
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]			
Sub-Activity 4.1.1.1.2	Toolkit drafting and layout		5.000	15.000	20.000			
Sub-Activity 4.1.1.1.3	Publication		5.000	10.000	15.000			
Activity 4.1.1.2	Advancing blue forests policy options	IUCN	85.000	150.000	235.000	85.000	68.335	16.665
Sub-Activity 4.1.1.2.1	Policy research and analysis based on lessons learned from small-scale interventions		65.000	75.000	140.000			
Sub-Activity 4.1.1.2.2	Policy recommendations publication - Drafting and Layout		20.000	75.000	95.000			
Activity 4.1.1.3	Documenting global carbon and ecosystem experiences based on the small-scale interventions	DUKE	75.000	229.520	304.520	75.000	66.680	8.320
Sub-Activity 4.1.1.3.1	Global C and ES report research		45.000	129.520	174.520			
Sub-Activity 4.1.1.3.2	Global C and ES report drafting		25.000	75.000	100.000			
Sub-Activity 4.1.1.3.3	Global C and ES report publishing and dissemination (Y4)		5.000	25.000	30.000			
Activity 4.1.1.4	Facilitating knowledge management for improving acceptance	GRID	25.000	45.000	70.000	25.000	7.470	17.530
Sub-Component 4.2	Increasing stakeholder awareness of the carbon storage and sequestration and ecosystem services values of blue forests ecosystems		295.000	455.000	750.000	265.000	140.057	124.943
Activity 4.2.1.1	Developing policy briefs to raise awareness on blue forest opportunities and on blue forests uptake in [illegible]	IUCN	75.000	255.000	330.000	75.000	42.529	32.471
Sub-Activity 4.2.1.1.1	Policy research and analysis		25.000	100.000	125.000			
Sub-Activity 4.2.1.1.2	Policy technical support		10.000	30.000	40.000			
Sub-Activity 4.2.1.1.3	Policy briefs publication - Drafting and layout		5.000	25.000	30.000			
Sub-Activity 4.2.1.1.4	Policy stakeholder engagement		35.000	100.000	135.000			
Activity 4.2.1.2	Developing media communication materials and strategies	GRID	40.000	75.000	115.000	40.000	26.242	13.758
Sub-Activity 4.2.1.2.1	Strategy development		5.000	5.000	10.000			
Sub-Activity 4.2.1.2.2	Interaction with relevant media outlets (subscriptions, etc.)		5.000	20.000	25.000			
Sub-Activity 4.2.1.2.3	Publications (information sheets, press releases, etc.)		20.000	30.000	50.000			
Sub-Activity 4.2.1.2.4	Dissemination and outreach		10.000	20.000	30.000			
Activity 4.2.1.3	Formation of stakeholder engagement workshops	GRID	155.000	80.000	235.000	125.000	63.877	61.123
Sub-Activity 4.2.1.3.1	Project Inception Workshop (Y1)		75.000	25.000	100.000			
Sub-Activity 4.2.1.3.2	Project Showcase Workshop (Y4)		75.000	25.000	100.000			
Sub-Activity 4.2.1.3.3	Outreach		5.000	30.000	35.000			
Activity 4.2.1.4	Facilitating knowledge management for increasing stakeholder awareness	GRID	25.000	45.000	70.000	25.000	7.409	17.591

4. List of Documents consulted

https://bluecarbonpartnership.org/about/blue-carbon-and-the-partnership/

https://forestsnews.cifor.org/57162/governing-blue-carbon-and-all-that-it-entails?fnl=en

http://thebluecarboninitiative.org/about-the-blue-carbon-initiative/

https://naturalcapitalcoalition.org/valuing-ecosystem-services-from-blue-forests-a-systematic-review-of-the-valuation-of-salt-marshes-sea-grass-beds-mangrove-forests/

http://grid-arendal.maps.arcgis.com/apps/MapJournal/index.html?appid=a49488a79f6644c290f7e01a29f57fc7

https://www.oceanfdn.org/sites/default/files/ADGEI%20Building%20Blue%20Carbon%20Projects%20-%20An%20Introductory%20Guide-ilovepdf-compressed-ilovepdf-compressed.pdf

https://panorama.solutions/en/solution/incentivized-participatory-approach-mangrove-conservation

https://news.gefblueforests.org/beyond-blue-carbon?more=true

AGEDI (2017). United Arab Emirates Lessons learnt. Blue Carbon Cross Training Workshop 23-26 January 2017 Panama

Glass Leah (2017) Blue Carbon and Fishing Communities. Lessons Learn in Madagascar Blue Carbon Cross Training Workshop 23-26 January 2017 Panama

IUCN / GRID-Arendal (2016). Workshop on Blue Carbon Pathways to Sustainable Development Joint Meeting of the UNEP/GEF Blue Forests Project Advisory Panels on Policy and Ecosystem Services

McOwen C, Weatherdon L, Bochove J, Sullivan E, Blyth S, Zockler C, Stanwell-Smith D, Kingston N, Martin C, Spalding M, Fletcher S (2017) A global map of saltmarshes. Biodiversity Data Journal 5: e11764. https://doi.org/10.3897/BDJ.5.e11764

Montserrat Alban, Emkio Martínez, Raúl Carvajal & Belén Vallejo (2016). Blue Forest Strategy Document. Standardized Methodologies for Carbon Accounting and Ecosystem Services Valuation of Blue Forests in Ecuador

Ruth Fletcher, Hazel Thornton, Steve Fletcher and Matt Ling (2018). Stage 1 deliverable: Review of Ecosystem Services Assessment Methods, UNEP-WCMC

UBO (2016) Blue Forest Carbon Science Toolkit

UN Environment ROLAC (2017) Blue Forests Cross-Training Workshop Recognizing the value of blue forests for Latin America and Caribbean through global experience sharing. Blue Carbon Cross Training Workshop 23-26 January 2017 Panama

UN Environment WCMC (2918) Tracking Shifting Baselines of Ocean habitats. Presentation at World Conference of Marine Biodiversity Montreal 13-16- May 2018

WWF Mozambique / Universidade Eduardo Mondlane (2017). Ecosystem Services Valuation of mangrove forests in Zambezi delta under the Blue Forest Initiative and Sustainable Financing of Protected Areas of Mozambique

Project reports to GEF

5. Response from Project Partners to MTR, Jakarta Workshop, September 2018

As part of the Blue Forests Global Applications Retreat held at the Ministry of Marine Affairs and Fishery in Jakarta, Indonesia on 27-29 September 2018, partners discussed the Conclusions section of the Mid-Term Review. Partners present included representatives from Blue Ventures, Conservation International Ecuador, Counterpart International, KMFRI, MMAF, and WWF Mozambique. The comments from this discussion are included following with each section referenced.

6.2. Lessons Learned

> Comment from Jakarta workshop: Overall these comments are too negative and to not describe what worked well. An overall conclusion or stance on lessons learned is needed.

1. The assumption that all project partners are able to execute the projects shows trust in partners and facilitates access to projects however in the project design phase a mandatory check of the administrative procedures (if and how the project partners can obtain the necessary registration and permits, in this case research permits which are issued by the Ministry of Research and encourage the support by local research partners) should have been conducted.

> Comment from Jakarta workshop: Overall these comments are too negative and to not describe what worked well. An overall conclusion or stance on lessons learned is needed.

3. Knowledge generation and sharing projects for carbon accounting are necessary to promote the fast application of methodologies however they can only supplement existing initiative or projects. So, project partners need a certain amount of activities and experience to bring into the project to be able to make full use of the resources of a project. The assumption that pilot projects can be implemented by actors without experience should be questioned.

> Comment from Jakarta workshop: it is unclear what the lesson learned here is, details or an example are needed.

4 Interactions between actors from different fields are important for knowledge creation and sharing. The project needs structures to create trust between actors. Even advanced actors need knowledge exchange and building a community of practice: in the project design, not only resources but also specific instruments need to be allocated to this purpose. As the project shows it is challenging for project partners to bridge the gap between academic research and policy and projects, so more policy-oriented and applied research is needed in addition to academic research driven by the need for publications.

> Comment from Jakarta workshop: Some partners needed to focus more on research than policy, maybe rephrase to better linking the results of research to policy goals. This comment is unfair to academic institutions. The first part lacks connect to the end sentences, are two lessons learned combined into one here? An example would be useful.

5. In general, knowledge exchange and the building of a community of practice among the actors in the small scale intervention sites has not been fully conceptualised in the project design phase. There are only limited ideas about how to facilitate the knowledge exchange in the project in the TOC at design and evaluation. The theory of change at project design emphasised bringing the issue of blue carbon forward at the international level rather than creating a community of practice which actively creates and uses the tools.

> Comment from Jakarta workshop: Community of practice did not suffer from lack of effort, Dropbox, Basecamp, IWLearn and WhatsApp were tried.

6.3. Recommendations

> Comment from Jakarta workshop: Overall, partners felt that the Recommendations were too limited. Communications within and between the project sites could have been better. Adaptive management helped this project avoid greater issues. Without major funds the Advisory Panels (C1) were weak. Uptake from governments at the national and international levels has been very positive. The partners agreed to the need for a one-year extension.

4. Project partners need to finish the knowledge products of component 2 and 4 like the white paper or the toolkit for community-based interventions (component 4) as a community of practice with inputs from all partners at the small scale interventions.

> Comment from Jakarta workshop: Component 4 deliverables are for after the MTR.

6. As not all small scale intervention sites did prioritise the need for the mangrove data toolkit, it needs to be assessed whether finishing the output makes sense because finishing the data toolkit would be no cost neutral.

> Comment from Jakarta workshop: this output had an unrealistic timeline and a limited focus on carbon.

6. Evaluation Bulletin

A short (2-page) and simple presentation of evaluation findings and lessons to support the dissemination of learning to a wide range of audiences. (Samples and a template can be provided by the EOU)

7. CV of consultants

CV

Dr. Ines Freier

Date of Birth:	25 July 1970	
Nationality:	German	
Education:	2000-2005	PhD Social Sciences Vechta University, Germany
	1996-1997	Postgraduate Training at the German Development Institute, Berlin, Germany Working group on institutions for community forestry in Nepal using an Rapid rural appraisal approaches for data gathering and presentation
	1990-1995	Area studies Latin America and Development Economics,(MA equivalent) Rostock University, Germany Focus on theories for sustainable development / economy and environment

Languages:	German	mother tongue
	English	excellent
	Spanish	excellent
	Portuguese	good
	Russian	good
	French	basic
	Nepali	basic
Training:	2016	u.lab: Leading From the Emerging Future a course of study offered by MITx, an online learning initiative of the Massachusetts Institute of Technology through edX.
	2010	Capacity works - GIZ methodology for programme development and management
	2007	Training in Stakeholder management CLI Potsdam
	2008	GTZ programme and project development
	2008	GTZ Training in Public Private Partnership
	2006	Training by GTZ in E-Val (evaluation)
	2002	Training in qualitative and quantitative methods of data gathering and evaluation
	2000	project and programme evaluation / logframe by German Ministry for Economic Development and Co-operation

Key Qualifications:

- Studies for policy analysis and strategy development focusing on Environment and development
- Natural resource management in South Asia

Countries of Work Experience:

Nepal, India (Gujarat, Andhra Pradesh, Maharashtra, Himachal Pradesh, Uttarakhand), Bhutan, Chile, Costa Rica, Argentina, Bolivia, Paraguay, Nicaragua, Panamá, Kazakhstan, Kyrgyz Republic, Uzbekistan, Eastern Europe, Germany

Professional History:

since 11/2013	Freelance consultant for studies and project development
11/2012-10/2013	Resource efficiency officer UNEP Regional Office Panamá project and programme development and identification of case studies
03/2009-10/2012	Freelance Consultant and university lecturer, Consultant of behalf of GIZ India
2008-2009	Senior Environmental Economist at ICIMOD, Nepal
2003 – 2007	Consultant on behalf of GTZ and BMZ, BMU and German Federal Agency for the Environment in the fields of natural resource management and CSR/ environmental management, Designing and conducting evaluations and research projects including multiple, case studies, liasing with scientific institutions, design of projects, policy advice projects
1995 – 1999	Project development and manager in international consultancy companies in the field of economic development

Relevant project experience in the field of planning, appraisal missions and studies

Study on quality infrastructure for water monitoring in India, PTB Braunschweig, Germany (7-9/2017)

scoping paper for project appraisal mission on quality infrastructure for water monitoring within the Namami Ganga Initiative

Study on financing renewable energy in Central Asia, German -Kazakh University (07/2017)
country studies on financing renewable energy and policies for renewable energy in Central Asia, field trips to rural areas in Kazakhstan and Kyrgyzstan

Study on rural livelihoods and sustainability standards in short value chains, University of Applied Sciences for Sustainability Eberswalde, Germany (since 1/2017)

Planning and design of a study about the impacts of short value chains of selected commodities on rural livelihoods in developing countries

Consultant for FCCLI Philippines (01-02/ 2017)

ASEAN study on food security on specialized farming practices to improve productivity, yields and farmers income. design of capacity building stream on agricultural marketing and knowledge sharing, desk study on capacity building for food security

Consultant for UNEP TEEB - the Economics of Ecosystem Services and Biodiversity - Report for Agriculture and Food (07-09/ 2015)
Review of Reports on Agroforestry and Palm Oil, Presentation of recommendations in the workshop for the preparation of evaluation framework

Green Economy and Ressource Efficiency Regional officer for Latin America of UNEP (11/2012-10/2013)

- Design, review and writing of studies related to Green Economy and resource efficiency, proposal development, planning and programming of activities, Liaising with stakeholders, planning and conduction of workshops

Consultant for GTZ Fact finding mission for interventions in rural livelihoods in Northern India 05/2009)

- Stakeholder analysis and interviews, needs assessment in selected communities, review of policy documents, risk analysis, workshop

Senior Environmental Economist at ICIMOD (2/2008-4/2009)

- building up inhouse-knowledge for payment for ecosystem services and respective pilot projects, conducting workshop and training

Evaluator: German KfW /GTZ contributions for rural livelihoods in India (2007) German Federal Ministry for Economic Development and Co-operation

- Short-term evaluation of projects and programmes of German technical and financial co-operation for rural livelihoods in several Indian regions. The seven projects and programmes mainly focus on climate change adaptation / watershed management at the local level
- Portfolio analysis, interviews and presentation of results in a workshop
- The country study is part of a large thematic evaluation

Short-term expert for DED in Nepal (2007)

- *Study and Fact finding mission* for renewable energy projects in *Nepal*
- Stakeholder analysis and interviews, needs assessment in selected communities, review of policy documents, risk analysis

Team leader, external evaluation of the on-going GTZ-Programme for Natural Resource Management and Promotion of Entrepreneurial Capabilities in Nicaragua (2006) GTZ

- The ongoing GTZ-Programme for natural resource management and disaster risk reduction aims at achieving a paradigmatic change in the way how poor farmers and enterprises use natural resources in rural areas of Nicaragua..
- Design of evaluation, conducting interviews and final workshop, supervision of local consultant

Team member, study preparing a larger thematic evaluation: 'Impacts of voluntary social and environmental standards' (2006) German Federal Ministry for Economic Development and Co-operation

- literature analysis of impacts and success factors of different standards such as organic agriculture in Asia and Latin America.
- presentation of results at an international conference organised by GTZ in Berlin.

Team member, Evaluation of the tri-national GTZ 'Project for resource management in the Gran Chaco region in Argentina, Paraguay and Bolivia:' (2005) German Federal Ministry for Economic Development and Co-operation

- This project promotes rural livelihoods in the Gran Chaco Sudamericano, the second largest forest area in South America. The project raises awareness for the relationship between forests and the livelihoods of the local and indigenous population.
- Design of evaluation, conducting interviews and final workshop, supervision of local consultants, writing of report, presenting to the Ministry

Team member, Evaluation of two projects in Central Asia (2003) German Federal Ministry for Economic Development and Co-operation

- Design of evaluation, conducting interviews and final workshop, writing final report, supervision of local consultants

Curriculum vitae

1. **Proposed role in the project: Evaluation specialist**

2. **Category:**

3. **Staff of (name of firm):** **Independent expert**
4. **Family name:** **Kiersch**
5. **First names:** **Benjamin**
6. **Date of birth:** **22 March 1971**
7. **Nationality:** **German**
8. **Place of Residence** **Berlin, Germany**
9. **Civil status:** **Married**
10. **Education:**

Institution [Date from – Date to]	Degree(s) or Diploma(s) obtained:
German Development Institute, Berlin, Germany 09.1998 – 05.1999	Postgraduate certificate, Development Studies
Technical University, Berlin, Germany 10.1990 – 08.1998	Diplom-Ingenieur, Environmental Engineering. Specialization: Water Management

11.

11. **Language skills:** Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
German (Mother Tongue)	1	1	1
English	1	1	1
Spanish	1	1	1
French	2	3	3
Italian	3	4	4
Portuguese	3	5	5
Russian	5	5	5

12.

12. **Membership of professional bodies:**
13. **Other skills:** (e.g. Computer literacy, etc.)

- Computer Skills: Microsoft Office (excellent)
- Application of Capacity Works Management model in project appraisal and evaluation
- Presentation and workshop facilitation

14. **Present position:** Independent Consultant
15. **Years within the firm:** 1
16. **Key qualifications:** (Relevant to the assignment, see technical assessment grid)

- Project Appraisal, Planning and Strategy Development, particularly GEF (see point 19)
- Results-based Project Management
- Evaluation expertise (see point 20)
    - Evaluation of Projects in International Cooperation (Application of OECD-DAC Criteria)
    - Experience with complex evaluation designs and managing participatory process
    - Gender-sensitive Monitoring and Evaluation
- Sector knowledge and experience (international waters, biodiversity, land degradation)
- Experience with Cross-Cutting Themes (Agenda 2030, Climate Change, Safeguards and Gender)
- Providing Advisory Services to Organisations in International Cooperation
- Capacity Development in complex socio-economic and political environments

17. **Specific experience in the region:**

Country	Date from – Date to
Latin America:	
Chile	08/2002-01/2005; 12/2010-12/2015 (residence) 08/2008, 05/2009 (project missions)
Bolivia	05/2005-09/2008 (residence); 01/2009, 03/2010, 11/2010, 12/2011, 11/2014 (project missions)
Peru	06-07/2001, 07/2002, 06/2003, 10/2003, 06/2004, 12/2011, 10/2013 (project missions)
Paraguay	07/2011, 09/2015 (project missions)
Colombia	10/2002, 03/2006, 01/2011, 02/2012, 02/2014, 06/2014, 06/2015 (project missions)
Ecuador	09-12/1996, 05-06/1998 (research) 2012, 2013 (project missions)
Argentina	05/2003, 03/2004, 06/2004, 11/2011, 05/2012, 09/2012, 04/2013, 08/2013, 08/2015 (project missions)
Uruguay	05/2012, 11/2012, 04/2013, 11/2013, 04/2014, 08/2014, 11/2014, 10/2015, 03/2017, 07/2017 (project missions)
Mexico	07-09/1993 (internship), 06/2013, 10/2014, 04/2015 (project missions)
Guatemala	02/2009, 05/2016, 07/2016, 11/2017 (project missions)
Nicaragua	03/2006, 01/2009 (project missions)
El Salvador	01/2009 (project mission)
Panama	11/2003, 01/2009 (project missions)
Antigua and Barbuda	07/2013 (project mission)
Costa Rica	11/2004, 03-04//2006, 07/2007, 01-02/2009 (project missions)
Honduras	11/2004 (project mission)
Africa:	
Benin	10/2008, 03/2009, 10/2009 (project missions)
Ethiopia	05/2008, 12/2008, 06/2009, 11/2009 (project missions)
Eritrea	11/2001 (project mission)
Madagascar	10/2000 (project mission)

18.

18. **Professional Experience**:

Date from – Date to	Location	Company	Position	Description
11.2017 – present	Berlin, Germany (home-based)		Independent advisor	Project design, evaluation, workshop facilitation
11.2016 – 10/2017	Berlin, Germany	adelphi consult GmbH	Senior Project Manager	Lead, design and evaluation of programmes on natural resources management and governance, climate change adaptation and vulnerability. Coordination and design of policy dialogues. Regional focus: Latin America
01.2016 – 10.2016	Berlin, Germany	Food and Agriculture Organisation of the United Nations (FAO)	Senior Consultant	Coordination and design of a blended learning programme for decision makers in public sector and civil society on responsible governance of land, forests and fisheries. D**esign of Global Environment Facility projects on international waters and sustainable forest management.**
12.2010-12.2015	Santiago de Chile, Chile	Food and Agriculture Organisation of the United Nations (FAO)	Natural Resources and Land Tenure Officer	Team leader and coordinator of regional FAO activities in water and soil management and governance, climate change adaptation, land tenure, territorial planning. Lead and design of projects in Latin America. Advisor of governments and partner organizations on sustainable natural resources management and governance. Preparation of policy briefs and organization of regional dialogue events.
12.2009 – 12.2010	Berlin, Germany	Federal Agency for Metrology (PTB)	Short Term Expert	Coordination of activities and monitoring of the project “Strengthening capacity of measuring in the drinking water sector in Bolivia”, Partner organization: National Institute of Metrology (IBMETRO), La Paz, Bolivia.
04.2008 – 06.2010	Benin and Ethiopia	Food and Agriculture Organisation of the United Nations (FAO)	Technical Advisor	Project coordinator „Strengthening national water monitoring capacities with emphasis on agricultural water management“. Oversee national project teams in Benin and Ethiopia. Monitor activities and expenditures, presentation and publication of results.
09.2008 – 10.2009	Eschborn, Germany	German Agency for International Cooperation (GIZ)	International Consultant	Technical Advisor, Project “Implementation of a national strategy of river basin management in Chile”, Partner: National Environment Commission (CONAMA). Advisor for the development of a national strategy for watershed management. Organization of a study tour on the implementation of the EU water framework directive.
01.2009 – 03.2009	Braunschweig, Germany	Federal Agency for Metrology (PTB)	Evaluation Specialist	Evaluation of the Project „Accreditation and environmental management in small and medium enterprises in Central America“. Design of the second phase of the project.
03.2006 – 04.2006	Turrialba, Costa Rica	Center for Studies in Tropical Agriculture/ World Bank	Evaluation Specialist	Evaluation of the Project “Integrated silvopastoral approaches to ecosystem management”, Costa Rica, Nicaragua and Colombia.
07.2005 – 12.2007	Cochabamba, Bolivia (Home-based)	Food and Agriculture Organization of the United Nations (FAO)	International Consultant	Technical reports and project documents on Payments for Ecosystem Services, watershed management and safe reuse of wastewater in agriculture (11 months total).
07.2005 – 12.2005	Cochabamba, Bolivia	Municipality of Cochabamba, Environmental Management Unit	Consultant	Coordinator of a multidisciplinary team to formulate an action plan for the restoration of eutrophic waterbodies in urban areas.

Date from – Date to	Location	Company	Position	Description
10.1999 – 01.2005	Santiago de Chile and Rome, Italy	Food and Agriculture Organization of the United Nations (FAO)	Associate Professional Officer	Compilation of case studies for water-related payment schemes for environmental services. Organization of virtual and face to face dialogue events. Advice to projects on integrated land and water development.

19.

19. **Detailed description of GEF Project assignments:**

Date from – Date to	Location	Project	Agency	Position	Description
2016-2017	Uruguay	**Climate-smart Livestock Production and Land Restoration in the Uruguayan Rangelands GEF ID 9153**	FAO	Senior Project Design Specialist	Facilitation of inception and validation workshops Revision of Terms of Reference and reports of technical specialists Preparation of project document, CEO endorsement, tracking tools, responses to GEFSEC and Council comments
2016-2017	Serbia	**Contribution of Sustainable Forest Management to a Low Emission and Resilient Development GEF ID 9089**	FAO	Senior Project Design Specialist	Facilitation of inception and validation workshops Revision of Terms of Reference and reports of technical specialists Preparation of project document, CEO endorsement, tracking tools, responses to GEFSEC and Council comments
2016	Guatemala / Mexico	**Enabling concerted source-to-sea management in the transboundary Coatán and Suchiate basins**	FAO	Senior Project Design Specialist	Facilitation of inception and validation workshops Revision of Terms of Reference and reports of technical specialists Preparation of project document, CEO endorsement, tracking tools, responses to GEFSEC and Council comments
2014-2015	Chile	**Establish a Network of National Important Agricultural Heritage Sites (NIAHS) GEF ID 9068**	FAO	Lead Technical Officer	Coordination of the PIF phase Consultations with implementing and co-financing partners Revision and technical clearance of project documentation Preparation of responses to GEFSEC and Council comments Selection and supervision of consultants
2013-2015	Mexico	**Sustainable Land Management Promotion GEF ID 5785**	FAO	Lead Technical Officer	Coordination of the PIF and PPG phases Consultations with implementing and co-financing partners Revision and technical clearance of project documentation Preparation of responses to GEFSEC and Council comments Selection and supervision of consultants
2013-2015	Colombia	**Implementing the Socio-Ecosystem Connectivity Approach to Conserve and Sustainable Use Biodiversity in the Caribbean Region of Colombia GEF ID 5288**	FAO	Lead Technical Officer	Coordination of the PIF and PPG phases Consultations with implementing and co-financing partners Revision and technical clearance of project documentation Preparation of responses to GEFSEC and Council comments Selection and supervision of consultants

20.

20. **Detailed description of evaluation assignments listed above :**

Date from – Date to	Location	Company	Position	Description
07/2015	Colombia	Funding partner: Government of Colombia. Implementing agency: FAO	Technical Advisor	Evaluation Object Ex-post evaluation of the project “Strategic alliance for the protection and sustainable production in the Las Ceibas watershed”, 2 years after project end Evaluation Design: FAO Project Cycle Management guidelines, Capacity Works Evaluation Process: Local mission, Desk study Applied data collection methods: Group interviews, qualitative Interviews, document analysis, secondary data analysis Applied data analysis strategy and tools: FAO evaluation tools Language and Type(s) of Report: Spanish, 30 pp. Other relevant information: Responsible for evaluation design, evaluation implemented by an external consultant
11/2014	Uruguay	Funding partner: World Bank. Implementing agency: Ministry of Agriculture	Technical Advisor	Evaluation Object: Mid-term evaluation, Project Sustainable Management of Natural Resources and Climate Change Evaluation Design: World Bank Manual, OECD/DAC Criteria Evaluation Process: Local mission, Desk study Applied data collection methods: Group interviews, qualitative Interviews, document analysis, secondary data analysis Applied data analysis strategy and tools: Excel, Matrix developed by the counterpart Language and Type(s) of Report: Spanish and English, 15 pp. Other relevant information: As part of the World Bank Backstopping Team
12/2012	Bolivia/Peru	Funding partner: European Commission. Implementing agency: FAO	Technical Advisor	Evaluation Object Mid-term evaluation of the project “Management of agroclimatic risks through improved water management” Evaluation Design: FAO Project Cycle Management guidelines, OECD/DAC Criteria, Capacity Works Evaluation Process: Local mission, Desk study Applied data collection methods: Group interviews, qualitative Interviews, document analysis, secondary data analysis Applied data analysis strategy and tools: FAO evaluation tools, Excel (FAO and EU formats) Language and Type(s) of Report: Spanish, 30 pp. Other relevant information:
01-02/2009	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama	Funding partner: German development cooperation. Implementing agency: German Agency of Metrology (PTB)	Evaluation Specialist	Evaluation Object: Final evaluation of the regional project “Accreditation and environmental management in small and medium enterprises in Central America”; and design of the second phase of the project. Evaluation Design: GIZ and PTB evaluation guidelines, OECD/DAC Criteria, Capacity Works Evaluation Process: Local mission, stakeholder workshop, desk study Applied data collection methods:, Group interviews, qualitative Interviews, document analysis, secondary data analysis Applied data analysis strategy and tools: Excel (self-developed matrix) Language and Type(s) of Report: Spanish and German, 52 pp. Other relevant information:
03-04/2006	Colombia, Costa Rica, Nicaragua	Funding partner: World Bank. Implementing agency: Center for Tropical Agricultural Research	Evaluation Specialist	Evaluation Object: Final evaluation of the Payments for Ecosystem Services Component of the regional project “Integrated silvopastoral approaches to ecosystem management.”. Evaluation Design: World Bank evaluation guidelines, Evaluation Process: Local mission,, stakeholder workshop, Desk study Applied data collection methods: Evaluation workshop, Group interviews, qualitative Interviews, document analysis, secondary data analysis Applied data analysis strategy and tools: Excel Language and Type(s) of Report: Spanish and English, 57 pp. Other relevant information:

21.

21. **Other relevant information** (e.g., Publications)

Sistematización de prácticas de conservación de suelos y aguas con enfoque de adaptación al cambio climático. Metodología basada en WOCAT para América Latina y el Caribe, Santiago de Chile: FAO 2014. Co-author.

Monitoring agricultural water use at country level: Experiences of a pilot project in Benin and Ethiopia. Land and Water Discussion Paper 9. Rome: FAO 2011.

Potential of payment for ecosystem services schemes for landslide risk reduction. In: N. Casagli, R. Fanti & V. Tofani (Eds) Web Proceedings of the First World Landslide Forum, Tokyo, Japan, 2008, pp. 706–709.

Freshwater Ecosystem Services. In: Millenium Ecosystem Assessment – Ecosystems and Human Well-being Volume 3: Policy Responses. Washington: Island Press 2005. Contributing author.

Payment schemes for water-related environmental services: A financial mechanism for natural resources management. Experiences from Latin America. Paper presented at the Seminar on Environmental Services and Sustainable Use of Ecosystems, Geneva, 2005. Co-author.

Land use impacts on water resources: A literature review. In: Land-water linkages in rural watersheds. Land and Water Bulletin 9. Rome: FAO 2002.

22. GEF References

Hernán González, FAO GEF Unit Rome Hernan.Gonzalez@fao.org

Valeria Gonzalez-Riggio, FAO GEF Unit Rome Valeria.GonzalezRiggio@fao.org

Maria Mercedes Proanio, FAO GEF Coordinator Latin America, Santiago de Chile Mariamercedes.proanio@fao.org

8. Evaluation TORs (without annexes)