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Vulnerability Assessment and Adaptation Project for Climate Change in the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems (VAAP) – Project Number: GEF project ID: 3890, IMIS number: LDL2328-2724-4C19

February 2017

Evaluation Office of UN Environment

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ACKNOWLEDGEMENTS

The evaluation involved various individuals. The evaluator would like to convey his thanks to the staff of the Executing Authority (Ministry of Environment) and implementing partners (at Ministry of Agriculture, Forestry and Fisheries, Ministry of Water Resources and Meteorology, Ministry of Land Management, Urban Planning and Construction) who generously gave their precious time and shared their thoughts and ideas for this evaluation. We are also particularly grateful to all employees at the Ministry of Environment and the Project Management Unit who provided all necessary documents and made arrangements to make possible meetings, interviews of local coordinators, etc.

Finally, the evaluator is grateful to the GEF Task Manager, Lars Christiansen, and the UN Environment Evaluation and Programme Management support team members (Norah Ng'eny, Tiina Piiroinen and Mela Shah) for their untiring support throughout the evaluation process.

Short biography of the consultant

The Terminal Evaluation (TE) was undertaken by Jonathan McCue, a UK based independent consultant who is Director of his own company, Sustainable Seas Ltd (www.sustainableseas.co.uk). He possesses 29 years' postgraduate experience in the field of integrated coastal zone management (ICZM) and disaster risk reduction. He is particularly skilled in the technical area of Monitoring and Evaluation (M & E) for international funding agencies. His professional expertise spans a range of sectors, including ICZM, disaster flood management, ecosystem management and biodiversity, strategic environmental assessment, community participation work and the delivery of climate change adaptation workshops overseas. He has a successful mid-term and full evaluation track record with over 6 prominent international projects that have involved the setting and appraisal of project evaluation criteria. This includes work for 3 separate international funding institutes, namely the European Commission (Final Evaluation Projects in Gambia, Maldives and Jamaica), UN organisations such as UNDP (Guyana) and IOC-UNESCO and finally also for DFID in the Caribbean region. A brief CV is presented in Annex IX.

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TABLE OF CONTENTS

PROJECT IDENTIFICATION TABLE

UN Environment PIMS ID:		**IMIS number:**	**4B15**
Sub-programme:	Climate Change	**Expected Accomplishment(s):**	
UN Environment approval date:	(2013 PIR notes date as July 2011)	**Programme of Work Output(s):**	
Global Environment Facility (GEF) project ID:	3890	**Project Type:**	Medium Size Project (MSP)
GEF Operational Programme #:	LDCF	**Focal Area(s):**	Climate Change
GEF approval date:	March 2011 (2013 PIR notes date as March 2011)	**GEF Strategic Priority/Objective:**	Climate Change Adaptation
Expected Start Date:	February 2011 with formal implementation (March 1 2011)	**Actual start date:**	July 2011
Original Planned completion date:	December 2014	**Actual completion date:**	30 June 2016
Planned project budget at approval:	US$ 5,830,000	**Total expenditures reported as of [date]:**	As at 30 June 2013 – *US$ 199,829.54* As at 30 June 2014 – *US$ 791,902.27* As at 30 June 2015 – *US$ 1,299,282.60* As at 31 March 2016 – *US$ 1,635,003.40*
GEF Allocation:	US$ 1,635,000	**GEF grant expenditures reported as of [date]:**	As at 31 March 2016 – US$1,635,003.4
PDF GEF cost:	US$ 50,000	**PDF co-financing:**	US$ 50,000
Expected MSP/FSP co-financing:	US$ 4,195,000	**Secured MSP/FSP co-financing:**	As at 30 June 2013 – US$ 1,081,103[1] As at 30 June 2014 – US $ 2,105,000 As at 31 March 2016 –US $ 4,195,000
First Disbursement:	(2013 PIR notes date as December 2011)	**Date of financial closure:**	As at 31 March 2016 – US$ 1,635,003.40
No. of revisions:	4	**Date of last revision:**	March 2016
Date of last Steering Committee meeting:	June 2015		
Mid-term review/ evaluation (planned date):	Q4 - 2013	**Mid-term review/ evaluation (actual date):**	May 2014
Terminal Evaluation (consultancy period):	October – January 2017	**Terminal Evaluation (planned actual date for Final Report):**	30 January 2017

[1] This figure is indicated as an estimate – refer to Project PIR 2013

LIST OF ABBREVIATIONS AND ACRONYMS

AR5	Assessment Report no. 5 (by IPCC, published in 2014)
BSP	Bali Strategic Plan
CC	Climate change
CCC	Coastal climate change
CCSP	Climate Change Sub-Programme (UN Environment)
CCU	Coastal Coordination Unit
CARP	Coastal Adaptation and Resilience Planning Component
CCCA	Cambodia Climate Change Alliance
CCCDN	Coastal Climate Change Data Network
CCCSP	Cambodia Climate Change Strategic Plan
CCU	Coast Conservation Unit (of MOE)
CDP	Commune Development Plans
CIP	Commune Investment Plans
CSI	Consortium for Spatial Information
CMCCAP	Coastal and Marine Climate Change Action Plan
COP	Conference of the Parties (the governing body of the United Nations Framework Convention on Climate Change)
CRC	Coastal Resource Centres
DEM	Digital Elevation Model
DMCCZ	Department of Marine Conservation and Coastal Zone (of MOE)
DoE	Department of Environment
DWA	Department of Women Affairs
DoT	Department of Tourism
DAFF	Department of Agriculture Forestry and Fisheries
DoWRM	Department of Water Resources and Meteorology
DoLMUPC	Department of Land Management Urban Planning and Construction,
EA	Executive Agency
EIA	Environmental impacts assessment
EO	Evaluation Office
EWS	Early Warning Systems
FiA	Fisheries Administration
GDP	Gross domestic product
HRBA	Human rights based approaches
IFS	Integrated Farming Systems
IPCC	Intergovernmental Panel on Climate Change
IPU	Investment Planning Unit
LDCF	Least Developed Countries Fund
M&E	Monitoring and evaluation
MAFF	Ministry of Agriculture, Forestry and Fisheries
MEA	Multilateral Environmental Agreements
MEF	Ministry of Economy and Finance
MLMUPC	Ministry of Land Management, Urban Planning and Construction
MOE	Ministry of Environment
MOP	Ministry of Planning
MSG	Money Saving Groups
MWRM	Ministry of Water Resources and Meteorology
NCCC	National Climate Change Committee
NCDM	National Committee for Disaster Management
NCSD	National Council for Sustainable Development
NGO	Non-governmental organization
NPC	National Project Coordinator
NSDP	National Strategic Development Plan
PIPs	Provincial Investment Plans

PIR	Project Implementation Report
PKWS	Peam Krasaob Wildlife Sanctuary
PKCFI	Peam Kraosob Community Fisheries Initiative
PoW	Programmes of Work
PPP	Public-private partnership
PSC	Project Steering Committee
PTWG	Provincial (inter-agency) Technical Working Group
ROtI	Review of Outcomes to Impacts
rToC	Reconstructed Theory of Change
SLR	Sea level rise
SOE	State of the Environment
SP	Sub-Programmes (UN Environment)
ToC	Theory of Change
UN Environment-EO	United National Environment Programme – Evaluation Office
VAAP	Vulnerability Assessment and Adaptation Programme for Climate Change within the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems
UN Environment	United Nations Environment Programme
YED	Youth Environmental Debate

EXECUTIVE SUMMARY

Introduction

This is a Terminal Evaluation (TE) report for the UN Environment Global Environment Facility project entitled - *"Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems – VAAP/LDCF"* (Project Number: GEF project ID: 3890, IMIS number: LDL2328-2724-4C19). The project was implemented in parallel with the Cambodia Climate Change Alliance's (CCCA) Coastal Adaptation and Resilience Planning (CARP) component, which, with a separate budget of $2.2 million, is implementing coastal adaptation activities in the 2 provinces and communities in which the Least Developed Countries Fund project also is active. The two projects were designed as complementary interventions and were closely coordinated – including the sharing of central management structures (such as Project Steering Committee (PSC) and Senior Technical Advisor), but are otherwise implemented and reported as separate projects. The present Terminal Evaluation, therefore, only covers the Least Developed Countries Fund financed activities. The Cambodia Climate Change Alliance's - Coastal Adaptation and Resilience Planning is funded by the European Union, SIDA, DANIDA and the United Nations Development Programme and covers the period November 2011 – May 2014.

B Evaluation findings and conclusions

Despite a delayed start, the project has proven to be visionary in capturing the need for climate adaptation approaches on the coast of Cambodia through a collective national provincial and district level effort. It has also been able to guide, support and train Cambodian stakeholders in a coordinated and coherent way. By doing so, the project has laid the foundations for subsequent actions of capacity building at national level to implement regulatory and administrative system for sustainable coastal adaptation and management in 4 coastal Provinces (Koh Kong, Kampot, Kep and Sihanouk).

The project rationale (and design) was well-founded and all activities were crafted towards addressing the existing vulnerabilities and barriers that exist in Cambodia to improving resilience to climate change. As a result of its design, the VAAP-project has proven to be strategically relevant to global, regional and national environmental issues plus UN Environment specific strategic mandates, strategies and priorities by implementing the range of activities delivered in all outputs and outcomes. Examples include the introduction of appropriate institutional systems and processes, the production of a Policy Brief (for Integration of Climate Change in Land Use Planning) and regulations concerning land use planning. The production of District specific Coastal Vulnerability and Climate Adaptation Plans and from this, the successful targeting and implementation of pilot projects (in Koh Kong and Sihanouk Provinces), coupled with the highly successful mangrove rehabilitation interventions in Outcome 4 all have helped to support the successful relevance to global and national climate resiliency needs.

The project has successfully produced the programmed activities and outputs as outlined in UN Environment's internal planning documents, both as regards the adopted Programme of Work of the Climate Change Sub-programme and UN Environment's Programme of Work. Using one successful example, one effective contribution of the project was the support towards setting up a local marine protected area at Peam Kraosob and all associated supporting regulations. When considering the combined direct outcomes, this evaluation confirms that VAAP has strengthened institutional capacity and policy coordination by providing a platform from which to mainstream climate change policy into national and local development plans. Capacity has certainly been enhanced especially on how to undertake climate vulnerability assessment and adaptation planning work. A considerable knowledge base has also been gained, on tools, techniques and approaches (ranging from integrated farming systems, mangrove planting and dyke rehabilitation) to help reduce vulnerability of productive lands to floods which also improving the resilience of coastal livelihoods to climate change (project intended impact).

A key factor relating to the relative success of the VAAP project was that the project design was purposely built around the existence of working institutional structures. Once the project started in earnest (in January 2012), procedures and structures were set up that undoubtedly helped to streamline and improve efficiencies in project delivery. Success of the VAAP project can therefore be linked to efforts made to link with existing

institutional group structures plus also the project design which attempted (at the outset) to build on past successful project structures. An additional strength of the VAAP project was that it has been able to deliver a platform for long term coastal adaptation in Cambodia. This is to be achieved through the provision of a set of policy recommendations for sustaining and mainstreaming of climate change in land use planning, demonstrated viable adaptation activities in selected communes, and organized training and knowledge dissemination for some stakeholders. These have all created "entry points" for mainstreaming climate change under the scope of the VAAP project/ Cambodia Climate Change Alliance's intended outcomes.

Regarding the projects likelihood of impact (and linked to the 3 Intermediate States identified within this evaluation), this is rated as being moderately likely. Importantly, there does also appear to be the political will at the national and provincial levels to make a concerted effort for mainstreaming climate resilience, through the implementation of updated sectoral policies and national vision documents. The new way of "climate resilient agricultural delivery" thinking has also encouraged new techniques to be followed and used, and from this, it is hoped that new climate resilient policies may possible be drafted, updated and eventually mainstreamed. The replanting of mangroves and environmental awareness-building should be recognised as one of the most successful achievements of the VAAP project with biodiversity levels increasing in the local mangrove areas. Whilst the pilot demonstration projects have all proven effective, their impact is often felt just for the immediate districts though not further afield. It also found that there was a lack of clarity as to who would be ultimately responsible for scheme maintenance within the Provincial authorities. Despite this, there is the continued risk that funds needed to sustain the projects impetus may be inadequate to really sustain the effective implementation of policy direction to address climate change (notably for operation and maintenance, basic development needs, and climate proofing of engineering structures). This risk inevitably influences project "impacts" at all levels, but particularly so at the district and commune intended beneficiary levels.

Project sustainability is slightly uneven along the different aspects taken into account. Whilst institutional and environmental sustainability of the VAAP project is satisfactory, the potential weakness of the VAAP project is that the prospects for sustaining the achievements attained will, however, depend on the allocation of resources and funding for climate change activities at the sub-national levels. Institutional capacity and funding shortages are common constraints to effective governance and concern was, however, raised by many local stakeholders over the cost of replicating and sustaining any demonstration project. Despite the physical interventions being mostly small in scale, continued financial support is going to be needed to maintain the interventions and as a consequence, is likely to add financial pressures which may prove difficult for Provinces to sustain.

From the perspective of Monitoring and Reporting, the evaluation finds that suitable monitoring reporting took place, as planned, in a timely fashion and with adequate attention to detail and content. The project should perhaps have adopted a clearer system to track risks posed by institutional stability and external communication in more detail. It is felt that internal risk oversights (more "day to day" running procedures) have had more impact on project performance than externalities.

The replication potential of the VAAP project is good, based on strategic dissemination efforts, and the ability to adapt to the needs and situation of Cambodia. The potential for replicating the youth "environmental awareness" forum approach should be seriously considered for replication. This is because many topics on environment and climate change issues can be selected for debate, interpretation and discussion, which can then be used to better communicate specific information and ideas on good behaviour, wise decisions, and best practices addressing climate change impacts and good governance.

Overall, this evaluation has rated the project as being **Satisfactory**.

C. Lessons learned

The project lessons learned are listed below.

- Lesson 1: Build project administration structures around existing institutional arrangements plus any positive experiences/approaches/arrangements from ongoing/past projects. The success of the VAAP project can be linked to efforts made to utilize existing institutional group structures as well as the project design which attempted at the outset to build on past successful project structures (Danida 2007 CZM project). The project has helped local beneficiaries (households, farmers and communes) to think differently with regards to climate resilience and what this means at the very basic household level. Capacity-building together with awareness building must, however, continue to be conducted

on a regular basis, targeting all stakeholders, especially decision-makers and natural resources and land use managers.

- Lesson 2: Improve clarity and visibility between parallel/ongoing donor projects. The VAAP project has demonstrated some catalytic effects as the applied approaches are supporting institutional changes, catalyzing other parallel donor projects and wider stakeholder behaviour. Some confusion did arise at times with local communities with regards to uncertainty over which project (Coastal Adaptation and Resilience Planning (CARP)/ Cambodia Climate Change Alliance (CCCA)/the VAAP project etc.) contributed to what output or outcome. Certainly, the sequencing of activities between the VAAP/Least Developed Countries Fund project and CARP/CCCA projects could perhaps have been improved upon, with activities such as planning and identification of vulnerabilities (which were made for the demonstration sites under CARP and used for selecting the livelihood activities during Outcome 2) being carried out prior to livelihood demonstrations (Outcome 3).

- Lesson 3: Better promote and implement Knowledge and Communication Management Systems. Capacity and knowledge for vulnerability assessment and identification of adaptation projects remain limited at the sub-national levels, especially at the district and commune levels. The VAAP project has organized training in climate change topics in various forms, such as on-the-job training, and training workshops, however, access to reliable climate data and knowledge on climate impact assessment remains limited, especially at the district and commune levels. It is therefore important to ensure that appropriate climate change knowledge is present within committees and stakeholder groups, and that this level of knowledge is sustained through continued hands on training (applied training) etc. Without this, the continuity message of climate resilience within communes remains at risk of being diluted.

- Lesson 4: Ensure Pilot Designs are simple to implement, install and maintain for future replication. The evaluation found that where those pilot projects had the best impact is where their installation, maintenance is easy to implement. For instance, the rainwater harvest tanks have proven an important adaptation option, which have a simple design and are easily installed by most of the villagers themselves at a low cost. The construction of new reservoirs, and/or dredging of existing ones, is another relatively easy adaptation option that may be replicated to help cope with water scarcity resulting from drought, limited surface water availability, and poor groundwater quality.

- Lesson 5: Develop and implement "all-inclusive capacity building" for all of aspects of society. The focus on educating farmers of alternative farming practices may prove a strategically suitable approach to follow. However, the sustainability of the VAAP project, whilst seen as being positive from a training and awareness perspective, will be judged against ownership by direct beneficiaries. A key livelihood sustainability finding is that the VAAP project has helped local beneficiaries (households, farmers and communes) to think differently with regards to climate resilience and what this means at the very basic household level..

- Lesson 6: Introduce simple and workable funding options for communities, business and the private sectors. Local savings groups were created and funded as part of a revolving loan scheme to facilitate livestock management under Coastal Adaptation and Resilience Planning (CARP). Villagers are granted a loan that they pay back with low interest after six months, however, the project was only able to conduct one or two cycles of disbursal and repayment of these loan mechanisms, which is not enough time to observe any tangible experience to replicate or to properly assess the effectiveness of the scheme.

D. Recommendations

Taking into account the scope of the evaluation and based on the main findings, conclusions and lessons learned, the recommendations that follow are principally addressed to UN Environment (as Implementing Agency of the VAAP project) to help craft future discussions on any future follow up project should this be agreed by Government of Cambodia.

Recommendation 1. Prepare a Continuation Strategic Plan (linked to Commune Development Plans) to help support the route map for next phases of work to help make communities climate resilient. This would provide an opportunity to follow-up and expand the conducted demonstration activities and thereby increase the likelihood for sustainability.

Recommendation 2. Update existing Coastal Adaptation and Resilience Planning (CARP) produced Guides and Manuals (January 2014) on how to mainstream climate resilience into Commune Development Plans and Provincial Plans. Through the introduction of guide manuals that are formally embraced by new Commune Investment Plans (CIPs) and Commune Development Plans (CDPs), adaptation planning in Cambodia (using new climate resilient infrastructure building codes), will be realised quicker as at present these do not currently exist and future donor support is therefore likely to be required to help deliver this need.

Recommendation 3. Strategic Study to assess long term Flood Management Engineering Options in Polder situations. To sustain the crest level of the dyke each year (with extra inland quarried materials), the most sustainable approach may be to redesign the scheme with more longer lasting foundations as opposed to the mud foundation which will continue to sink. The key intervention strategy may be (instead of dyke crest height increase) to be improved drainage and culver design.

1 INTRODUCTION

1. This is a Terminal Evaluation (TE) report for the UN Environment GEF project entitled - "Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems – VAAP/LDCF" (Project Number: GEF project ID: 3890, IMIS number: LDL2328-2724-4C19). The project was implemented in parallel with the Cambodia Climate Change Alliance's (CCCA) Coastal Adaptation and Resilience Planning (CARP) component, which, with a separate budget of $2.2 million, is implementing coastal adaptation activities in the 2 provinces and communities in which the LDCF project also is active. The two projects were designed as complementary interventions and were closely coordinated – including the sharing of central management structures (such as Project Steering Committee (PSC) and Senior Technical Advisor), but are otherwise implemented and reported as separate projects. The present TE, therefore, will only cover the LDCF financed activities. The CCCA-CARP is funded by the EU, SIDA, DANIDA and the UNDP and covers the period November 2011 – May 2014.

2. This VAAP/LDCF project is funded through the Global Environment Facility's Least Developed Country Fund (GEF/LDCF) and adheres closely to the specific GEF Focal Area of Climate Change Adaptation. The main target groups were the national institutions involved in the implementation of the VAAP/LDCF, particularly the key government and civil society organisations. The key intended audience for the findings of this TE therefore include the Government of Cambodia (GoC) and all Cambodian stakeholders/ beneficiaries who have been involved in its implementation and delivery in addition to the UN Environment Evaluation Office (UN Environment-EO).

3. The project is designed to support the UN Environment Sub-Programme of "Climate Change" (CCSP) which is consistent with UN Environment's mandate and does address UN Environment corporate objectives, including the CCSP objective expressed in the Medium-Term Strategy 2010/13, which is to *"strengthen the ability of countries to integrate climate change responses into national development processes.*" Consequently, UN Environment acted as GEF Implementing Agency whilst the Ministry of Environment (MoE) were tasked with being the Executing Agency (EA), responsibility for co-ordination of project activities relating to coastal climate change in Cambodia with the Coastal Conservation Unit (CCU) being the focal delivery body for the MoE.

4. The total budget (US$) based on GEF Allocation is US$ 1,635,000 with a planned programme extending from July 2011 and which was scheduled to close in July 2015. The official project starting date was actually February 2011 with formal implementation (1 March 2011) and the official project completion date was extended from the 30 June 2016 (signed on 1 July 2015) to a second project extension date of 30 September 2016 (signed on 12 November 2015) of which the latter was authorised as a formal Amendment Extension.

5. VAAP/LDCF project activities were directed towards all four of the coastal provinces in Cambodia and were designed to focus specifically on capacity building and adaptation planning, as well as the direct implementation of specific adaptation measures in two of the four coastal districts identified as being most vulnerable to climate change impacts. Regarding implementation within these coastal provinces, a series of inter-sectoral Technical Working Groups (TWGs) were established to cover all four coastal provinces, namely Kampot, Kep, Koh Kong, and Sihanoukville, with each consisting of a Deputy Governor and representatives from the Department of Environment (DoE), Department of Agriculture Forestry and Fisheries (DAFF), Department of Water Resources and Meteorology (DoWRM), Department of Land Management Urban Planning and Construction (DoLMUPC), the Investment Planning Unit (IPU), Department of Women Affairs (DWA), Department of Tourism (DoT), Chief of Districts, and Chiefs of Communes.

6. A project Baseline Assessment exercise was undertaken by Talafré and Lyngby early into the project (2013) and an independent Mid Term Review (MTR)[2] was undertaken (Baastel 2014) approximately at the mid-term stage. Following the recommendations set out within this TE, a formal process will be undertaken by the UN Environment EO to follow up on compliance with the recommendations.

[2] Reviews are initiated and managed internally by the project team under the responsibility of the project manager.

2 EVALUATION METHODS

2.1 Overview

7. In line with the UN Environment Evaluation Policy and the UN Environment Programme Manual, this TE is undertaken after completion of the project, to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability.

8. According to the ToR, the evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment and the main project partners in Cambodia. Taking into account the structure, initial design and linkages with parallel projects (e.g. CCCA), the ToR of the TE underlines the need to identify lessons of operational and strategic relevance for future initiatives within the field of sustainable development and climate change adaptation on the coast. Several interviewees in particular referred to the high quality of experience exchange between stakeholders on climate indices setting as a consequence of a series of joint meetings, workshops and project organised events.

9. The report follows the format for TEs provided by the UN Environment-EO and provides individual ratings for each evaluation criteria. Most criteria are rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact are rated from Highly Likely (HL) down to Highly Unlikely (HU) and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU).

2.2 Data collection and analysis

10. The findings presented within this TE are based on the design of an evaluation matrix (see Annex II) which was based on the evaluation criteria and scope presented in the ToR (see Annex I) and the project Intervention Logic (log-frame). The methodological approach adopted a mix of techniques, including a review of the key project documents that were provided by either UN Environment or the PSC at the start of the consultancy (see Annex VIII), targeted stakeholder interviews to key project partners or individuals that were identified at the start of the Inception Phase as being important stakeholders to engage with by either the consultant or the PSC (see Annex IV), a purposely designed set of questions were prepared (to reflect the evaluation criteria and verbally presented (translated as needed) to a select group of stakeholders (list of respondents see Annex IV). The methods used to analyse data involved a simple scoring system that helped the evaluator identify whether further interrogation (triangulation) was needed (see below). In addition, each answer provided was coded with a prefix letter (or group of letters) that applied to the 6 point criteria as set out above.

11. An introductory online meeting was undertaken with GEF Task Manager of the UN Environment Evaluation Office in September 2016 to discuss the scope of the evaluation, agree on the working arrangements, field mission timing and project deliverables following the procedures of the UN Environment-EO in Nairobi. The first draft of the inception report was delivered to UN Environment-EO on 7 October 2016 and subsequent comments were incorporated within a final iteration of the Inception Report during the field mission (16-23 October 2016).

2.3 Evaluation criteria and key questions

12. The TE adheres to a robust participatory approach whereby the UN Environment Task Manager, representatives of the Project Management Unit (PMU), key representatives of the executing agencies and other relevant staff were kept informed and consulted throughout the TE. In attempting to evaluate any observations on project outputs and direct outcomes that the project may have achieved and contributed to, the evaluator (where possible) verified these through a triangulation process with the PSC and UN Environment-EO. The evaluator also kept in mind the difference between the answers to two simple questions:

- *Question 1: "what happened?"*
- *Question 2: "what would have happened without the intervention anyway?"*

13. To answer these questions, consideration of the baseline conditions and trends was undertaken and findings were then compared to the intended project outcomes and impacts. The evaluator then sought to attribute the judged outcomes and potential impacts to the "actual" actions recorded from the project. To this end, a thorough review of baseline conditions and data collected was undertaken so that the evaluator may make informed judgements about project performance. Quantitative and qualitative methods and indicators were also used, taking into account that the project was expected to deliver institutional and capacity building outputs and outcomes. As a result, quantitative outputs were also assessed for their quality and effectiveness, particularly their capacity to drive and sustain changes at a higher level of objectives.

14. The main evaluation headings are presented below:

(a) Strategic Relevance; (b) Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (c) Sustainability and replication; (d) Efficiency; and (e) Factors and processes affecting project performance.

15. The key questions adapted from the ToR were used as the main questions for the Evaluation Matrix. These are set out below and replicated in (Annex II). *(NB: Some slight alterations were made by the evaluator to better reflect project understanding needs*).

- *"To what extent did the project contribute to: (i) national mechanisms for collecting, managing and using data on climate change and coastal management, (ii) national development plans and polices on issues of climate change adaptation with specific reference to the coastal zone, and (iii) improved multi-sectoral/departmental integration (or mainstreaming) of these plans and policies"?*
- *"How successful was the project in creating an inclusive process to undertake coastal zone adaptation planning? Has the project outcome helped leverage on existing or future projects and efforts? What lessons were learnt that can increase the replicability and sustainability of these efforts (positive or negative")?*
- *"To what extent has the project: (i) succeeded in developing climate resilience and adaptation practices for the agriculture sector leading to improvement of livelihoods, (ii) encourage ownership of these efforts with the local communities and other interest groups, and (iii) put in place measures to encourage replicability and sustainability of these efforts"?*
- *"How successful was the project in engaging stakeholders outside of the government system (i.e. NGOs, universities and research bodies, and local community groups) in efforts to increase resilience to coastal buffers through ecosystem-based coastal protection"?*
- *"To what extent has the project achieved (i) sustained results and upscaling by local communities and provincial and national governments, (ii) sustainability of medium to long term measures implemented in the project e.g. dykes and lake deepening (iii) are there sufficient measures in place to enable and sustain these efforts"?*

16. From the field mission (see Annex IV), approximately 55 stakeholders (governmental officials in Phnom Penh), provincial TWG members and local household beneficiaries in Koh Kong and Sihanouk Provinces) were interviewed as part of the field mission exercise. The use of a local interpreter was adopted throughout the field mission to help gather local information for the evaluator.

2.4 Evaluation Limitations

17. Certain evaluation limitations attempted to be mitigated at the outset of the project, such as the risk of a low or imbalanced response rates across different local groups (including women). This was addressed through the selection of an appropriate interpreter who was instrumental to the success of the field mission as he had an experienced background in the topic area. He was briefed to the questions being asked prior to each meeting, and was encouraged to elicit discussion/debate (especially from potential project beneficiaries) on project "impacts" and how local or provincial level day to day operations have altered as a consequence of the projects interventions. Where possible, gender focused

questions/discussion were encouraged as appropriate and to the extent possible, community women were provided an opportunity to discuss about project issues/observations without the presence of men (separate breakout groups etc.).

18. At all times, efforts to mitigate generalised statements were maximised especially on questions that related to localised beneficiary impacts (encourage disaggregated findings where feasibly possible etc.) or where potential or apparent biases were possible. The selection of the interpreter, whom had a degree of understanding of the local situation and any "history" that the evaluator would not have been aware of, certainly helped to overcome any concerns or "local politics" etc.

2.5 Communication and Outreach

19. To ensure that the TE seeks to promote learning and reflection, and that the key stakeholders find the recommendations relevant and useful, the evaluator has applied the following approach:

- The reconstructed Theory of Change (rToC - see Section 4) was discussed and validated with the UN UN Environment-EO and briefly with the Director of the PSC at the end of the field mission. Assumptions and impact drivers were then tested with key stakeholders during the field mission;
- Findings, impressions and recommendations were discussed and tested with the PSC and project stakeholders in a continuous and iterative process during the field mission.
- Interviews were conducted in a semi-structured manner, allowing space for interviewees to ask questions and communicate their priorities and views, and enabling the evaluator to follow up (through the interpreter) on unforeseen and emerging points and findings.
- Recommendations were sought from all stakeholders to provide advice for future implementation of similar projects;
- Preliminary findings and recommendations were presented to the Director of the PSC (Dr Monyneath) at a wrap-up meeting at the end of the field mission (see PowerPoint presentation in Annex VII);
- The evaluator was available to the PSC and stakeholders throughout the consultancy period (October to January 2017) via email or Skype for further contact and discussions.
- The draft TE report was shared with UN Environment and the PSC, and this provided national stakeholders with an opportunity to comment and provide further inputs via online. National Stakeholders also receive a 2 page "Evaluation Bulletin" summary as requested as part of the ToR (see Annex VI);
- The TE report will be posted on the Evaluation Office website and will be publicly available.

3 THE PROJECT

3.1 Context

20. The Cambodian coastal zone comprises the four provinces of Sihanoukville, Kampot, Koh Kong, and Kep (see Figure 3.1). According to data analyzed for the project design phase (VAAP ProDoc 2011), approximately 45 percent of the population in Koh Kong and Sihanoukville and 80 percent of the population in Kampot form their livelihoods around agricultural activities. These livelihoods, however, are vulnerable to the anticipated effects of climate change. Coastal ecosystems directly along the coastline in the four provinces perform important ecological services for communities, such as providing spawning and nursery areas for commercially important fish species and buffering the coastal area from cyclones and storm surges.

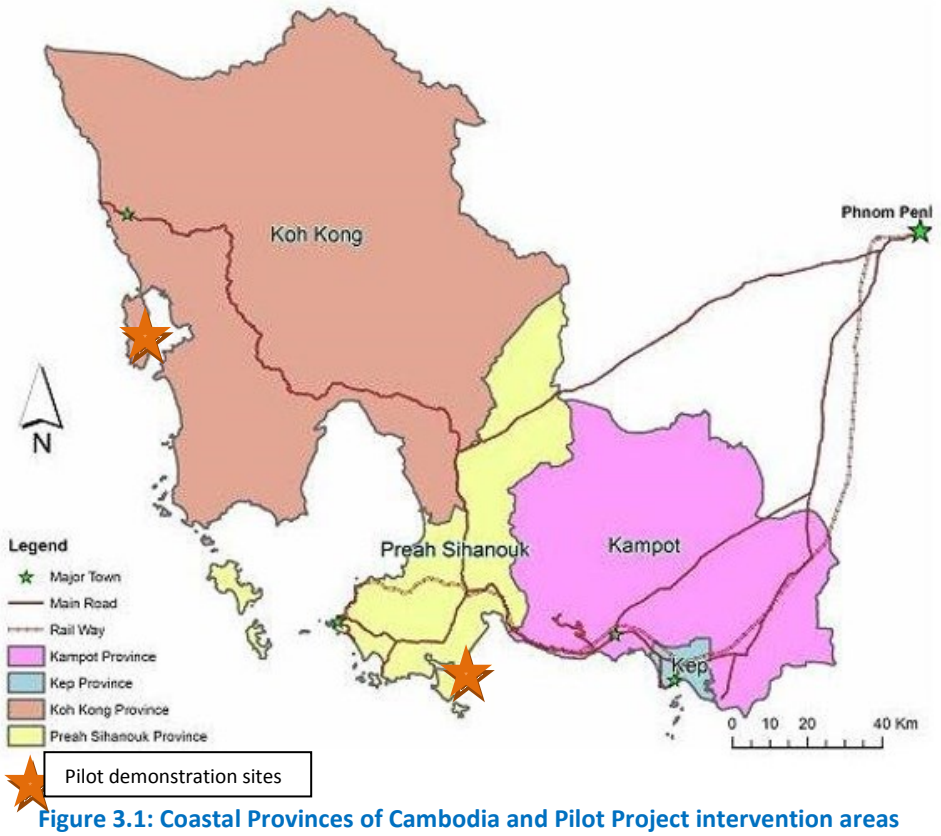


Figure 3.1: Coastal Provinces of Cambodia and Pilot Project intervention areas

21. In addition to the above, contemporary agricultural systems being deployed within the coastal provinces are often characterized by low productivity, often as a consequence of changing seasonal weather patterns, insufficient modern technology or farming practices, and insufficient financial resources. The consequence of this increasing trend of low agricultural productivity creates cyclical poverty and food insecurity, and climate change is expected to worsen these conditions. Moreover, coastal communities, district leaders, provincial leaders, and national government presently have limited technical capacity, climate change knowledge, management capacity, and resources to prepare for anticipated climate hazards. In light of these principle challenges (see Figure 3.2) four root causes of vulnerability (Figure 3.3) were identified along the coastal zones of Cambodia.

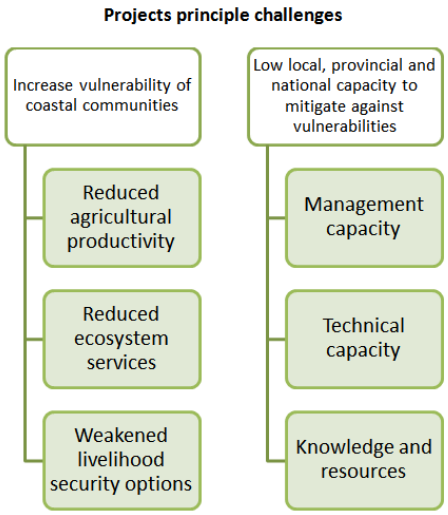


Figure 3.2: Principle Challenges

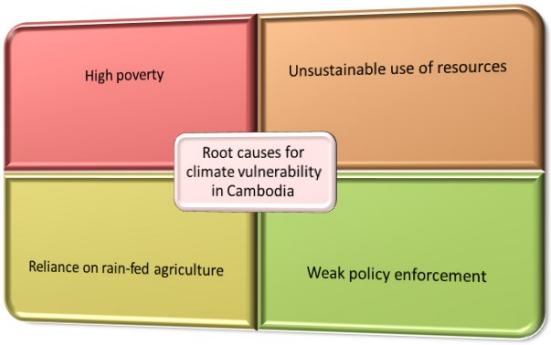


Figure 3.3: Root causes for CLIMATE vulnerability

22. Figure 3.4 outlines that there are three major types of barriers facing effective climate adaptation delivery from materializing in Cambodian coastal communities. As a consequence, four domain themes

were presented at the project design phase that, if improved, would potentially reduce community vulnerability to climate change in the coastal zones.

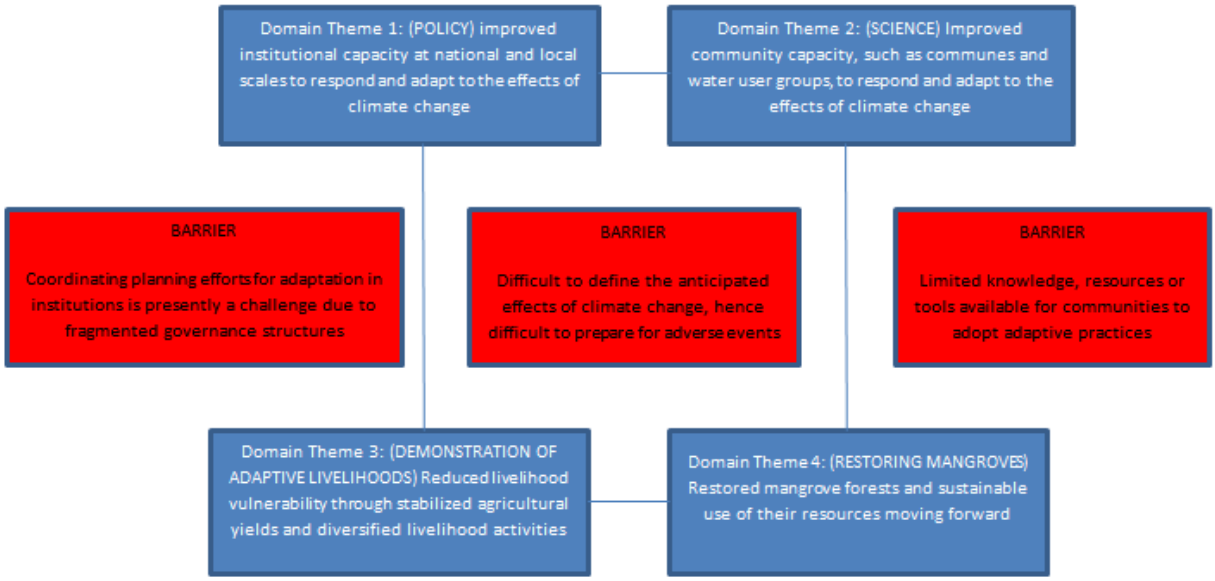


Figure 3.4: Main Project Barriers and links to Project Document Domain Themes

23. The VAAP project was subsequently designed to increase the resilience of natural ecosystems (such as mangrove forests) and to reduce the vulnerability of coastal communities to climate change impacts. The VAAP also attempted to address a series of climate related impacts, notably: i) changes in rainfall levels and patterns; ii) increased temperatures; iii) sea level rise; and iv) an increase in frequency of climatic hazards (such as droughts, episodes of heavy rainfall and flooding). This was deemed very important as these projected impacts are predicted to have a negative impact on livelihoods, water supply and quality in the coastal zones of Cambodia which, if not addressed, are likely to accelerate the rate of coastal erosion and increase risk of flooding within the polder areas.

24. The project falls predominantly within GEF Strategic Priorities “Climate Change Adaptation - CCA Objective 1 - Reducing Vulnerability” and “CCA Objective 2: Increasing Adaptive Capacity”. VAAPs interventions thus contribute directly to CCA1 and CCA2 through building institutional capacity to integrate climate change information into policies and planning at the national and regional level.

25. Figure 3.4 displays that combining the sources of vulnerability, the preferred approach towards reducing vulnerability and the barriers towards achieving the preferred situation should focus on delivering four “domains” of activities, namely: 1) policy, 2) science, 3) demonstration of adaptive livelihoods, and 4) restoration of mangroves. Activities identified in the Project Design therefore included tasks to:

- Build capacity at the national, provincial, and local level;
- Include climate change in national policy related to the coastal zone;
- Increase scientific understanding of climate change in the coastal area;
- Increase local awareness of climate change and adaptation;
- Create an adaptation plan for the coast that includes wide stakeholder involvement;
- Pilot adaptation measures at the local level; and
- Introduce livelihood alternatives.

26. Pilot demonstration sites were selected in the provinces of Koh Kong and Sihanouk (see Figure 1.1). In Koh Kong province, storms and saline intrusion (including sea level rise) are predominant concerns, affecting several communes, with floods and drought as additional concerns. The highest vulnerabilities relate to households, agriculture and livelihoods. Two communes, Peam Krasaob and Tuol Kokir, are rated

as extremely vulnerable. They also contain some of the largest coastal mangrove forests in Cambodia. Within Sihanouk Province, erratic rainfalls, sea water intrusion and storms are deemed the main concerns that were raised during the consultations. Low-lying rice fields, groundwater and rice and crop production have been destroyed by saline intrusion and storms, especially in Prey Nob district and sea level rise will affect large areas in many communes. Prey Nob District was selected as a pilot site being one of the largest rice growing regions along the coast, with most agricultural land in low-lying areas.

3.2 Objectives and Components

27. The confirmed goal of the VAAP/LDCF project was defined *"to reduce coastal vulnerability to climate change impacts on agricultural systems and natural ecosystems within the coastal zone."* The confirmed objective of the project was "*to reduce the vulnerability of coastal communities to the impacts of climate change by strengthening policy and science, and demonstrating targeted local interventions to increase ecosystem resilience"*.

28. The rToC undertaken in 2013 confirmed that the original project objective and most outcomes continued to be relevant and should not be changed. However, it was recommended that Outcome 3 be reformulated to better reflect the scope of interventions, since the outcome contained some provisions for implementing alternative livelihoods activities, and in order to harmonize its formulation with that of Outcome 4 (see Section 3.5 for details).

29. Table 3.1 below details the revised and original wordings (where appropriate) for each project outcome and output as set out within the baseline assessment by Talafré and Lyngby (2013). Specific wording changes to outcome 3 are presented in *italics* text.

Table 3.1: Project Components, Outcomes and Outputs

Outcomes	Outputs
Outcome 1: **Institutional capacity to assess climate change risks and integrate them into national development policies strengthened.**	**Output 1.1:** Systems and processes for identification and implementation of adaptation measures.
	Output 1.2: Climate change risks are incorporated into development plans and policy.
	Output 1.3: Relevant government departments are trained on climate change risks within the coastal zone.
	Output 1.4: Indicators for monitoring climate change impacts and assessing risks in the coastal zone in place.
Outcome 2: **Adaptation planning in the coastal zone improved.**	**Output 2.1:** Vulnerability maps for sensitive ecosystems and infrastructure within the coastal zone.
	Output 2.2: Relevant provincial- and district-level stakeholders are trained on climate-proofing development and adaptation planning within the coastal zone.
Outcome 3: **Vulnerability of productive systems and livelihoods to increased floods reduced** **Original Prodoc Wording** *"Vulnerability of productive systems to increased floods reduced".*	**Output 3.1:** Coastal communities use agricultural practices protected from changing climatic conditions and livelihoods are improved.
Outcome 4: **Resilience of coastal buffers to climate change increased and livelihoods improved.**	**Output 4.1:** Ecosystem-based coastal protection through mangrove system restoration.

3.3 Stakeholders

30. Stakeholders under the VAAP include government ministries (implementers), civil society (NGOs/academia), provincial/commune/district officers (demonstration beneficiaries), and local agriculturalists/fisherfolk/householders (livelihood beneficiaries). The institutional set-up of the project and the mechanisms of coordination are analyzed and discussed in this report under Chapters 5.8 (Sustainability and 5.9 (Factors Affecting Performance).

31. The approach towards establishing the composition of the PSC was purposely created to help facilitate stakeholder engagement. National, provincial and local members of the PSC also were encouraged to participate in both PSC scheduling's as well as TWG activities. The governance structure also includes the involvement of Commune Council Members in field activities, and the partnerships between Commune Councils, Community Committees, and the MoE was designed to be sustained throughout the project (in tandem with CARP/CCCA activities).

32. The VAAP/LDCF projects connection to local beneficiaries took place, in large part, through its collaboration with the CARP, which was essentially designed to implement more "on-the-ground" activities within communities, included the installation and set-up of rainwater harvesting systems, livestock raising support mechanisms, integrated farming systems (IFS), climate change awareness raising and village savings and money saving groups (MSG). The VAAP/LDCF project, on the other hand, interacted more with local communities specifically through its activities on awareness building and vulnerability assessment trainings etc.

33. A detailed mapping exercise of the stakeholders, their capacities and their roles, interests, and influence in relation to the project is presented in Annex XII. It has been prepared on the basis of a) inputs from the Project Management Unit (PMU) plus field visit preliminary assessments, and b) a review of the documents listed in Annex VIII.

3.4 Project Implementation Structure and Partners

34. The project's management structure is based on government ownership and is aligned to the existing institutional arrangements with the CCCA (see Figure 3.5). The Project Executing Agency for VAAP/LDCF is the Ministry of Environment (MoE) with a range of Implementing Partners supporting its delivery including the Ministry of Agriculture, Forestry and Fisheries (MAFF), the Ministry of Water Resources and Meteorology (MWRM), and the Ministry of Land Management, Urban Planning and Construction (MLMUPC). The project also reports to the PSC and, through this, to the National Climate Change Committee (NCCC), where the latter is the government-designated body for climate change coordination in Cambodia. The Project Team is based out of the Cambodian Coastal Coordination Unit (CCU), which is within the Cambodia MoE. The Director of the CCU serves as the National Project Coordinator (NPC), and the position is appointed by the MoE. The project also made use of the four Coastal Resources Centres (CRCs), one in each coastal province which provided support in terms of working, meeting and office space.

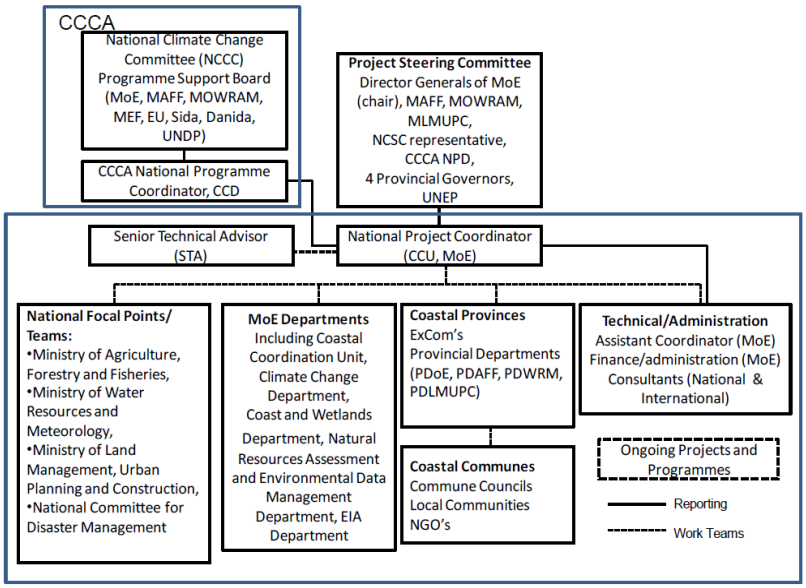


Figure 3.5: VAAP/LDCF Project Management Structure

3.5 Changes in Design

35. An updated project results framework, with revised indicators, confirmed baseline values and updated targets, was presented in response to a Baseline Assessment report undertaken by Talafré and Lyngby (2013) which was endorsed by the PSC in January 2013. Whilst the report findings suggested that the project objective and outcomes continued to be relevant and need not be changed in any significant way, it was recommended that specific aspects should be slightly altered to be better aligned with the CCCA Coastal Component Project from which it received parallel co-financing for adaptation measures.

36. The report recommended that certain Outcome and Output titles (presented in Table 3.1) should be reviewed. For example, Outcome 3 *("Vulnerability of productive systems and livelihoods to increased floods reduced")* was suggested to be reformulated to better reflect the scope of interventions, since the outcome contained some provisions for implementing alternative livelihoods activities, and in order to harmonize its formulation with that of Outcome 4 *("Resilience of coastal buffers to climate change increased and livelihoods improved")*. Outcome 4 also contained references to livelihoods improvements, whereas both Outcomes 3 and 4 included activities related to the promotion of alternative livelihoods. This is due to the fact that, in practice, Outcome 3 was set to be deployed in Sihanouk Province and Outcome 4 to be deployed in Koh Kong Province. Though it would have been possible to combine these two Outcomes, it was felt at the time that that approach would constitute a significant derivation from the project's approved results framework. It was therefore decided to clarify the scope of outcomes instead. The TE agrees with this strategy.

37. A number of changes were also made to the project indicators to ensure that they be SMART (specific, measureable, attainable, relevant, and time-bound). Changes were made to be able to track both the perceived and objective vulnerabilities of beneficiaries to droughts and floods, which were identified as the principle negative climate events in the area. Additionally, the modified indicators included gender disaggregated metrics. Finally, the Baseline Assessment Talafré and Lyngby (2013) reorganized project indicators to create a more coherent and meaningful framework (see Annex XI text in *green italics* denotes revised updates).

38. The MTR (Baastel 2014) found that the edits made to the VAAP/LDCF impacts, outcomes, and outputs as well as corresponding indicators made clear improvements to the project design, and the resulting project results framework was appropriate and beneficial for the project. The MTR stated that stakeholders interviewed did not voice criticisms or faults with the results framework. The MTR did, however, propose that certain outcome indicators could be better disaggregated by gender. The TE can confirm that attempts to do this were undertaken and the project outcome assessments have attempted to achieve this (see Section 5.4.2 – Table 5.3).

39. This TE reiterates the observation presented in the PIR (2015) which stated that the VAAP/LDCF has worked extensively in building ownership for the activities to be implemented. In addition it has also established a strong institutional structure (necessary at both national and provincial level) for long term sustainability of the activities that have started, such as those with full stakeholder involvement that involve "learning by doing" processes to ensure full ownership of the produced outcomes (especially the vulnerability assessment for each province and the adaptation plans). These points are elaborated further in Sections 5.9.

3.6 Project Financing

3.6.1 Project Contributions (at Project Document Design Phase)

Table 3.2: Project Contributions

	LDCF(UN Environment)	CCCA-CARP (cash)	Min of Env. (in kind)	MAFF	MWRM	TOTAL
Outcome 1. Institutional capacity to assess climate change risks and integrate them into national development policies	**0.32M**	0.23M	0.03M	-	0.08M	0.66M

strengthened						
Outcome 2. Adaptation planning in the coastal zone improved.	**0.32M**	0.48M	0.005M	-	-	0.81M
Outcome 3. Vulnerability of productive systems to increased floods reduced.	**0.43M**	0.65M	0.1M	0.2M	1.07M	2.45M
Outcome 4. Resilience of coastal buffers to climate change increased and livelihoods improved.	**0.30M**	0.66M	0.015M	0.1M	0.23M	1.31M
M&E	**0.11M**	0.03M	0.005M	-	-	0,14M
Project Management	**0.15M**	0.05M	0.04M	-	-	0.24M
Total	**1.635M**	**2.1M**	**0.2M**	**0.3M**	**1.38M**	**5.61M**

40. The financial figures in Tables 3.2 and 3.3 show the total project budget of US$ 5.61 million and how this is made of from separate Ministerial contributions as defined from the Prodoc. More detailed assessment of this (and final project spend) is presented in more detail within Section 5.5.

3.7 Project Costs

41. Table 3.3 outlines the initial budget of the VAAP (taken from the ProDoc) which is subdivided in the four project components. It also displays the total expenditure (as of 31 March 2016) and subsequent expenditure ratio (actual against planned). It shows reprioritization of project budgets (revisions) which were approved by the PSC and UN Environment. The table shows overspend in Outcome 4 of circa US$130,000 though underspend within Outcomes 1, 2 and 3 (following budget redistribution). Interestingly, and despite the above, an "overspend" of only US$3.4 has been recorded for the whole project. A more detailed evaluation of these figures is presented in Section 5.5.

Table 3.3: Project Costs

Component	Planned project budget (see Section 3.6.1 - LDCF – UN Environment) (US$)	Final revised budget (VAAP/LDCF – US$) *(taken from Baastel 2014 MTR)*	Total expenditures reported (as of 31.3.16)	Expenditure ratio (actual/planned)
Outcome 1. Institutional capacity to assess climate change risks and integrate them into national development policies strengthened	**320,000**	485,400	361,691	**74.5%**
Outcome 2. Adaptation planning in the coastal zone improved.	**320,000**	385,736	256,752.1	**67%**
Outcome 3. Vulnerability of productive systems to increased floods reduced.	**430,000**	336,104	415,431	**97%**
Outcome 4. Resilience of coastal buffers to climate change increased and livelihoods improved.	**305,000**	198,880	330,471.1	**124%**
Monitoring and Evaluation	**110,000**		109,472.1	**99%**
Project Management	**150,000**		161,186.1	**107%**
TOTAL	**1,635,000**		**1,635,003.4**	**100%**

3.7.1 Relationship between VAAP and CARP

42. VAAP took the lead on Outcome 1, while the CARP project is not directly involved at the national level. The two projects were designed to share information regularly on the outcome, particularly VAAP activities sponsoring conferences, workshops, and trainings.

43. In Outcome 2, CARP created detailed planning maps and guidelines in the project target areas. CARP also conducted activities to integrate maps and guidelines into Commune Development Plans. The VAAP focused on creating vulnerability maps for ecosystems and infrastructure using, in part, the information from CARP. VAAP also includes delivering training to relevant district-level stakeholders on the ensemble of information created by the two projects.

44. In Outcome 3, CARP has a strong focus on livelihood improvements. This included assessments of current coping strategies, current vulnerabilities, and current risks to agricultural livelihoods posed by climate variability. It also includes conducting a social Cost Benefit Analysis of different adaptive practices. Finally, CARP includes activities to train Farmer Water User Committees, conduct demonstration practices, and create guidance for scaling up adaptive practices. VAAP focused more on rehabilitation and improvement of water control for this outcome.

45. Outcome 4 was primarily addressed under VAAP, which focused on activities to restore mangroves as well as activities to increase awareness about the importance of restoring mangroves. CARP did, however, make large contributions to improve livelihood options for communities in the mangrove areas, such as establishing community fisheries and providing assistance to communities in climate change awareness training.

3.7.2 Co-financing

46. The following are planned and actual co-financing amounts for the project that were included in the Request for CEO Endorsement, alongside the confirmed actual amounts received recently by the PSC (Table 3.4). Co-financing was mobilized from CARP and "in-kind" from MoE, and the full amount expected at CEO endorsement from MAFF and MOWRAM was achieved.

47. Table 3.4 shows in-kind contributions which are used to cover the cost of core operations. This 'in-kind contribution' refers to an estimate of de facto services provided for the project and it is therefore difficult to assess it in absolute numbers.

Table 3.4: Co-financing and Leveraged Resources

Co-financing (Type/Source)	UN Environment Allocation (US$1,000)		Government* (US$1,000)		CCCA-CARP** (US$1,000)		Total (US$1,000)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
– Grants (cash)			1,680	1,680	2,200	2,200	1,680	1,680
– Loans							2,200	2,200
– Credits								
– Equity investments								
– In-kind support			200	315			200	315
– Other (*) - -								
Totals	**0**	**0**	**1,880**	**1,995**	**2,200**	**2,200**	**3,980**	**4,195**

** MoWRAM (1,400k); MAFF (400k) and MOE (195k) • CARP/CCCA: $2.2 million planned;*

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

4 THEORY OF CHANGE

48. At its simplest, Theory of Change (ToC) is a dialogue-based process to generate a description of a sequence of events that is expected to lead to a particular desired outcome. The ToC, as described in the Project Document (ProDoc), is centred on identifying two principle challenges related to climate change for the coastal communities in Cambodia (see Figure 3.2). To this end, the original ProDoc identified 4 root causes for vulnerability (Figure 3.2).

49. The original ToC was presented within the Prodoc along with a separate Project Results Framework (Appendix 4 of the Prodoc). Figure 4.1 below outlines the original ToC "linkages" that exist between the project outcomes and outputs as set out within the ProDoc. This diagram demonstrates a degree of concurrence with the observations stated within the MTR (Baastel 2014) which concluded that the ToC was well-founded and that activities were linked to existing vulnerabilities and existing barriers to change, and it is clear how the project activities will attempt to remove or reduce identified vulnerabilities and barriers to achieve the project's preferred situation and improve resilience to climate change.

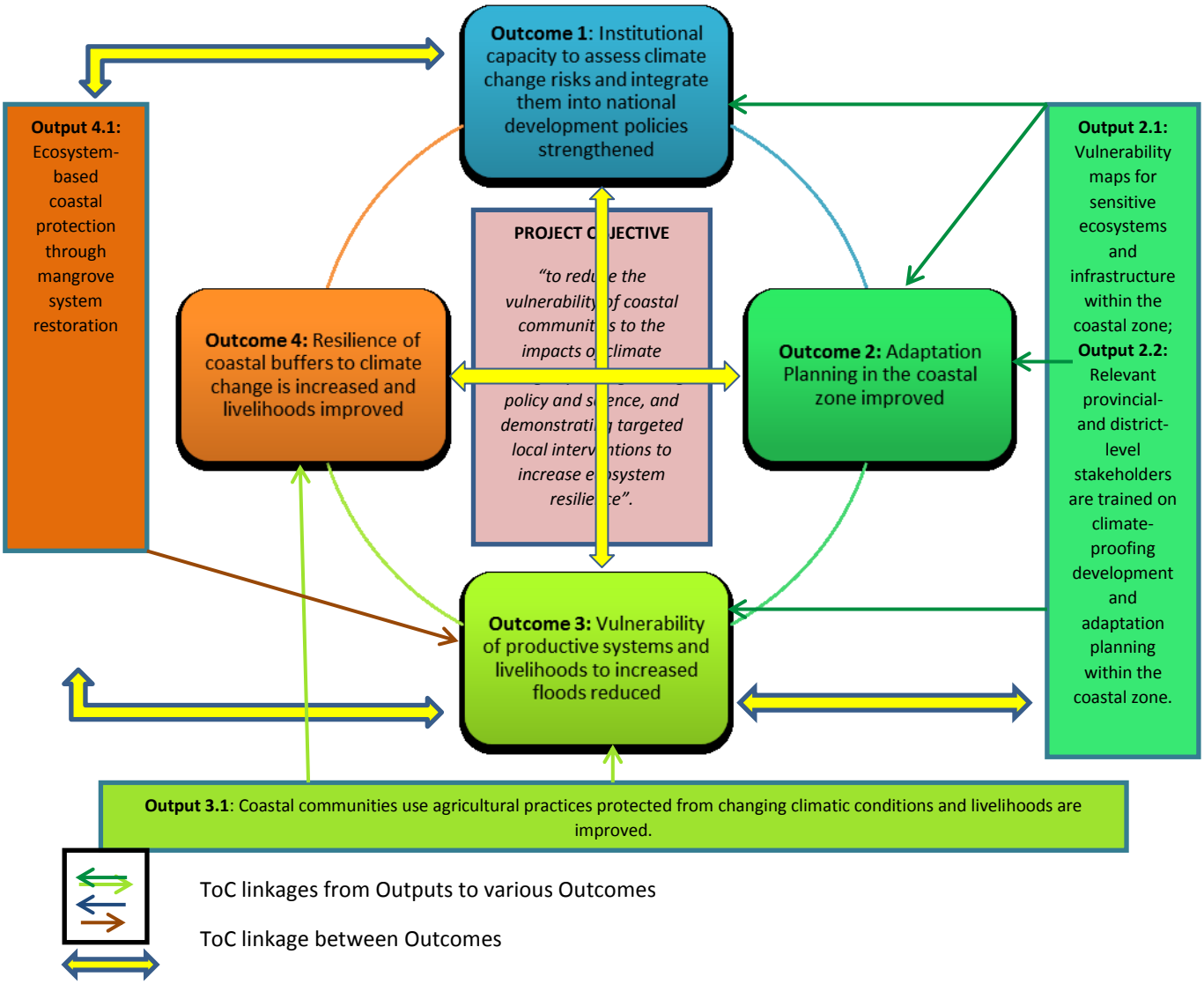


Figure 4.1: Theory of Change Project – Linkages between Outputs to Outcomes

50. The GEF Evaluation Office developed an approach to assess the likelihood of impact. Annex 8 of the ToR (not included within Annex 1 of this report) is entitled *'Introduction to Theory of Change / Impact Pathways, the ROtI Method and the ROtI Results Score Sheet'* and it describes the Theory of Change (ToC) approach. The ToC depicts the causal pathways from project outputs, over outcomes towards impact. It

also depicts any intermediate changes required between project outcomes and impact and defines the external factors that influence change along these pathways – referred to as either drivers (factors which the project has a certain level of control) or assumptions (factors beyond project's realm of influence). The application of this methodology has three distinct stages:

- Identifying the project's intended impacts;
- Review of the project's logical framework;
- Analysis and modelling of the project's outcomes-impact pathways: reconstruction of the project's Theory of Change

51. Using the ToC methodology, it is possible to assess to what extent the project has to date contributed towards achieving the intended impact. The following diagram (Figure 4.2), taken from the ToR, outlines a generic 'impact pathway' schematic showing causal pathways from outputs, through intermediate states, assumptions and impact drivers, and over to the intended Impact.

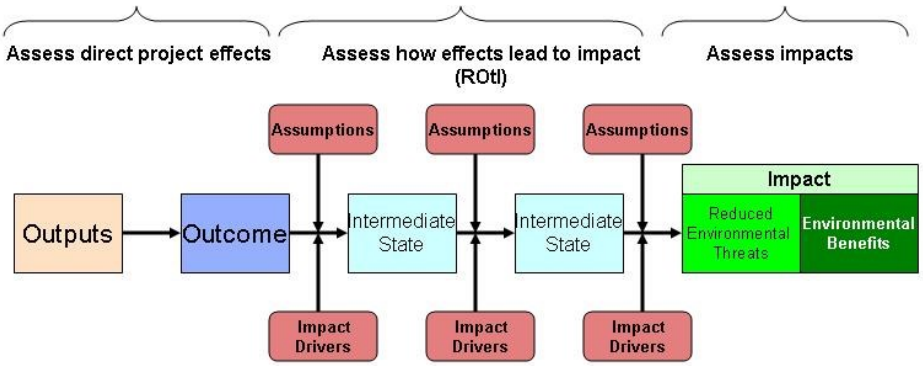


Figure 4.2: A schematic 'impact pathway'[3]

52. The reconstructed ToC (Figure 4.3) lists four 'Outcomes'. According to UN Environment staff and statements made by certain interviewees, the proposed activities are appropriate, are successfully implemented and are likely to produce the intended outcomes, through some may require time to be realised beyond that of the project's time frame as some are an ongoing and continuously changing, long-term process.

53. The same is valid for driving changes along the intended causal pathways. These external factors – assumptions and drivers – are also included in Figure 4.3 and are highlighted as separate boxes. As regards assumptions (factors, which the project has no control of), some have been derived already from the original project design (i.e.: "coordination and planning efforts are improved within institutional structures"), and some have been added during the evaluation exercise (i.e.: "replication/upscaling of CC resilience measures"). One of the original assumptions.

54. The reconstruction of the project logic uncovered a range of drivers. This is a major advantage as drivers (contrary to assumptions) can be influenced to a certain extend by the project. The project is already investing a lot in this direction, to name a few examples, continuous lobbying at government and donor level, using integrated coastal adaptation approaches during the demonstration project process ("crab-banks" to reservoir pond construction, thereby seeking to strengthen and add new partnerships. If the outlined assumptions prove valid and influencing the impact drivers in a strategically planned way, this will lead the Cambodia into different levels of the intermediate states.

55. Within the Inception Report of the TE, the evaluator presented a reconstructed ToC (rTOC) of the Project, which mapped the possible pathway of change from the projects outputs to the expected outcomes, up to the intended impact. The causal pathways are presented in Figure 4.3. It highlights the fact that there are 'change processes' that have linked the project outputs (left of the diagram) to the desired higher level immediate outcomes and through to impacts (to the right of the diagram). This is

[3] Diagram adapted from GEF Independent Evaluation Office (IEO), 2009.

demonstrated (as an example) by the achievement of mangrove rehabilitation (Outcome 4). Here, the key driver was the need to identify suitable locations for mangrove planting based on community knowledge of local conditions and an appreciation of past experiences and project work (CARP and DANIDA project interventions). Output 4.1 (coastal areas apply ecosystem based coastal protection through mangrove restoration) resulted in the planting of 75ha of new mangroves which have experienced a 90% growth success rate. The assumption that "science and practice is used to better anticipate the effects of climate change" was inculcated within the design and implementation processes adopted by VAAP (correct mangrove species type and planting techniques etc.) and the intended outcome of local communities/stakeholders being better aware of mangrove restoration and climate smart agriculture can be successfully demonstrated. Through the success of the intervention, coupled with the driver that demands that project partners and stakeholders continue efforts to enhance uptake of the intervention, has resulted in a positive impact of improving livelihood adaptation through the strategy to increase coastal buffers to climate change (i.e.: ecosystem service delivery).

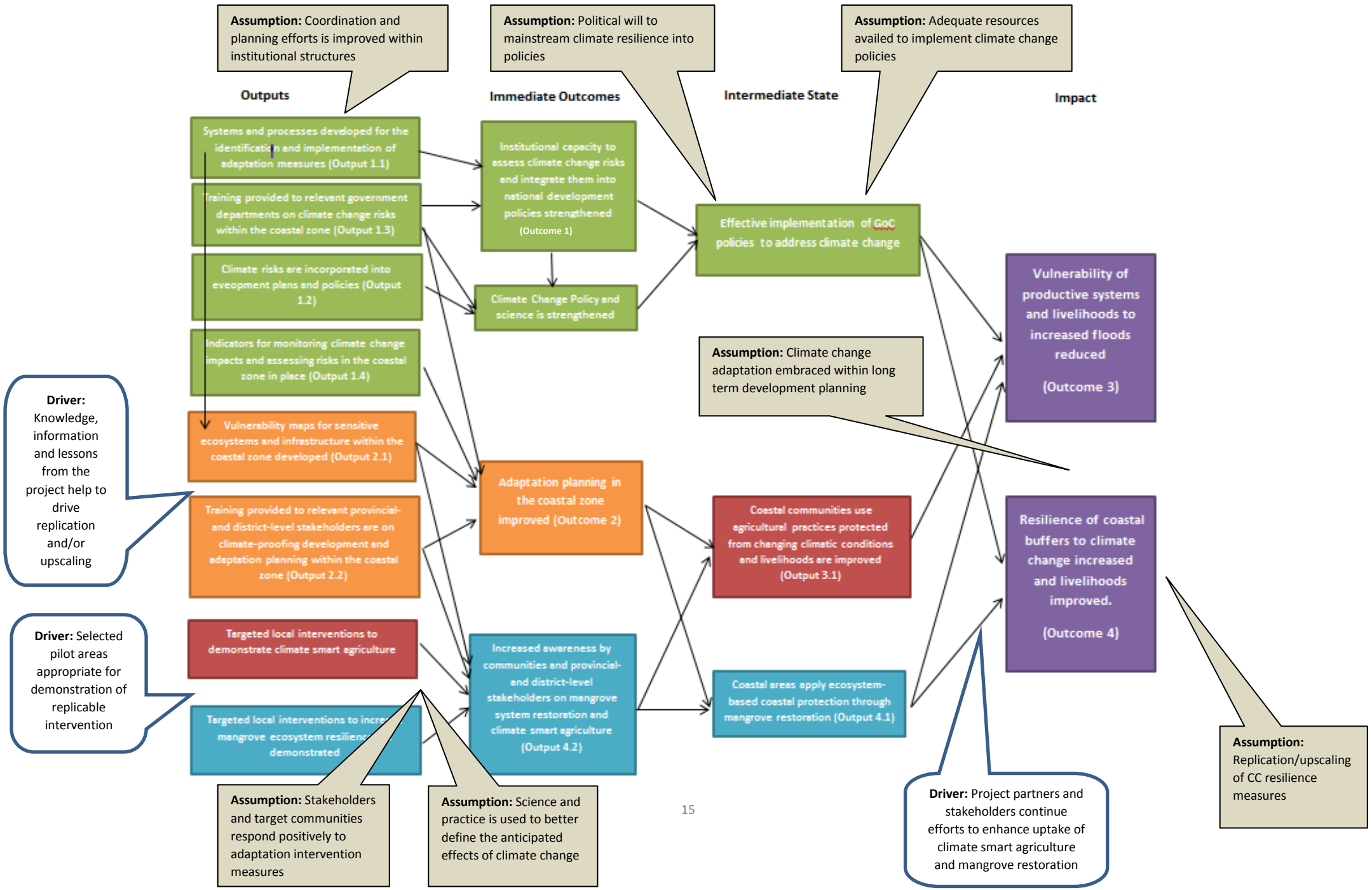
56. It is also noted that in some cases within the VAAP, that more than one output and change process are required to achieve a certain outcome. Conversely, one output may lead to more than one outcome (via different change processes-see Output 1.3). In addition, 'intermediate states' occur between the immediate project outcome and the desired objective. Figure 4.2 shows a number of different pathways from the outputs to the objective, though the specific VAAP activities (to produce outputs and promote 'change processes" are not shown. The "Drivers" are the significant factors that are expected to contribute to the realization of the intended outcomes, intermediate states or impacts. Each of these can be influenced by the project / project partners & stakeholders which in the instance of VAAP may apply to knowledge, information and lessons from the project helping to drive replication and/or upscaling, as this aspect may be influenced considerably by political will to pursue climate change adaptation on the coast etc.

57. The project has already successfully contributed towards achieving some of the low-level intermediate states, but there still remains some way to go towards attaining evidence towards the support of total compliance to all 4 intermediate states (especially "effective implementation of GoC policies to address climate change"). In addition, not all of the intermediate states can be achieved through project interventions only (true also for some outcomes, namely Outcome 1).

58. This rToC (see Figure 4.3) has proven a valuable instrument of analysis throughout the evaluation exercise and its design has been tested and revised by the evaluator during the production of this TE. It has particularly contributed to the assessment of the effectiveness and the sustainability of the project's results, as well as the likelihood to achieve the intended impact, as discussed in Chapter 5.4 (Effectiveness) of this report. The exercise has highlighted the fact that the project's success lies squarely on a number of factors that includes:

- the need for strong political support;
- the design of an appropriate and realistic project result framework;
- strong collaboration and cooperation between all stakeholders,
- ownership of local communities in particular in the Prey Nup and Peam Krasoap districts and
- design of a proper work plan, monitoring and evaluation approach.

Figure 4.3: Reconstructed Theory of Change (overleaf)


Assumption: Coordination and planning efforts is improved within institutional structures
Assumption: Political will to mainstream climate resilience into policies
Assumption: Adequate resources availed to implement climate change policies
Outputs
Immediate Outcomes
Intermediate State
Impact
Systems and processes developed for the identification and implementation of adaptation measures (Output 1.1)
Training provided to relevant government departments on climate change risks within the coastal zone (Output 1.3)
Climate risks are incorporated into eveopment plans and policies (Output 1.2)
Indicators for monitoring climate change impacts and assessing risks in the coastal zone in place (Output 1.4)
Vulnerability maps for sensitive ecosystems and infrastructure within the coastal zone developed (Output 2.1)
Training provided to relevant provincial- and district-level stakeholders are on climate-proofing development and adaptation planning within the coastal zone (Output 2.2)
Targeted local interventions to demonstrate climate smart agriculture
Targeted local interventions to incre mangrove ecosystem resilienc demonstrated
Institutional capacity to assess climate change risks and integrate them into national development policies strengthened (Outcome 1)
Climate Change Policy and science is strengthened
Adaptation planning in the coastal zone improved (Outcome 2)
Increased awareness by communities and provincial- and district-level stakeholders on mangrove system restoration and climate smart agriculture (Output 4.2)
Effective implementation of GoC policies to address climate change
Assumption: Climate change adaptation embraced within long term development planning
Coastal communities use agricultural practices protected from changing climatic conditions and livelihoods are improved (Output 3.1)
Coastal areas apply ecosystem-based coastal protection through mangrove restoration (Output 4.1)
Vulnerability of productive systems and livelihoods to increased floods reduced (Outcome 3)
Resilience of coastal buffers to climate change increased and livelihoods improved. (Outcome 4)
Driver: Knowledge, information and lessons from the project help to drive replication and/or upscaling
Driver: Selected pilot areas appropriate for demonstration of replicable intervention
Assumption: Stakeholders and target communities respond positively to adaptation intervention measures
Assumption: Science and practice is used to better define the anticipated effects of climate change
Driver: Project partners and stakeholders continue efforts to enhance uptake of climate smart agriculture and mangrove restoration
Assumption: Replication/upscaling of CC resilience measures

5 EVALUATION FINDINGS

5.1 Strategic Relevance

5.1.1 Global, Regional and National Environmental Issues and Needs

59. Climate change increasingly becomes one of the defining factors to sustainable socio-economic development across the World (UNDP, 2011), as modelling of climate change impacts (by various international organizations and IPCC) continually points to a rise of global mean surface temperature and the increased intensity and frequency of extreme climate change variables and events. Scientific data clearly suggests that the global mean surface temperature has increased since the late 19th century, plus observations suggest that the first decade of 21st century has been the warmest ever recorded (IPCC 2014). Complimenting this, a total global increase of 0.85^{o}C has been observed over a period 1880-2012 and an increase of 0.72^{o}C was recorded over the period 1951-2012. The IPCC Fifth Assessment Report (AR5) has revealed that the numbers of cold days and nights have decreased and the numbers of hot days and nights have increased globally since about 1950, indicating a trend of extreme events with potential negative effects on socio-economic development and human health across the planet.

60. Global warming would cause sea level rise (SLR) as a result of melting of ice sheets and thermal expansion of the ocean. The AR5 suggests that it is likely the rate of SLR has increased with a global rate of 1.7mm/year between 1901 and 2010, and the rate was observed higher at 3.2 mm/year between 1993 and 2010. The rate of SLR in 21st century is projected to increase further ranging between 0.24m to 0.63 m compared to the rate observed during 1971-2010 for the lowest and highest Representative Concentration (RCP) scenarios respectively (Table 5.1). Studies by CSIRO for the Asia Pacific region have confirmed a similar range of approximately 3–16 cm by 2030 and 7–50 cm by 2070 (CSIRO 2006).

Table 5.1: Representative Concentration (RCP) scenarios for the Asia-Pacific Region

	2046-2065	2081-2100
Scenario	Mean and likely range	Mean and likely range
RCP2.6	0.24 (0.17 to 0.32)	0.40 (0.26 to 0.55)
RCP4.5	0.26 (0.19 to 0.33)	0.47 (0.32 to 0.63)
RCP6.0	0.25 (0.18 to 0.32)	0.48 (0.33 to 0.63)
RCP8.5	0.30 (0.22 to 0.38)	0.63 (0.45 to 0.82)

Source: AR5, 2014

61. Cambodia's mean surface temperature has increased by 0.8°C compared to 1960 (SNC 2010) and it is projected to increase at a rate of 0.013 °C to 0.036°C per year, where the rate of temperature increase is high in central Cambodia and in the North East of Cambodia (0.036°C per year) and low in the high altitude areas of South West region (0.013°C per year), including the coastal areas (SNC, 2010). Future projections suggest that these trends will continue, with the average annual temperature rising by 0.7-2.7°C by the 2060s and 1.4-4.3°C by the 2090s throughout the year (IFAD, 2013). By the 2090s, rainfall during the rainy season is anticipated to increase by up to 31% in the June-August period and by up to 42% in September-November. During December-February, however, rainfall is projected to decrease by up to 54% (IFAD, 2013). This means that coastal provinces will be exposed to increased frequency of drought, heavy rain, and storm surges, including increased saline intrusion and sea level rise.

62. According to the above IPCC predictions, the coastal zone of Cambodia is predicted to become more exposed to the risks and impacts of climate change, though of interest, the vulnerability index for the coastal zone (MOE, 2010) shows relatively less vulnerability to climate change than other areas in the central plain and northeast of Cambodia. Despite this, it is felt that this could be a biased and incorrect assessment as sea level rise (SLR) was not integrated in that national vulnerability assessment (MOE2010). Instead, it is more likely that the expected increase in global warming and its associated climate extremes will place the coastal zone and communities living within it, at significant risk to hazards that are exacerbated by climate change (SoE, MOE 2014) As a consequence, sector specific plans and master plans

(including land use plans) will need to embrace new resiliency techniques, interventions and policies to better embrace climate related factors.

63. As a result of the above, climate change may impact macro-economic performance by reducing GDP growth (by 6.7%) and poverty reduction achievement especially in the developing countries like Cambodia (ADB, 2009). The ADB study (2009) estimated a potential decline of 50% in agricultural productivity by 2100 compared to the 1990 baseline. Subsequently, and in light of the above scientific regional and national predictions, introducing adaptation approaches that are designed to address these climate change impacts are of critical national importance, and hence any project intervention that focuses on these issues are deemed of strategic relevance to Cambodia.

64. VAAP has contributed to these key global, regional and national environmental issues through the activities delivered in Outcome 1 (as developed further in Section 5.4) to better introduce appropriate systems and processes (coupled with training of GoC staff and suitable indicator setting). In particular, the production of a Policy Brief (for Integration of Climate Change in Land Use Planning) can be used to demonstrate a useful approach towards proposing a set of national policy interventions that are required to improve institutional arrangements and coordination, amendments and revision of policies, guidelines, and regulations concerning land use planning. With regards to Outcome 2 (the production of District specific Coastal Vulnerability and Climate Adaptation Plans - especially for Koh Kong and Sihanouk Provinces whereby suitably targeted pilot projects were implemented in Outcome 3), coupled with the mangrove rehabilitation interventions in Outcome 4, all provide clear evidence of how the project has contributed to regional and international climate change challenges.

5.1.2 UN Environment Mandate and Policies

65. UN Environment's Medium Term Strategy 2014-2017 (MTS) is a document that guides UN Environment's programme planning over the immediate four-year period. It identifies UN Environment's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes [known as Expected Accomplishments (EAs)] of the Sub-programmes. In addition, the updated version of the UN Environment Programme of Work (PoW) for the biennium 2016-2017 builds on the results framework in MTS 2014-2017 and the Strategic Framework 2016-2017. This version of the PoW also takes into account comments from the UN Secretariat whilst revisions to the Strategic Framework have been subsumed into this updated version of the PoW.

66. Based on the PoW (2016-2017) UN Environment will deliver its work within 7 priority areas for the biennium 2016-2017 (those in *underlined italics* are of direct relevance for VAAP and reflected in Table 5.1):

- *climate change*,
- disasters and conflicts,
- *ecosystem management*,
- environmental governance,
- chemicals and waste,
- resource efficiency and sustainable consumption and production, and
- environment under review.

67. Within the framework of the UN's approach to climate change, UN Environment intends to work closely with Member States to (a) build the resilience of countries to climate change through ecosystem-based and other supporting adaptation approaches; facilitating access to finance; undertaking pilot interventions and promoting the integration of these approaches through national development and fostering climate change outreach and awareness raising. These have all been reflected in the project design as defined in Sections 4 and Section 5.2.

68. With a view to mainstreaming the ecosystem approach in policy-making and implementation processes, whilst assisting the reversal of ecosystem degradation and to address the challenge of food security and water quality, UN Environment seeks to promote proper management of biodiversity

particularly at the ecosystem level. UN Environment seeks to promote projects that catalyse the maintenance of natural capital and the protection and sustainable use of ecosystems, notably promoting *"the management of coasts and marine systems to ensure ecosystem services are restored or maintained"* plus *"help strengthen the enabling environment for ecosystems"*. This is undertaken in consultation with secretariats of the biodiversity related multilateral environmental agreements (MEAs) and will include support to countries in creating the enabling environment for the implementation of ecosystem and biodiversity-related multilateral environmental agreements, paying particular attention to the Aichi biodiversity targets and the CBD 2011-2020 Strategic Plan for biodiversity.

69. Table 5.2 assesses whether the project has made a tangible/plausible contribution to any of the EAs specified in the MTS 2014-2017 and MTS 2010-2013 and/or outputs in the PoW 2016-2017. In addition, an evaluation is briefly made on whether the project is aligned with the Bali Strategic Plan (BSP)[4], UN Environment's Gender Policy and Strategy, whether the project has applied the UN Common Understanding on Human rights based approaches (HRBA) and finally, whether the project has any aspect that may be considered as an example of South-South Cooperation.

Sub-Evaluation Rating: Moderately Satisfactory (MS)

5.1.3 GEF Climate Change focal area, strategic priorities and operational programme(s)

70. With reference to UN Environment Sub-Programme/GEF Strategic Priority and Expected Accomplishments, despite the fact that the project was designed before the adoption of the Focal Area Strategic Framework, the contribution to those objectives and targets predominantly falls within Climate Change Adaptation CCA Objective 1 ("Reducing Vulnerability") and CCA Objective 2 ("Increasing Adaptive Capacity"). The project seeks to respond to: i) changes in rainfall levels and patterns; ii) increased temperatures; iii) sea level rise; and iv) increased frequency of climatic hazards (such as droughts, episodes of heavy rainfall and flooding).

71. These projected impacts are expected to have a negative impact on livelihoods, water supply and quality in the coastal zones of Cambodia and to accelerate the rate of coastal erosion in erosion prone areas and increase risk of flooding in the polder areas. These negative impacts are likely to continue unless timely adaptation interventions are implemented. To this end, the project's interventions are designed to specifically contribute to CCA1. In addition, the project was designed in an attempt to build institutional capacity to integrate climate change information into policies and planning at the national and regional level, therefore contributing to CCA2. Section 5.4 and 5.5 stress that the projects effectiveness had much to do with the fact that VAAP was designed to build not only on historic and parallel projects, but also made best attempts to structure institutional arrangements to mimic national governance frameworks, especially in the format/composition of committees and steering groups etc.

Strategic Relevance Evaluation Rating: Satisfactory - the VAAP has largely contributed to the fulfilment of UN Environment's mandate and policy, plus it has also supported towards meaningfully contributing to the fulfilment of GEF strategy and priorities. VAAP confirms, in retrospect, that its design has been strategically relevant towards addressing national challenging issues and needs by implementing the range of outputs that are discussed in more detail in Table 5.1 and also in Section 5.3**.**

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[4] http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf

Table 5.2 Reference to key UN Environment mandates and strategic relevant policies

Project Components		UN Environment Medium Term Strategy (2014-2017)	Link to Bali Strategic Plan?	Link to UN Environment Gender Policy and Strategy	Human Rights Based Approach?	Example of South-South Co-operation?	Evidence of UN Environment Safeguards followed?
Outcomes	**Outputs**						
Outcome 1: **Institutional capacity to assess climate change risks and integrate them into national development policies strengthened.**	**Output 1.1:** Systems and processes for identification and implementation of adaptation measures. **Output 1.2:** Climate change risks are incorporated into development plans and policy. **Output 1.3:** Relevant government departments are trained on climate change risks within the coastal zone. **Output 1.4:** Indicators for monitoring climate change impacts and assessing risks in the coastal zone in place.	UN Environment support to countries for a green economy in the context of sustainable development and poverty eradication is one of the important aspects of the MTS 2014-2017. Also Expected Accomplishment 1 (MTS 2014-17) is addressed (**Climate resilience:** Ecosystem-based and supporting adaptation approaches are implemented and integrated into key sectoral and national development strategies to reduce vulnerability and strengthen resilience to climate change impacts) in the VAAP.	BSP objective to develop national research, monitoring and assessment capacity was undertaken through the set-up of the Coastal Climate Change Data Network (CCCDN) to support data collection, analysis and monitoring of environmental trends and in establishing infrastructure for scientific development and environmental management.	GPS Sub-programme 1 (Climate Change) is not specifically referred to in the ProDoc for Outcome 1. No specific gender related information possible that is disaggregated for this Outcome (according to the VAAP Completion Report (2016).	No direct evidence of the project purposely applying the UN Common Understanding on HRBA. Despite this, there is no evidence to conclude that the project intentionally set out not to be in line with the UN Declaration on the Rights of Indigenous People, and has subsequently pursued the concept of free, prior and informed consent.	The exchange of resources, technology, and knowledge between developing countries is possible through the future implementation of the Coastal Climate Change Data Network (CCCDN) to support data collection, analysis and monitoring of environmental trends	Section 5.7 assesses whether the project has adequately considered environmental, social and economic risks and established whether they were vigilantly monitored.
Outcome 2: **Adaptation planning in the coastal zone improved.**	**Output 2.1:** Vulnerability maps for sensitive ecosystems and infrastructure within the coastal zone. **Output 2.2:** Relevant provincial- and district-level stakeholders are trained on climate-proofing development and adaptation planning within the coastal zone.	Relevant Aichi Biodiversity Target are addressed through Outcome 2 outputs, namely Target 10. (Pressures on vulnerable ecosystems reduced) and Target 15 (Ecosystems restored and resilience enhanced). A framework for developing climate resilient sustainable development along the coast has been provided (Expected	BSP objective is to strengthen the capacity of Governments of developing countries as well as of countries with economies in transition, at all levels – Outcome 2 provided train the trainer initiatives and awareness of vulnerability awareness approaches and techniques for future replication and upscaling.	No specific gender related information possible that is disaggregated for this Outcome (according to the VAAP Completion Report (2016).	The Outcome does not aim specifically to support vulnerable ethnic groups and no reference is made towards any specific indigenous peoples. Despite this, the outputs of the vulnerability mapping exercise have mapped vulnerable "groups" clearly within the 4 Provinces focused on.	Platform is set (through completion of Provincial level Vulnerability Assessment Plans for improving institutional capacity-building, including through the exchange of expertise, experiences, information and documentation	

		Accomplishment 1) through the VAAP project design for Outcome 1.					
Outcome 3: **Vulnerability of productive systems and livelihoods to increased floods reduced**	**Output 3.1:** Coastal communities use agricultural practices protected from changing climatic conditions and livelihoods are improved.	Relevant Aichi Biodiversity Target are addressed through Outcome 2 outputs, namely Targets 7 (Sustainable agriculture, aquaculture and forestry), 14 (Ecosystems and essential services safeguarded) Target 10 (Pressures on vulnerable ecosystems reduced)	Environment -related technology support and capacity-building was provided (in part) throughout Outcome 3 (training events and new pilot demonstration projects etc.).	According to the VAAP Completion Report (2016), for Outcome 3, 94% of those interviewed claim improved livelihoods, 91% of men and 97% of women.	Muslims make up a minority in the coastal area and specific training activities and livelihood options were introduced to these communities (applying the UN Common Understanding on HRBA). Despite this, there is no evidence to conclude that the project intentionally set out not to be in line with the UN Declaration on the Rights of Indigenous People, and hence has pursued the concept of free, prior and informed consent in all demonstration projects completed.	Training approaches on Integrated Farming Systems (IFS) has helped (in this Outcome) to support future capacity building to local communes, individuals and between the institutions of the South in order to develop human resource capacity on IFS.	
Outcome 4: **Resilience of coastal buffers to climate change increased and livelihoods improved.**	**Output 4.1:** Ecosystem-based coastal protection through mangrove system restoration.	Relevant Aichi Biodiversity Target are addressed through Outcome 2 outputs, namely Targets 6 (Sustainable management of marine living resources), 7 Target 10. (Pressures on vulnerable ecosystems reduced) and Target 15 (Ecosystems restored and resilience enhanced)	The BSP promotes the integration of environmental initiatives and programmes agreed and supports the development, enhancement and implementation of regional and sub-regional environmental strategies and action plans (ie: outcome 4's strategy for ecosystem reliance etc.)	For Indicator 4c *("Number of coastal communities households who note improved livelihood due to access to alternative livelihood options at end of project"),* of all the trained householders in Peam Krasoab/Toul Kokir, 92% of all households report improved livelihoods, 96% of men, and 89% of women. This shows that the target has been achieved.	As above	South-South best practice on mangrove planting techniques is possible in the future.	

5.2 Quality of Project Design

72. As stated in Section 4, the PSCs approach to update the project results framework with revised indicators, confirmed baseline values and updated targets, which was endorsed by the PSC in January 2013 has proven to be a valuable exercise. For example, changes were made to the project indicators to ensure that they are SMART (specific, measureable, attainable, relevant, and time-bound). This enabled the PSC to better track both the perceived and objective vulnerabilities of beneficiaries to droughts and floods, which were identified as the principle negative climate events in Cambodia. Additionally, the modified indicators better included gender disaggregated metrics. Finally, the Baseline Assessment (2013) reorganized outputs and activities to create a more coherent division.

73. Overall, the updates to the project design presented in the ProDoc, in the view of the TE, assisted towards achieving compliance with UN Environment strategic priorities. This is because the approach centred itself (correctly) on identifying just two principle challenges that relate directly to well-known climate change risks facing Cambodian coastal communities. Firstly, climate change is predicted to increase livelihood vulnerability by reducing agricultural productivity, reducing (or diluting) ecosystem services, and weakening overall socio-economic options and hence household income security. Secondly, local, provincial, and national capacity is low (financial and human) and hence the ability to mitigate vulnerabilities to climate change will remain low *(NB: identified capacity deficiencies include management capacity, technical capacity, knowledge, and resources)*.

74. The quality of the Project Design (within the ProDoc and Request for CEO Endorsement) is also linked to the decision for it to adhere to several proposals to embrace lessons learned from past projects to influence the design and choice of interventions for the VAAP, indicating that design team used the opportunity to draw from experiences of past projects. In addition, the DoE believe that the project's design (in particular the correct selection of sites for demonstration projects) resulted in more easily being able to target roles and responsibilities (see Section 5.4 – Effectiveness). The use of lessons learned in the project design also included the importance of embracing experiences from the following donor funded projects:

- *"Environmental Management of the Coastal Zone"* – Funded by the Danish International Development Agency (Danida), and underway from 1997 to 2008, the project worked towards capacity building and effective natural resource management. The VAAP/LDCF proposed the use of information generated throughout the Danida project, and identified the following best practices from the project: a) maintain focus on capacity development throughout the project; b) establish local ownership; c) recognize that capacity-building is a long-term effort; d) acknowledge existing levels of capacity ; e) structure project accordingly; f) resist making unnecessary changes to the project as it leads to frustration and reduced national ownership, and; g) build the capacity of individuals who will use this knowledge continually in their careers:

- *"Promoting Climate-Resilient Water Management and Agricultural Practices"* – Funded by the GEF-LDCF and implemented by UNDP, this was the first project implemented under Cambodia's NAPA (approved in 2009). Whilst the project did not operate in the coastal zones, the VAAP/LDCF anticipated creating linkages to increase synergies and share lessons;

- *"Natural Resource Management and Livelihoods Program"* – funded by Danida, the United Kingdom Department for International Development (UK/DFID), and the Royal Government of Cambodia, the program ran from 2006 to 2011.

- *"National Integrated Strategy of Coastal Zone and Master Plan of Sihanoukville Province for Sustainable Development"* – Funded by the Japanese International Cooperation Agency (JICA), the project created planning maps that the VAAP/LDCF made use of in designing and implementing Outcome 2 of the project;

- *"Participatory Management of Mangrove Resources Project"* – Funded by the International Research Centre-Canada and the Cambodian MoE, the project worked on sustainable community natural resource management in Peam Krasaop's Wildlife Sanctuary beginning in 1990. The VAAP/LDCF used lessons learned within the VAAP specifically for mangrove rehabilitation in Peam Krasaop (Outcome 4).

75. Annex XI of this TE has undertaken a more detailed new review of the Project Design. This TE finds that the edits made to the VAAP/LDCF impact, outcome, and output statements as well as corresponding indicators, at the time of the MTR, made clear improvements to the project design, and the resulting project results framework was appropriate for the project. A summary of this analysis is presented in Table 5.3.

Table 5.3: Scoring of the Project Design

Criterion	Rating*[5]
Project context and complexity	5
Project preparation	4
Strategic relevance	5
Intended results and causality	4
Logframe and Monitoring	5
Governance and supervision arrangements	6
Partnerships	5
Learning, communication and outreach	5
Financial planning/budgeting	5
Efficiency	5
Risk identification and social safeguards	4
Sustainability, replication and catalytic effects	5
Identified project design weaknesses/gaps	5
Overall	**4.84**

Quality of Project Design Evaluation Rating: Satisfactory (S) : The TE finds that the project rationale was well-founded. It is clear that activities are linked to existing vulnerabilities and existing barriers to change (as identified above), and it is clear how the project activities will attempt to remove or reduce identified vulnerabilities and barriers to achieve the project's preferred situation and improve resilience to climate change.

5.3 Nature of the External Context

76. Externalities that possibly could have affected the project implementation context were identified in the MTR (Baastel 2014). These were all identified as being of either a low or medium risk. No other tangible evidence can be found regarding economic or social externalities (at the time of writing) which may have impacted on project implementation. In fact, based on interviews conducted during the field mission with project partners, the TE finds that certain external risk factors appear to be mostly well considered by project partners, and this is perhaps a direct consequence of the projects institutional risk strategy being designed to embrace existing political frameworks plus an understanding of lessons learned from ongoing or past project experiences (see Section 5.2).

77. With reference to any political instability, there was no recorded evidence of any situation (electoral or non-electoral) that occurred during the projects duration that impacted on project performance over and above normal government operating procedures and in fact, between 2011 and 2016 (including the Local Commune Elections in 3 June 2012[6] and the General Election that took place in Cambodia on 28 July 2013), the political situation could be described as being relatively stable despite claims of election fraud (Al Zareera 2013). Hence there were no extra-ordinary political circumstances that may have affected

[5] Rating system for quality of project design and revision: A number rating 1-6 is used for each section: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall quality of the evaluation report is calculated by taking a weighted mean score of all rated quality criteria,

[6] http://www.comfrel.org/eng/components/com_mypublications/files/620271Final_Report_Commune_Elections_2012_Final_Final_06_11_2012.pdf

project performance. Regarding environmental conditions, the project demonstration site interventions, which all may have been delayed as a result of flooding during the wet seasons, were purposely planned to be implemented mostly during the dry season. Some delays did occur during this time, though these delays cannot explicitly be pin-pointed directly to environmental conditions.

Nature of the External Context Evaluation Rating: Moderately Favourable (MF)

5.4 Effectiveness

5.4.1 Achievement of outputs

78. According to progress reports and information provided by UN Environment staff, the project has successfully produced the programmed activities and outputs as outlined in UN Environment's internal planning documents, both as regards the adopted PoW of the CC and UN Environment's PoW. A more recent assessment of this was, in part, completed by the VAAP PMU in the VAAP Final Report (2016) which declares that the project has delivered virtually all its planned outputs. Based on an evaluation of available reports, coupled with key stakeholder consultation in Cambodia, the delivery of a high percentage of outputs have collectively contributed significantly (in synergy with the CARP) towards tackling many interrelated aspects of climate change concerns in the coastal areas.

a) Output 1.1: Systems and processes for the improved identification and implementation of coastal adaptation measures *(through the use of CVA reports that embrace science and practice to better define the anticipated effects of climate change for specific provinces – see rTOC in Figure 4.2)*;

79. The production of a report on *"Climate Change Governance for Land Use Planning in Cambodian Coastal Areas"* was undertaken (analysis of climate change governance at the national and sub-national levels) to identify gaps, weakness and strengths, and propose a set of actions for enhancing institutional arrangements, coordination and capacity, dissemination of knowledge and information and integration of climate change considerations in planning. It is felt that the project has been effective towards setting the platform and baseline to provide the knowledge and alternative approaches to possibly upscale and replicate demonstration activities around other coastal Provinces.

80. The production of a report on the Coastal Climate Change Data Network (CCCDN) has proven an important part of Cambodia's situation analysis to help fill (or reduce) the Climate Change data gap, and from this, be used to promote data sharing and access by data users and planners to improve more timely and targeted resilience response options for the coastal zone. The report (which reviewed existing databases and data management systems managed by different agencies, especially by the MoE, MoP and the National Institute of Statistics) recommended that the CCU serve as a coordination platform or point of contact for data sharing at the national level, because of its long-standing experience in coordination of project activities and data acquisition at the national and provincial levels. The report also suggests that to become more efficient, secretariats should be established at the provincial governors' offices to better facilitate information flows among the provincial departments, NGOs, the private sector, researchers and universities, districts and communes. Five departments, namely DOE, DOF, DWRAM, DLMUPC and DOP, would be involved in this data network, with more departments and agencies to join. At the time of writing, climate change data are scattered among sector agencies and are not readily available for planning purposes.

81. There is no gauging of sea level and sea level rise, and hydrological and meteorological records are fragmented. Environmental quality and saline intrusion are not systematically monitored, and little is known about the mangroves, wetlands and forests, and their conversion to other uses. The impact of the CCCDN is not, however, being realised as the "network" is not being mainstreamed or sustained (see Section 5.8) into "day to day" operating practices (based on discussions held with key departments).

82. The production of a Policy Brief (for Integration of Climate Change in Land Use Planning) has proven to be a useful approach towards proposing a set of national policy interventions that are required to improve institutional arrangements and coordination, amendments and revision of policies, guidelines, and regulations concerning land use planning. At the time of writing, the national effectiveness of the project is, however, not being maximised (or realised), though it is anticipated that capacity building programmes (at

the national and sub-national levels) coupled with knowledge dissemination and awareness raising programmes will be identified and embraced within Ministerial strategy plans for future delivery.

b) Output 1.2: Climate risks are incorporated into development plans and policies *(through the improved coordination of existing planning efforts within institutional structures – see rTOC in Figure 4.2)*

83. Climate change risks have attempted to be incorporated into development plans and policies in Cambodia. VAAP has developed a proposal for climate change policies and land use which was presented for the PSC in June 2015 and was endorsed by PSC in December 2015. At the time of writing, a number of other projects providing related national policy advice are ongoing nationally, and the draft proposals identified to assist with climate mainstreaming still need to be better coordinated before final adoption. The efforts will continue to be coordinated through MoE in the near future.

c) Output 1.3:Training to relevant government departments on climate change risks within the coastal zone *(through the targeting of specific stakeholders and communities whom are most likely to respond to the opportunities offered through improved capacity building and training – see rTOC in Figure 4.2)*;

84. With respect to the effective delivery of capacity needs assessment for climate change adaptation training for relevant agencies at the national level, VAAP has provided training to technical staff and stakeholders of about 150 persons through several training sessions on climate change adaptation whilst training manuals have been prepared to help deliver training courses on vulnerability assessment in all four coastal provinces. The results of the climate change scenario modelling have been used in the training sessions and climate predictions have been prepared for water resources and meteorology for the coastal area.

d) Output 1.4: Indicators for monitoring climate change impacts and assessing risks in the coastal zone *(through the improved coordination of existing planning efforts within institutional structures – see rTOC in Figure 4.2)*

85. The VAAP production of climate change monitoring indicators report has, for the first time, been used directly (and elaborated within) the third State of Environment, Climate Change and Socio-economy Report for the Cambodian coastal areas (2013). This provides an analysis on potential climate scenarios, risks and impacts of a rising temperature, sea level rise, storm surge, flooding and droughts which has helped broaden the scope of the projects reporting by considering climate change response options along with socio-economic development needs, thus avoiding GDP reduction due to climate change. This output also proposed a list of key monitoring data which (in time) should be collected by various agencies.

Output 1 Sub-Evaluation Rating: Satisfactory (S)

e) Output 2.1: Vulnerability maps for sensitive ecosystems and infrastructure within the coastal zone developed;

86. At the project level, work associated with the production of this output (and for Output 2.2 – see (f) below) was delayed, more so than those outputs discussed above (a-d).Consequently, this output received a moderately unsatisfactory rating within the PIR of June 2013. VAAP did, however, gain momentum since the MTR with this (and Output 2.2) being successfully completed.

87. The VA information produced as part of Output 2.1 (Vulnerability Mapping), has been used to support a range of parallel outputs, being incorporated into a range of databases, namely the Commune Database, the IDPoor Database, as well as incorporation into the Digital Elevation Model (called SRTM 90m, extracted from the Consortium for Spatial Information (CGIAR-CSI) Geo-Portal), the shoreline assessment, and the study on climate change impacts on streamflow see below). In addition under Outcome 2, the shoreline assessment, topographic study and the applied methodologies all provide useful findings about the current shoreline vulnerability to both climate change and infrastructure development, and is well suited as a basis for a management plan covering soft and hard measures to control coastal erosion, flooding, landslides, and saline intrusion, resulting from sea level rise, storm surges, extreme rainfalls, and land use practices.

88. Visibly, the four published VA reports (one for each coastal province in Cambodia) have used the outputs information to define asset of priority adaptation options for consideration and integration within provincial development plans. The supporting vulnerability maps subsequently embraced and used the vulnerability indices calculated under the VA, with 6 classes of vulnerability, ranging from low (1) to high (6) and mapped accordingly to show the extent of current climate change risks and vulnerabilities. This has successfully been used as a basis for planning appropriate early warning systems (EWS) and adaptation measures to better reflect the level of vulnerability and exposure of each commune (notably the use of a Digital Elevation Model (DEM), coupled with ground truthing). These were used to evaluate impacts of sea level rise and vulnerability in the coastal area to provide the basis for the preparation of future shoreline management plans for each Province.

Output 2.2: Training provided to relevant provincial and district-level stakeholders are on climate-proofing development and adaptation planning within the coastal zone.

89. With regard to Output 2.2, the VAAP conducted training and capacity building outputs (training exercises and manuals etc.). Several trainings were held for members of the national focal points (NFP), the PTWGs, and other government officers from relevant departments and commune councils. According to interviewed attendees, the training has certainly advanced understanding and hence capacity on a range of issues including climate change and adaptation planning, Vulnerability Assessment (VA) and climate reporting. The training outputs have resulted in better understanding and improved capacity for assessment of climate change risk and impacts in coastal areas, increased knowledge on modelling of current and future climate change scenario and impacts, and devising appropriate adaptation response.

Output 2 Sub-Evaluation Rating: Moderately Satisfactory (MS).

f) Output 3.1: Coastal communities use agricultural practices protected from changing climatic conditions and livelihoods are improved

90. Overall, the demonstration of livelihood activities has proven to be a strong component to this project with direct impacts on local communities. With reference to Output 3.1 (Coastal Communities Livelihoods are improved), the cost benefit analyses undertaken for each of the intervention works undertaken, such as the polder 7500m and outer polder dyke rehabilitation at Prey Nob District and the 60,000 seedlings of *Teaptrus* trees planted to protect 2000ha of polder, plus the 60 rainwater harvest tanks benefiting 50 households in Prey Nob District and 10 households in Peam Krasaob), all demonstrated that the interventions not only will help towards improving livelihood security effectiveness, but also should enhance local Provincial budget efficiencies with regards to supporting socio-economic development at the commune level. Each project has demonstrated high internal rates of return (IRRs), with additional benefits such as increased access to water during the dry period for household consumption; and a reduced risk of flooding and sea water intrusion during flash floods, high tides and the ongoing sea level rise (which stakeholders report are higher between November and the end of January each year).

91. Stakeholders, when interviewed, believed that the demonstration projects have been effective, though their impact is felt just for the immediate districts and not further afield. However, a key concern with the approach (from the perspective of the Provincial Authority of Koh Kong) was who is responsible for correcting any problem should anything need maintaining or correcting. The whole issue of "maintenance responsibility" was, however, not clear to the Provincial authority (see Section 5.8 Sustainability). Study tours to the Mekong Delta were also initiated to improve human resource capacity in tandem with the CARP project. This engaged TWG and Commune Council leaders plus NSC to show them how the engineering concepts to be adopted could be applied in the field. This was particularly focused upon with regards to the Prey Nob polder system, where, a system of sea walls and dykes, and irrigation and drainage facilities (rehabilitated from 1998 to 2004 with technical assistance of GERES in collaboration with MWRM) was identified to require upgrade.

92. Due to poor maintenance and erosion, some dyke sections had deteriorated and been overtopped by sea water during high tide, damaging several hundred hectares of paddy fields inside the polder system. The VAAP endorsed the proposal for reconstruction of 7 km of dykes, which was requested and implemented by the Prey Nob Polder User Committee, to help protect over 10,000ha of rice cultivated fields. Importantly, its effectiveness appears to have been tested in the following 6 months after construction when it was reported that high tide levels were prevented from overtopping into the

cultivated areas on 2 separate occasions *(pers comm)* since its construction (during June 2016, a section of the dyke was temporarily overtopped). Therefore, whilst the Prey Nob District dyke rehabilitation demonstration Project has benefitted local communities, however, in the future, it is proposed that improved dissemination of knowledge is needed on how local communities can maintain dyke repairs when observed. From this, the long term financial sustainability of similar interventions can be better realised.

93. The VAAP support towards reducing water shortages in the coastal areas is justified within the low lying communities where groundwater levels are recorded as becoming more brackish. Rainwater harvest tanks made of plastic were provided to 50 households in Prey Nob and additional 10 households in Peam Krasoap. As a result of installation of 60 water tanks in Prey Nup and Peam Krasoap the households now have water to support daily consumption and for vegetable production in the dry season (54 of the supported households grow vegetables around their houses). Their introduction was never intended to support all households living around them, but rather to better demonstrate the possibility of harvesting rainwater for household consumption during the dry season when water becomes scarce. To that end, their effectiveness can be documented and hopefully be seen as an important replication approach for wider community groups. The overall sustainability of the water tank investments is expected to be positive as all reflects a strong need and request from the communities benefitting as water shortage is a major issue in the dry season in these areas (see Section 5.8).

94. Outcome 3 has supported the set-up of Agricultural Co-operations (Agricultural Sector Programmes for Innovation were set up). However, it is felt that the project needed to better engage the private sector in the set-up of agricultural co-operations. This could have been implemented through PPPs as defined within the Cambodia Agriculture Extension Policy, however, the budget availability for this initiative, once the CARP project timeline had expired, was unlikely to be achieved with any particular gravitas in the remaining time of the project (from 2015 onwards).

95. Finally, the rehabilitation of water reservoirs (as an approach) can be considered as a viable adaptation option to address water shortage associated with climate change. The shallow lake in Toul Kokir commune was expanded (through dredging and rehabilitation) and as a consequence could store water for use in the dry season. The introduction of a fence around the lake (to keep livestock away from the lake and hence to avoid any animal waste contamination) was an important minor addition to the design process.

Output 3 Sub-Evaluation Rating: Satisfactory (S).

g) Output 4.1: Ecosystem-based coastal protection through mangrove system restoration

96. Output 4.1 includes efforts to restore mangroves and increase the understanding, awareness and importance of maintaining healthy mangrove ecosystems. This output has demonstrated progress on a number of VAAPs principle activities, primarily beginning in the latter half of 2013 through to its completion towards the end of 2015.

97. One effective contribution of the project was the support towards setting up local marine protected area at Peam Kraosob and all associated supporting regulations. One of the key reasons for this being successful, and thus effective, is that the regulations are being adhered to by locals and all members of the Peam Kraosob Community Fisheries Initiative (PKCFI) who embark on regular patrolling exercises to help enforcement within the boundaries of the Wildlife Reserve sanctuary. When interviewed, locals state that the sanctuary zone was established to the correct size and its boundaries extended to correct areas for protection. Its effectiveness is also supported by the work of the MoE, who have responsibility (under law) for establishing “zones” within any protect area. Official recognition of Peam Kraosob Community Fisheries Initiative as a Regulatory Body is however still required (from Government of Cambodia) before the PKCFI Management Plan is formally accepted and hence regulatory management can be transferred currently from MoE and MAFF to PKCFI. Of interest, discussion on the future development of boundary extents to include “zones” for dolphin conservation/protection was popular amongst locals. They agreed that for this to be effective, additional studies are needed before any management plan should be set up. Nevertheless, it was agreed that this may provide a new opportunity for livelihood security if managed correctly (i.e.: dolphin watching services with trained guides etc.).

98. The original design of the project had included an activity to stabilize sand on Peam Krasaop Beach by planting trees over 4ha. It was decided by the PSC that this activity and budget should be re-allocated instead for mangrove restoration works (60ha in Prek I and II of the Peam Krasoap commune demonstration site). In July 2015, an additional 15ha of mangrove propagules were replanted (75ha in total). Importantly, and based on latest observations (VAAP Completion Report 2016), 70% of the propagules are surviving well, thus confirming the approach and techniques adopted to be effective. Stakeholders interviewed declare that since this has been undertaken, crab stock catch has been improved (*pers comm*, Koh Kong community October 2016).

99. A supporting valuation study was conducted on the role of ecosystem services that mangroves provide to coastal communities. This work has helped to compliment the VA work undertaken in Output 2.1 and has embraced field assessment work (coupled with a review of literature and studies in Cambodia and elsewhere in the region).. An effective result of this work was to introduce and provide the mechanisms to introduce techniques to dry shrimp products for wider market sale potential to Thailand and beyond which has been achieved as a consequence of the VAAP, along with training support to realise the potential for eco-tourism development, crab industry enhancement and to better sustain co-management partnership arrangements amongst local communes in the Koh Kong province area. Whilst this output serves as a part of the basis for wise and well-informed decisions that harmonize development with environmental conservation, the "impact" of this is closely linked to whether there is good political will and a commitment to the rule of law. A potential danger is that with the good understanding of the high value of mangrove ecosystems, people may look for ways to exploit or grab the areas for their own individual benefits rather than to give something back to the nature in terms of conservation and restoration.

100. Finally, an innovative output included the organization (in 2014) of a Youth Environmental Debate (YED) on Climate Change Adaptation which was broadcast on local television (TVK). Three topics for competitions were set up between the 4 universities focusing on: (1) Mainstreaming climate change adaptation and resilience into commune investment or development plan as an effective tool for improving Cambodian coastal community livelihood; (2) Strengthening climate change policy and science based adaptation to minimize vulnerability of Cambodian Coastal Communities and; (3) Improving coastal communities' livelihood through agricultural intensification. 150 students participating in the debate which proved to be an effective and cost-effective tool for promoting awareness and learning through debates and discussion on particular issues. From the pros and cons of the debate, and responses to particular topics, the students were able to develop their understanding, learning and capacity to use all information and knowledge they access through teaching, reading and the internet. This awareness-building approach (which included some episodes of artistic entertainment such as comedy and singing, which makes the programme popular to a broad spectrum of the public) has proven effective in being able to reach a large audience and its impact has proven valuable in being able to communicate useful information and knowledge presented by the students (see Section 5.9 – Replication).

Achievement of Outputs Evaluation Rating: Satisfactory (S). - VAAP has delivered virtually all its planned outputs. Based on an evaluation of available reports, coupled with key stakeholder consultation in Cambodia, the delivery of a high percentage of outputs have collectively contributed significantly (in synergy with the CARP) towards tackling many interrelated aspects of climate change concerns in the coastal area

5.4.2 Achievement of Direct Outcomes

101. The Evaluation has assessed to what extent the delivery of the outputs has produced short to medium term institutional changes and systemic effects (outcomes). It is believed (combined) the direct outcomes have strengthened institutional capacity and policy coordination, mainstreaming climate change in national and local development plans, capacity building for vulnerability assessment and adaptation planning, reduced vulnerability of productive systems to floods, and improved resilience of coastal buffers to climate change and livelihoods improved. A considerable knowledge base has also been gained, which can feed into work plans or programs of relevant departments, local administrations and ministries.

Outcome 1: Institutional capacity to assess climate change risks and integrate them into national development policies strengthened.

102. Supporting statements as regards Outcome 1 achievements have been made by several interviewees during the field mission. One observation reported by a number of stakeholders was that whilst Outcome 1, in general, managed to successfully produce a suite of manuals and scientific reports, reports suggest that a number of these could not be easily interpreted and used for broader project implementation purposes as they are deemed too technical in many instances, certainly at the commune level (however, outputs under outcome 1 were mainly produced for discussion at the national/provincial level). Whether institutional capacity has been strengthened as a consequence of Outcome 1 is deemed to be embryonic at best, however, a platform for future climate change adaptation mainstreaming certainly has been created for the future, especially at the national/provincial levels. At the commune level, although numbers involved are small and consist mainly of the council and one commune clerk, persons with a technical background (who are on district and provincial levels) were the persons targeted by VAAP designed training events.

Outcome 2: Adaptation planning in the coastal zone improved.

103. One uncertainty regarding Outcome 2 is whether the detailed studies undertaken (i.e.: the VA work) have really contributed effectively towards the design of innovative long term design strategies for each of the Demonstration Project sites? For example, with particular reference to Sihanouk Province (Prey Nob District), whilst a streamflow study was conducted for the drainage basin of Preah Sihanouk, it is unclear whether localised hydrodynamic modelling results (taken from the VAAP Shoreline Study 2014) were inculcated into the design parameters of the polder system arrangements and defence crest heights at Prey Nob District. The specific Section of that report (Section 5 Vulnerability Assessment) that discussed the risk of dyke overtopping, states that a particular analysis was carried out at Cell 3 (Prey Nup) where dike levels were obtained from land survey data. The data shows that land levels at the dike area in the order of 0.80 m MSL. Predicted present maximum sea levels at the site show sea level values ranging between 1.14 and 1.08m MSL that are well above the 0.80m MSL dike level indicating that this area is presently highly vulnerable to flooding and it is expected that conditions will worsen in the future due to sea level rise. In addition it has been observed that the dikes are experiencing settling effects (in the order of 3cm/yr) that tend to further increase the vulnerability of this area. It should be stressed that sea level rise will increase the vulnerability of this area to very high levels.

104. Additionally, it was raised by some local consultees (from provincial committees) that the various technical studies undertaken within Outcome 2 are not technically detailed enough to really ascertain climate resilient engineering design requirements that are required to counter flood risk from terrestrial and coastal sources. It is acknowledged that the analysis findings made use of MOWRAM records, which suggested that the rainfall recorded over the last 20-30 years does not indicate an increase, but rather a slight decrease. Future donor support is therefore likely to be required to help focus on setting up climate resilient building codes for infrastructure as this does not currently exist.

Outcome 3: Vulnerability of productive systems and livelihoods to increased floods reduced

105. With reference to Outcome 3, and specifically the Prey Nob dyke intervention in Sihanouk Province, the engineering project has reported to have benefitted 2000 families (800 individuals as declared by the Polder Sub Committee – *pers comm*). Locals also declare that rice yields have improved and the introduction of the tree planting initiative along the rehabilitated dyke crest has helped to consolidate the structure and hence reduce erosion impacts and rates. Despite this, and with reference towards attempting to determine the likelihood to achieving the project impact (i.e.: improving livelihood resilience to climate change), there remains some wider delivery challenges. The real issue of continued hypo-saline soils behind the rehabilitated dyke structure continues as any alteration in pH levels will take time to occur.

106. With reference specifically to Integrated Farming Systems (IFS), some challenges have been raised regarding the eventual impact and these are discussed separately within the sustainability section (Section 5.8). Some salient points are nonetheless elaborated further here. IFS are essentially a low cost and low impact approach with benefits to only a few. It should be re-emphasised that VAAP only provided funds for IFS set up costs, mainly seedlings, pigs (livestock) and training only (though NOT fencing or materials which had to be sought elsewhere. This is a problem as keeping livestock away from new crops is a fundamental activity that is needed to ensure the success of specific crop growth etc.). Despite this, as 80% of the population of Cambodia earn a living from the land, and if the message of alternative livelihood approaches (embracing IFS) has taken place, then this is perceived as a very positive outcome and impact of the project. However, the long term success of IFS may require a revised strategic vision, as at present, its

implementation essentially only needs very basic equipment to be performed (hand held tools etc.) though more robust machinery maybe needed for larger IFS farms. The sustainability "model" for IFS implementation will no doubt improve once communities and groups understand the long term benefits of alternative approaches being tried and tested.

Outcome 4: Resilience of coastal buffers to climate change increased and livelihoods improved

107. With reference to Outcome 4, it is appropriate to determine the effectiveness of interventions since a time prior to the VAAP (i.e.: since 2001). In terms of specific indicators to determine key impacts, some 343ha of mangrove seedlings have been planted (from the Danida (2007) funded original CZM project). The contribution from the VAAP project can only be attributed to circa 75ha of this total amount. Whilst this only represents a 22% supporting addition, it is important to stress that this percentage is experiencing a 70% growth success rate with the mangrove juvenile trees now standing over 3ft tall. VAAP has also helped to train 15 commune workers and to create training for the fishing community (mangrove rehabilitation) and in addition, 97 families have benefitted from the training intervention. In fact, stakeholder consultation during the TE mission in October 2016 with local beneficiaries stated that since the 2013 planting programme, 3 new fish species have returned to the area along with 6 different crab species (3 of which are main commercial species). Consequently, it may be stated that the impact that VAAP has had on biodiversity levels is increasing. Regarding the impact that this intervention has had on fishery income returns during 2016, local stakeholders stated that annual income returns regarding fishery catch is believed to be similar to those recorded in 2015.

Achievement of Direct Outcomes Evaluation Rating: Satisfactory (S). The direct outcomes have strengthened institutional capacity and policy coordination, mainstreaming climate change in national and local development plans, capacity building for vulnerability assessment and adaptation planning, reduced vulnerability of productive systems to floods, and improved resilience of coastal buffers to climate change and livelihoods improved. A considerable knowledge base has also been gained, which can feed into work plans or programs of relevant departments, local administrations and ministries

5.4.3 Likelihood of impact

108. As stated in the ToR (see Annex I), a Review of Outcomes to Impacts (ROtI) approach has to be adopted to assess the likelihood of impact. This evaluation hereby assesses to what extent the project has (to date) contributed, and is likely in the future to further contribute, to intermediate states, and the likelihood that those changes in turn to lead to positive changes in the natural resource base, benefits derived from the environment and human well-being (see scoring Table 5.3).

Table 5.3: Rating scale for outcomes and progress towards 'intermediate states'

Outcome Rating	Rating on progress toward Intermediate States
D: The project's intended outcomes were not delivered	D: No measures taken to move towards intermediate states.
C: The project's intended outcomes were delivered, but were not designed to feed into a continuing process after project funding	C: The measures designed to move towards intermediate states have started, but have not produced results.
B: The project's intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact.
A: The project's intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding.	A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact.

Intermediate State 1: Effective implementation of GoC policies to address climate change

109. An important observation from VAAP is that there does appear to be the political will at the national and provincial levels to make a concerted effort for mainstreaming climate resilience, through the implementation of updated sectoral policies and national vision documents. Despite this, funds are often inadequate to really sustain the effective implementation of policy direction to address climate change (for operation and maintenance, basic development needs, and climate proofing of engineering structures). This inevitably influences project "impacts" at all levels, but particularly so at the district and commune intended beneficiary levels.

110. More financial commitment is therefore likely to be needed to achieve effective policy implementation, (through the delivery and implementation of Provincial plans committed to with more financial resources which shall inevitably be required in the future). On a very positive note, the success of the demonstration projects (in part due to successful project partnering to enhance uptake of demonstration project findings) shall help to create the impetus for follow on replications and / or upscaling of existing activities.

111. One successful approach that helped to channel improved future policy delivery impacts was associated with the establishment of the TWG "model". At the Provincial level, this "model" was deemed a good framework to help communicate policy direction, outputs and any associated local project delivery challenges. This is believed to be something that may be replicated as a workable "model" for future project designs (see Section 5.9).

Intermediate State 1: ROtI Score: B Outcome rating=B+, Intermediary state rating=C.

Intermediate State 2: Coastal communities use of agricultural practices (protected from changing climatic conditions and livelihoods) are improved.

112. The VAAP impact is often best determined through its approach towards setting the framework for how climate resilience of coastal communities, agricultural systems and ecosystems is being achieved to address the impacts of climate change). Based on a review of outcomes 1, 2, 3 and 4 (see Section 5.4.2) the achievements of the various outputs and outcomes have positively set a platform for guiding and communicating a national direction towards becoming climate resilient in the future. Importantly, the VAAP has set the platform for Climate Smart Agriculture for the future in Cambodia. The new way of "climate resilient agricultural delivery" thinking has encouraged new techniques to be followed and used, and from this, it is hoped that new climate resilient policies may possibly be drafted, updated and eventually mainstreamed. This is important as farming (and fishing) communities, in general, are difficult to encourage mind-set changes and to think in different ways. For example, the project has faced challenges in getting farmers/fishers to motivate themselves to start their own businesses, especially diversifying into new business areas (such as eco-tourism in Koh Kong etc.).

113. Whilst local communities are stating that they are now befitting from increased agricultural productivity, it is important to review some historical facts to determine whether VAAP can claim to have improved local situations. Evidence from reports and stakeholder discussions suggest that before 2008, agricultural productivity was 800kg of rice/ha. Since the dyke was been rehabilitated, rice yield increased to 1000kg of rice/ha. After 2013, rice yield improved to 3tonnes/ha. Despite these improvements, the cost of maintaining the road access from the community in Polder 2 to Road 4 has to be taken into consideration and Section 5.8 goes into more detail on the sustainability challenges associated with long term cost implications of structure maintenance to sustain livelihood resilience.

114. To improve the impact on local beneficiaries, a continuation of the training approaches should be continued for farmers. Positively, new field schools were established for farmers under CARP and more than 1500 farmers participated and 20 model farmers were established in the demonstration sites. The farmers supported under VAAP had participated in this training and then received some re-fresher training under VAAP and financial support. What now needs further embracing is the role of women in farming. This is because women in particular have been identified as being particularly vulnerable, though importantly, they also act as a viable entry point for climate change mainstreaming, due to their role within households and families. It is recommended that the farm school concept is developed to help with the delivery of intensive training programmes, working alongside the Agricultural Marketing Office which runs a program to train farmers (men and women) to improve product marketing and quality. The program is called the Farmer Marketing School and could be used to help formulate "model farms" which could be

future research facilities for agriculture which potentially represent good focal businesses for the private sector to invest into[7].

Intermediate State 2: ROtI Score: Outcome rating=B, Intermediary state rating=A

Intermediate State 3: Coastal areas apply ecosystem-based coastal protection through mangrove restoration

115. The impact that VAAP has had on biodiversity levels coupled with the success of the mangrove planting exercise (circa 75ha) has been highly successful with biodiversity levels increasing in the local mangrove areas.

116. Human skills in applying ecosystem based coastal protection (using mangrove restoration as an example) coupled with continued and institutional capacity development should be placed as high priorities, both at the province, district and commune levels. This should include training of trainers, and provision of CCA guidelines as the present capacity in relation to climate change remains low. A key observation from stakeholders clearly stated that extensive training programmes appeared to be targeted at those who were running their own businesses, whilst "others" were less targeted.

117. Awareness-building and improved understanding will continue to be required at all sub-national levels of administration, as well as within the private sector, and among women and vulnerable groups. Close collaboration and consultation with local communities in the planning and early implementation phases of VAAP certainly had beneficial impacts on improving the relevance and sustainability of project investments. For example, within Peam Krasaop, early consultations revealed that baseline conditions for activity 4.1.1 had changed significantly (i.e. the beach targeted for tree planting had been completely eroded caused by changes in water currents). The commune council therefore recommended that this task should be cancelled thus allowing the PMU to redistribute funding to more relevant and sustainable activities (i.e. to mangrove restoration and livelihood security measures).

Intermediate State 3: ROtI Score: Outcome rating=A, Intermediary state rating=A

Overall Likelihood of Impact Evaluation Rating: Likely (L). ***(as per RoTI rating which is a GEF requirement)***

5.4.4 Summary of Project Results

Table 5.4 demonstrates considerable progress has been made with all intended outcomes successfully completed. It should be noted that Table 5.4 is based on the VAAP Logframe and therefore there are some outputs that are presented as outcomes. Of interest with regards to the overall project objective and outcome (see row 1 of Table 5.4), for all 3 indicators set, it shows that the targets have been more than achieved with the only indicators showing lower values are for percentage of women in Peam Krasoap in relation to 2b and men in relation to 3c.

[7] see http://www.agriculturalmarketinformation.org.kh/

Table 5.4: Project Results *(adapted from VAAP Final Completion Report 2016)*

Project objective and Outcomes	Description of indicator	Baseline level	End-of-project target	Level at 31 March 2016
Objective *To reduce the vulnerability of coastal communities to the impacts of climate change by strengthening policy and science, and demonstrating targeted local interventions to increase ecosystem resilience.*	1. Percentage of men and women who feel that the consequences of climate change have had an impact on their livelihoods. 2. Percentage of men and women who feel they have adequate capacity to cope with the consequences of climate change (droughts, floods) 3. Percentage of men and women who report experiencing a loss due to a climate or weather event.	a. Prey Nob: 65% of all; 68% of men; 63% of women a. Peam Krasoab /Toul Koki:65% of all;74% of men; 60% of women b. Prey Nob: 5% of all; 4% of men; 7% of women b. Peam Krasoab /Toul Koki: 17% of all; 21% of men; 14% of women. c. Prey Nob: 96% of all; 96% of men; 96% of women c. Peam Krasoab /Toul Koki: 72% of all; 68% of men; 75% of women	a. Prey Nob: 35% of all; 35% of men; 35% of women. a. Peam Krasoab /Toul Koki: 35% of all; 35% of men; 35% of women b. Prey Nob: 50% of all; 50% of men; 50% of women b. Peam Krasoab /Toul Koki: 50% of all; 50% of men; 50% of women c. Prey Nob: 50% of all; 50% of men; 50% of women c. Peam Krasoab/ Toul Koki 35% of all; 35% of men; 35% of women	A total of 248 households were interviewed for assessing the impacts of the activities implemented. Regarding indicator 1 the following responses were obtained: 1a. Prey Nob: 7% of all; 7% of male, 6% of female 1a. Peam Kreasoab: 8% of all, 4% of male, 11% of female 2b. Prey Nob: 87% of all; 87% of men; 86% of women 2b. Peam Krasoab /Toul Koki: 55% of all; 66% of men; 46% of women 3c. Prey Nob: 44% of all; 47% of men; 40% of women 3c. Peam Krasoab/ Toul Koki 36% of all (43% of men and 29% of women)
Outcome 1: *Institutional capacity to assess climate change risks and integrate them into national development policies strengthened*	1a. Number of government agencies participating in a Coastal Climate Change data network at end of project	0 participating agencies	At least 5 relevant government agencies participating in the data network and disseminating climate-related analyses relevant to the coastal zone to the CCU	Achieved. Key institutions for data provision have been identified such as DoE, DAFF, DWRAM, DLMUPC, and DOP. District Authorities have been involved and meetings with focal points have been conducted. All parties are actively participating in the network. A study on the data network has also been finalized. However, the long term sustainability of the network will be dependent on external support as sufficient funds are not available inside the government system
	1b. Availability of Climate change risk assessments for the coastal provinces at end of project	No (0) climate risk assessments for coastal area available.	1b. Climate risk assessments are available for the 4 coastal provinces by end of project.	Achieved. Final Climate change assessments have been published together with the four coastal provinces vulnerability assessments and adaptation plans.
	1c. Number of relevant national development plans and policies that include climate change considerations at end of project.	No coastal-relevant policy has been revised	1c. At least 1 coastal-relevant policy revised by end of project	Project activities expected to lead to this target has been finalized. The project has produced a Gap Analysis and Policy considerations for Mainstreaming Climate

				Change into Land Use Planning in the Coastal Areas of Cambodia. PSC has endorsed the policy consideration. Presently a number of other projects providing related national policy advice are also ongoing, however, and the present recommendations need to be coordinated with these before final adoption.
	1d. Number of indicators for monitoring climate change impacts within the coastal zone developed at end of project	No indicators have been developed	1d. By the end of the project, at least 5 indicators have been developed	Achieved. The project has produced the 3rd report on State of Coastal Environment, Climate Change and Socio-Economy Report. 14 climate change indicators have been proposed for monitoring and evaluation climate change. Based on this a technical note has been prepared discussing the proposed indicators.
Outcome 2: *Adaptation planning in the coastal zone improved*	2a. Number of detailed vulnerability maps produced at end of project	1 map exists for Koh Kong province that needs to be updated.	By the end of the project, vulnerability maps for each of the 4 coastal provinces are produced	Achieved. Thematic maps have been prepared for identified indicators of vulnerability and these thematic indicators have been used for calculation of an overall vulnerability index at the commune level. Vulnerability maps were published in March 2015 for all 4 coastal provinces.
	2b. Availability at end of project of a comprehensive adaptation plan that includes guidance on zoning and land use planning.	0 -No comprehensive plan is available.	By the end of the project a comprehensive adaptation plan is developed for the coastal zone	Achieved. Final adaptation plans have been prepared for the four coastal provinces. The plans were published in January 2016 and has been signed by the governors.
Outcome 3: *Vulnerability of productive systems and livelihoods to increased floods reduced*	3a. Number of coastal households who note improved livelihood due to access to alternative livelihood options at end of project	0 households (HH).	At least 75% of trained households (beneficiaries) note having improved or diversified livelihoods by end of project.	Achieved. Overall 94% reports of improved livelihoods, 91% of men and 97% of women.
	3b. % change in the number of families having improved access to water in the home area.	Data is available for all communes but the specific communities or villages to support are not decided yet.	At least a 50% increase in the number of men and women having improved access to water in their home area	In Toul Kokir, all 250 HHs are now relying on water from the deepened lake for drinking water during the dry season (compared to 40 HHs before the intervention). This gives an increase of 300%. Besides this also HH from other villages used water from this source amounting to approximately 100 additional HHs.

	3c. Number of men and women in the demonstration sites who feel that climate change has had an impact on their livelihoods	- For Pream Krasoab: 65% of respondents; - For Prey Nob: 65% of respondents;	At least a 25% decrease in the number of men and women who feel that climate change has had an impact on their livelihoods.	Achieved. For Peam Krasoab it was found that 36% (-45%) and in Prey Nob 44% (-33%) still feel that climate change is having an impact of livelihoods. Some of the impacts they mention are pests, insects and livestock diseases, which maybe not directly is linked to climate change.
Outcome 4: *Resilience of coastal buffers to climate change increased and livelihoods improved*	4a. Number of hectares of mangrove forests replanted to withstand climate change impacts within the demonstrations sites.	0 hectares replanted.	60 ha of mangroves replanted, with at least 50% survival rate by end of project.	By July 2015, 75 Ha has been replanted with mangrove trees in Prek I and Prek II. A survival rate of 70-80% has been achieved. So the end-of-project target has been fully achieved.
	4b. *Availability of* a report on mangrove restoration practices in response to climate change *at the end of the project*	0 – no such report exists.	By the end of the project, a report detailing the restoration strategy undertaken in response to anticipated climate change impacts developed based on the data collected during the project's lifetime.	Achieved. Guidelines on the management of mangroves for local communities and a policy brief on the use of mangrove ecosystems have been finalized.
	4c.Number of coastal communities households who note improved livelihood due to access to alternative livelihood options at end of project	0 households.	At least 75% of trained households (beneficiaries) not having improved or diversified livelihoods by end of project.	Of the trained household in Peam Krasoab/Toul Kokir 92% of all households report improved livelihoods, 96% of men, and 89% of women. This shows that the target has been achieved.

Summary of Results Evaluation Rating: In general, Effectiveness is rated "Satisfactory" – With regards to the overall project objective and outcome (see row 1 of Table 5.4), for all 3 indicators set, it shows that the targets have been more than achieved.

5.5 Financial Management

118. According to financial figures of project documents, despite project start up challenges (declared clearly in the MTR – Baastel 2014), VAAP has proven successful financial resource disbursements particularly after the Inception. VAAP was a fixed price contract and payments have been made in relation to linked outputs/progress reporting and payment schedule. The summarized spending of VAAP (see Annex V) shows that 100% of the funds have been spent for implementation. From spreadsheets and reports offered to the evaluator (again see Annex V), the project appears to have made strong progress towards its outputs and thus positive use of funds. The use of the whole project budget has been shown in Table 3.3. According to the PSC 2016 Financial Report, the project budget (up to 31st March 2016), was exactly used up (subject to a few dollars overspend) and hence there is no remaining unspent budget. Minor budget overruns (printing /binding/workshops etc.) were effectively communicated from the PSC to UN Environment and no evidence of any major dissent to this was recorded during the TE consultations held.

119. Regarding the realised co-financing spend, the allocated budget (expected funding of US$4,195,000) was effectively utilised as of 31 March 2016. Figures of spend as of 30 June 2013 displayed an utilisation amount of US$ 1,081,103 whilst as of 30 June 2014, this had increased to US $ 2,105,000. Table 5.5 outlines the indicative spend per outcome.

120. The evaluator believes that project has proven successful as regards the administrative arrangements and no irregularities reported. As stated by responsible staff in UN Environment, the project has proven successful as regards the financial and administrative side and no irregularities are reported. The recruitment of staff was always guided by UN rules. In terms of internal guidelines and documents, the project's independent financial and management audit of 2012 found that the project's Internal Control Manual (produced in 2014 some 2 years into the project)declares that attention has been paid to compliance with all necessary procurement rules and regulations, and that according to the PIR (2015), appropriate communication took place between the PSC and the FMO, who were appropriately responsive to any budgetary requests or clarifications as required.

121. Table 5.4 outlines the evaluation of project financial performance as requested within the ToR TE.

Table 5.4: Evaluation of Financial Performance

GEF PROJECTS				
Attention paid to compliance with procurement rules and regulations			HS:HU	S
Contact/communication between the TM & FMO			HS:HU	HS
TM & FMO knowledge of the project financials			HS:HU	S
FMO responsiveness to financial requests			HS:HU	S
TM & FMO responsiveness to addressing and resolving financial issues			HS:HU	S
Were the following documents provided to the evaluator:				
A.	An up to date co-financing table	Y		
B.	A summary report on the projects financial management and expenditures during the life of the project - to date	Y		
C.	A summary of financial revisions made to the project and their purpose	Y		
D.	Copies of any completed audits	Y		
Availability of project financial reports and audits			HS:HU	S
Timeliness of project financial reports and audits			HS:HU	HS
Quality of project financial reports and audits			HS:HU	S
FMO knowledge of partner financial requirements and procedures			HS:HU	S
Financial Management Overall rating				**S**

5.6 Efficiency

122. The cost-effectiveness and timeliness of project execution is a critical aspect of any project. Efforts taken that were embraced to improve cost or time efficiencies (time/cost saving measures etc.) are outlined below, along with an analysis of how delays (if any), affected project execution, costs and effectiveness. One key shortcoming that was identified by the MTR for Outcome 1 was the delay with which most of the activities were completed. Though most activities were delayed at the outset of the project programme, the PIR reporting structure (since 2013) has demonstrated substantial traction regards progress (especially from the beginning of 2013).

123. Any project progress is often characterized, largely, by any delays involved in the project inception and launch. With regard to VAAP, the original project's duration was for four years (2011 – 2014), though the VAAP/LDCF project received an initial project "no cost" extension to 30 June 2016 (signed on 1 July 2015) and then a second project "no cost" extension to 30 September 2016 (signed on 12 November 2015) of which the latter was authorised as a formal Amendment Extension (which was needed because of delayed project activities)..

124. Whilst many activities showed delays up to the MTR stage, project progress towards activities was strong from the later part of 2013 through to mid-2016.

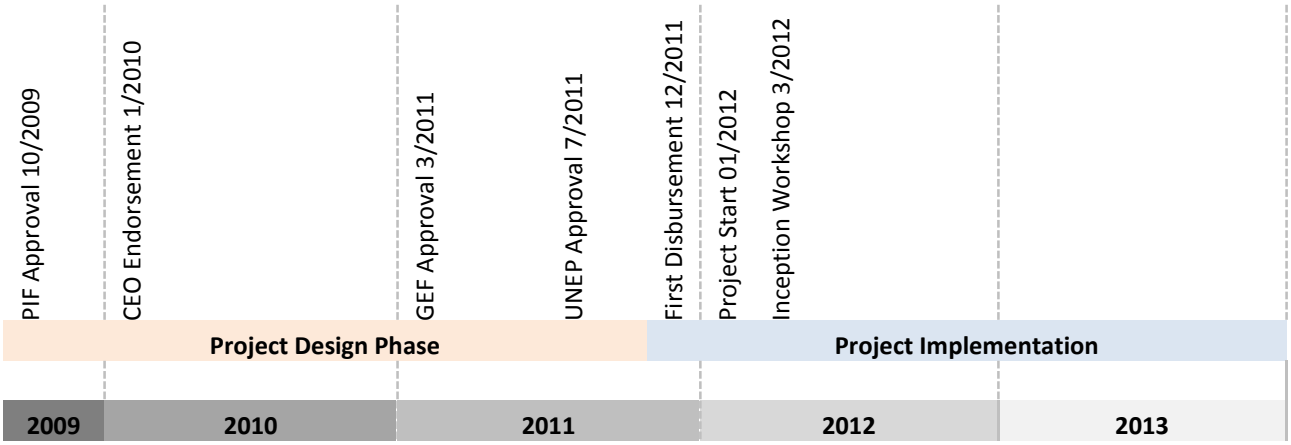


Figure 5.1: Timeline of project design and implementation showing start up delays (from Baastel 2014).

125. According to interviews for the TE and project reports consulted, delays were caused by a long negotiation period between MoE and UN Environment followed by slow completion of recruitment of key consultants for preparatory activities. The delay was, to some extent, a consequence of the joint setup with CCCA/CARP. With a key mandate from donors to expedite CARP to complete on time, the project coordination unit focused more on ensuring CARP activities were completed. Once CARP started to wind down, attention re-focused back to VAAP, which partly explains the strong performance from 2013 forward.

126. Inevitably, these delays culminated in alterations to certain project activities as well as budgeting. The slow start date also had implications for M&E activities because measuring activity progress compared to schedules becomes more challenging in order to incorporate the information gained from M&E into management decisions. The impact of the long start delay was considered a major risk to the project and this was reported in the PIR 2013 implementation table, resulting in the MTR recommending a "six months to one year" no cost extension. Interviewees also stated that procurement procedures were quite long, which certainly contributed to project delays that can be seen in Figure 5.1 above.

127. In addition, efficiency of VAAP is positive as it was purposely built around the existence of working institutional structures. Once the project started in earnest (in January 2012), procedures and structures were set up that undoubtedly have helped to streamline and improve efficiencies in project delivery. It has already been stated in Section 5.2 that one clear approach used to improve project efficiency was to build the projects project management and review procedures upon pre-existing institutions, agreements and partnerships (see Section 5.9), that were already in place and which inculcated institutional arrangements that already existed. Success of the VAAP can therefore be linked to efforts made to link with existing institutional group structures plus also the project design which attempted at the outset to build on past

successful project structures (Danida2007 CZM project). For example, the working delivery "Model" for IFS was designed to be managed under the responsibility of the Ministry of Agriculture and as a consequence provided support to 60HHs in two target areas (Preynob and Mondulseyma Districts).

128. The synergies and complementarities with other parallel initiatives (for instance, the MoWRAM project; "*Rehabilitation of Prey Nup Reservoir*"; the MAFF project, "*Proper Management of Mangrove Forest Resources*"; CCCA[8] Coastal Component project etc.) certainly helped to continue efforts and interventions in complimentary "soft theme" areas of training etc. The principle partnership under the VAAP/LDCF project is with the CARP/CCCA project. Originally, these 2 projects were designed to be a single program; however, due to financial and institutional constraints, the program was split into two projects.

129. The project design reflects this change with the VAAP/LDCF project focusing more on capacity building and sustainability, while the CARP/CCCA project focuses more on demonstrating alternative livelihood practices. Therefore, a key factor relating to project efficiency was that regarding VAAP livelihood activities (not least the revolving fund/animal raising activities) have to a large degree been implemented as a direct extension of similar activities under CARP (even taking over technical extension staff etc.), hence actual 'pilot' phases could be said to be longer than planned in some cases. The overall division of tasks within the two projects is considered appropriate (with more "soft" tasks focused on within VAAP), and as outlined in Table 5.3, this TE process has not determined any rudimental gaps with the way in which the two projects were designed to ensure streamlined parallel working practices.

130. It is of interest to record that despite an interim stakeholder analysis assessment (essentially a consultation outcome section) that was presented in Appendix 19 of the Prodoc, no comprehensive stakeholder analysis was undertaken when the project implementation commenced. This is mainly believed to be because a stakeholder analysis had already been undertaken in 2007 as part of the Danida funded CZM project which worked on similar project related issues to VAAP. Consequently, VAAP can demonstrate institutional efficiencies by basically building on the institutional framework that was already set up as a consequence of the 1997 Danida project. Improved efficiency levels were thereby influenced by the fact that key stakeholders were in fact line ministries.

131. Finally, approaches to streamline and integrate efficiency opportunities can be demonstrated by comparing management approaches between the CARP/CCCA and VAAP projects. One example is that both projects were implemented by the UN Environment-DHI Centre for Water and Environment, and as a result, both projects shared the same Chief Technical Advisor (CTA). The two projects also attempted to prepare "linked" outcomes in certain situation. For example, the shared implementation and governance mechanisms at the national level and in the Sihanouk and Koh Kong Provinces (in particular for Outcome 3) worked well and reduced transaction costs, whilst the CARP/CCCA project was able to make substantial contributions to the VAAP through its larger funding source.

132. Table 5.5 represents a summary of the planned contribution of the CARP/CCCA project to the VAAP outcomes.

Table 5.5: Planned Contribution of the CARP/CCCA to the VAAP/LDCF Outcomes (Adapted from Baastel 2014).

VAAP/LDCF Outcomes[9]	**Coordination "efficiencies" between VAAP/LDCF and CARP/CCCA[10]**
Outcome 1: Institutional capacity to assess climate change risks and integrate them into national development policies strengthened	VAAP took the lead on this outcome, while the CARP project was not directly involved at the national level. The two projects were designed to share information regularly on the outcome, particularly VAAP activities sponsoring conferences, workshops, and trainings. This sharing

[8] The objective of the CCCA Coastal Component is: "increased resilience of coastal communities and ecosystems to climate change through adaptation planning, demonstrated targeted local interventions and provision of practical learning experience in adaptation planning to the NCCC/CCD

[9] Planned co-financing as reported in the VAAP CEO Request for Endorsement. Actual division of co-financing and co-financing amounts may be different.

[10] Summarized from the Project's working document: "Synergy CARP LDCF"

VAAP/LDCF financing: $485,400 Co-financing: CARP/CCCA $315,000 ; MAFF $200,000	appeared to work effectively thus improving the efficiency of both CARP and VAAP.
Outcome 2: Adaptation planning in the coastal zone improved VAAP/LDCF financing: $385,736 Co-financing: CARP/ CCCA $459,600	CARP created detailed planning maps and guidelines in the project target areas. CARP also conducted activities to integrate maps and guidelines into Commune Development Plans. The VAAP focused more on creating vulnerability maps for ecosystems and infrastructure using, in part, the information from CARP. VAAP also included delivering training to relevant district-level stakeholders on the ensemble of information created by the two projects.
Outcome 3: Vulnerability of productive systems and livelihoods to increased floods reduced VAAP/LDCF financing: $336,104 Co-financing: CARP/CCCA $479,700; MoWRAM $1,400,000	CARP had a strong focus on livelihood improvements. This included assessments of current coping strategies, current vulnerabilities, and current risks to agricultural livelihoods posed by climate variability. It also included conducting a social Cost Benefit Analysis of different adaptive practices. Finally, CARP included activities to train Farmer Water User Committees, conduct demonstration practices, and create guidance for scaling up adaptive practices. VAAP focused primarily on rehabilitation and improvement of water control for this outcome (with a limited budget).
Outcome 4: Resilience of coastal buffers to climate change increased and livelihoods improved VAAP/LDCF financing: $198,880 Co-financing: CARP/CCCA $640,700 ; MAFF $200,000	This outcome primarily was addressed under VAAP, which focused on activities to restore mangroves as well as activities to increase awareness about the importance of restoring mangroves. CARP made larger contributions towards improving livelihood options for communities in the mangrove areas, such as establishing community fisheries and providing assistance to communities in climate change awareness training.

133. Whilst this TE does believe that project efficiencies were achieved by adhering to a strategy of close parallel project alignment (CARP/VAAP), at the local stakeholder level, undoubted confusion was apparent when it was required to communicate to locals which project (CARP/CCCA/VAAP etc.) was contributing to what output or outcome. Certainly, the sequencing of activities between the VAAP/LDCF and CARP/CCCA projects could perhaps have been better, despite activities such as planning and identification of vulnerabilities (Outcome 2) being carried out previously as part of the CARP and hence prior to livelihood demonstrations (Outcome 3). These programmatic sequencing events were, however, defined and approved by the PSC and UN Environment during the ProDoc production and Inception Phases of VAAP (building on CARP outputs). Consequently, to some extent, improving donor coordination in similar situations is recommended at the outset of parallel projects.

134. Finally, one improvement to the efficiency of the project, that perhaps was remiss and not altered by the PSC (in wither CARP or VAAP), was the early omission of representation from the Department of Womens Affairs (DoWA) and also the Department of Rural Development (DRD) within the provincial TWGs. This error was, however rectified by including representation within the TWGs groups, plus also representatives of DoWA and DRD participated in the vulnerability and adaptation planning exercises. This is deemed an early error by the evaluator as the guidance provided by the MoE (at the start of the project) failed to recommend their inclusion. Despite this, the project should be applauded for recognizing this error and rectifying the situation relatively quickly.

Efficiency Evaluation Rating: Satisfactory (S) - Approaches to streamline and integrate efficiency opportunities are demonstrated by comparing management approaches between the CARP/CCCA and VAAP

projects, in that both projects were implemented by the UN Environment-DHI Centre for Water and Environment, and as a result, both projects shared the same Chief Technical Advisor (CTA). The two projects also attempted to prepare "linked" outcomes in certain situations.

5.7 Monitoring and Reporting

135. The TE reviewed M&E activities carried out to-date, which includes the review and edits made to the project indicators during the Baseline Assessment, collection of baseline values for indicators, an independent audit was conducted for 2012, a PIR in 2013 validated by the PSC, Half-yearly Progress & Financial Reports completed etc. From this assessment, it is considered that the project's documentation, analysis, and tracking of risks to be appropriate and were implemented well. Risks are identified throughout in all PIRs (2013, 2014 and 2015) and Half-Yearly and Final Report (2016), with each report making specific mitigation recommendations for risks judged as substantial or higher. As of the Final VAAP Completion Report publication (June 2016), all of these measures were followed upon. PIRs (annual and 6 monthly "technical progress reports") are the main sources of M&E on the project. Some (but not all) were placed on the website.

136. The TE also finds that suitable monitoring reporting took place, as planned, in a timely fashion and with adequate attention to detail and content. The Project underwent a MTE in 2014 though was purposely delayed as a consequence of implementation delays (not administrative delays) and limited progress on the ground, this could perhaps have fruitfully benefited from being commissioned during mid-2013. Budgeting and funding for M&E activities, such as the MTR was nevertheless funded in a timely fashion during implementation. According to Annex V, the budget for this activity was set at US$30,000, with the contract successfully awarded and implemented by Baastel (2014). As described under previous sections, project indicators (see Annex XI) and the results framework have been well-thought and proved conducive towards effective monitoring, managing, and evaluating of the VAAP.

137. Despite the above observations, apart from the Project Implementing Reporting (PIR) system adopted at the management level, with specific regard to risk monitoring, with stakeholders emphasizing a range of risks at the start of the project and at the MTR stage, the project may perhaps have adopted a clearer system to track risks posed by institutional stability and external communication in more detail. It is felt that internal risk oversights (more "day to day" running procedures) have had more impact on project performance than externalities (see Section 5.9). Likewise, there does not seem to be any formal approach set up to document any compliance to UN Environment or GEF safeguarding issues, beyond those that are presented within the PIRs for 2013, 2014 and 2015.

138. Of note regarding internal project reporting processes, local Communes were responsible for signing off progress notes or forms on any work completed. Local TWGs interestingly challenged the technical quality of the VA maps produced as part of Outcome 2 and how useful the outputs actually were for the local recipients (including the Provincial Government despite these being translated into Khmer).

Monitoring and Reporting Evaluation Rating: <u>Satisfactory (S)</u> - the project's documentation, analysis, and tracking of risks to be appropriate and were implemented well and risks were all clearly identified throughout in all PIRs (2013, 2014 and 2015) and Half-Yearly and Final Report (2016).

5.8 Sustainability

139. The Sustainability of the VAAP has been addressed in four main aspects as follows: a) Socio-political sustainability, b) Institutional sustainability, c) Financial sustainability (resources), d) Environmental sustainability. All these dimensions of sustainability are deemed critical. Therefore, the overall rating for sustainability will be the lowest rating on the separate dimensions.

5.8.1 Socio-political sustainability

140. There is a risk of delay or a lack of follow-up after the end of VAAP because of a changing political agenda and commitment. For instance, the recent institutional reform undertaken by MOE may bring about certain legal and institutional implications, thus there will be a need for securing consistent

commitment of the senior managers and decision makers (at the national and provincial levels) by activating discussions on the recommendations with existing coordination bodies, such as NCSD, the National Committee for Development and Management of Cambodia's Coastal Areas, the National Committee for Democratic Development, and the Provincial Committee for Land Use Planning, and from this, explore a practical way to institutionalize climate change planning and response as part of the agencies' mandates and responsibilities.

141. Proof of the intended outcome of VAAP is, even at this TE stage, too early to predict, however the focus on educating farmers of alternative farming practices may prove a strategically suitable approach to follow. Importantly, the sustainability of the VAAP is seen as being positive from a training and awareness perspective. Ownership by direct beneficiaries is also linked to uptake of the project's demonstration measures for adaptation. A key livelihood sustainability finding is that VAAP has helped local beneficiaries (households, farmers and communes) to think differently with regards to climate resilience and what this means at the very basic household level. From the TE process, it may be confirmed that capacity-building together with awareness building must continue to be conducted on a regular basis now that VAAP has been completed, targeting all stakeholders, especially decision-makers and natural resources and land use managers.

142. The model of integrated farming systems (IFS), importantly, has been adopted and integrated in Commune Development Plans (CDPs) and Commune Investment Plans (CIPs) by commune councils and (Provincial Development Authorities (PDAs). The model of Climate Resilient IFS has also been adopted and put in the Climate Change Action Plan for Agriculture, Forestry and Fisheries 2014-2018 for building up the resilience of farmers and farming communities in the coastal area to climate adaption in agriculture and livelihoods. Climate Resilient Integrated Farming essentially needs to be followed up and expanded to other areas in the coastal area and originally with a strong expectation that this would be supported by a new phase of CCCA (NB: as of January 2017, a Global Climate Fund concept application is being prepared for possible submission by MoE)).

143. Positive sustainability outcomes can be demonstrated by householders who have been trained and encouraged to show how this may alter livelihoods, however, evidence from some householders suggests that in some instances, after 1 year, animals had already died off. The actual cause of this is, however, unknown at the time of writing. A better understanding of the adaptation opportunities that face households, through meaningful applied training, can help to better relay an appreciation of what seasonal climate change means to families, farmers and communities and from this appreciation, come up with suitable coping strategies that embrace the implications of variable seasonal conditions. This is seen by the TE as a major beneficial outcome of the VAAP. In time, for example, this should influence cropping patterns and farming techniques adopted within commune areas.

144. Despite the above, how useable the VAAP outputs have been at the commune level has been questioned on a number of occasions by interviewees, especially how Commune Plans can upscale the guidance manuals to help replicate the VAAP message over time. Likewise, the mainstreaming of the CC Guidelines produced by the NCDD needs to be reviewed, as it is important that mainstreaming of CC principles takes place for all Provinces on the coast and not just the two where demonstration interventions have taken place. Mainstreaming climate change into the national and provincial development policies and plans require time and efforts beyond the duration of the Programme. It is a long-term learning process of adjusting and adapting socio-economic system and development needs to overcome climate change impacts.

145. Finally, though an issue which is outside of the remit of VAAP, it is of interest to note that broader land ownership communal regulations regarding land use play a pivotal role in efforts to reduce community vulnerability to climate change. The rapid development in the coastal area is increasing the pressure on the natural resources and the environment, because of poor governance, absence of cohesive land use master plan, and proper environment and climate change considerations in the development planning. Unless mediated, these factors will exacerbate the coastal vulnerability and reduce the resilience to climate change and natural disasters. For example, householders (through current land ownership rights and Provincial regulations) are forced to build properties along the seaward side of any protective dyke structure, instead of landwards of the more protected inner side of any dyke. This is due to old commune regulations which really need to be reviewed and altered as part of a more integrated planning approach (linked to building regulations).

Sub-Evaluation Rating: Moderately Likely (ML).

5.8.2 Financial Resources

146. A few examples are now used to convey whether the TE believes that VAAP has provided the basis for financial sustainability in the future.

147. At the time of project approval (early in the LDCF portfolio process), the budget available for Cambodia from LDCF was capped to $2 million. Hence the VAAP was really designed as *'what could be done within the available budget'* rather than a bottom assessment of full needs. It may be argued that based on this issue, the ambition and scope selected with the available budget was too large and it would have been better to focus on only a few of the activities (see lessons learned section).

148. A lack of government budget represents a common issue not only for local development projects, but in general for climate change-related activities and adaptation projects in the coastal provinces. Discussions and negotiations on the establishment of a national climate change fund are in progress at the national level between various key ministries such as MEF, MOE, MAFF, and MOP, with technical assistance from CCCA, but need more time before final arrangements are in place. Potential funding from the Adaptation Fund pledged by COP for the least developed countries like Cambodia is considered an important source but is not always easily accessible due to various reasons such as donor priorities, and national management capacity and coordination mechanisms. The transfer of management authority and budget from the central ministry to the sub-national level is slow and will not happen in the near future. These constraints must be kept in mind in connection with expanding VAAP activities beyond their current scope and momentum.

149. Concern was raised by many local stakeholders over the cost of replicating and sustaining any demonstration project. Despite the physical interventions being mostly small in scale, continued financial support is going to be needed to maintain the interventions and as a consequence, is likely to add financial pressures which may prove difficult for Provinces to sustain. It is important to note that this is not a unique challenge for Cambodia, and something that is a structural problem which is unlikely to be fixed by any one project. Those demonstration projects set up under VAAP (excluding the mangrove rehabilitation project) require significant initial investment costs or “grants” (IFS/polder rehabilitation) even though the Polder User Committee (a well-functioning entity) which was set up through relies heavily on funds received from farmers to maintain inner dykes and canal systems .

150. Regarding the Community Fisheries project at Peam Krasaob Commune, whilst VAAP only offered limited financial support to activities such as the crab bank and dried shrimp production, there is positive evidence that local communities, especially the role of female community members, have benefitted from this intervention in partnership and cooperation with Fisheries Administration (FiA). VAAP helped provide funds to set up a women’s group (US$6,000) to help women buy crabs, incubate and sell the juveniles when hatched. VAAP also helped to support the “soft” aspects of the project, but NOT in the purchase of significant heavy machinery and business set up costs. The project did, however, partly fund a drying machine for dried shrimp production. This is currently a huge market internal (Phnom Penh) and overseas (Thailand) and so the opportunities for expansion and replication of the approach are significant.

151. With regards to the demonstration Intervention at Prey Nob District, the whole intervention strategy from a sustainability perspective represents an interesting case example. MWRM, having responsibility for dyke maintenance, supported the choice to select Prey Nob District as a focus area for dyke rehabilitation intervention. The Polder Committee provide maintenance of the road and this is financed through a hectare based fee they receive from the farmers in the polder area. However, based on the short period of intervention of livelihood activities and the short lifespan of the dyke, socio-economic sustainability of the project appears questionable. This case example was supported through evidence of climate related risks being observed in the area. In 2010, seawater intrusion was occurring plus the dyke was sinking at 20-40cm prior to the intervention. As a consequence, the 7.5km of dyke was rehabilitated and raised. The crest design reflects current estimates of sea level rise inundation, now raised to 8.15m above sea level (raised by 50-70cm along the length - increased from 7.7m prior to VAAP).

152. Whilst the work was completed in 2014/2015, whether the approach adopted was the most sustainable long term technique on offer is questioned by the evaluator. This concern was discussed at the

3rd PSC meeting (July 2013). UN Environment accepted that part of the decision was for a limited feasibility study/discussion note to be produced by a consultant that has since been taken to key donors (ADB and others) to potentially lead "follow up" actions for longer term sustainability in Prey Nub. Therefore, the short term nature of the dyke rehabilitation was fully recognized by the PSC, and it was felt that a short term solution was critical to help avoid flooding which did occur during the following year) as an intermediary measure.

153. Dyke inspections currently take place (via the DoWRM) on an annual basis, and latest monitoring suggests that the dyke rehabilitation work (VAAP intervention) is still sinking due to poor foundations for such a scheme (mud base). DoWRM basically have no budget for continued monitoring and will continually rely on local communities to let them know of any failures along the dyke. To this end, the dyke maintenance levy (for inner dykes only of which 85% of local farmers contribute towards) that communes have agreed to set up (outside of the VAAP) cannot be properly enforced. Basically, the challenge associated with this levy is that when yields are low, the farmers are unable to contribute any money to the levy (amount is 55,000 Riel per hectare of land). The collection of this fee also only occurs in the dry season and used for dyke maintenance for the following year. Consequently, additional funds are often sought for maintenance especially should the collection amount be low (especially if yields are low). If the crop yield is good, then farmers are more likely to contribute to the dyke maintenance fund (NB: maintenance and funds to maintain the outer dyke is the responsibility of MOWRAM though funds for this have been erratic)

154. Provincial Investment Plans (PIPs) should (or perhaps could) be better used as a lever to request additional budget from GoC for dyke construction and maintenance. The current maintenance budget is 500,000,000 Cambodian Riel for dyke repairs (US$12,000/year - an estimate received from an international consultant *(pers comm)).* There may have been benefit in attempting to prepare, consult upon and implement a new Memorandum of Understanding (MoU) which could have been set up between the commune and the Ministry of Water Resources to help divide up and enforce specific responsibilities for maintaining dykes into the long term. With regards to the engagement of local commune members, this may have required the framework and implementation strategy for the long term establishment of the fund to attract and involve commune "watchers" (similar to the current team within the polder committee) who would be provided with additional training on dyke structure monitoring and maintenance aspects.

155. Financial sustainability may be an issue with specific livelihood interventions, namely project activities to establish village savings and loans schemes. Local savings groups were created and funded as part of a revolving loan scheme to facilitate livestock management under CARP. Villagers are granted a loan that they pay back with low interest after six months. The project was only able to conduct one or two cycles of disbursal and repayment of these loan mechanisms, which is not enough time to create experience or assess the effectiveness of the scheme. Despite this, these schemes are still working and in addition, local saving groups have been established which also add additional funds to community activities. Regarding the financial sustainability of the new tools and approaches (IFS), which have started to help locals become more savvy and adaptive towards being climate resilient, their continuity long term remains questionable without continued financial support.

156. Positively, the establishment of Money Saving Groups (MSGs), (which are 15-25 members with 1 member from each family unit only), is an interesting financial sustainable "model" to evaluate for future replication. For the MSGs, each group receives US$1,000 as a loan to the group for grain etc. Should one member from the group want to make use of the money, then that person has to pay the interest on the loan. One Commune has 4 MSGs and so in total 14 MSGs are set up. Some have more members and so loan more money (up to 1,000,000 Riel) which is just enough to set up a fully functioning IFS.

157. Finally, financing "approaches" need to be reviewed in general. It is the view of the TE that micro-finance "models" are not sustainable although it is acknowledged that there is no clear scientific consensus on this statement to make it more objective. It is, in the view of the evaluator, unlikely that most micro-financing of IFS schemes would be sufficient enough to sustain any significant project impacts long term. Instead, there is perhaps a need to develop cooperative groups to help business to thrive. One strategy that may have been useful in the project design could have been the adoption of work already started under CARP which engaged Commune Extension Workers to help be part of future TWGs (at least 2 per commune including both men and women). The staffs of district agriculture offices have completed this type of work for the revolving fund schemes (provided by local NGOs).

Sub-Evaluation Rating: Moderately Unlikely (MU).

5.8.3 Institutional Framework

158. The TE finds positive evidence regarding the ownership of project activities especially in terms of institutional capacity. In addition, interviews reported that community awareness about climate change had increased following project awareness sessions conducted with support from CARP/CCCA. These are both positive signs of potential institutional sustainability. In terms of sustainability, the institutional set-up and anchorage of the CCU and the MoE is a relevant issue to consider and not a neutral one. The nature and quality of the relationship between the MoE and partnering Ministries (such as MWRM, MAFF, MOP and MLMUPC) has certainly helped towards making VAAP a relative success.

159. Outcome 1 and its outputs, in particular, has made a positive contribution to the institutional strengthening for climate change risk assessment in Cambodia, though whether the output "message" is clearly integrated into policy and development plans in the coastal areas is less conclusive. Regardless of this, most results produced are both responsive to the stated programme objective and are suited (and potential ready – see Section 5.9) for dissemination and replication in the remaining two coastal provinces (Kep and Kampot). Undoubtedly, certain outputs, such as the data network, climate change policy mainstreaming, and M&E, require additional work and consolidation before they can become more effective and operational as part of an institutional decision making and planning framework at all levels of Cambodian society.

160. Other forms of inter-institutional coordination, such as TWGs and ad hoc working groups, have proven very helpful to improve transparency and collegiality of the decision-making process. They represent a tremendous opportunity of meaningful participation, frank peer-debate, information sharing and practical problem-solving. In fact one observed aspect of institutional improvement is the coordination procedures that were set up between Provincial and the Municipality institutes as a consequence of VAAP. At the Provincial TWG level, for example, 16 members make up the group, headed by a Provincial Governor as Chair and with a District Governor to create the link with local stakeholder groups. Importantly, now that VAAP has finished, many of the same TWG members remain available to the community, to provide advice if required. This was often demonstrated by the Project Coordinator (VAAP) who would often visit the Province every quarter to ensure that the TWG members are clear with latest project information and updates, plus also what information was being drawn out from local groups to support local technical delivery if required. Consequently, and from an institutional perspective, what is being implemented differently now is that leaders of Communes are now better able to have a "voice" and participate in TWG workings.

161. Despite the above, at the same local commune level, the sustainability of provincial committees (chaired by Deputy Governors) is questioned. The fact (at the time of writing) is that most (if not all) of the provincial TWGs have now disbanded and as a consequence, the committees had no procedural need to meet on a formal basis. To support longer term institutional sustainability, there is a need to enhance the role of sector specific sub-committees to regularly meet, such as the "Water User Group" to ensure long term sustainability of the reservoir demonstration approach (at Toul Koki Commune (Koh Kong)) whom seek to help maintain ponds plus how to replicate the approach to a broader number of villages. The same concept is needed for "IFS Committees" who should provide the evidence to put forward into CDPs (including training plans etc.).

162. Trainings to build institutional capacity plus activities to build community awareness were activities undertaken by CARP, though activities to help integrate climate change adaptation into Communal Investment Plans (CIPs) were specifically set up within VAAP. These approaches are believed to have successfully helped to increase project sustainability. Nevertheless, for institutional sustainability to be secured, extra help is still likely to be needed to better mainstream climate resilience into Provincial Plans and Commune Development Plans (CDPs). One support mechanism that could be introduced would be support to encourage Provincial Plans and CDPs to prepare synergistic and complimentary 3 year working plans, and from this to promote the recommended actions plans up to the national level (as the review of Provincial Plans is undertaken at the national level). There is currently no formal guide on how to mainstream CC and strategic environmental assessment (SEA) into principal plans, and consequently, there is no guarantee that the concepts of IFS or climate resilience would be embraced within Provincial Plans.

163. Regarding stakeholders involved outside of the public sector (apart from local communes), there was no formal strategy to better engage the tertiary education sector into VAAP. Despite this, within Prey Nob District, university students did get involved in local agriculture projects and so, indirectly, universities did get to hear about the various research initiatives taking place in the local communes. There did not appear to be a concerted engagement plan to ensure the longer term commitment of the tertiary sector into the planning and design of demonstration project design, maintenance or monitoring (physical or social) during or beyond the lifespan of VAAP.

Sub-Evaluation Rating: Moderately Likely (ML).

5.8.4 Environmental

164. A couple of demonstrated environmental sustainability aspects are now described. One "intended" example of efforts to improve environmental sustainability is the VAAP support to create approximately 2km of a mangrove planted buffer in front of the Prey Nob rehabilitated dyke. Under Outcome 4, the replanting of mangroves and environmental awareness-building should be declared as one of the most successful achievements of VAAP. The multiple benefits, mangrove reforestation represent an important environmentally sustainable practice which can relatively easily be replicated and implemented on tidal flats along the coast. Whilst *Rhizophora apiculata* is the most common species used for transplantations within degraded areas, other mangrove species *(including Melaleuca)* should also be included in order to increase the diversity and enhance the ecosystem services. Site visits for the TE to Peam Krasoap show that the mangrove activities undertaken are showing 70 percent survival rate of trees planted through the project.

165. Although in most areas, the growth of the *Teatrus* species has been successful, visual evidence in some places shows that certain mangrove stands are showing signs of poor growth. Establishing reasons for their failure to grow (in places) are not properly known as *Teatrus* species trees are believed to be the most suitable type for planting in this area. Other issues such as pollution or tree cutting/damage may be more realistic reasons for their demise. The TE recommends that mangrove replanting activities to Prey Nob will be needed to compensate for this difference. This is because replanting projects must not only consider appropriate implementation, but also the long-term viability, which may otherwise be jeopardized by 'the tragedy of the commons' (shared benefits undermined by self-interest of individuals). This is best done with the participation of community-based organizations such as protected areas communities, water users committees, forestry communities, and fishery communities.

166. The paucity of detailed geotechnical investigative feasibility studies appears to have possibly compromised long term environmental sustainability of VAAP. Whilst some pre-construction vulnerability assessment related studies were undertaken in Outcome 2, detailed pre-engineering studies (within Outcome 3) appear to have been limited in scope due to budget available. Hence, decisions regarding design, materials and performance specifications appear to have been made to commence with the physical works prior to undertaking a robust optioneering assessment of alternatives exercise.

167. The decision to use local contractors was taken by the commune and the MWRM based on their previous contract experience. It is uncertain through the documentation viewed, however, whether any of the project findings (VA) were embraced within the contract tender documentation for the scheme (i.e. accommodation of latest predictions for rainfall (for drainage issues) and sea level rise predicted rates (for overtopping frequency etc.). 13 flood gates exist along the 7.5km length though the frequency of their opening is unknown. In addition, the sinking of the dyke near Gate 3 is being well documented, at a rate of 10-15cm. It is clear that the crest level of the dyke must be sustained each year (with extra inland quarried materials), however, it may be argued that the most sustainable approach would in fact be to retreat vulnerable communities or to redesign the whole polder scheme).

168. Commune and Polder Sub-Committees consequently reported that perhaps the most environmentally sustainable solution to be adopted in future projects should be to dredge channels in front of dykes to help with flood water conveyance in front of flood gates to help with flood water escape. The recommendations section reiterates that there is a real need for an additional feasibility study to be undertaken to embrace an improved strategic flow model and dyke height/orientation design for the

future and for other polders. A proposal for such a study has apparently been put forward to the ADB in 2016 and is currently under review.

169. Finally, and perhaps most critically in terms of project impact, the sustainability of the Prey Nob dyke rehabilitation essentially should relate to how the dyke is maintained and whether crop yield increases are actually due to adaptation measures that VAAP has been instrumental towards creating. For example, in 2015, crop yield was significantly affected not by saline intrusion or seawater overtopping, but instead by infestations of an insect (from the locust family) called the brown hopper.

Sub-Evaluation Rating: Moderately Likely (ML).

5.8.5 Catalytic Role

170. VAAP has demonstrated some catalytic effects as the applied approaches are supporting institutional changes, catalyzing other parallel donor projects and wider stakeholder behaviour. The replication potential is good, based on strategic dissemination efforts, and the ability to adapt to the needs and situation of Cambodia.

171. Put simply, the TE believes that the VAAP has represented the starting point of a growing process of capacity and institution building in Cambodia. In terms of national catalytic impacts, however, continued effort will be needed to engage those two coastal provinces which did not receive direct demonstration activities (Kampot and Kep Provinces). In addition, future demonstration activities (in all 4 coastal Provinces) should, if possible, be designed to either work more intensively with specific households or to include more households to broaden the beneficiary opportunities. Of course, it is acknowledged that this is in many cases donor budget dependent.

172. However, there are some examples that demonstrate areas where the catalytic role of VAAP could have been improved upon. One example, and re-emphasising the issues linked to the long term sustainability of the Prey Nob dyke rehabilitation project, was that there was no community training that was designed for local commune workers (or the Polder Sub-Committee) on dyke engineering design, maintenance/monitoring. This simple addition could have been added to the broader "training programme" initiated under VAAP, and from this may have provided the platform for longer term financial sustainability of interventions of this type, especially as there is little or no budgetary support available for similar monitoring/maintenance from MWRM.

173. The design of the village savings scheme implemented by CARP/CCCA was identified as an intervention that the VAAP/LDCF could improve upon. If the catalytic role of VAAP is to really demonstrate impact on the ground, it is recommended that an assessment of any "savings group" should ideally be conducted prior to starting any of the VAAP/LDCF livelihood activities. Based on the assessment, it would be proposed that additional support is sought to strengthen the structure of existing groups.

174. Finally, it is worth noting that the basic premise of the project was a fixed with a very limited budget compared to other LDCF projects). The issue of donor budget support long term is therefore a critical factor towards ensuring the good work undertaken through CARP/VAAP is maintained.

Catalytic Role Evaluation Rating: The catalytic role has been unquestionable and is rated as being "Satisfactory". The likelihood of replication is conditioned by several and variable regional factors that relate to their socio-economic context, priorities and political will and national capacities. The role of Sihanouk and Koh Kong Provinces in "leading by example" has also not to be underestimated in achieving the rating.

5.8.6 Replication

175. Considering the implementation period of VAAP (circa 4 years) the main concern is the sustainability of the activities implemented and their replication and expansion to other areas. As re-confirmed with all provincial stakeholders as part of this evaluation, a clear recommendation from the stakeholders (and despite the very limited financial resources for "on the ground" implementation), was that they would like to have the VAAP to continue the coastal activities if it had a continuation phase into 2017. This would provide an opportunity to follow-up and expand the conducted demonstration activities and thereby increase the likelihood for sustainability. Replication of the VAAP demo projects into Kep and Kampot

Provinces would certainly require the role and input of local communes and stakeholders early in the design process. Continuation, however, is dependent on budget, which is dependent on both national and donor priorities. Both of which are often beyond the control of both MoE/CCU and UN Environment.

176. As stated in Section 3, one of the key factors adopted by VAAP to encourage success was to ensure that the project's management structure was based on government ownership and be aligned to the existing institutional arrangements with the CCCA (see Figure 3.5). This strategy has provided the opportunity for a number of VAAP outputs to potentially be replicated to other locations on the coast, though in particular those coastal Provinces that did not experience direct Demonstration project support. A clear recommendation received from stakeholders was that they would like to continue with the coastal activities set out within VAAP.

177. The rehabilitation of dykes carried out under Outcome 3 is project activity that could be replicated in other areas along the coastline. This includes the management practice of the (well-functioning) polder water user committees, as this provides co-benefits in terms of reducing vulnerability to climate change impacts and improved livelihoods. Regular maintenance and rehabilitation of dykes, canals, and gates are important tasks of the polder water users committee in Prey Nob and will become more critical in the future, to deal with increased climate change pressures such as SLR, drought and flooding. Given the substantial costs of the rehabilitation, the water user committee should consider mainstreaming it into the commune (or district, or province) investment planning, as fees from member contributions may not be sufficient.

178. Due to the high costs of this demonstration project, however, any future replicated intervention strategies need to consider whether alternative approaches are possible, as opposed to accepting that the "status quo" of maintaining structures in their current geographic location are the most suitable (and only) option available. Cost-sharing options with the beneficiaries should then be debated and potentially applied, and managed by the water user committees (as it is the case for maintenance of the Prey Nob dyke). Planning initiatives (including polder re-design or even community relocation) should be re-considered for mainstreaming within the commune development planning process and consulted upon for possible inclusion within district-level or province-level investment plans. Of interest, relocation strategies were included in stakeholder discussions on polder system sustainability, though it was generally assessed as politically unfeasible by local partners.

179. The potential for upscaling IFS approach is very dependent on land ownership issues, and the cost effectiveness of increasing the labour intensive approaches that are linked with IFS. A strong sign of sustainability/replication of the IFS can be shown in some of the VAAP initiatives, particularly the role of farmers involved in IFS. Despite, this, the IFS demonstration projects perhaps should be tested at a much larger scale to assess whether IFS is actually viable at larger scales, plus what the impact this has on local households (employment/crop production) over various wet and dry seasons.. Significantly, recent data show that farmers involved now have started to use their own fund for expanding their farm activities using the methods learned under the training. The climate resilient integrated farming activities have showed significant increase in household income compared to baseline and this should by itself be a clear incentive for the farmers to replicate and continue these activities and also potentially more benefits should be possible to generate through these activities. To implement full IFS practices an investment of approximately 1000 USD are needed but it is expected that some farmers seeing the overall benefits could have the possibility to implement it stepwise to generate funds for full establishment. It would also be expected that other farmers who have received training would be interested to adapt these methods after experiencing the results. The replication would therefore depend on potential access to funds for initial investments and for the local departments of agriculture to provide support during implementation. It is expected that the established saving groups could provide start-up financing for interested farmers but this process could be accelerated if the key ministries could provide a funding source.

180. Regarding the replication potential of IFS training, it is perhaps appropriate to view the current status of IFS in the Demonstration Pilot areas. The outcome of IFS training is positive with 10 families receiving IFS training which has helped to better communicate how to address pest control and also rice cultivation. For example, in Koh Kong, out of the 10 families undertaking the IFS training, at the time of writing, only 5 families are continuing the practice, whilst the other 5 have reverted back to traditional techniques (not climate smart agriculture) mainly due to the fact that IFS does not appear to work in wet seasons along with the fact that IFS implementation is very farm size and labour availability dependent (the

approach is far better for small farms). This observation needs to be embraced during any future replication strategy that may be adopted. Considering replicability of IFS training the cost for each farmer would be between 50-100 USD per farmer.

181. Within Outcome 3, the rainwater collection (water tanks) activity can easily be replicated at the household level and possibly expanded to private enterprises. The storage capacity of the tanks cannot fully eliminate the water scarcity of the households, but can provide an important supplement during the dry season (with the remaining deficit covered by vended water). Large installations of tanks in public areas would help to increase the public access to safe water at times of water shortage. Attention should be paid to hygiene and quality in the public water tanks.

182. The training manual and methodology approach produced under Outcome 2 on vulnerability assessment and adaptation planning (for all 4 coastal Provinces) is an important product that was developed further under VAAP from the CARP project. The training modules and additional climate data may be refined and improved upon testing and practicing the methodology and the planning approach, given the diverse socio-economic and ecological characteristics, sensitivities, exposures and adaptation capacities of each province.

183. It is recommended that a mangrove rehabilitation replication plan is needed to be produced and included as an annex to Provincial Local Development Plans. The role of the NCSD should be part of this (as part of a 3 year Work Plan approach) which needs to be budgeted accordingly. No budget is currently set aside for mangrove rehabilitation within local plans, however, "Corridor Plans" have budgets to replant over 100ha of mangroves into 2017 (Koh Kong Province).

184. Regarding the Toul Kokir Commune pond deepening exercise (Koh Kong), lessons can be learned regarding any replication process for any future similar projects in neighbouring Provinces. Whilst the pond was deepened and dredged to 3m in 2013, this process took a lot time (circa 6 months) due to the use of old machinery derived from local contractors. Larger expensive equipment is likely to be needed for any replication of pond deepening projects which should consider new pumping equipment to help service nearby / adjacent village communities. The long term benefit of the approach is not questioned and should be seriously considered in the future, though beneficiaries need to appreciate that (based on lessons learned from Toul Koku) that water quality is only really suitable for cleaning and for watering crops in the dry season (contains much iron in the dry season), though water is not good for human consumption.

185. Finally, the potential for replicating the YED "environmental awareness" forum approach should be seriously focused upon. This is because many topics on environment and climate change issues can be selected for debate, interpretation and discussion, which can then be used to better communicate specific information and ideas on good behaviour, wise decisions, and best practices addressing climate change impacts and good governance. Current findings under the VAAP should be disseminated as a part of a national education and awareness campaigns.

Replication Evaluation Rating: Satisfactory - one of the key factors to assist with replication that was adopted by VAAP to encourage success was to ensure that the project's management structure was based on government ownership and be aligned to the existing institutional arrangements with the CCCA

5.9 Factors Affecting Performance

5.9.1 Preparation and Readiness

186. Opinions over the project design, either positive or critical, have accompanied the project since its launch and, in fact, the issue was exhaustively assessed both by the MTR (2014) and by Baseline Assessment (2013). Discussion points surrounding the quality of project design and preparation have been mentioned earlier in Section 5.2. As described in Chapter 5.2, the project was preceded by several relevant projects and initiatives, including CARP which all have contributed to shape project's design, contents and methodology. It re-affirms that one of the key factors that influenced performance levels on the ground was that VAAP built on existing programmes and projects (notably the close link with the CARP) which has impacted positively on the readiness of VAAP to deliver its expected outcomes, plus also the selection of

key institutions within committees and TWGs and whether they sufficiently involved in project development and ground truthing etc.

187. The TWG "model" adopted had certainly helped to better combine local level participation (commune councils) with local implementation/expectation though the use of tried and tested methods of local communication between Province to District, and District to Commune and down to Village levels. For example, District level TWG members were all involved in demonstration project work ranging from IFS work, to crab bank set ups, rain harvesting and pond dredging work. The success of this approach was linked to the District TWGs having a good understanding of the local area, and also they have the ability and capacity to help locals to draw "maps" to clarify the vision of what the demo project was seeking to achieve. Likewise, Committee members were able to provide specific trainings and help with transferring seedlings over to specific households/community members. It would be potentially beneficial (due to the close proximity to Thailand) that a cross border "link" is created with Thailand to help with extending the training work to others using the mangrove ecosystem through across national borders.

Preparation and Readiness Evaluation Rating: Satisfactory (S)

5.9.2 Project Implementation and Management

188. Overall, considering the nature of the Project, and its links with CARP/CCCA, coupled with the limited staff available, UN Environment has been effective in providing supervision and backstopping. The Executing Agency (MoE) also performed its duties and responsibilities very well and in accordance to the legal agreement that was set up between UN Environment and the MoE. UN Environment's implementing agency role was supportive which resulted in a positive working relationship between UN Environment and the MoE.

189. The design to ensure "partnerships" and management arrangements between Govt agencies and parallel project initiatives is a key reason for VAAPs success. For example, the Project Steering Committee functioned well, in part due to the fact that same management board for VAAP/CARP was used to avoid duplication of effort between the two projects and to facilitate fluent project implementation where possible. This was needed as the key Ministry (MoE) only had 4 or 5 staff including the Chief Technical Advisor (CTA) to the VAAP project. Instead the involvement of the 50 plus members of the TWGs was an extra key resource to ensure work was achieved on budget and to programme.

190. In addition to this, VAAP was also designed to provide the guidance of existing line ministries to be assigned specific project tasks to help undertake (and take responsibility for) most of the work on the ground. As a result of this approach, there were no political blockages to project progress within VAAP as local communes were involved early on into the process and so the VAAP team already knew the capabilities of the local counterparts.

191. Building on the design and framework of the CARP has therefore proven a significant factor in the project's success. This was needed especially regarding training events, organising events and in their delivery (plus also avoiding duplication of effort and consultation fatigue).

Project Implementation and Management Evaluation Rating: Satisfactory

5.9.3 Stakeholder Participation, Cooperation and Partnerships

192. Wide and meaningful forms of stakeholder participation actually represent a crucial issue in the development and implementation of VAAP. Having said that, questions regarding "who" are the stakeholders to be involved, "how" stakeholders are effectively participating and "when" should they be involved, remain crucial issues to be addressed in practice, opening the field to a large array of interpretation and varying "degrees" of participation.

193. It has been noted that the participation of some groups of stakeholders (notably the tertiary education and NGO sector) is lower than expected. However, a clear observation from the TE is that the potential success of VAAP stakeholder links closely to the partnership arrangements that were set up between itself and CARP.

194. A main catalytic finding from the TE field mission is that VAAP has provided the opportunities for local Cambodian stakeholders to "think differently". It has contributed effectively in providing a catalytic role in educating farmers of new farming techniques which has proven vital for both the delivery of IFS in both dry and wet seasons. Despite this, the sustainability over the long term has to be questioned without future funding commitments. In particular, any physical interventions (dyke enhancements and maintenance etc.) need continued funds in the Prey Nob District. For this to be realised for all beneficiaries, there needs to be more emphasis on partnerships with international experts and donors so that some new international "best practice" techniques (dredging and flood conveyance) can be piloted and tested in other Districts. Engineering design and maintenance manuals are needed to help learn examples in the Netherlands and Guyana (e.g.: how to introduce the use of bamboo which could be cultivated inland and transported as a material for use on the coast).

195. After 2014 a change in Government Policy on climate change and ICZM meant that the original Coastal Development Committee was changed to become a Committee chaired by the Min of Land Management. According to some interviewees, some implementation Issues apparently quickly arose mainly due to a lack of clarity as to who is to take ownership of specific issues such as improving engagement related issues (i.e.: project committees vs. national committees etc.).

196. One specific change of relevance towards the end of the project is the establishment of the new National Council for Sustainable Development (NCSD) which provides Cambodia with a forum for government wide coordination on sustainable development. An inter-ministerial team from across participating sectors comprises the NCSD, which is primarily serviced and coordinated by the MoE. At the provincial level, there is a Government directive to create coastal management committees in each province (under the leadership of the Ministry of Land Management). The VAAP project committees/inputs importantly are already integrated into that process.

Stakeholder Participation, Cooperation and Partnerships Evaluation Rating: Overall, when considering the baseline situation, considerable progress has to be acknowledged in Stakeholders participation and awareness, which has to be considered Moderately Satisfactory (MS).

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

197. Despite a delayed start, the project has been visionary in capturing the need for climate adaptation approaches on the coast of Cambodia through a collective national provincial and district level effort, which has been able to guide and support Cambodian stakeholders in a coordinated and coherent way. By doing so, the project has laid the foundations for subsequent actions of capacity building at national level to implement regulatory and administrative system for sustainable coastal adaptation and management, which has occurred or is happening in 2 coastal Provinces (Koh Kong and Sihanouk).

198. Regarding **Strategic Relevance**, VAAP has contributed towards delivering key global, regional and national environmental issues plus also to the fulfilment of UN Environment's mandate and policy and meaningfully contributing to the fulfilment of GEF strategy and priorities. VAAP confirms, in retrospect, that its design has been strategically relevant towards addressing national challenging issues and needs by implementing the range of activities delivered in Outcome 1 to better introduce appropriate systems and processes, the production of a Policy Brief (for Integration of Climate Change in Land Use Planning) and regulations concerning land use planning, Outcome 2 (the production of District specific Coastal Vulnerability and Climate Adaptation Plans), Outcome 3 (targeted pilot projects in Koh Kong and Sihanouk Provinces), and the successful mangrove rehabilitation interventions in Outcome 4.

199. On the **Quality of the Project Design**, this evaluation finds that the project rationale was well-founded and that activities are linked to existing vulnerabilities and existing barriers to improving resilience to climate change.

200. With regards to the **Nature of the External Context**, no tangible evidence can be found regarding economic or social externalities which may have impacted on project implementation. In fact, based on

interviews conducted during the field mission with project partners, the evaluation finds that certain external risk factors appear to be mostly well considered by all project partners.

201. Regarding the **Achievement of Outputs**, the project has successfully produced the programmed activities and outputs as outlined in UN Environment's internal planning documents, both as regards the adopted PoW of the CC and UN Environment's PoW. Using one successful example, one effective contribution of the project was the support towards setting up local marine protected area at Peam Kraosob and all associated supporting regulations.

202. On the **Achievement of Direct Outcomes**, the combined direct outcomes have strengthened institutional capacity and policy coordination, mainstreaming climate change in national and local development plans, capacity building for vulnerability assessment and adaptation planning, reduced vulnerability of productive systems to floods, and improved resilience of coastal buffers to climate change and livelihoods improved. A considerable knowledge base has also been gained, which can feed into work plans or programs of relevant departments, local administrations and ministries.

203. With regards to the **Likelihood of Impact** (and linked to the 3 Intermediate States identified within this evaluation), it does appear to be the political will at the national and provincial levels to make a concerted effort for mainstreaming climate resilience, through the implementation of updated sectoral policies and national vision documents. Despite this, funds are often inadequate to really sustain the effective implementation of policy direction to address climate change (for operation and maintenance, basic development needs, and climate proofing of engineering structures). This inevitably influences project "impacts" at all levels, but particularly so at the district and commune intended beneficiary levels. The new way of "climate resilient agricultural delivery" thinking has also encouraged new techniques to be followed and used, and from this, it is hoped that new climate resilient policies may possible be drafted, updated and eventually mainstreamed. The replanting of mangroves and environmental awareness-building should be declared as one of the most successful achievements of VAAP with biodiversity levels increasing in the local mangrove areas.

204. Regarding **Project Efficiency**, a key factor of its success was that it was purposely built around the existence of working institutional structures. Once the project started in earnest (in January 2012), procedures and structures were set up that undoubtedly helped to streamline and improve efficiencies in project delivery. Success of the VAAP can therefore be linked to efforts made to link with existing institutional group structures plus also the project design which attempted at the outset to build on past successful project structures. Despite this, there was undoubted confusion has arisen at times with local communities with regards to which project (CARP/CCCA/VAAP etc.) was contributing to what output or outcome. Certainly, the sequencing of activities between the VAAP/LDCF and CARP/CCCA projects could perhaps have been improved upon better, with activities such as planning and identification of vulnerabilities (Outcome 2) being carried out by CARP for the demonstration sites in 2012 (prior to livelihood demonstrations in Outcome 3).

205. On the **Monitoring and Reporting** criteria, the TE also finds that suitable monitoring reporting took place, as planned, in a timely fashion and with adequate attention to detail and content. The project should perhaps have adopted a clearer system to track risks posed by institutional stability and external communication in more detail. It is felt that internal risk oversights (more "day to day" running procedures) have had more impact on project performance than externalities.

206. Regarding **Sustainability**, in general, one strength of VAAP has been that has been able to provide a set of policy recommendations for sustaining and mainstreaming of climate change in land use planning, initiated discussions on data network and monitoring indicators, demonstrated viable adaptation activities in selected communes, and organized training and knowledge dissemination for some stakeholders, as an entry point for mainstreaming climate change under the scope of the current Programme..

207. With regards to the projects **Catalytic Role**, VAAP has demonstrated some catalytic effects as the applied approaches are supporting institutional changes, catalyzing other parallel donor projects and wider stakeholder behaviour. The **replication** potential is good, based on strategic dissemination efforts, and the ability to adapt to the needs and situation of Cambodia. The potential for replicating the youth "environmental awareness" forum approach should be seriously considered for replication. This is because many topics on environment and climate change issues can be selected for debate, interpretation and

discussion, which can then be used to better communicate specific information and ideas on good behaviour, wise decisions, and best practices addressing climate change impacts and good governance.

208. Regarding the **reconstructed Theory of Change (rTOC),** analysis reveals that the project is following a logical pathway towards the intended impact, leading from strategic interventions (carried out under each of the 'Outputs') to 'Outcomes' and 'Intermediate States'. The project successfully produced the programmed activities and outputs as outlined in UN Environment's internal planning documents and is on a good way to achieving its primary objectives. This denotes a key strength of VAAP, as this has helped to deliver a platform for long term coastal adaptation in Cambodia. Success of the project can be linked to efforts made to link with existing institutional group structures plus also the project design which attempted at the outset to build on past successful project structures (Danida 2007 CZM project). It has helped local beneficiaries (households, farmers and communes) to think differently with regards to climate resilience and what this means at the very basic household level. Capacity-building together with awareness building must, however, continue to be conducted on a regular basis (subject to funding), targeting all stakeholders, especially decision-makers and natural resources and land use managers.

209. The ratings of the project are presented together in the table below (Table 6.1), with a brief justification for each main headers rating (cross-referenced to findings within report).

Table 6.1: Terminal Evaluation Ratings for VAAP

Criterion	Summary Assessment	Rating
A. Strategic Relevance	The Project confirms in retrospect all its relevance in: Supporting alignment to MTS and POW; creating and/or improving Cambodia's capacity to fulfil its rights and obligations towards the BSP; laying the foundations for more comprehensive and effective actions of Capacity Building at National level; and largely contributing to fulfil UN Environment's mandate and policy on Climate Change plus meaningfully contributing to fulfil GEF strategy and priorities (see Section 5.1)	**S**
B. Achievement of Outputs	The project outputs have been completed effectively and within programme. Despite some inconsistencies in the Log Frame, standard project monitoring tools have been used to rectify and improve monitoring/indicator setting and hence reporting). (see Section 5.7)	**S**
C. Effectiveness: Attainment of project objectives and results		
1. Achievement of direct outcomes	Despite not all Outcomes having been fully achieved, the Project has succeeded in promoting a new way of thinking in a complex national context which has set out a vulnerability methodology that has gathered new baseline situation information (see Section 5.4). Awareness-building and improved understanding will continue to be required at all sub-national levels of administration, as well as within the private sector, and among women and vulnerable groups.	**S**
2. Likelihood of impact	The impact of the project to all beneficiaries has been felt, especially to local household or community beneficiaries.	**MS**
3. Achievement of project goal and planned objectives	With regards to the overall project objective and outcome (see row 1 of Table 5.4), for all 3 indicators set, it shows that the targets have been more than achieved.	**S**
D. Sustainability and replication		
1. Financial	The overall long term financial sustainability picture is deemed less satisfactory. (see Section 5.8)	**MU**
2. Socio-political	Proof of the intended outcome of VAAP is, even at this TE stage, too early to predict, however the focus on educating farmers of alternative farming practices may prove a strategically suitable approach to follow.	**ML**
3. Institutional framework	In terms of sustainability, the institutional set-up and anchorage of the CCU and the MoE is a relevant issue to consider and not a neutral one. The nature and quality of the relationship between the MoE and partnering Ministries (such as MWRM, MAFF, MOP and MLMUPC) has certainly helped towards making VAAP a relative success.	**ML**
4. Environmental	In general, environmental sustainability (long term) should be achieved. This is certainly the case from work undertaken for Outcome 4, whereby the replanting of mangroves and environmental awareness-building should be declared as one of the most successful achievements of VAAP.	**ML**
5. Catalytic role and replication	The catalytic role has been unquestionable and is rated as being "Satisfactory". The likelihood of replication is conditioned by several and variable regional factors that relate to their socio-economic context, priorities and political will and national capacities. The role of Sihanouk and Koh Kong Provinces in "leading by example" has also not to be underestimated in achieving the rating	**S**
E. Efficiency	A key factor relating to project efficiency was that it was purposely built around the existence of working institutional structures (see Section 5.6)	**S**
F. Factors affecting project performance		
1. Preparation and readiness	VAAP was designed to provide the guidance of existing line ministries to be assigned specific project tasks to help undertaken (and take responsibility for) most of the work on the ground. As a result of this approach, there were no political blockages to project progress within VAAP as local communes were involved early on into the process and so the VAAP team already knew the capabilities of the local counterparts.	**S**
2. Project implementation and management	VAAP was designed to provide the guidance of existing line ministries to be assigned specific project tasks to help undertake (and take responsibility for) most of the work on the ground. As a result of this approach, there were no political blockages to project progress within VAAP as local communes were involved early on into the process and so the VAAP team already knew the capabilities of the local counterparts. Building on the design and framework of the CARP has therefore proven a significant factor in the project's success.	**S**
3. Stakeholders participation and public awareness	VAAP has provided the opportunities for local Cambodian stakeholders to "think differently". It has contributed effectively in providing a catalytic role in educating farmers of new farming techniques which has proven vital. Building on the design and framework of the CARP has therefore proven a significant factor in the project's success. This was needed especially regarding training events, organising events and in their delivery (plus also avoiding duplication of effort and consultation fatigue). (see Section 5.9)	**MS**
4. Country ownership and driven-ness	One of the key factors adopted by VAAP to encourage success was to ensure that the project's management structure was based on government ownership and be aligned to the existing institutional arrangements with the CCCA (see Figure 3.5). This strategy has provided the opportunity for a number of VAAP outputs to potentially be replicated to other locations on the coast, though in particular those coastal Provinces that did not experience direct Demonstration project support.	**S**
5. Financial planning and management	The project has proven quite successful as regards the administrative arrangements and no irregularities reported. As stated by responsible staff in UN Environment, the project has proven quite successful as regards the financial and administrative side and no irregularities are reported	**HS**

Criterion	Summary Assessment	Rating
A. Strategic Relevance	The Project confirms in retrospect all its relevance in: Supporting alignment to MTS and POW; creating and/or improving Cambodia's capacity to fulfil its rights and obligations towards the BSP; laying the foundations for more comprehensive and effective actions of Capacity Building at National level; and largely contributing to fulfil UN Environment's mandate and policy on Climate Change plus meaningfully contributing to fulfil GEF strategy and priorities (see Section 5.1)	**S**
B. Achievement of Outputs	The project outputs have been completed effectively and within programme. Despite some inconsistencies in the Log Frame, standard project monitoring tools have been used to rectify and improve monitoring/indicator setting and hence reporting). (see Section 5.7)	**S**
6. UN Environment supervision and backstopping	UN Environment has been effective in providing supervision and backstopping. The Executing Agency (MoE) also performed its duties and responsibilities very well and in accordance to the legal agreement that was set up between UN Environment and the MoE. UN Environment's implementing agency role was supportive which resulted in a positive working relationship between UN Environment and the MoE	S
7. Monitoring and evaluation		
a. M&E Design	The Project underwent a MTE in 2014 though was purposely delayed as a consequence of implementation delays (not administrative delays) and limited progress on the ground, this could perhaps have fruitfully benefited from being commissioned during mid-2013.	S
b. Budgeting and funding for M&E activities	Budgeting and funding for M&E activities, such as the MTR was nevertheless funded in a timely fashion during implementation.	S
c. M&E Plan Implementation	The TE finds that suitable monitoring reporting took place, as planned, in a timely fashion and with adequate attention to detail and content.	S
Overall project rating	Satisfactory	S

6.2 Lessons Learned

210. In general project terms, the most important lessons learned are only listed below, as all of them have already been captured and discussed in detail in respective sections and sub-sections of the report and are cross referred accordingly).

Lesson 1: Build project administration structures around existing institutional arrangements plus any positive experiences/approaches/arrangements from ongoing/past projects

211. The evaluation found that a key factor relating to project efficiency was that it was purposely built around the existence of working institutional structures (see Sections 5.2, 5.6 and 5.9). One clear approach used to improve project efficiency was to build the projects project management and review procedures upon pre-existing institutions, agreements and partnerships that were already in place and which inculcated institutional arrangements that already existed. In future projects, it is important to embrace this lesson where at all possible. In addition, Technical Working Groups must have representation from the Department of Women's Affairs and also the Department of Rural Development. The implications of this omission manifested itself in what could have proven a much better and successful delivery of the pilot demonstration projects, notably, the integrated farming systems and crab bank challenges that were faced by women).

Lesson 2: Improve clarity and visibility between parallel/ongoing donor projects

212. The evaluation found that in spite of Lesson 1 (above), there was a degree of confusion apparent amongst local stakeholders (not at the PSC level) when the various ongoing/parallel/recently concluded projects required to be communicated to locals (i.e.: CARP/CCCA/VAAP etc.) and the uncertainty over which project/programme was contributing to what VAAP output or outcome (despite sign boards being put up to make visible who had funded the activity). In future projects, it is important to try to reduce these uncertainties by conveying clearly any differences or complimentary actions that a new project is seeking to undertaken, and communicate this clearly with local beneficiaries via the project Communications Plan (or Stakeholder Engagement Plan).

Lesson 3: Better promote and implement Knowledge and Communication Management Systems

213. The evaluation found that certain knowledge management systems or "networks" (e.g.: the climate change data network (CCCDN) are better mainstreamed or sustained (see Section 5.4.1 (a) and also Section 5.8) into "day to day" operating practices. In order to ensure data and knowledge management becomes more efficient, In future projects, it is important to ensure that "secretariats" are established at appropriate levels e.g. the provincial governors' offices to better facilitate information flows among the provincial departments, NGOs, the private sector, researchers and universities, districts and communes. The Youth Environment Debate has proven an attractive tool for communicating environmental problems and climate change issues to a large population. The evaluation believes an additional benefit would be if TV programmes included debates with Q&A sessions, including elaborations on policy responses to particular topics of climate change concerns.

Lesson 4: Ensure Pilot Designs are simple to implement, install and maintain for future replication.

214. The evaluation found that where those pilot projects had the best impact is where their installation, maintenance is easy to implement. For instance, the rainwater harvest tanks have proven an important adaptation option, which have a simple design and are easily installed by most of the villagers themselves at a low cost. The overall sustainability of the water tank investments is expected to be positive as all reflects a strong need and request from the communities benefitting as water shortage is a major issue in the dry season in these areas (see Section 5.8). One lesson learned is that the tanks require space, and

good foundations to support a large storage, which is difficult in the low lying areas where the underground is not so stable.

215. The construction of new reservoirs, and/or dredging of existing ones, is another relatively easy adaptation option that may be replicated to help cope with water scarcity resulting from drought, limited surface water availability, and poor groundwater quality. However, it is key to ensure that water availability for both domestic use and agriculture is available (potential sources of surface water in the headwater areas etc.). More reliable water supply systems (perhaps involving instream storage and/or piped conveyance) should be established where reservoirs and rainwater harvest tanks are inadequate.

216. Whilst the pilot demonstration projects have all proven effective, their impact is often felt just for the immediate districts though not further afield (see Section 5.4.1 (g)). It also found that there was a lack of clarity as to who would be ultimately responsible for scheme maintenance within the Provincial authorities (Section 5.8 - Sustainability). In future projects, it is important to ensure improved dissemination of knowledge is needed (at the local level) on how to train locals on monitoring dyke condition (repairs needed – see Section 5.8.5). From this, the long term financial sustainability of future interventions can be realised.

Lesson 5: Develop and implement "all-inclusive capacity building" for all of aspects of society

217. The evaluation found that in order to improve the impact on local beneficiaries, a continuation of new training approaches should be undertaken, especially building on the training engagement work (started during CARP where 54% of persons participating in training activities were women) for farmers and women involved in farming practices in particular (see Section 5.4.3). In future projects, it is important to continue the "farm school" training approach (started under CARP where more than 1500 farmers were engaged). In addition, to ensure long term sustainability, there is a need for continued coaching and guidance from local authorities and relevant departments beyond the project life such as commune councils or agricultural departments. Future capacity building support should possibly focus on developing tourist guide skills, more IT skills and leadership and management skills.

218. Re-emphasising the issues linked to the sustainability of the Prey Nob dyke rehabilitation project, there was no community training that was designed for local commune workers (or the Polder Sub-Committee) on dyke design or maintenance/monitoring (despite this "function" being already established with a team under the Polder User Committee - See Lesson 4 above). It is proposed that improved dissemination of knowledge is therefore needed on how local communities can maintain dyke repairs when observed (as opposed to waiting for Ministry of WR to come out and fix the problem). This simple addition could have been added to the broader "training programme" initiated under VAAP, and from this may have provided the platform for longer term financial sustainability of interventions of this type, especially as there is little or no budgetary support available for similar monitoring/maintenance from MWRM.

Lesson 6: Introduce simple and workable funding options for communities, business and the private sectors

219. The evaluation found that VAAP needed to better engage the private sector in the set-up of agricultural co-operations (see Section 5.4.1 (g)). This concept was started as a result of CARP (under implementation by Ministry of Agriculture) whereby interested farmers set up Livestock Interest Groups which was based on the guideline for Agriculture Association Establishment of MAFF.

220. This could have been implemented through PPPs as defined within the Cambodia Agriculture Extension Policy, however, the budget availability for this initiative, once the CARP project timeline had expired, was unlikely to be achieved with any particular gravitas in the remaining time of the project (from 2015 onwards). In future projects, it is important for project interventions to consider not only capacity building (i.e.: Lesson 6), but must also look at the mainstreaming of businesses and services that provide funds for the implementation of new livelihood techniques (Section 5.8.2).

221. For example, setting up a framework for workable private public partnerships and improving credit access for farmers is needed to help prime fund new irrigation technologies into the market place along with new saline tolerant crop growing. Such PPP approaches should seek to provide innovative options to

attractive business and market access training that links to climate smart agriculture to increase climate resilience and also production.

222. The evaluation also found that the long term success of IFS may require a revised strategic vision, as at present, its implementation essentially only needs very basic equipment to be performed (hand held tools etc.) though more robust machinery maybe needed for larger IFS farms (Section 5.4.2). The sustainability "model" for IFS implementation will no doubt improve once communities and groups understand the long term benefits of alternative approaches being tried and tested. In addition, it is unlikely that any micro-financing of IFS schemes, in most instances, would be sufficient enough to sustain any significant (large scale) project impacts over the long term as there is limited evidence of such approaches working well at scales larger than those implemented as demonstration sites under VAAP). Instead, there is perhaps a need to develop cooperative groups to help business to thrive. In future projects, it is important to continue to adopt Commune Extension Workers into the project design (i.e.: similar to the CARP approach using Village Livestock Health Workers including both men and women) (see Section 5.8.2).

6.3 Recommendations

223. Taking into account the scope of the evaluation and based on the main findings, conclusions and lessons learned, the recommendations that follow are principally addressed to UN Environment (as Implementing Agency of the VAAP) to help craft future discussions on any future follow up project should this be agreed by GoC.

Recommendation 1. *Need for a Continuation Strategic Plan (linked to CDPs) to help support the route map for next phases of work to help make communities climate resilient.*

224. This is an important task for UN Environment/Implementing Agency and the GoC to help capture the best practice events that have occurred during VAAP and to help set an Action Plan to take forward urgent interventions that are now required to ensure that the impact of VAAP is not lost and is sustained. This is founded from consultation from the Cambodian stakeholders who state that they would like to see VAAP continue the coastal activities as a specific continuation phase into 2017. This would provide an opportunity to follow-up and expand the conducted demonstration activities and thereby increase the likelihood for sustainability. Replication of the VAAP demo projects into Kep and Kampot Provinces would certainly require the role and input of local communes and stakeholders early in the design process.

225. It is acknowledged that significant effort, outreach and lobbying has already taken place by CCU (CCU and CTA can provide further details) for follow up work, including the draft preparation of a GCF Concept Note (2017). Despite this, neither CCU nor UN Environment have the authority to assure that this happens.

Recommendation 2. *Update existing CARP Guides and Manuals to help mainstream climate resilience into Commune Development Plans (CDPs) and Provincial Plans.*

226. Guidelines for Integrating Climate Change Considerations into Commune Development Planning were produced under CARP in early 2014. This and other existing CARP produced institutional guidance manuals/documents on how to formulate "government ready" climate resilient CDPs and Provincial Plans still require to be better mainstreamed into existing Government practices. It is also clear that there is recommendation from this VAAP that the CARP produced guidelines should be updated with new information attained from the VAAP outputs and outcomes. This therefore links directly to the financial sustainability/replication issue raised in Recommendation 1.

227. Detailed engineering design and maintenance manuals will also be needed to help introduce international best practice examples from the Netherlands, Vietnam and Guyana (e.g.: how to introduce the use of bamboo which could be cultivated inland and transported as a material for use on the coast including the potential for inland bamboo "nurseries" and how these could be harvested and used on the coast as climate resilient materials for coastal defence mechanisms). Future projects would also benefit

from improved guidance on how local communities can maintain and improve mangrove rehabilitation areas to aid future replication programmes elsewhere around Cambodia. Through the introduction of new or updated guide manuals (see above) that are formally embraced by new CIPs and CDPs, adaptation planning in Cambodia, using new climate resilient infrastructure building codes, will be realised quicker as at present these do not currently exist (though this aspect is apparently embraced within a SDB funded project (*pers comm*)).and future donor support is therefore likely to be required to help deliver this need.

228. This recommendation is targeted at GoC and the donor community.

Recommendation 3. *Strategic Study to assess long term Flood Management Engineering Options in Polder situations.*

229. This is perhaps a recommendation for GoC and donors community to seriously consider to help provide solutions to address the inevitable situation in Prey Nob that the dyke continues to sink at a rate of 10-15cm per year. To sustain the crest level of the dyke each year (with extra inland quarried materials), the most sustainable approach may be to redesign the scheme through either a realigned positional strategy or a new engineered design with more longer lasting foundations as opposed to the mud foundation which will continue to sink.

230. A study is recommended (currently being proposed to ADB) to assess dyke rehabilitation within both Prey Nob District Polders 1 and 2 are prioritised (including mangrove protection sites) to assist the protection of over 2000ha of farm land from saline intrusion and overtopping. The key intervention strategy may be (instead of dyke crest height increase) to improve drainage and culver design.

231. For effective adaptation to work in practice, efforts should be made to initiate feasibility programmes (in the long term) that move vulnerable populations away from the coastal risk areas and to encourage livelihood options in less risk prone areas (i.e.: focus on providing alternative livelihood options such as eco-tourism away from low lying areas as opposed to protecting rice fields that are continually in climate vulnerable areas).This long term strategy requires full endorsement from the GoC to become a tangible national policy option.

ANNEX I. TERMS OF REFERENCE FOR THE EVALUATION

Objective and Scope of the Evaluation

In line with the UN Environment Evaluation Policy[11] and the UN Environment Programme Manual[12], the Terminal Evaluation is undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment; Cambodia Climate Change Alliance (CCCA); the Ministry of Environment (MoE); Ministry of Water Resources and Meteorology (MoWRAM); and Ministry of Agriculture, Forestry and Fisheries (MAFF) among other partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation especially if a second phase of the project, is developed.

It will focus on the following sets of **key questions**, based on the project's intended outcomes, which may be expanded by the consultant as deemed appropriate:

To what extent did the project contribute to: (i) national mechanisms for collecting, managing and using data on climate change, (ii) national development plans and polices on issues of climate change adaptation, and (iii) improved multi-sectoral/departmental integration of these plans and policies?

How successful was the project in creating an inclusive process to undertake the coastal zone adaptation planning? Did the project leverage on existing projects and efforts? What lessons were learnt that can increase the replicability and sustainability of these efforts?

To what extent did the project: (i) succeed in developing and adapting agricultural practices to climatic conditions leading to improvement of livelihoods, (ii) encourage ownership of these efforts with the local communities and other interest groups, and (iii) put in place measures to encourage replicability and sustainability of these efforts?

How successful was the project in engaging stakeholders outside of the government system (i.e. NGOs, universities and research bodies, and local community groups) in efforts to increase resilience to coastal buffers through ecosystem-based coastal protection?

To what extent is the project likely to achieve sustainability of the project results in terms of: (i) sustained results and upscaling by local communities and provincial and national governments, (ii) sustainability of medium to long term measures implemented in the project e.g. dykes and lake deepening - are there sufficient measures in place to enable and sustain these efforts?

Overall Approach and Methods

The Terminal Evaluation of the Project will be conducted by independent consultant under the overall responsibility and management of the UN Environment Evaluation Office in consultation with the UN Environment Task Manager and the Sub-programme Coordinator of the Climate Change Sub-programme.

It will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be

[11] http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx

[12] http://www.unep.org/QAS/Documents/UNEP_Programme_Manual_May_2013.pdf

used to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings.

The findings of the evaluation will be based on the following:

(a) A **desk review** of:

Relevant background documentation, inter alia UN Environment Medium-term Strategy 2010-2013 and 2014-2017 and Programmes of Work 2010-2011, 2012-2013 and 2014-2015, and the goals of GEF-5 Climate Change Adaptation Strategy 2010-2014;

Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;

Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence etc.;

Project outputs detailed in table 2 above

Mid-term review (MTR) of the project

Evaluations/reviews of similar projects

Interviews (individual or in group) with:

UN Environment Task Manager
Project management team (PSC, PMU)
UN Environment Fund Management Officer;
Project partners, including focal points in the following ministries:

- Ministry of Environment (MoE);
- Ministry of Agriculture, Forestry and Fishery (MAFF);
- Ministry of Water Resources and Meteorology (MoWRAM);
- Cambodian Climate Change Alliance Partners – in particular UNDP

Relevant resource persons;

Field visits to Cambodia

Other data collection tools as will be discussed an agreed between the evaluation consultant and evaluation manager

Key Evaluation principles

Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned. Analysis leading to evaluative judgements should always be clearly spelled out.

The evaluation will assess the project with respect to **a minimum set of evaluation criteria** grouped in five categories: (1) Strategic Relevance; (2) Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) Sustainability and replication; (4) Efficiency; and (5) Factors and processes affecting project performance, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, UN Environment supervision and backstopping, and project monitoring and evaluation. The evaluation consultant can propose other evaluation criteria as deemed appropriate.

Ratings. All evaluation criteria will be rated on a six-point scale. Annex 3 provides guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

Baselines and counterfactuals. In attempting to attribute any outcomes and impacts to the project intervention, the evaluators should consider the difference between *what has happened with, and what would have happened without, the project*. This implies that there should be consideration of the baseline conditions, trends and counterfactuals in relation to the intended project outcomes and impacts. It also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions, trends or counterfactuals is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

The "Why?" Question. As this is a terminal evaluation and a follow-up project is likely [or similar interventions are envisaged for the future], particular attention should be given to learning from the experience. Therefore, the "*Why?*" question should be at the front of the consultant's mind all through the evaluation exercise. This means that the consultant needs to go beyond the assessment of "*what*" the project performance was, and make a serious effort to provide a deeper understanding of "*why*" the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category F – see below). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultant to explain "*why things happened*" as they happened and are likely to evolve in this or that direction, which goes well beyond the mere review of "*where things stand*" at the time of evaluation.

A key aim of the evaluation is to encourage reflection and learning by UN Environment staff and key project stakeholders. The consultant should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons.

Communicating evaluation results. Once the consultant(s) has obtained evaluation findings, lessons and results, the Evaluation Office will share the findings and lessons with the key stakeholders. Evaluation results should be communicated to the key stakeholders in a brief and concise manner that encapsulates the evaluation exercise in its entirety. There may, however, be several intended audiences, each with different interests and preferences regarding the report. The Evaluation Manager will plan with the consultant(s) which audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them. This may include some or all of the following; a webinar, conference calls with relevant stakeholders, the preparation of an evaluation brief or interactive presentation.

Evaluation criteria

Strategic relevance

The evaluation will assess, in retrospect, whether the project's objectives and implementation strategies were consistent with global, regional and national environmental issues and needs.

The evaluation will assess whether the project was in-line with the GEF Climate Change focal area's strategic priorities and operational programme(s).

The evaluation will also assess the project's relevance in relation to UN Environment's mandate and its alignment with UN Environment's policies and strategies at the time of project approval. UN Environment's Medium Term Strategy (MTS) is a document that guides UN Environment's programme planning over a four-year period. It identifies UN Environment's thematic priorities, known as Subprogrammes (SP), and sets out the desired outcomes [known as Expected Accomplishments (EAs)] of the SubProgrammes. The evaluation will assess whether the project makes a tangible/plausible contribution to any of the EAs specified in the MTS 2014-2017 and MTS 2010-2013 and/or outputs in the PoW 2010-2011. PoW 2012-2013 and PoW 2015-2016. The magnitude and extent of any contributions and the causal linkages should be fully described.

The evaluation should assess the project's alignment / compliance with UN Environment's policies and strategies. The evaluation should provide a brief narrative of the following:

1. *Alignment with the Bali Strategic Plan (BSP)*[13]. The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UN Environment BSP.

2. *Gender balance*. Ascertain to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation. Are the project intended results contributing to the realization of international GE (Gender Equality) norms and agreements as reflected in the UN Environment Gender Policy and Strategy, as well as to regional, national and local strategies to advance HR & GE?

3. *Human rights based approach (HRBA) and inclusion of indigenous peoples issues, needs and concerns*. Ascertain to what extent the project has applied the UN Common Understanding on HRBA. Ascertain if the project is in line with the UN Declaration on the Rights of Indigenous People, and pursued the concept of free, prior and informed consent.

4. *South-South Cooperation.* This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

5. *Safeguards*. Whether the project has adequately considered environmental, social and economic risks and established whether they were vigilantly monitored. Was the safeguard management instrument completed and were UN Environment ESES requirements complied with?

Based on an analysis of project stakeholders, the evaluation should assess the relevance of the project intervention to key stakeholder groups.

Achievement of Outputs

The evaluation will assess, for each component, the projects' success in producing the programmed outputs (products and services delivered by the project itself) and milestones as per the ProDocs and any modifications/revisions later on during project implementation, both in quantity and quality, as well as their usefulness and timeliness.

Briefly explain the reasons behind the success (or failure) of the project in producing its different outputs and meeting expected quality standards, cross-referencing as needed to more detailed explanations provided under Section F (which covers the processes affecting attainment of project results). Were key stakeholders appropriately involved in producing the programmed outputs?

Effectiveness: Attainment of Objectives and Planned Results

The evaluation will assess the extent to which the project's objectives were effectively achieved or are expected to be achieved.

The **Theory of Change** (ToC) of a project depicts the causal pathways from project outputs (goods and services delivered by the project) through outcomes (changes resulting from the use made by key stakeholders of project outputs) towards impact (long term changes in environmental benefits and living conditions). The ToC will also depict any intermediate changes required between project outcomes and impact, called 'intermediate states'. The ToC further defines the external factors that influence change along the major pathways; i.e. factors that affect whether one result can lead to the next. These external factors are either drivers (when the

[13] http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf

project has a certain level of control) or assumptions (when the project has no control). The ToC also clearly identifies the main stakeholders involved in the change processes.

The evaluation will reconstruct the ToC of the project based on a review of project documentation and stakeholder interviews. The evaluator will be expected to discuss the reconstructed TOC with the stakeholders during evaluation missions and/or interviews in order to ascertain the causal pathways identified and the validity of impact drivers and assumptions described in the TOC. This exercise will also enable the consultant to address some of the key evaluation questions and make adjustments to the TOC as appropriate (the ToC of the intervention may have been modified / adapted from the original design during project implementation).

The assessment of effectiveness will be structured in three sub-sections:

(b) Evaluation of the **achievement of outcomes as defined in the reconstructed ToC**. These are the first-level outcomes expected to be achieved as an immediate result of project outputs. For this project, the main question will be to what extent the project has contributed to the immediate outcomes: Institutional capacity to assess climate change risks and integrate them into national development policies strengthened; Adaptation planning in the coastal zone improved; Vulnerability of productive systems to increased floods reduced; and Resilience of coastal buffers to climate change increased and livelihoods improved.

(c) Assessment of the **likelihood of impact** using a Review of Outcomes to Impacts (ROtI) approach[14]. The evaluation will assess to what extent the project has to date contributed, and is likely in the future to further contribute, to [intermediate states], and the likelihood that those changes in turn to lead to positive changes in the natural resource base, benefits derived from the environment and human well-being. The evaluation will also consider the likelihood that the intervention may lead to unintended negative effects (project documentation relating to Environmental, Social and Economic. Safeguards)

Evaluation of the **achievement of the formal project overall objective, overall purpose, goals and component outcomes** using the project's own results statements as presented in the Project Document[15]. This sub-section will refer back where applicable to the preceding sub-sections (a) and (b) to avoid repetition in the report. To measure achievement, the evaluation will use as much as appropriate the indicators for achievement proposed in the Logical Framework (Logframe) of the project, adding other relevant indicators as appropriate. Briefly explain what factors affected the project's success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section F. Most commonly, the overall objective is a higher level result to which the project is intended to contribute. The section will describe the actual or likely **contribution** of the project to the objective.

The evaluation should, where possible, disaggregate outcomes and impacts for the key project stakeholders. It should also assess the extent to which HR and GE were integrated in the Theory of Change and results framework of the intervention and to what degree participating institutions/organizations changed their policies or practices thereby leading to the fulfilment of HR and GE principles (e.g. new services, greater responsiveness, resource re-allocation, etc.)

Sustainability and replication

Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition the sustainability of benefits. The evaluation should

[14] Guidance material on Theory of Change and the ROtI approach is available from the Evaluation Office.

[15] Or any subsequent **formally approved** revision of the project document or logical framework.

ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time. The reconstructed ToC will assist in the evaluation of sustainability, as the drivers and assumptions required to achieve higher-level results are often similar to the factors affecting sustainability of these changes.

Four aspects of sustainability will be addressed:

(d) *Socio-political sustainability.* Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and other key stakeholder awareness, interests, commitment and incentives to sustain the intended results of the project? Did the project conduct 'succession planning' and implement this during the life of the project? Was capacity building conducted for key stakeholders? Did the intervention activities aim to promote (and did they promote) positive sustainable changes in attitudes, behaviours and power relations between the different stakeholders? To what extent has the integration of HR and GE led to an increase in the likelihood of sustainability of project results?

Financial resources. To what extent are the continuation of project results and the eventual impact of the project dependent on financial resources? What is the likelihood that adequate financial resources[16] will be or will become available to use capacities built by the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?

Institutional framework. To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources, goods or services?

Environmental sustainability. Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? Are there any foreseeable negative environmental impacts that may occur as the project results are being up-scaled?

Catalytic role and replication. The *catalytic role* of UN Environment interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UN Environment also aims to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project has:

(e) *catalyzed behavioural changes* in terms of use and application, by the relevant stakeholders, of capacities developed;

provided *incentives* (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour;

contributed to *institutional changes*, for instance institutional uptake of project-demonstrated technologies, practices or management approaches;

contributed to *policy changes* (on paper and in implementation of policy);

contributed to sustained follow-on financing (*catalytic financing*) from Governments, private sector, donors etc.;

[16] Those resources can be from multiple sources, such as the national budget, public and private sectors, development assistance etc.

created opportunities for particular individuals or institutions ("*champions*") to catalyze change (without which the project would not have achieved all of its results).

Replication is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluation will assess the approach adopted by the project to promote replication effects and determine to what extent actual replication has already occurred, or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons?

Efficiency

The evaluation will assess the cost-effectiveness and timeliness of project execution. It will describe any cost- or time-saving measures put in place in attempting to bring the project as far as possible in achieving its results within its (severely constrained) secured budget and (extended) time. It will also analyse how delays, if any, have affected project execution, costs and effectiveness. Wherever possible, costs and time over results ratios of the project will be compared with that of other similar interventions. The evaluation will also assess the extent to which HR and GE were allocated specific and adequate budget in relation to the results achieved.

The evaluation will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency. For instance, the MoWRAM project; "*Rehabilitation of Prey Nup Reservoir*"; the MAFF project, "*Proper Management of Mangrove Forest Resources*"; CCCA[17] Coastal Component project.[18]

Factors and processes affecting project performance

Preparation and readiness. This criterion focuses on the quality of project design and preparation. Were project stakeholders[19] adequately identified and were they sufficiently involved in project development and ground truthing e.g. of proposed timeframe and budget? Were the project's objectives and components clear, practicable and feasible within its timeframe? Are potentially negative environmental, economic and social impacts of projects identified? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.? Were any design weaknesses mentioned in the Project Review Committee minutes at the time of project approval adequately addressed?

Project implementation and management. This includes an analysis of implementation approaches used by the project, its management framework, the project's adaptation to changing conditions and responses to changing risks including safeguard issues (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

[17] The objective of the CCCA Coastal Component is: "increased resilience of coastal communities and ecosystems to climate change through adaptation planning, demonstrated targeted local interventions and provision of practical learning experience in adaptation planning to the NCCC/CCD

[18] More synergies with recently completed projects are listed in pg. 41 of the project document

[19] Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or 'stake' in the outcome of the project. The term also applies to those potentially adversely affected by the project.

(f) Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project milestones, outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?

Evaluate the effectiveness and efficiency of project management and how well the management was able to adapt to changes during the life of the project.

Assess the role and performance of the teams and working groups established and the project execution arrangements at all levels.

Assess the extent to which project management responded to direction and guidance provided by the UN Environment Task Manager and project steering bodies

Identify operational and political / institutional problems and constraints that influenced the effective implementation of the project, and how the project tried to overcome these problems.

Stakeholder participation, cooperation and partnerships. The Evaluation will assess the effectiveness of mechanisms for information sharing and cooperation with other UN Environment projects and programmes, external stakeholders and partners. The term stakeholder should be considered in the broadest sense, encompassing both project partners and target users (such as Ministry of Environment (MOE); Cambodia Climate Change Alliance (CCCA); Ministry of Agriculture, Forestry and Fisheries (MAFF), Ministry of Water Resources and Meteorology (MoWRAM); local communities; and local organizations) of project products. The TOC and stakeholder analysis should assist the evaluators in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathways from activities to achievement of outputs, outcomes and intermediate states towards impact. The assessment will look at three related and often overlapping processes: (1) information dissemination to and between stakeholders, (2) consultation with and between stakeholders, and (3) active engagement of stakeholders in project decision making and activities. The evaluation will specifically assess:

(g) the approach(es) and mechanisms used to identify and engage stakeholders (within and outside UN Environment) in project design and at critical stages of project implementation. What were the strengths and weaknesses of these approaches with respect to the project's objectives and the stakeholders' motivations and capacities?

(h) How was the overall collaboration between different functional units of UN Environment involved in the project? What coordination mechanisms were in place? Were the incentives for internal collaboration in UN Environment adequate?

(i) Was the level of involvement of the Regional, Liaison and Out-posted Offices in project design, planning, decision-making and implementation of activities appropriate?

(j) Has the project made full use of opportunities for collaboration with other projects and programmes including opportunities not mentioned in the Project Document[20]? Have complementarities been sought, synergies been optimized and duplications avoided?

(k) What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during design and implementation of the project? This should be disaggregated for the main stakeholder groups identified in the inception report.

(l) To what extent has the project been able to take up opportunities for joint activities, pooling of resources and mutual learning with other organizations and networks? In particular, how useful are partnership mechanisms and initiatives to build stronger coherence and collaboration between participating organisations?

[20] Linkages with other projects detailed in Pg. 40-45 of the ProDoc

(m) How did the relationship between the project and the collaborating partners (institutions and individual experts) develop? Which benefits stemmed from their involvement for project performance, for UN Environment and for the stakeholders and partners themselves? Do the results of the project (strategic programmes and plans, monitoring and management systems, sub-regional agreements etc.) promote participation of stakeholders, including users, in environmental decision making?

Communication and public awareness. The evaluation will assess the effectiveness of any public awareness activities that were undertaken during the course of implementation of the project to communicate the project's objective, progress, outcomes and lessons. This should be disaggregated for the main stakeholder groups identified in the inception report. Did the project identify and make us of existing communication channels and networks used by key stakeholders? Did the project provide feedback channels?

Country ownership and driven-ness. The evaluation will assess the degree and effectiveness of involvement of government / public sector agencies in the project, in particular those involved in project execution and those participating in the project Steering Committee:

(n) To what extent have Governments assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various public institutions involved in the project?

How and how well did the project stimulate country ownership of project outputs and outcomes?

[Any other project-specific questions]

Financial planning and management. Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

(o) Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;

(p) Assess other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;

Present the extent to which co-financing has materialized as expected at project approval (see Table 1). Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluation will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 4).

Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

Analyse the effects on project performance of any irregularities in procurement, use of financial resources and human resource management, and the measures taken UN Environment to prevent such irregularities in the future. Determine whether the measures taken were adequate.

Supervision, guidance and technical backstopping. The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project

execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UN Environment has a major contribution to make.

The evaluators should assess the effectiveness of supervision, guidance and technical support provided by the different supervising/supporting bodies including:

(q) The adequacy of project supervision plans, inputs and processes;

The realism and candour of project reporting and the emphasis given to outcome monitoring (results-based project management);

How well did the different guidance and backstopping bodies play their role and how well did the guidance and backstopping mechanisms work? What were the strengths in guidance and backstopping and what were the limiting factors?

Monitoring and evaluation. The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The evaluation will assess how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

(r) *M&E Design*. The evaluators should use the following questions to help assess the M&E design aspects:

Arrangements for monitoring: Did the project have a sound M&E plan to monitor results and track progress towards achieving project objectives? Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the time frame for various M&E activities specified? Was the frequency of various monitoring activities specified and adequate?

How well was the project logical framework (original and possible updates) designed as a planning and monitoring instrument?

SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?

Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable? For instance, was there adequate baseline information on pre-existing accessible information on global and regional environmental status and trends, and on the costs and benefits of different policy options for the different target audiences? Was there sufficient information about the assessment capacity of collaborating institutions and experts etc. to determine their training and technical support needs?

To what extent did the project engage key stakeholders in the design and implementation of monitoring? Which stakeholders (from groups identified in the inception report) were involved? If any stakeholders were excluded, what was the reason for this? Was sufficient information collected on specific indicators to measure progress on HR and GE (including sex-disaggregated data)?

Did the project appropriately plan to monitor risks associated with Environmental Economic and Social Safeguards?

Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?

Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

M&E Plan Implementation. The evaluation will verify that:

- the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;
- PIR reports were prepared (the realism of the Task Manager's assessments will be reviewed)
- Half-yearly Progress & Financial Reports were complete and accurate;
- Risk monitoring (including safeguard issues) was regularly documented
- the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs.

The Consultant

Details about the specific roles and responsibilities of the consultant are presented in Annex 1 of these TORs. The consultant should have 10 to 15years of technical / evaluation experience, including of evaluation large, regional or global programmes and using a Theory of Change approach; and a broad understanding of large-scale, consultative assessment processes and factors influencing use of assessments and/or scientific research for decision-making.

The consultant will undertake data collection and analysis, and the preparation of the main report for the evaluation and ensure together that all evaluation criteria and questions are adequately covered.

By undersigning the service contract with UN Environment /UNON, the consultant certifies that he/she have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project's executing or implementing units.

Evaluation Deliverables and Review Procedures

The evaluation consultant will prepare an **inception report** (see Annex 2(a) of TORs for Inception Report outline) containing a thorough review of the project context, project design quality, a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.

It is expected that a large portion of the desk review will be conducted during the inception phase. It will be important to acquire a good understanding of the project context, design and process at this stage. The review of design quality will cover the following aspects (see Annex 7 for the detailed project design assessment matrix):

- Strategic relevance of the project
- Preparation and readiness;
- Financial planning;
- M&E design;
- Complementarity with UN Environment strategies and programmes;
- Sustainability considerations and measures planned to promote replication and up-scaling.

The inception report will present a draft, desk-based reconstructed Theory of Change of the project. It is vital to reconstruct the ToC *before* most of the data collection (review of progress reports, in-depth interviews, surveys etc.) is done, because the ToC will define which direct outcomes, drivers and assumptions of the project need to be assessed and measured – based on which indicators – to allow adequate data collection for the evaluation of project effectiveness, likelihood of impact and sustainability.

The inception report will also include a stakeholder analysis identifying key stakeholders, networks and channels of communication. This information should be gathered from the Project document and discussion with the project team. See annex 2 for template.

The evaluation framework will present in further detail the overall evaluation approach. It will specify for each evaluation question under the various criteria what the respective indicators and data sources will be. The evaluation framework should summarize the information available from project documentation against each of the main evaluation parameters. Any gaps in information should be identified and methods for additional data collection, verification and analysis should be specified. Evaluations/reviews of other large assessments can provide ideas about the most appropriate evaluation methods to be used.

Effective communication strategies help stakeholders understand the results and use the information for organisational learning and improvement. While the evaluation is expected to result in a comprehensive document, content is not always best shared in a long and detailed report; this is best presented in a synthesised form using any of a variety of creative and innovative methods. The evaluator is encouraged to make use of multimedia formats in the gathering of information e.g. video, photos, sound recordings. Together with the full report, the evaluator will be expected to produce a 2-page summary of key findings and lessons. A template for this has been provided in Annex?.

The inception report will also present a tentative schedule for the overall evaluation process, including a draft programme for the country visit and tentative list of people/institutions to be interviewed.

The inception report will be submitted for review and approval by the Evaluation Office before the any further data collection and analysis is undertaken.

The main evaluation report should be brief (no longer than 40 pages – excluding the executive summary and annexes), to the point and written in plain English. The report will follow the annotated Table of Contents outlined in Annex 2. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate. To avoid repetitions in the report, the authors will use numbered paragraphs and make cross-references where possible.

Review of the draft evaluation report. The evaluation consultant will submit a zero draft report to the UN Environment EO and revise the draft following the comments and suggestions made by the EO. Once a draft of adequate quality has been accepted, the EO will share this first draft report with the Task Manager, who will alert the EO in case the report would contain any blatant factual errors. The Evaluation Office will then forward the first draft report to the other project stakeholders, in particular the Task Manager and project team for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. It is also very important that stakeholders provide feedback on the proposed recommendations and lessons. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UN Environment EO for collation. The EO will provide the comments to the consultant for consideration in preparing the final draft report, along with its own views.

The evaluation consultant will submit the final draft report no later than 2 weeks after reception of stakeholder comments. (S)He will prepare a **response to comments**, listing those comments not or only partially accepted by them that could therefore not or only partially be accommodated in the final report. They will explain why those comments have not or only partially been accepted, providing evidence as required. This response to comments will be shared by the EO with the interested stakeholders to ensure full transparency.

Submission of the final evaluation report. The final report shall be submitted by Email to the Head of the Evaluation Office. The Evaluation Office will finalize the report and share it with the interested Divisions and Sub-programme Coordinators in UN Environment. The final evaluation report will be published on the UN Environment Evaluation Office web-site www.unep.org/eou.

As per usual practice, the UN Environment EO will prepare a **quality assessment** of the zero draft and final draft report, which is a tool for providing structured feedback to the evaluation consultant. The quality of the report will be assessed and rated against the criteria specified in Annex 3.

The UN Environment Evaluation Office will assess the ratings in the final evaluation report based on a careful review of the evidence collated by the evaluation consultant and the internal consistency of the report. Where there are differences of opinion between the evaluator and UN Environment Evaluation Office on project ratings, both viewpoints will be clearly presented in the final report. The UN Environment Evaluation Office ratings will be considered the final ratings for the project.

At the end of the evaluation process, the Evaluation Office will prepare a Recommendations Implementation Plan in the format of a table to be completed and updated at regular intervals by the Task Manager. After reception of the Recommendations Implementation Plan, the Task Manager is expected to complete it and return it to the EO within one month. (S)he is expected to update the plan every six month until the end of the tracking period. As this is a Terminal Evaluation, the tracking period for the implementation of recommendations will be 18 months, unless it is agreed to make this period shorter or longer as required for realistic implementation of all evaluation recommendations. Tracking points will be every six months after completion of the implementation plan.

Logistical arrangements

This Terminal Evaluation will be undertaken by an independent evaluation consultant contracted by the UN Environment Evaluation Office. The consultant will work under the overall responsibility of the UN Environment Evaluation Office and will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultant's individual responsibility to arrange for their travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize online surveys, and any other logistical matters related to the assignment. The UN Environment Task Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultant to conduct the evaluation as efficiently and independently as possible.

Schedule of the evaluation

Table 7 below presents the tentative schedule for the evaluation.

Table 7: Tentative schedule for the evaluation

Milestone	**Deadline**
Inception Report	10th October 2016
Evaluation Mission – 6 days (Cambodia)	17th – 22nd October 2016
Telephone interviews, surveys etc.	24th – 26th October 2016
Zero draft report	7th November 2016
First draft	14th November 2016
Draft Report shared with UN Environment Task Manager	21st November 2016
Draft Report shared with project team	28th November 2016
Draft Report shared with stakeholders	5th December 2016
Final Report	23rd December 2016

ANNEX II. EVALUATION FRAMEWORK METHODOLOGY

This evaluation matrix represents the core aspect of the project is structured along the five evaluation criteria (1) Strategic Relevance; (2) Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) Sustainability and replication; (4) Efficiency; and (5) Factors and processes affecting project performance). The evaluation matrix below serves as a general guide for the TE. It provides directions for the evaluation; particularly for the collection of relevant data. It is designed to provide overall direction for the evaluation and shall be used as a basis for interviewing people and reviewing project documents.

Evaluated Component (Key Question)	Sub-question	Range of potential Indicators	Sources	Data Collection Method
Evaluation Criteria: (1) Strategic Relevance (REL) ***– How strategically relevant was the Project Design at the outset and during subsequent revisions (e.g.: baseline assessment in 2013)?***				
To what extent did the project contribute to: (i) national mechanisms for collecting, managing and using data on climate change, (ii) national development plans and polices on issues of climate change adaptation, (iii) improved multi-sectoral/departmental integration of these plans and policies? Were the project's objectives and implementation strategies consistent with global, regional and national coastal environmental and climate resilient issues and needs? Was the project aligned with UN Environment and GEF strategies in mind as well as alignment to relevant global processes? Did the project consider gender related issues in its design	**1. Has the VAAP-LDCF project, and its focused project activities, helping to address your country's ICZM/CCA needs?** **2. Have the planned activities and expected results and outcomes been designed to be consistent with the overall Cambodian national goals?** **3. Are the VAAP-LDCF project results consistent with what your country intended at the outset of the project?** **4. To what extent are the VAAP-LDCF project results complementary to other donor activities / interventions?** **5. Should the VAAP-LDCF project activities / results been adjusted, eliminated or new ones added in light of new needs, priorities and policies in Cambodia?**	REL 1 – donor complementarity • Level of coherence between project objectives and those of donor agency mandates on ICZM/CCA etc. • Degree to which project was coherent and complementary to other donor programming in coastal adaptation and coastal livelihood security issues. REL 2 – national priorities • Degree to which the project supports national climate change and ICZM objectives, priorities, policies and strategies; • Degree of coherence between the project and national priorities, policies and strategies in the area of ICZM/CCA etc; • Level of involvement and capacity of Government officials and other partners into the project. REL 3 – national context • Extent to which the project is actually implemented in line with financial commitments to ICZM/CCA at the national level. • Strength of the link between expected results from the Project and the needs of target beneficiaries • Degree of involvement and inclusiveness of beneficiaries and stakeholders in Project design and implementation	• Project documents • National policies and strategies or related to coastal environment and climate change more generally • Key government officials and other partners • Cambodian Government websites • Key government officials and other partners • MTR • UN Environment reports (PIRs etc.)	Documents analyses Interviews with government officials and other partners Interviews with Project Beneficiaries Data analysis

Evaluated Component	Sub-question	Range of potential Indicators (select most applicable)	Sources	Data Collection Method
Evaluation Criteria: (2) Attainment of objectives and planned result (EFFECT) ***To what extent have the expected outcomes of the VAAP/DCF been achieved?***				
How successful was the project in creating an inclusive process to undertake coastal zone adaptation planning? To what extent has the project: (i) succeeded in developing climate resilience and adaptation practices for the agriculture sector leading to improvement of livelihoods, (ii) encourage ownership of these efforts with the local communities and other interest groups, and (iii) put in place measures to encourage replicability and sustainability of these efforts? To what extent has the project achieved: (i) sustained results and upscaling by local communities and provincial and national governments, (ii) sustainability of medium to long term measures implemented in the project e.g. dykes and lake deepening, and (iii) are there sufficient measures in place to enable and sustain these efforts?	**1. To what extent has the VAAP-LDCF project enhanced Cambodia's institutional capacity for ICZM and CCA?** **2. To what extent have the planned VAAP-LDCF direct outcomes been achieved?** 3. **Has the VAAP-LDCF project delivered the identified outcomes?** **4. To what extent does the VAAP-LDCF project's contribution improve livelihood security and poverty reduction for coastal communities?** **5. To what extent does the VAAP-LDCF project's contribution focus on gender equality (planned or unplanned)?**	EFFECT 1 – project design Level of coherence between Project expected results and Project design internal logic; Level of coherence between Project implementation approach and Project design; Completeness of risk identification and assumptions during Project planning EFFECT 2 – project outcomes Increased institutional support at national level. Enhanced coastal community resilience Quality of outcomes EFFECT 3 – project progress Change in social response to coastal adaptation needs and approaches; Change in capacity for awareness raising Change in capacity in implementation and enforcement Change in capacity in mobilizing resources EFFECT 4 – project mainstreaming Delivered poverty reduction Improved gender equality	• Project documents • National policies and strategies to implement ICZM/CCA or related to the coastal environment more generally • Key government officials and other partners • Cambodian Government websites • Key government officials and other partners • MTR • UN Environment reports (PIRs etc.)	Documents analyses Interviews with government officials and other partners Interviews with Project Beneficiaries Data analysis Research findings

Evaluated Component	Sub-question	Range of potential Indicators (select most applicable)	Sources	Data Collection Method
Evaluation Criteria: (3)Efficiency - How efficiently is the project implemented?				
Was the Project support channelled in an efficient way? How efficient were partnership arrangements (including Project Management Committees) in terms of implementing the Project? What new coordination and communication mechanisms are in place to ensure a good flow of information and how could these be improved? How efficient was the project in terms of timeliness (project implementation issues - delays, extensions, etc.).	**Do you believe (based upon available evidence) that the activities undertaken were implemented cost efficiently when compared to alternatives or other projects of a similar nature?** **Did the VAAP-LDCF project activities that were implemented overlap or duplicate other similar interventions taking place in Cambodia (funded nationally and/or by other donors)?** **How efficient was the input from the VAAP-LDCF project in aiding effective resolution of ICZM /CCA related issues that were presented? Are there specific examples that demonstrate your reasoning on how the project can improve its efficiency?**	EFFICIENCY 1 – financial spend What was the level of discrepancy (if any) between planned and utilized financial expenditures per outcome; Cost spend in view of results achieved compared to costs of similar projects from other donors; Cost associated with delivery mechanisms and management structures compared to alternatives; EFFICIENCY 2 – project implementation quality Adequacy of pilot intervention choices in view of existing context, infrastructure and cost; Occurrence of change in Project design / implementation approach (i.e. restructuring) when needed to improve project efficiency; Number/quality of analyses done to assess local capacity potential and absorptive capacity. EFFICIENCY 3 – project feedback Existence, quality and use of M&E, feedback and dissemination mechanism to share findings, lessons learned and recommendation on effectiveness of project design;	• Project documents • National policies and strategies to implement ICZM/CCA or related to the coastal environment more generally • Key government officials and other partners • Cambodian Government websites • Key government officials and other partners • MTR • UN Environment reports (PIRs etc.)	Documents analyses Interviews with government officials and other partners Interviews with Project Beneficiaries Data analysis Research findings

Evaluated Component	Sub-question	Range of potential Indicators (select most applicable)	Sources	Data Collection Method
Evaluation Criteria: (4) Factors and processes affecting project performance (IMPACT) - ***What are the potential and realized impacts of activities carried out in the context of the Project?***				
How successful was the project in creating an inclusive process to undertake coastal zone adaptation planning? Has the project outcome helped leverage on existing or future projects and efforts? To what extent has the project: (i) succeeded in developing climate resilience and adaptation practices for the agriculture sector leading to improvement of livelihoods, (ii) encourage ownership of these efforts with the local communities and other interest groups, and (iii) put in place measures to encourage replicability and sustainability of these efforts? How successful was the project in engaging stakeholders outside of the government system (i.e. NGOs, universities and research bodies, and local community groups) in efforts to increase resilience to coastal buffers through ecosystem-based coastal protection?	**1. How well has the VAAP-LDCF and its defined interventions been communicated to all governmental / institutional stakeholders in Cambodia and what challenges were faced to address this?** **2. Are there any factors (social/political/environmental/ physical) that influenced or affected the achievement or non-achievement of the stated VAAP outputs/ results?** **3. Have VAAP activities made, or are likely to make, communities more resilient and less vulnerable to climate change impacts on the coast? If so how? What is the likelihood of replication or scaling up the activities within the project to other areas or within the pilot areas?**	IMP1 – communication and collaboration Clear lines documented communication and feedback with other government bodies. IMP2 – external factors Change to the quantity and strength of barriers such as change in; • Lack of community-level stakeholder capacity and experience to develop ICZM/CCA responses. • Insufficient knowledge of coastal processes to ensure sustainable resources are available. • Absence of scientific baseline coastal assessment and monitoring data. • Evidence of change at project level in light of external factors to enhance impact. IMP3 – community resilience Evidence of enhanced community resilience in coastal provinces. Evidence of community feeling safer/more secure from climate impacts. Evidence of feedback loop with community with regards to coastal planning.	• Project documents • National policies and strategies to implement ICZM/CCA or related to the coastal environment more generally • Key government officials and other partners • Cambodian Government websites • Key government officials and other partners • MTR • UN Environment reports (PIRs etc.)	Documents analyses Interviews with government officials and other partners Interviews with Project Beneficiaries Data analysis Research findings

Evaluated Component	Sub-question	Range of potential Indicators (select most applicable)	Sources	Data Collection Method
Evaluation Criteria: (5) Sustainability and replication (SUST); - Are the initiatives and results of the Project allowing for continued benefits?				
How successful was the project in creating an inclusive process to undertake coastal zone adaptation planning? Has the project outcomes helped to leverage on existing or future projects and efforts? To what extent has the project achieved (i) sustained results and upscaling by local communities, provincial and/or national governments, (ii) sustainability of medium to long term measures implemented in the project e.g. dykes and lake deepening, and (iii) are there sufficient measures in place to enable and sustain these efforts?	1. **What evidence so far have you seen to suggest that the actions taken by the project will be sustained now that the VAAP-LDCF project has finished?**	SUST1 – building sustainability Evidence/Quality of a sustainability strategy; Evidence/Quality of steps taken for sustainability; Level and source of future financial support to be provided to relevant sectors and activities after Project termination? Level of recurrent costs after completion of Project and funding sources for those recurrent costs; Existence of a strategy for financial sustainability of the project actions and activities; SUST2 – CCA institutionalisation and political sustainability Degree to which Project activities and results have been taken over by local counterparts or institutions/ organizations; Level of financial support to be provided to relevant sectors and activities by Cambodian stakeholders after Project end; Number/quality of replicated initiatives at national / provincial level; SUST3 – harmonisation benefits Harmonization benefits clearly communicated Harmonization felt at sector level and benefits at donor level. Activities undertaken by the recipient communities that don't need external financial assistance SUST4 – project mainstreaming Evidence of delivered poverty reduction at local level with improved gender equality	• Project documents • National policies and strategies to implement CDM or related to environment more generally • Key government officials and other partners • CDEMA website • Key government officials and other partners	Documents analyses Interviews with government officials and other partners Interviews with Project Beneficiaries Data analysis Research findings

ANNEX III. RESPONSE TO STAKEHOLDER COMMENTS RECEIVED BUT NOT (FULLY) ACCEPTED BY THE EVALUATORS

Paragraph / section	Stakeholder comment[21]	Consultant response
Exec Summary (page xi)	"The schemes continued under VAAP and are still working – so around six or more cycles have been made"	Minor change made – the wording does not imply any major change is needed, it's just an observation that within the 2 cycles, it's difficult to show tangible evidence of change.
Exec Summary (page x)	"Guides and manuals were done a part of CARP both in Khmer and English"	Evidence of this received – text updated
Page 37 (Table 5.4) Section 5.5	Financial - The background for these ratings are not clear to me. In particular when those are below "S", I think a brief reference needs to be provided in above text.	As stated in the text, this format is requested from the TOR and I find it a little cumbersome – putting additional clarification text almost negates the need for the table, so I recommend this table remains for now.
Section 5.1 and all Evaluation Score Ratings throughout	"I wonder if it would be worth (for this and all below ratings) to provide just one or two sentences summarizing the rationale for the rating provided. In some cases it is obvious, whereas in others I don't think it is 100% clear how the rating selected links to the analysis. This can be done either in the main text or in the summary table (see comment on this below though)"	Updated however Section 5.1.4 (and others) was purposely inserted to address this point – a revised header of "sub-evaluation rating) is included, and the original text in Section 5.1.4 has been moved into the overall scoring box instead.
Original Para 86 (page 26)	"Vulnerability and risk assessment of the demonstration sites was made under CARP in 2012. As the training in vulnerability and adaption planning was a learning by doing process it could not be finalised early on in the project"	Accepted upon review of CARP documentation sent through on 10 Jan 2017 – the paragraph is now deleted
Original Para 90 (page 27)	"Which part of the dyke – the rehabilitated part of the dyke or other parts?"	Uncertain of the exact location so all I can declare is that "a section" of the dyke was overtopped.
Original Para 101 (page 29)	"Hydrodynamic modelling was conducted as part of the shoreline study and a chapter discuss risk of	Whilst this is presented within the Shoreline Study report (2014) there is still no evidence however of this important information being

[21] Some parts modified by the Evaluation Office

	overtopping of dyke"-	relayed into the actual engineering design drawings of the dyke rehabilitation works
Original Para 102 (page 29)	"it would be valuable to know the technical background/expertise of these persons to understand this perception"	This information is difficult to attain at this juncture of the report and so the sentence is adapted slightly instead.
Original Para 168 (page 48)	"They already have a functioning unit to do this kind of work"	They may have a unit but whether it functions with staff who are properly trained is not certain
Section 5.9.2	"See on the rating of TM and FMO. Seems to be countered by this statement"?	Not certain whether I agree with this, no change made.
Section 6 Conclusion	Overall, this reads a lot more positive than above? At least this is my feeling when reading it immediately after the previous section.	I believe that the blend of observations and compliments is suitable within Section 5 to warrant the phraseology used in Section 6. Some alterations in grammar shall be made and some points in Section 5 are deleted with I agree needed softening, but in essence, I am content with the text presented.
Page 57 (Original Para 213)	Original Lesson 6 – "This function is already established with a team under the Polder User Committee"	Whist there may be a "function" in existence, there is no evidence of proper engineering monitoring and maintenance training and surely this would be of value in the long term?)
Page 58 (Original Para 216)	"It seems to work well in the demonstration sites"	I agree at the smaller scale, but i personally would like to see examples of this being up-scaled at a larger scale, of which there are sadly no working examples – hence this point remains and is not deleted.
Page 57 - Lesson 6 (new Para 219)	"This was done under CARP under implementation by Ministry of Agriculture. In the demonstration sites the organisation of interested farmers was made into Livestock Interest Groups and primarily based on the guideline for Agriculture Association Establishment of MAFF"	Noted and updated however, I still see no real continuity evidence and effort is still needed to build on and adapt good starter initiatives set up by carp.
Page 58 (new Para 224) – New Recommendation 1	"This has actually been done by preparing a concept note for continuation and expansion in the coastal area for GCF funding. However, this is still awaiting response form MoE also including demonstration activities in Kep and Kampot and implementation a part of adaptation plans".	This is good news to hear, but as it still appears quite embryonic and with no formal response from MOE I propose that no further mention is given to this new proposal in this recommendation.

ANNEX IV. EVALUATION ITINERARY AND STAKEHOLDERS INTERVIEWED

Time	Description	Location
Mon 17 Oct 2016		
09.00am-12.00pm	Round table group meeting with project management team (H.E Long Heal PSC's Chairman, Dr. Vann Monyneath, National Project Coordinator and Mr. Meas Rithy, Project Manager)	Department of Marine and Coastal Zone Conservation, Ministry of Environment)
15.00-17.00pm	Individual dialogue with H.E Chhim Sokhun, PSC member and Deputy Director General, Ministry of Land Management Urban Planning and Construction (MLMUPC)	MLMUPC Office
Tue 18 Oct 2016		
09.00-10.00am	Individual dialogue with , H.E Dr. Tin Punlok, PSC Member and Secretary General Sustainable Development Council	CCCA Office/MOE
10.00-11.00am	Meeting with Mr. Julien Chevillard, Trust Fund Administrator/CCCA	CCCA Office/MOE
14.30-16.30pm	Group Meeting with Implementing partners Mrs. Kaing Khim (FiA), Dr. Mak Soeun (MoAFF), Dr. Khieu Borin (CELAGRID), Dr. Seng Vang (CARDI)	Department of Marine and Coastal Zone Conservation, Ministry of Environment)
Wed 19 Oct 2016		
7.00-12.00pm	Travel from PHN to Koh Kong province (rent car)	Koh Kong province
12.00-14.00pm	Visit and Lunch at Peam Krasoap Community	Demonstration site, Peam Krasoap Commune
14.00-15.00pm	Individual interview with beneficiaries HHs at Peam Krasoap Community (IFS HHs, Saving HHs, FiA Members and Poor HHs)	Demonstration site, Peam Krasoap Commune
15.30-17.00pm	Visit rehabilitated pond and group interview with beneficiaries HHs at Tuolkoki Community (IFS HHs, Saving HHs and Poor HHs)	Demonstration site, Tuolkoki Commune
Thu 20 October 2016		
09.00-12.00pm	Group Meeting with key technical working group members including: • Deputy Provincial Governor/ Chairman of technical working group • Director/ representative of department of Water Resources and Meteorology • Director/ representative of department of Agriculture, Forestry and Fishery • Director/ representative of department of Environment • Director/ representative of department of Land Management Urban Planning and Construction	Koh Kong City Hall
12.00-14.00pm	Check out hotel and have Lunch	Koh Kong Town
14.00-18.00pm	Travel from KohKong to Preah Sihanouk province(SHV)	SHV province
Fri 21 Oct 2016		
09.00-12.00pm	Group Meeting with key technical working group including: • Deputy Provincial Governor/ Chairman of technical working group	SHV City Hall

	• Director/ representative of department of Water Resources and Meteorology • Director/ representative of department of Agriculture, Forestry and Fishery • Director/ representative of department of Environment • Director/ representative of department of Land Management Urban Planning and Construction	
12.00-13.30pm	Lunch	SHV Town
13.30-14.00pm	Travel to Preynob, demonstration site	
14.00-15.00pm	Group meeting with Polder community. Visit polder rehabilitation 3.5 km and Dike and Teap Tos replanting areas if time and weather allows.	Polder office Preynop district
15.30-17.00	Group interview with beneficiaries HHs at target commune O UkNhaheang, PreyNop and Tuoltotoeng (IFS HHs, Saving HHs, and Poor HHs)	PreyNop Commune UkNhaheang Commune Tuoltotoeng Commune
Sat 22 Oct 2016		
	Evaluation team travel back to PHN	
15.00-17.00pm	Debriefing to National Coordinator	MoE office

Project Steering Committee (PSC) (interviewed in person or via email/online)		
1. H.E LONH Heal	General Director of the Technical Department of the Ministry of Environment	**Chairman**
2. Mr. MEAS Sarim	General Deputy Director of the General Department of Local Administration of Ministry of Interior	**Vice-Chairman**
3. Dr. VANN Monyneath	General Deputy Director of the Ministry of Environment and Representative of the Coastal Committee	**Permanent Vice-Chairman**
4. Dr. TIN Ponlok	General Deputy Director of the General Department of Administration for Nature Conservation and Protection, Ministry of Environment, and Head of Trust Fund	**Member**
5. Dr. HEAN Van Horn	General Deputy Director of the Ministry of Agriculture, Forestry and Fisheries	**Member**
6. Mr. MAO Hak	General Deputy Director of the Ministry of Water Resource and Metrology	**Member**
7. Mr. CHHEM Sokun	General Deputy Director of the Ministry of Land Management, Urban Planning and Construction	**Member**
8. Mr. PHAI Phan	Deputy Governor of Preah Sihanouk Province	**Member**
9. Mr. SAUT Yea	Deputy Governor of Kampot Province	**Member**
10. Mr. SAY Socheat	Deputy Governor of Koh Kong Province	**Member**
11. Mr. HIEM Khuon	Deputy Governor of Kep Province	**Member**
12. Mr, Lars Christiansen	Representative of the United Nations Environment Project	**Member**
13. Mr. SRENG Sophal	**Coastal Coordination Unit**	**Secretary**

Name	**Designation**	**Role in the Project**
Mr. Jens Erik Lyngby	Project Team	Senior Technical Advisor (STA)

Mr. Meas Rithy	Project Team	Project Manager
Mr. Sok Seyla	Project Team	Accountant Manager
Mr. Sreng Sophal	Project Team	Livelihood Coordinator
H.E Ing Chhay	KEP Provincial Working Group	Chairman and Deputy Governor
H.E South Yea	Kampot Provincial Working Group	Chairman and Deputy Governor
H.E Say Socheat	Koh Kong Provincial Working Group	Chairman and Deputy Governor
H.E ChhinSengNguon	Preah Sihanouk Provincial Working Group	Chairman and Deputy Governor
Mr. Mon Phalla	Department of Environment, Koh Kong	Deputy Chairman and Director
Mr. SamuthSothearith	Department of Environment, Preah Sihanouk	Deputy Chairman and Director
Mr. SuyThea	Department of Environment, Kampot	Deputy Chairman and Director
Mr. ImPanharith	Department of Environment, KEP	Deputy Chairman and Director
H.E Kheav Borin	CelAgrid Provider	Director
Dr. Mak Soeurn	Ministry of Agriculture/ Partnership on Saving Group project	Director
Mr.Huy Sok Chea	CelAgrid Staff	Technical Staff
Mrs. Kaing Khim	Fishery Administration, MAFF	Deputy General Director

Technical Working Groups by Province (Visited and briefly engaged during the Mission – 16.10.16 to 23.10.16)				
Province	**Technical Working Group**			
	Name	**Institution**	**Position**	**Working group position**
Preah Sihanouk	***Chhin SengNguon***	Provincial Hall	Provincial Deputy Governor	Chief
	Samuth Sothearith	DoE	Director	Vice Chief
	Tith Vuthy	Prey Nub District	District Governor	Vice Chief
	Chim Kalyany	DoE	Deputy Director	Secretary
	Duong SamAth	Fishery Contenment	Director	Member
	Kev Pha	DAFF	Director	Member
	Sou Sok	DLMUC	Director	Member
	Ang ChanDara	DWRAM	Director	Member
	Em Pheap	Provincial Development Unit	Director	Member
	Prak Visal	Prvincial Admin Unit	Deputy Director	Member
	Pen SamBou	Prey Nub Commune	Chief	Member
	Prak SaRoem	Sammaky Commune	Chief	Member
	Hak San	ToeLaork Commune	Chief	Member
	Phoeun Nam	ToekThla Commune	Chief	Member
	Kea Vou	O OuknhaHeng commune	Chief	Member
	Soeng SaReth	TuolTorToeng Commune	Chief	Member
Koh Kong				
	Say SuCheat	Provincial Hall	Provincial Deputy Governor	Chief
	Mon Phalla	DoE	Acting Director	Perminent vice chief
	Sao SinThuon	Provincial Adminstration Unit	Deputy Director	Vice Chief
	Chuon BunTHoeut	DAFF	Agronomy vice chief office	Member
	Lung KoemTha	DLMUC	Vice Chief office of LMUC	Member
	Irv Vannara	DWRAM	Deputy Director	Member

	Pen Vanna	Mondul Seyma District	Deputy District Governor	Member
	Yem Yan	Peam Krasaop commune	Chief	Member
	Khoem SaNeth	KuolKorki commune	Chief	Member
	Hun Marady	DoE	Deputy director and CRC coordinator	Secretary
	Ul Ran	Peam Krasaop wildlife Sanctuary	Director	Member
	Nei BroHorsSaRith	DoE	vice Chief office of conservation	Member
	Nou Nguy	Fishery Devision Peam Krasoap	vice Chief	Member

ANNEX V. SUMMARY OF CO-FINANCE AND A STATEMENT OF PROJECT EXPENDITURE BY ACTIVITY

Co-financing (Type/Source)	UN Environment Allocation (US$1,000)		Government* (US$1,000)		CCCA-CARP** (US$1,000)		Total (US$1,000)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
– Grants (cash)			1,680	1,680	2,200	2,200	3,880	3,880
– Loans							2,200	2,200
– Credits								
– Equity investments								
– In-kind support			200	315			200	315
– Other (*) - -								
Totals	**0**	**0**	**1,880**	**1,995**	**2,200**	**2,200**	**3,980**	**4,195**

***** *MoWRAM (1,400k); MAFF (400k) and MOE (195k) • CARP/CCCA: $2.2 million planned;*

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

QUARTERLY EXPENDITURE STATEMENT (US$)											
Project title:		Vulnerability Assessment and Adaptation Programme for Climate Change within the Coastal Zone of Cambodia considering Livelihood Improvement and Ecosystems									
Project number:		LDL/PMS: 3890									
IMIS number		LDL-2328-2724-4C19									
Project executing partner:		Ministry of Environment, Cambodia									
Project implementation period:		From:	1-Oct-11				To:	31-Mar-16			
Reporting period:		From:	1-Jan-16				To:	31-Mar-16			
UNEP Budget Line		GEF-approved budget		Actual expenditures incurred*							Cummulative unspent balance to-date
		Total project budget	Current year budget	Cummulative expenditures from previous period	Jan-Mar Qtr 1	Apr-Jun Qtr 2	Jul-Sep Qtr 3	Oct-Dec Qtr 4	Current year total	Cummulative expenditures to-date	
10		A	B	C	D	E	F	G	H=D+E+F+G	I=C+H	J=A-I
1101	Assistant coordinator	55250.00	4000.00	51250.00	4000.00	0.00	0.00	0.00	**4000.00**	**55250.00**	**0.00**
1103	National Project Coordinator	27625.00	2000.00	25625.00	2000.00	0.00	0.00	0.00	**2000.00**	**27625.00**	**0.00**
1201	NC - Governance Expert (data network)	4800.00	0.00	4800.00	0.00	0.00	0.00	0.00	**0.00**	**4800.00**	**0.00**
1202	IC - Climate Change Specialist	47250.00	0.00	47250.00	0.00	0.00	0.00	0.00	**0.00**	**47250.00**	**0.00**
1203	NC-Climate Change Specialist	25500.00	0.00	25500.00	0.00	0.00	0.00	0.00	**0.00**	**25500.00**	**0.00**
1204	IC - Water resources modeling	15250.00	0.00	15250.00	0.00	0.00	0.00	0.00	**0.00**	**15250.00**	**0.00**
1205	NC - Meteorologist	6000.00	0.00	6000.00	0.00	0.00	0.00	0.00	**0.00**	**6000.00**	**0.00**
1206	NC - Hydrologist	6600.00	0.00	6600.00	0.00	0.00	0.00	0.00	**0.00**	**6600.00**	**0.00**
1207	NC - Policy expert	11000.00	0.00	11000.00	0.00	0.00	0.00	0.00	**0.00**	**11000.00**	**0.00**
1208	NC - Land use/GIS specialist	13440.00	0.00	13440.00	0.00	0.00	0.00	0.00	**0.00**	**13440.00**	**0.00**
1209	NC - knowledge management expert	10200.00	0.00	10200.00	0.00	0.00	0.00	0.00	**0.00**	**10200.00**	**0.00**
1210	IC - STA	219997.68	3102.68	216895.00	3103.00	0.00	0.00	0.00	**3103.00**	**219998.00**	**(0.32)**
1211	IC - DTA	30600.00	0.00	30600.00	0.00	0.00	0.00	0.00	**0.00**	**30600.00**	**0.00**
1212	IC - Coastal modeller	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**	**0.00**
1213	IC - Shoreline management expert	17500.00	0.00	17500.00	0.00	0.00	0.00	0.00	**0.00**	**17500.00**	**0.00**
1214	IC - Early warning specialist	5000.00	0.00	5000.00	0.00	0.00	0.00	0.00	**0.00**	**5000.00**	**0.00**
1215	NC - socioeconomist /rural development expert	10200.00	0.00	10200.00	0.00	0.00	0.00	0.00	**0.00**	**10200.00**	**0.00**
1216	NC - governance specialist	7500.00	0.00	7500.00	0.00	0.00	0.00	0.00	**0.00**	**7500.00**	**0.00**
1217	NC - Land use expert	16900.00	0.00	16900.00	0.00	0.00	0.00	0.00	**0.00**	**16900.00**	**0.00**
1218	IC - Land use and zoning specialist	27380.00	0.00	27380.00	0.00	0.00	0.00	0.00	**0.00**	**27380.00**	**0.00**
1219	NC - Shoreline Management Expert	8970.00	0.00	8970.00	0.00	0.00	0.00	0.00	**0.00**	**8970.00**	**0.00**

1220	IC - ecosystem services specialist/mangroves	27500.00	0.00	27500.00	0.00	0.00	0.00	0.00	**0.00**	**27500.00**	**0.00**
1221	NC - mangrove specialist	15120.00	0.00	15120.00	0.00	0.00	0.00	0.00	**0.00**	**15120.00**	**0.00**
1301	Finance Assistant	33150.00	2400.00	30750.00	2400.00	0.00	0.00	0.00	**2400.00**	**33150.00**	**0.00**
1302	Driver	6000.00	1000.00	5000.00	1000.00	0.00	0.00	0.00	**1000.00**	**6000.00**	**0.00**
1303	Secretary/Admin	12000.00	2000.00	10000.00	2000.00	0.00	0.00	0.00	**2000.00**	**12000.00**	**0.00**
1304	Livelihood Coordinator	24000.00	4000.00	20000.00	4000.00	0.00	0.00	0.00	**4000.00**	**24000.00**	**0.00**
1601	Travel for project management	27490.86	1038.50	26452.51	1,360.50	0.00	0.00	0.00	**1360.50**	**27813.01**	**(322.15)**
1602	Travel for international consultants (technical assistanc	84905.72	4940.00	79965.72	4,478.00	0.00	0.00	0.00	**4478.00**	**84443.72**	**462.00**
1603	National Consultants Travel DSAs	38145.14	0.00	38145.14	0.00	0.00	0.00	0.00	**0.00**	**38145.14**	**0.00**
2201	Subcontract dyke rehabilitation (commune council)	115678.00	0.00	115678.00	0.00	0.00	0.00	0.00	**0.00**	**115678.00**	**0.00**
2202	Sub contract dyke stabilisation (Prey nup) (commune cc	11281.25	0.00	11281.25	0.00	0.00	0.00	0.00	**0.00**	**11281.25**	**0.00**
2203	Sub-Contract commune councils (livelihoods activities F	60909.00	0.00	60909.00	0.00	0.00	0.00	0.00	**0.00**	**60909.00**	**0.00**
2204	Sub-contract alternative livelihoods (Peam krasop)	43638.50	0.00	43638.50	0.00	0.00	0.00	0.00	**0.00**	**43638.50**	**0.00**
2205	Sub-contract National TV and Telecom agencies	10300.00	5200.00	5100.00	5135.00	0.00	0.00	0.00	**5135.00**	**10235.00**	**65.00**
2206	Sub-contract mangrove restoration	71226.00	0.00	71226.00	0.00	0.00	0.00	0.00	**0.00**	**71226.00**	**0.00**
2301	Subcontract rural engineering firm (dike feasibility and EIA)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**	**0.00**
2302	Sub-contract installation of water tanks	10000.00	0.00	10000.00	0.00	0.00	0.00	0.00	**0.00**	**10000.00**	**0.00**
2303	Subcontract rural engineering firm (rapid feasibility and ESIA shallow lake)	15972.00	0.00	15972.00	0.00	0.00	0.00	0.00	**0.00**	**15972.00**	**0.00**
2304	Sub-contract deepening shallow lake	118448.00	0.00	118448.00	0.00	0.00	0.00	0.00	**0.00**	**118448.00**	**0.00**
3201	Private sector training workshop	7490.00	0.00	7490.00	0.00	0.00	0.00	0.00	**0.00**	**7490.00**	**0.00**
3202	Climate Change Training workshop	16177.44	0.00	16177.44	0.00	0.00	0.00	0.00	**0.00**	**16177.44**	**0.00**
3203	Training event on indicator monitoring	8992.50	0.00	8992.50	0.00	0.00	0.00	0.00	**0.00**	**8992.50**	**0.00**
3204	Land Use Planning training workshops	19942.30	0.00	19942.30	0.00	0.00	0.00	0.00	**0.00**	**19942.30**	**0.00**
3301	Adaptation Planning workshops and meetings	11991.50	0.00	11991.50	0.00	0.00	0.00	0.00	**0.00**	**11991.50**	**0.00**
3302	Steering committee/focal point meetings and workshops	11522.56	3354.06	8168.50	1761.00	0.00	0.00	0.00	**1761.00**	**9929.50**	**1593.06**
3303	Provincial and technical meetings and workshops	22402.50	0.00	22402.50	0.00	0.00	0.00	0.00	**0.00**	**22402.50**	**0.00**
3304	Inception Workshop	6729.00	0.00	6729.00	0.00	0.00	0.00	0.00	**0.00**	**6729.00**	**0.00**
3305	Annual project planning seminars	30942.36	8723.94	22218.42	8611.40	0.00	0.00	0.00	**8611.40**	**30829.82**	**112.54**

4101	General office supplies	13898.75	1056.34	12842.41	1,075.82	0.00	0.00	0.00	**1075.82**	**13918.23**	**(19.48)**
4102	Equipment and supplies for district offices	5752.20	0.00	5752.20	0.00	0.00	0.00	0.00	**0.00**	**5752.20**	**0.00**
4201	Water tanks and cisterns	15000.00	0.00	15000.00	0.00	0.00	0.00	0.00	**0.00**	**15000.00**	**0.00**
5201	Website creation and maintenance	1750.00	0.00	1750.00	0.00	0.00	0.00	0.00	**0.00**	**1750.00**	**0.00**
5202	Inception workshop report	2800.00	0.00	2800.00	0.00	0.00	0.00	0.00	**0.00**	**2800.00**	**0.00**
5301	Printing, binding, translation	66881.74	5185.06	61696.53	7,136.76	0.00	0.00	0.00	**7136.76**	**68833.29**	**(1951.55)**
5501	Final VRA Study	25000.00	13561.50	11438.50	13504.00	0.00	0.00	0.00	**13504.00**	**24942.50**	**57.50**
5504	Audit	10000.00	2500.00	7500.00	2500.00	0.00	0.00	0.00	**2500.00**	**10000.00**	**0.00**
5581	Mid-term Evaluation	30000.00	0.00	30000.00	0.00	0.00	0.00	0.00	**0.00**	**30000.00**	**0.00**
5582	Final Evaluation	35000.00	35000.00	0.00	35000.00	0.00	0.00	0.00	**35000.00**	**35000.00**	**0.00**
GRAND TOTAL		**1635000.00**	**99062.08**	**1535937.92**	**99065.48**	**0.00**	**0.00**	**0.00**	**99065.48**	**1635003.40**	**(3.40)**

***The actual expenditures should be reported in accordance with the specific budget lines of the approved budget (Appendix 1) of the project document in Annex 1**

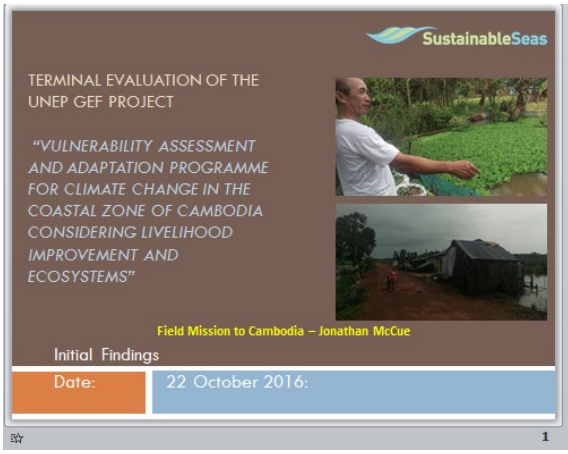
The appended schedule "Explanation for expenditures reported in quarterly expenditure statement" should also be completed

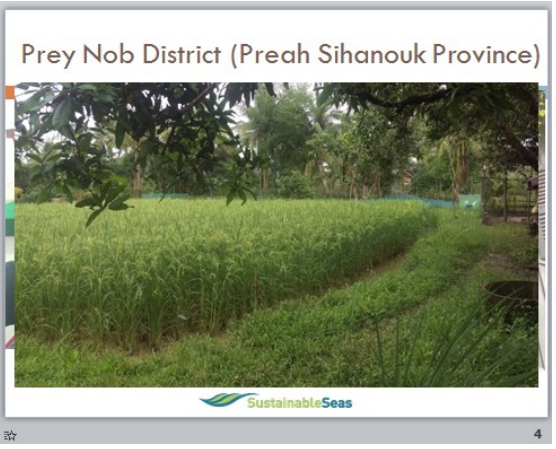
EXPLANATION FOR EXPENDITURES REPORTED IN QUARTERLY EXPENDITURE STATEMENT

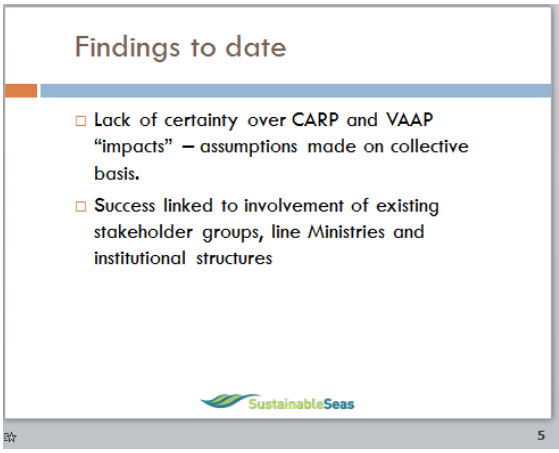
From:	1-Jan-16	Total	
To:	31-Mar-16	expenditure for	EXPLANATION

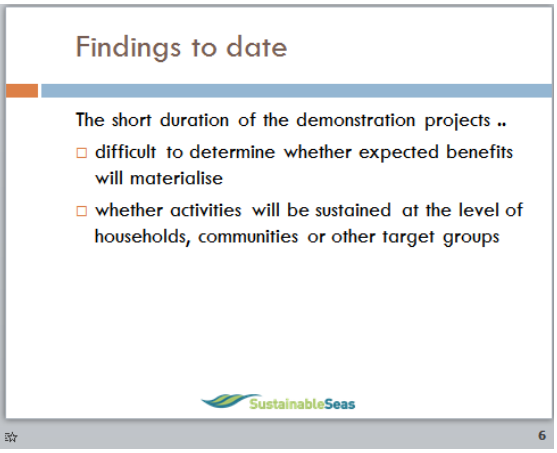
ANNEX VI. COMMUNICATION AND OUTREACH TOOLS USED TO DISSEMINATE RESULTS

Presentation slides of interim findings given to Dr Monyneath (PSC Project Director) on 22 October 2016.









Findings to date

- Interventions relating to local water resources management are expected to yield significant short-term and longer-term community benefits related to poverty alleviation and increased food security

SustainableSeas

7

Findings to date

- Important to consider the appropriateness and scale of the interventions at the level of the beneficiary *(dyke options/IFS/mangrove etc)*
- Important to consider whether new climate data is needed for the wider project area and in the context of provincial level and/or sectoral planning.

SustainableSeas

8

Findings to date

- Policy and climate mainstreaming (Outcome 1) appears to be the weakest area of project delivery
- However, clear evidence that demonstration projects have worked in a policy context including practical solutions for issue identified through a vulnerability analysis at the sector level.
- Making the message simple is still required for maximum impact!

SustainableSeas

9

Findings to date

- In the longer term, the VAAP approach (if upscaled) offers a potentially winning combination of awareness building and training at commune, district and provincial levels
- However, future financial support is needed to influence more comprehensive integration of climate responsive measures (possible link to CIPs and CDPs).
- The relatively short CIP and CDP cycles provide an opportunity for ongoing improvements and reorientation of measures according to emerging needs.

SustainableSeas

10

Findings to date

- Main finding is that VAAP has provided the opportunities for local stakeholders to "think differently". It has partly achieved this objective - educating farmers of new farming techniques is vital for both dry and wet seasons!
- Sustainability long term has to be questioned without future funding commitments – physical interventions need continued funds (Prey Nob)
- Partnerships needed within international experts and "best practice" *(dredging and flood conveyance techniques)*.

SustainableSeas

11

Findings to date

- CCA and ICZM is an iterative process that requires financial and resource commitment
- VAAP has set the platform and information baseline (VA) to consider new approaches

SustainableSeas

12

Intended Programme

- Mid to end Nov 2016 – Zero and Draft reporting
- Early Dec 2016 – Dissemination of UNEP accepted Draft Report to Cambodian stakeholders
- Jan 2017 - Update and Final Reporting

SustainableSeas

13

Information Requests

- Final VAAP Financial Reporting (per outcome) spreadsheets
- Status on applications for other donor funds to continue/upscale VAAP work?
- Directors view on ICZM "pathway" to 2020 in Cambodia?

SustainableSeas

14

ANNEX VII. LIST OF DOCUMENTS CONSULTED

1. Baastel (May 2014) Mid Term Review of the Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) Project.
2. Joana Talafré and Jens Erik Lyngby (2013) "Baseline Assessment for the LDCF – Vulnerability Assessment and Adaptation Project for Cambodia"
3. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – PIR 2013
4. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – PIR 2014
5. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – PIR 2015
6. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – UNEP Project Document (2013)
7. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – CEO Endorsement Letter (Dec 2010)
8. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – GEF Approval Letter (2013)
9. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – Project Cooporation Agreement (PCA) 2015 (Amendment No. 1 – extension to 30 June 2016).
10. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – Project Cooporation Agreement (PCA) 2015 (Amendment No. 2 Extension to 30 September 2016).
11. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – Budget Revision Letter and Sheet (2013).
12. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – Budget Revision Letter and Sheet (2014).
13. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – Budget Revision Letter and Sheet (2015).
14. UNEP Vulnerability Assessment and Adaptation Project for Climate Change with in the Coastal Zone of Cambodia Considering Livelihood Improvement and Eco-Systems (VAAP) – Budget Revision Letter and Sheet (2016).

The following are documents listed within the Mid Term Review (2014) and have been reviewed during the post Field Mission (16-23 October 2016) phase since returning from Cambodia.

- CAMBODIA CLIMATE CHANGE ALLIANCE - FINAL REPORT OF WORK (2014) COASTAL ADAPTATION AND RESILIENCE PLANNING (CARP) COMPONENT DHI WATER ENVIRONMENT HEALTH AUGUST 2014
- Cambodia Climate Public Expenditure and Institutional Review (July 2012), *The report is also supported by the Cambodia Climate Change Alliance, with funding from SIDA, DANIDA, UNDP and EU and with the Ministry of Environment and Ministry of Economy and Finance as implementing partners*
- GEF. (2 March 2011). "GEF Secretariat Review for LDCF/SCCF Projects." Washington, DC. 22pp.
- Humphrey, S. & Mak, S. (6 May 2012). "Cambodia Climate Change Alliance Review of Pilot Projects." 79pp.
- MoE. (14 March, 2012; 9 January 2013; 5 July 2013) "Project Steering Committee Meeting Minutes." Phnom Penh, Cambodia.
- MoE (October 2006). "Cambodian National Adaptation Project of Action to Climate Change." Phnom Penh, 125 pp.
- MoE CCU. (15 July 2013). "Financial Report and Report of the Independent Auditors for the Year Ended 31 December 2012." Audit prepared by NAS Co., Ltd. Phnom Penh, Cambodia. 8pp.
- MoE CCU. (15 July 2013). "Management Report for the Year Ended 31 December 2012." Audit prepared by NAS Co., Ltd. Phnom Penh, Cambodia. 6pp.
- MoE/UNEP. (30 April 2012). "Inception Workshop Report." Phnom Penh, Cambodia. 35pp.
- MoE/UNEP. (23 April 2013). "Activity Based Budget for VAAP." [excel document].
- MoE/UNEP. (26 September 2013). "Procurement Plan."
- MoE/UNEP. (9 December 2013). "UNEP Project Implementation Report for VAAP 2013."
- UNEP. (4 March 2013, 24 October 2013, and 31 January 2014). "Cash Advance Statement."
- UNEP. (December 2013). "VAAP Half Yearly Progress Report." 16pp.
- UNEP. (9 December 2013). "UNEP GEF Project Implementation Report Fiscal Year 1 July 2012 to 30 June 2013." 32pp.
- UNEP/DHI. (December 2013). "Mainstreaming of Climate Change Adaptation into the Sub-National Development Planning in Cambodia." 72pp

ANNEX VIII. BRIEF CV OF EVALUATION CONSULTANT

Jonathan McCue, Director of Sustainable Seas Ltd, is a chartered coastal scientist, with 29 years' consultancy experience in the field of climate change adaptation, disaster risk resilience, coastal and beach master planning and design, artificial reef design and environmental planning, coastal engineering and integrated coastal management (ICM). He is particularly strong in the areas of team leadership, project and programme management, ocean and coastal planning, strategic environmental assessment, climate financing and community participation work. Jonathan has worldwide experience of working for all international donors, government and non-government organisations (NGOs) and has contributed to the production of disaster risk management plans globally. He regularly provides institutional and capacity building support to private and public sector clients on matters relating to climate change adaptation related projects. In the Caribbean, his expertise links to coastal and marine spatial planning, comprehensive disaster management, climate change action planning, reef rehabilitation projects and coastal engineering strategy work.

Key skills and experience

- International Project Management and Team Leader expertise;
- Monitoring and evaluation (M&E) expert including Terminal and Mid Term Evaluations;
- Expert in Ecosystem Based Approaches (EBA) for ICZM delivery;
- Socio-economic expertise on coastal vulnerability assessment projects;
- Experienced strategic environmental assessment (SEA) consultant for coastal projects;
- Shoreline Management advice and coastal engineering;
- Design of community participation programmes;
- Institutional Strengthening for ICZM in the developing world;

Qualifications and Associations

- MSc Tropical Coastal Management (Newcastle University - completed 1989);
- BSc (Hons) Geography and Geology;
- Member of the British Geomorphological Research Group (BGRG) and the UNFCCC Expert Panel for Coastal Technologies (1999;)
- Elected to the Board of Management for CoastNET (1999) and Industrial Fellow of Nottingham University, Civil Eng Dept (since 2000);
- Fellow of the Royal Geographical Society (since 1994);
- Chartered Water and Environmental Manager (MCIWEM - achieved in 1996).

Employment History

2013 to present Director, Sustainable Seas Ltd

2011 - 2013 Director, CTL Consult Ltd

2010 - 2011 Director, Sustainable Seas Ltd

2000 - 2010 WS Atkins International Ltd

ANNEX IX. QUALITY ASSESSMENT OF THE EVALUATION REPORT

Evaluation Title:

Vulnerability Assessment and Adaptation Programme for Climate Change within the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems – VAAP

All UN Environment evaluations are subject to a quality assessment by the Evaluation Office. *This is an assessment of the quality of the evaluation report rather than the consultant.* Nevertheless the quality assessment is used as a tool for providing structured feedback to the evaluation consultants.

The quality of both the draft and final evaluation report is assessed and rated against the following criteria:

	UN Environment Evaluation Office Comments	Draft Report Rating	Final Report Rating
Substantive report quality criteria			
Quality of the Executive Summary: Does the summary stand alone as an accurate summary of the main evaluation product? It should include a concise overview of the evaluation object; clear summary of the evaluation objectives and scope; overall evaluation rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria (plus reference to where the evaluation ratings table can be found within the report); summary of the main findings of the exercise, including a synthesis of main conclusions (which include a summary response to key strategic evaluation questions), lessons learned and recommendations.	Draft report: Not presented/required at this stage. Next draft will have the executive summary Final report: The executive summary is well written and presents the main conclusions of the evaluation, rather than highlighting strengths and weaknesses against the criteria.	N/A	5
I. Introduction Is there a brief introduction, identifying the following: institutional context of the project (sub-programme, Division, regions/countries where implemented) and coverage of the evaluation; date of PRC approval and project document signature); results frameworks to which it contributes (e.g. Expected Accomplishment in POW); project duration and start/end dates; number of project phases (where appropriate); implementing partners; total secured budget and whether the project has been evaluated in the past (e.g. mid-term, part of a synthesis evaluation, evaluated by another agency etc.)? Does the introduction include a concise statement of the purpose of the evaluation and the key intended audience for the findings?	Draft report: Concise introduction. Needs a little more information on the key intended audience and the Subprogramme that the project is aligned to. Final report: The section provides a good introduction to the evaluation.	4	6
II. Evaluation Methods Does the section include a description of how the TOC at Evaluation was designed (who was involved etc.) and applied to the context of the project? A data collection section should include: a description of evaluation methods and information sources used, including the number and type of respondents; justification for methods used (e.g. qualitative/quantitative; electronic/face-to-face); any selection criteria used to identify respondents, case studies or sites/countries visited; strategies used to increase stakeholder engagement and consultation; details	Draft report: Good presentation of the evaluation criteria and key questions as well as communication and outreach. This section however needs to include information on the methods used for data collection and analysis as well as the limitations faced during the evaluation	3	5

of how data were verified (e.g. triangulation, review by stakeholders etc.). The methods used to analyse data (e.g. scoring; coding; thematic analysis etc.) should be described. It should also address evaluation limitations such as: low or imbalanced response rates across different groups; extent to which findings can be either generalised to wider evaluation questions or constraints on aggregation/disaggregation; any potential or apparent biases; language barriers and ways they were overcome. Ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected and strategies used to include the views of marginalised or potentially disadvantaged groups and/or divergent views.	Final report: The report provides a good overview of the evaluation methods used.		
III. The Project This section should include: • *Context:* Overview of the main issue that the project is trying to address, its root causes and consequences on the environment and human well-being (i.e. synopsis of the problem and situational analyses). • *Objectives and components*: Summary of the project's results hierarchy as stated in the ProDoc (or as officially revised). • *Stakeholders:* Description of groups of targeted stakeholders organised according to relevant common characteristics • *Project implementation structure and partners:* A description of the implementation structure with diagram and a list of key project partners • *Changes in design during implementation:* Any key events that affected the project's scope or parameters should be described in brief in chronological order • *Project financing:* Completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing	Draft report: Good *context* section. Short but presents the climate change situation in Cambodia's coastal areas. *Project components* presented. Consultant requested to clearly present the original and revised outcome and outputs in the section. Brief but good section presenting *stakeholders* and their roles in the project. More detail provided in the annex XIII refined from the inception report – mostly covers the various ministries. Short section on the *implementation structure* – provides information on the reporting lines *Changes in design* covered. However request made to present the changes in outcomes and outputs e.g. in a table *Project financing* – comprehensive tables provided. However there are no comments or discussion supporting the tables. Final report: The report provides a good overview of the project.	3.5	5
IV. TOC A summary of the project's results hierarchy should be presented for: a) the results as stated in the approved/revised Prodoc logframe / TOC and b) as formulated in the *TOC at Evaluation*[22]. The TOC at Evaluation should be presented clearly in both diagrammatic and narrative forms. Clear articulation of each major causal	Draft report: Diagrams well presented.. However supporting narrative can be enhanced to better describe the various causal pathways.	4	5

22 During the Inception Phase of the evaluation process a *TOC at Design* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions). During the evaluation process this TOC is revised based on changes made during project intervention and becomes the *TOC at Evaluation*.

pathway (starting from outputs to long term impact), including explanations of all drivers and assumptions as well as the expected roles of key actors.	Final report: The ToC is well presented.		
V. Key Findings **A. Strategic relevance:** The evaluation will include an assessment of the project's relevance in relation to UN Environment's mandate and its alignment with UN Environment's policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups will be made. This criterion comprises four elements: 1. *Alignment to the UN Environment Medium Term Strategy (MTS) and Programme of Work (POW)* 2. *Alignment to UN Environment/GEF/Donor Strategic Priorities* 3. *Relevance to Regional, Sub-regional and National Environmental Priorities* 4. *Complementarity with Existing Interventions*	Draft report: Table provided that provides a good summary of the various relevance sections and how the project's outcomes contribute or are aligned. Improvement is however required on how project contributes to these key global, regional and national environmental issues. Final report: Strong assessment of relevance.	3.5	6
B. Quality of Project Design Are strength and weaknesses of the project design effectively summarized?	Draft report: Good coverage and discussion on the changes in design that the project went through. Final report:	5	5
C. Nature of the External Context Have the key external features of the project's implementing context that may have been reasonably expected to limit the project's performance (eg conflict, natural disaster, political upheaval) been described? *(where appropriate)*	Draft report: Short section that provides a summary of possible external factors that could have affected the project. Consultant considered various aspects/factors. Final report:	5	5
D. Effectiveness (i) How well does the report present a well-reasoned, complete and evidence-based assessment of the achievement of outputs, and direct outcomes? How convincing is the discussion on attribution and contribution? How well are limitations to attribution discussed?	Draft report: Section comprehensively discusses the outputs, outcomes and impacts. Final report: Comprehensive and well structured discussion.	3	5
(ii) How well does the report present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact? How well and explicit are the description of change processes, key actors and the related drivers and assumptions discussed?	Draft report: However the section should better align with the reconstructed TCO and integrate the assumptions and drivers identified in the RTOC diagram. Most discussions are based on the "logframe pathways" and not the RTOC. Final report: The report presents a good analysis.	2	5

E. Financial Management Integrated analysis of all dimensions evaluated under financial management. Include the completed 'financial management' table. How well does the report address the following: • *completeness* of financial information, • *communication* between financial and project management staff and • *compliance* with relevant UN financial management standards and procedures.	Draft report: Section is quite thin. Presents the financial data (with detailed financial data provided in the annex). However minimal analysis or comments on adequacy of co-finance, alignment with UN financial management, financial management practices used etc Final report: The assessment is adequate, however could have presented a stronger analysis as mentioned above. *(if this section is rated poorly as a result of limited financial information from the project, this is not a reflection on the consultant)*	3	4
F. Efficiency Has the report present a well-reasoned, complete and evidence-based assessment of efficiency under the categories of cost-effectiveness and timeliness including: • Implications of delays and no cost extensions • Time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • Discussion of (making us of/building on) pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. • Consider the extent to which the management of the project minimised UN Environment's environmental footprint.	Draft report: Good presentation of project dates and milestones. Good discussion of the synergy measures taken by the project to enhance efficiency Final report: As above	5	5
G. Monitoring and Reporting How well does the report assess: • Monitoring design and budgeting *(including SMART indicators, resources for MTE/R etc.)* • Monitoring implementation *(including use of monitoring data for adaptive management)* • Project reporting *(e.g. PIMS and donor report)*	Draft report: Good discussion on design, implementation and reporting. Final report: As above.	5	5
H. Sustainability How well does the evaluation identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes including: • Socio-political Sustainability • Financial Sustainability • Institutional Sustainability *(including issues of partnerships)*	Draft report: Comprehensive discussion on sustainability. Section also includes discussion on environmental sustainability, catalytic role and replication. Well-reasoned arguments presented Final report: As above.	5	5
I. Factors Affecting Performance These factors are not discussed in stand-alone sections but are **integrated in criteria A-H as appropriate**. A rating is given for each:	Draft report: Preparation and readiness, project implementation and management and		4, 4, 4, 3, 4, 3

• Preparation and readiness • Quality of project management and supervision[23] • Stakeholder participation and co-operation • Responsiveness to human rights and gender equity • Country ownership and driven-ness • Communication and public awareness	Stakeholder participation, cooperation and partnerships were discussed as stand-alone sections of the report. The sections provide cross-references where appropriate. The sections provide quick snap shots without repeating issues raised in the prior text. Final report: Most sections adequately discussed. Gender and human rights discussed only in regards project design,		
J. Quality of the conclusions: How clearly and succinctly are the key strategic questions addressed? How well do the conclusions highlight the main strengths and weaknesses of the project, and connect them in a compelling story line? How consistent are the conclusions with the evidence presented in the main body of the report?	Draft report: Summary ratings provided in a table. However comprehensive conclusions will be presented in the next draft. Final report: Conclusions section presents the key findings, rather than concluding. Section is however consistent with the main report.	N/A	5
K. Quality and utility of the lessons: To what extent are lessons based on explicit evaluation findings? To what extent do the lessons suggest prescriptive action and specify in which contexts they are derived/ applicable? To what extent are positive and negative lessons balanced and duplication with recommendations avoided?	Draft report: Seven lessons presented. Brief descriptions for each lesson. However the explicit connection to the source should be provided. Final report: Lessons are relatively well formulated. Some lessons could be less subject-specific.	4	4
L. Quality and utility of the recommendations: To what extent are recommendations based on explicit evaluation findings? To what extent do the recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?)'. To what extent are they feasible?	Draft report: Nine recommendations presented. Some recommendations should be specified who they are directed at. Final report: Recommendations are specific.	4	5
Report structure quality criteria			
M. Structure and completeness of the report: Does the report follow EO structure guidelines? Are all requested Annexes included and complete?	Draft report: Excellent – first draft submitted follows the structures as required by EO Final report: As above.	6	6
N. **Quality of writing and formatting:** Was the report well written (clear English language and grammar)? Is the language adequate in quality and tone for an official document? Do visual aids, such as maps and graphs convey key information? Does the report follow EO formatting guidelines?	Draft report: Good writing with well-reasoned and referenced statements and discussions. Good use of tables and diagrams to	5	6

[23] Copy from criteria document

	support text. Final report: As above.		
OVERALL REPORT QUALITY RATING		4.1	5

Rating system for quality of evaluation reports
A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1

The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.

The compliance of the evaluation process against the agreed standard procedures is assessed at the end of the evaluation

Evaluation process quality criteria	**Compliance**	
	Yes	**No**
Independence:		
1. Were the Terms of Reference finalised by the Evaluation Office?	x	
2. Was the final selection of the evaluator(s) made by the Evaluation Office?	x	
3. Were possible conflicts of interest of the selected evaluator(s) appraised?	x	
4. Was the evaluator contracted directly by the Evaluation Office?	x	
5. Does the report indicate whether the evaluator/ evaluation team was able to work freely and without interference or undue pressure from project staff or the Evaluation Office?	x	
Preparation:		
6. Was the evaluation budget agreed and approved by the Evaluation Office?	x	
7. Was inception report delivered and approved prior to commencing any travel?		x
Timeliness		
8. If a Terminal Evaluation: Was the evaluation initiated within the period of six months before or after project operational completion? Or If a Mid Term Evaluation: Was the evaluation initiated within a six month period prior to the project's mid-point?	x	
9. Were all deadlines set in the ToR respected?	x	
Project's engagement and support:		
10. Did the main project stakeholders provide comments on the evaluation ToRs?	x	
11. Did the project make available all required documents?	x	
12. Did the project make available all financial information (and audit reports if applicable)?	x	
13. Was adequate support provided by the project to the evaluator(s) in planning and conducting evaluation missions?	x	
14. Did the main project stakeholders provide comments on the draft evaluation report?	x	
Quality assurance:		
15. Were the ToC and key evaluation questions in the evaluation ToR peer-reviewed?	x	
16. Was the quality of the draft report checked by the Evaluation Manager and Peer Reviewer prior to dissemination to stakeholders for comments?	x	
17. Did the Evaluation Office complete an assessment of the quality of the final	x	

report?		
Transparency		
18. **:** Were the draft ToR and evaluation report circulated to all key stakeholders for comments?	x	
19. Was the draft evaluation report sent directly by the evaluator to the Evaluation Office?	x	
20. Did the Evaluation Office disseminate (or authorize dissemination) of the draft report to key stakeholders to solicit formal comments?	x	
21. Were all stakeholder comments to the draft evaluation report sent directly to the Evaluation Office	x	
22. Did the evaluator(s) prepare a response to all comments?	x	
23. Did the Evaluation Office share all comments and evaluator responses with the commentators?	x	
Participatory approach		
24. **:** Was close communication to the Evaluation Office and project maintained throughout the evaluation?	x	
25. Were evaluation findings, lessons and recommendations adequately communicated?	x	

Provide comments / explanations / mitigating circumstances below for any non-compliant process issues.

Process Criterion Number	**Evaluation Office Comments**
7	Inception draft was delivered, reviewed and comments provided to the consultant before the travels, however, it was finalized and approved after the evaluation mission due to time constraints.

ANNEX X. REVIEW OF PROJECT DESIGN

A.	**Project Context and Complexity**		**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating[24]: 5**
1	Did the project face an unusually challenging operational environment negatively affected project performance?	i) Ongoing/high likelihood of conflict?	No	Risk of conflict and political disturbances played no role throughout the duration of the project. No deteriorating security at project sites reported that may have hampered implementation.	
		ii) Ongoing/high likelihood of natural disaster?	Yes	Cambodia is prone to cyclones and floods. Extreme events were identified in ProDoc as risks that may damage infrastructure and ecosystems. At the same time, the focus of the project is to enhance the resilience to the impacts of climate change.	
		iii) Ongoing/high likelihood of change in national government?	No	No major political change recorded of any key note (excluding institutional reshuffle)	
B.	**Project Preparation**		**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 4**
2	Does the project document entail a clear and adequate problem analysis?		Yes	The ProDoc is provided a clear and consistent presentation of the problem. There were however long delays in the project design and inception phase (see later in efficiency section J) which need to be better understood.	
3	Does the project document entail a clear and adequate situation analysis?		Yes	A comprehensive analysis and description of the Cambodian situation vis-à-vis climate change is provided. VAAP/LDCF project is well situated with regard to local context, needs, and priorities.	

[24] Rating system for quality of project design and revision

A number rating 1-6 is used for each section: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall quality of the evaluation report is calculated by taking a weighted mean score of all rated quality criteria, see below. (For Project Context and Complexity, replace 'un/satisfactory' with 'un/likely'

4	Does the project document include a clear and adequate stakeholder analysis?		Yes	The stakeholder analysis section only mentions that consultations were carried out; there is no mapping or description of the roles and interests of stakeholders.	
5	*If yes to Q4:* Does the project document provide a description of stakeholder consultation during project design process? *(If yes, were any key groups overlooked: government, private sector, civil society and those who will potentially be negatively affected)*		Yes	Stakeholders were consulted during the project design, and both VAAP/LDCF and CARP/CCCA documents demonstrate a clear analysis of local needs and vulnerabilities and link those directly to project activities. It is mentioned that stakeholder consultations were carried out in the form of an inception workshop for ministries and government agencies and also meetings with government agencies, and provincial authorities. Researchers and one NGO participated in the inception workshop in 2011. Provinces and project site selection was done in consultation with stakeholders, e.g. selection criteria were decided by stakeholders. It was envisaged that NGO/CSO involvement would continue throughout the project, which it did (to a degree) in Outcomes 2 and 3. The role of theTWG for each Commune were introduced to help broaden and better formalize the existence of a provincial adaptation planning coordination body. In addition, the individual and collective capacities of the PWG members perhaps should ideally have been strengthened.	
6	Does the project document identify concerns with respect to human rights, including in relation to sustainable development?	i)Sustainable development in terms of integrated approach to human/natural systems	Yes	The focus of the project is on sustainable coastal ecosystem management to enhance resilience of rural communities. As such, an integrated approach to human/natural systems is at the heart of the project.	
		ii)Gender	Yes	Gender issues do not, however, appear to be a focus of the project. Impact level indicators are disaggregated by gender, but there are other outcome indicators that should also have been disaggregated.	
		iii)Indigenous peoples	No	The project does not aim specifically to support vulnerable ethnic groups and no reference is made towards any specific indigenous peoples..	
C	**Strategic Relevance**		**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 3**
7	Is the project document clear in terms of its relevance to:	i) UN Environment MTS, PoW and Sub-programme	No	MTS, PoW, Sub-programmes not mentioned in ProDoc, but there is an annex on UN Environment's comparative advantage. The project contributes to a number of UN Environment objectives and priorities, and the related sub-programmes, especially in relation to CC (CCA), but also in relation to aspects of disaster and conflict (DRR, environmental rehabilitation), ecosystem management (ecosystem services) and environmental governance (climate mainstreaming).	
		ii) Regional, Sub-regional and National environmental issues and needs?	Yes	The focus is mainly on environmental issues and needs at the national level, but the relevance of the project in relation to these is clearly spelled out.	
		iii) The relevant GEF focal areas, strategic priorities and operational	Yes	GEF strategic long-term objective addressed by the project is climate change adaptation, which is	

		programme(s)? (if appropriate)		mentioned in the ProDoc. But there is no reference to GEF operational programmes.
		iv) Key SDG[25] goals and targets	Yes	It is briefly mentioned that the project will contribute to relevant MDGs (prior to SDG establishment). Specific MDGs to this project include: •Eradicate extreme poverty and hunger. ... •Promote gender equality and empower women. ... •Ensure environmental sustainability.
8	Does the project address key cross cutting issues?	i) South-South Cooperation *(where appropriate)*	Yes	The focus appears to be on disseminating the project's lessons within Cambodia, but not on learning from other countries and mobilising their capacities.
		ii) Bali Strategic Plan	No	There is no description of the project's link to the Bali Strategic Plan, although government capacity building vis-à-vis CCA, water and ecosystem management is central to the project.
D	**Intended Results and Causality**		**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)* — **Section Rating: 4**
9	Is there a clearly presented Theory of Change?		No	The intervention logic is generally sound and well explained in text and results framework (even if not presented as a ToC) and addresses key institutional and capacity constraints at central, and community levels (see chapter 5). The results framework only presents the objective and outcomes levels, not the goal and output level, but these are described in the text.
10	Are the causal pathways from project outputs (goods and services) through outcomes (changes in stakeholder behaviour) towards impacts (long term, collective change of state) clearly and convincingly described in either the logframe or the TOC?		Yes	
11	Are impact drivers and assumptions clearly described for each key causal pathway?		Yes	A number of relevant assumptions and risks are presented, some of the assumptions are in reality impact drivers. They are, however not always presented at the right level in the causal pathway.
12	Are the roles of key actors and stakeholders clearly described for each key causal pathway?		Yes	Lead institutions and key partner identified for each output, but the roles are described jointly per activity, and not specifically for each partner.
13	Are the outcomes realistic with respect to the timeframe and scale of the intervention?		Yes	The four outcomes are realistic, but outcomes 1 and 4 may take longer than anticipated to be realised as policy change processes can take time and be delayed. Likewise, mangrove rehabilitation and its intended impact to reduce vulnerability to climate change and storm surge

[25]Depending on the date of project approval and type of intervention the MDGs (2015) or Aichi Biodiversity Targets (2020) may stand as alternatives to the SDGs (2030).

				events will need close monitoring over time.	
E	**Logical Framework and Monitoring**		**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 4**
14	Does the logical framework	i) Capture the key elements of the Theory of Change/ intervention logic for the project?	Yes	See rows 9 and 10	
		ii) Have 'SMART' indicators for outputs?	Yes	The project's identified outputs, outcomes, and impacts as well as the indicators for monitoring achievements towards outcomes and impacts were reviewed, commented on, and revised during the project Baseline Assessment. The review was performed by the project's Senior and Deputy TAs, and a number of changes to the project indicators were made to ensure that they be SMART (specific, measureable, attainable, relevant, and time-bound).	
		iii) Have 'SMART' indicators for outcomes?	Yes	See above (row 14 ii)	
15	Is there baseline information in relation to key performance indicators?		Yes	The baseline situation is described for each component and the ProDoc specifies that the project will carry out a baseline assessment for the indicators during implementation.	
16	Has the desired level of achievement (targets) been specified for indicators of outputs and outcomes?		Yes	All indicators have end of project targets.	
17	Are the milestones in the monitoring plan appropriate and sufficient to track progress and foster management towards outputs and outcomes?		No	The monitoring plan is not a detailed plan, but mainly provides a brief outlines of the M&E with reference to the results framework. Neither the results framework nor the implementation plan contain milestones. The baseline study provided generic advisories on milestone advisories, though not any real specific tangible dates to adhere to.	
18	Have responsibilities for monitoring activities been made clear?		Yes	The monitoring arrangements are clear, but seem to involve mainly the PMU and the project coordinator and with somewhat limited involvement of government partners, although it is stated that: "*Other partners will have responsibilities to collect specific information to track the indicators*". Local groups certainly demonstrated their ability to monitor activities linked to the demonstration projects (dyke condition in Prey Nob and pond level conditions in Koh Kong etc)	
19	Has a budget been allocated for monitoring project progress?		Yes	There are allocations for an M&E expert, a baseline assessment, the MTE and the final evaluation.	
20	Is the workplan clear, adequate and realistic? *(eg. Adequate time between capacity building and take up etc)*		Yes	Yes but only in the narrative text.	
F	**Governance and Supervision Arrangements**		**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and*	**Section Rating: 5**

			approaches, key respondents etc)	
21	Is the project governance and supervision model comprehensive, clear and appropriate? *(Steering Committee, partner consultations etc.)*	Yes	The project management structure is clearly outlined and supported by a clear organigram. PSC composition is deemed to have been optimal and representative of key stakeholders. Member involvement and ownership was considered positive, and PSC decisions are being implemented by the Project Team. Meetings were being held regularly and with appropriate documentation. UN Environment role to ensure synergy and compliance with national/international requirements, plus role as donor coordinator was also embraced throughout the project timescale. While overall PSC functioning was good, stakeholders requested that PSC documents be translated into Khmer to accommodate members who are less comfortable in English.	
22	Are roles and responsibilities within UN Environment clearly defined?	Yes		
G	**Partnerships**	**YES/NO**	**Comments/Implications for the evaluation design** **(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)**	**Section Rating: 3**
23	Have the capacities of partners been adequately assessed?	No	See row 4. But the project activities appear well suited and planned vis-a-vis capacities and addressing constraints.	
24	Are the roles and responsibilities of external partners properly specified and appropriate to their capacities?	No	See row 12.	
H	**Learning, Communication and Outreach**	**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 5**
25	Does the project have a clear and adequate knowledge management approach?	Yes	There is significant focus on knowledge management, dissemination and awareness raising; - component 4 is dedicated to knowledge management which (mostly) have been translated into Khymer for ease of outreach. All documents are updated onto the project website (see below)..	
26	Has the project identified appropriate methods for communication with key stakeholders during the project life? If yes, do the plans build on an analysis of existing communication channels and networks used by key stakeholders?	Yes	Key focus is given to strengthen inter-ministerial co-ordination.	
27	Are plans in place for dissemination of results and lesson sharing at the end of the project? *If yes, do they build on an analysis of existing communication channels and networks?*	Yes	See rows 25 and 26. and www.czmcam.org	
I	**Financial Planning / Budgeting**	**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 5**

28	Are there any obvious deficiencies in the budgets / financial planning at design stage? *(coherence of the budget, do figures add up etc.)*	No	.None obvious. More details to be provided in the Draft Report based on the final financial spreadsheets received on 22 October 2016 (dated 30 Sept 2016).	
29	Is the resource mobilization strategy reasonable/realistic? *(If it is over-ambitious it may undermine the delivery of the project outcomes or if under-ambitious may lead to repeated no cost extensions)*	Yes	Project co-funding is mainly mobilised through existing large-scale donor-funded rural/local development programmes as well as projects building the capacities of key partner government agencies. Letters confirming their co-financing commitments are attached to the ProDoc.	
J	**Efficiency**	**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 5**
30	Has the project been appropriately designed/adapted in relation to the duration and/or levels of secured funding?	Yes	The planned outputs and activities appear in sync with the budget, including co-funding although security is always a significant added cost in Cambodia.	
31	Does the project design make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency?	Yes	The project aims at climate proofing existing development initiatives. It is thus drawing upon major national programmes, as well as the existing CC coordination mechanisms. It also draws upon the results of other projects. Moreover, it seeks to strengthen existing institutions, including community organisations, and engage them in the implementation of project activities.	
32	Does the project document refer to any value for money strategies (ie increasing economy, efficiency and/or cost-effectiveness)?	Yes	There is a section on cost-effectiveness and how it is achieved by building on existing initiatives – see row 31. The ProDoc anticipates that the targeting of upstream areas will lead to improved provision of water-related eco-system services, which in turn will generate economic benefits for downstream communities.	
33	Has the project been extended beyond its original end date? *(If yes, explore the reasons for delays and no-cost extensions during the evaluation)*	No	No comments. There were long delays in the project design and inception phaseand as a result a no cost extension was granted. Details to be provided in the Draft Report.	
K	**Risk identification and Social Safeguards**	**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 4**
34	Are risks appropriately identified in both the ToC/logic framework and the risk table? *(If no, include key assumptions in reconstructed TOC)*	Yes	Risks have been identified in the results framework. They are all relevant, in particular the two presented in the results framework.	
35	Are potentially negative environmental, economic and social impacts of the project identified and is the mitigation strategy adequate*? (consider unintended impacts)*	No	A detailed risk log has been responded to, but the ProDoc states that no negative environmental or social impacts are expected, so no mitigation measures are needed. However, while negative environmental impacts are very unlikely, there could perhaps be some risk of negative social impacts (such as elite capture).	
36	Does the project have adequate mechanisms to reduce its negative	No	The ProDoc specifies that no negative environmental footprint is anticipated.	

	environmental foot-print? *(including in relation to project management)*			
L	**Sustainability / Replication and Catalytic Effects**	**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 5**
37	Was there a credible sustainability strategy at design stage?	Yes	Stakeholder ownership is promoted through their involvement in project design. The project focuses on capacity building (incl. learning-by-doing), to enable stakeholders to continue their engagement post-project.	
38	Does the project design include an appropriate exit strategy?	No	It is planned to incrementally reduce the level of international technical assistance (TA) and to capacitate national consultants. But otherwise the exit strategy is not that clear.	
39	Does the project design present strategies to promote/support scaling up, replication and/or catalytic action?	Yes	Different CCA options are tested. A national adaptation strategy is another output that will promote replication.	
40	Did the design address any/all of the following: socio-political, financial, institutional and environmental sustainability issues?	Yes	Not explicitly described, but the project is specifically aiming at improving environmental sustainability, and reducing economic and food security vulnerabilities. Moreover one expected output is a resource mobilisation strategy.	
M	**Identified Project Design Weaknesses/Gaps**	**YES/NO**	**Comments/Implications for the evaluation design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 5**
41	Were there any major issues not flagged by PRC?	No	No major issues have been identified in the final ProDoc.	
42	What were the main issues raised by PRC that were not addressed?	No	No comment.	

Annex (to Annex XI) - Revised formulation of Project Indicators (from Talafré and Lyngby (2013)

Outcome 1 is "Institutional capacity to assess climate change risks and integrated them into national development policies strengthened" and is to be measured through 4 indicators. The analysis of these indicators reveals some minor weaknesses in their formulation, as summarized below:

Original indicator	Comments	Proposed reformulation
1a. Number of government agencies participating in the data network	This indicator is not fully specific. It is Measurable, Attributable and Relevant, though it is not time-bound. Proposed reformulation:	1a. Number of government agencies participating *in a Coastal Climate Change data* network *at end of project*
1b. Climate change risks determined for the coastal zone through modeling of climate change impacts	This indicator is not Time-Bound. The indicator could be reformulated for added specificity regarding the scope of intervention.	1b. *Availability of Climate change risk assessments* for the coastal provinces *at end of project*
1c. Number of relevant national development plans and policies which include climate change consideration	This indicator is not time-bound. Furthermore, there may be difficulties in attributing this result to the project's interventions since there are other processes involved in this integration, and since many other initiatives are currently pursuing this goal in Cambodia. It was felt by the project team, however, that this remained a legitimate indicator, provided that this project chose to intervene on a distinct plan or policy. A revised target may therefore be in order. (see below for a discussion of targets)	1c. Number of relevant national development plans and policies *that* include climate change considerations *at end of project*.
1d. Number of indicators for monitoring climate change impacts within the coastal zone developed	This indicator is not time-bound.	1d. Number of indicators for monitoring climate change impacts within the coastal zone developed *at end of project*

Outcome 2 is "Adaptation planning in the coastal zone improved" and was intended to be measured through two indicators. The analysis reveals minor formulation weaknesses, for which corrections are proposed below:

Original formulation	Comments	Proposed reformulation
2.a Number of detailed vulnerability maps produced	This indicator is not time-bound.	2a. Number of detailed vulnerability maps produced *at end of project*
2.b A comprehensive adaptation plan, including guidance on zoning and land use planning in the context	This indicator is formulated as an output (the immediate product, e.g. the plan) and, furthermore, is not time-bound.	2b. *Availability at end of project* of a comprehensive adaptation plan that includes guidance on zoning and land use planning.

of climate change, is developed for the coastal zone		

Outcome 3 is "Vulnerability of productive systems *and livelihoods* to increased floods reduced" and it was designed to be measured through four indicators. The analysis reveals some significant flaws with some of the indicators, in that they imply a number of undocumented assumptions and linkages.

Original formulation	Comments	Proposed reformulation
3a. The percentage change in the income of men and women in the demonstration sites. This is a proxy for climate-resilient income production. (sic)	This indicator's '"attributability" is unclear since a large number of factors are determinants of income, and since the project's interventions are not necessarily designed as income-increasing activities. Furthermore, the implied link between increased income amounts and the resilience of said livelihoods is not evident. The indicator is also not time-bound. It is therefore suggested that this indicator be replaced by one more in line with the project's intended activities to make livelihoods more resilient (e.g. more productive or more sustainable), and that its measure be kept in line with the simplest means of verification, based on a question to be posed to project beneficiaries "do you feel that your livelihoods have improved as a result of this project".	3a. Number of coastal households who note improved livelihood due to access to alternative livelihood options at end of project
3b. The percentage change in subsistence food production of male and female subsistence farmers in the demonstration sites. This is a proxy for climate-resilient food production.	The same issues as above apply. At inception, there was no certainty on the nature or activities to be implemented, and therefore no certainty that food production would be increased. A large number of variables and intermediate states intervene in the amount of food production and the scope of the project would not allow for intervention on all these factors. In fact the project's interventions would act only on the water aspect of food production, therefore a food-based target was not realistically achievable. Attributability is therefore an issue. Measurability is also somewhat impractical since the type of food production is not specified (crop type), and this would require differentiating between food produced locally and food purchased. The indicator is also not time-bound. Since activities in this outcome are intended to act on water availability through the deepening of a water reservoir, it was decided to formulate an indicator related to water availability that would be easily measurable by using available community-based census data.	*3b. % change in the number of families with piped water, private pump well or private ring well, usable year round, at their house or at less then 150m.*
3c. Number of men and women from local communities aware of climate change vulnerability and adaptation responses.	Since the activities intended to act on beneficiaries awareness of climate change were contained in another outcome, indicator 3 could be considered beyond the scope of the interventions, and not directly relevant, although it could be a measure of an indirect result of the project (Intermediary state), or a measure of a necessary condition for the project (it might be assumed that beneficiaries should be aware of climate change before the project starts). Furthermore, this indicator would not be easily measured, since it would imply counting the number of people "aware" and "unaware" in a given community in order to arrive at a legitimate measurement. Given that indicator 4 is intended as a measure of perception of climate impacts and vulnerability, it is therefore suggested to remove this indicator.	N-A
3d. Number of men and women in the demonstration sites whose perceived vulnerability to climate change	This indicator is not time-bound. It is relatively specific, and could be attributable to the project activities. However, the indicator is flawed in that it indicates that the project would like to exert influence on the "number of people who feel their vulnerability has decreased" when the project is trying to influence "the number of people who feel vulnerable". Indeed, the project is trying to reduce the number of people who currently feel vulnerable to climate change. This may	3c. Number of men and women in the demonstration sites *who feel that climate change has had*

has decreased	appear as a nuance, but it has an impact on the types of instruments used for measure. With this in mind, the study "Assessment of Coping Mechanisms" provides a useful avenue for measuring this indicator (with a minor reformulation). In this study, the awareness of climate change impacts was measured through local interviews with community members (total 250 people) based on questionnaires that targeted the perception of climate changes and sought to retrace coping mechanisms. The questions were "are you aware of changes in climate patterns?";"If yes, what consequences has the change had?"; and "Have these consequences had an impact on your livelihood (occupation, health, income)"?	*an impact on their livelihoods*

Outcome 4 is "Resilience of coastal buffers to climate change increased and livelihoods improved" and was intended to be measured through three indicators. The analysis showed a number of conceptual flaws with some of the indicators, indicating too large a gap between the project's intention and what would ultimately be measured under the indicator.

Original formulation	Comment	Proposed reformulation
4a. Number of hectares of mangrove forests rehabilitated to withstand climate change impacts within the demonstration sites.	The indicator seeks to measure mangrove rehabilitation, whereas the project intends to undertake reforestation or replanting in denuded areas to increase the area under mangrove cover. In order to ensure that the indicator is realistic and measures the change in status due to the project's interventions, a reformulation of this indicator could be required to keep close to the project's intended scope.	4a. Number of hectares of mangrove forests *replanted* to withstand climate change impacts within the demonstrations sites.
4b. Number of hectares of replanted mangroves that survive.	This indicator, in order to be a realistic reflection of sustainability in the mangrove, would have to be measured at a longer interval than is allowed by the project – (years after completion), however this is not entirely realistic due to the lack of means after project completion. Furthermore, this indicator on its own indicates that the project would seek to intervene on aspects related to the management of the mangrove, or its protection, which, at time of writing, was not included in project design. It is recommended to merge this indicator with the one above, but to retain the dimension of "survival rates" into the target.	N-A
4c. Report on mangrove restoration practices in response to climate change developed	This indicator is formulated as an output or a product, and could be reformulated in order to reflect current practice. In addition, it is also not time-bound.	4b. *Availability of* a report on mangrove restoration practices in response to climate change *at the end of the project*
	As there was no indicator to measure the component's delivery of alternative livelihoods activities, and further to the discussion above, it is suggested to add an indicator similar to the indicator in component 3.	*4c.Number of coastal communities households who note improved livelihood due to access to alternative livelihood options at end of project*

ANNEX XI. KEY PROJECT STAKEHOLDER ANALYSIS

Stakeholder	Responsibility/Role	Interest	Influence (H/M/L)	Engagement (H/M/L)	Rating explanation	Capacity and Constraints
Ministry of Environment (MoE)	The Government of Cambodia mandated the Ministry of Environment (MoE) to supervise and coordinate climate change mitigation and adaptation efforts in Cambodia and to provide, through its climate change Department, Secretariat support to the National climate change Committee (NCCC) which is chaired by Senior Minister, Minister of Environment. Prime Minister Samdech Hun Sen accepted the Honorary Chair position of the NCCC in late 2009, which enhances the committee's status. The MoE is also responsible for protected areas in Cambodia, and has the mandate to approve Economic Land Concessions (ELC). 98 community protected areas (CPA) have been established so far. The CPA management strategy is seen by the government and donors alike as one means to reverse the trend of forest loss and the negative impacts that has on livelihoods of poor rural communities.	MoE has been central to Cambodian efforts to respond to climate change, and is responsible for environmental issues.	H	H	The ministry reinforced the importance of working in close collaboration with the climate change Department, and welcomed the representation of CCD in the project formulation team, encouraging the acceptance of this approach throughout the formulation and implementation of the project. More importantly, MoE stressed that the participation of the government had to be an active one, and welcomed the aspects of learning-by-doing of the project.	The climate change Office was established in 2003 and was expanded to become the climate change Department (CCD) at the end of 2009 under umbrella of MoE. Under the SNC, MoE has been conducting a vulnerability and adaptation assessment of different sectors, such as agriculture, water resources, forest and health care. MoE noted that both the line ministries and national stakeholders have to improve their coordination, in conjunction with the donors, and the international organizations.
Ministry of Agriculture, Forestry and Fishery (MAFF)	The Ministry of Agriculture, Forestry and Fisheries (MAFF) consists of five departments: Agriculture, Livestock, Fisheries, Forestry, Rubber and Economic Land Concession. Representatives of the agriculture, fisheries administration, and Forest Administration (FA) are members of	MAFF is implementing a programme to Enhancing Climate-Resilient Agriculture and Food Security' in partnership with the Ministry of Environment with the support of the	H	H	Some mangrove protection and replantation activities are being undertaken by the Fisheries directorate with local communities. With regards to facilities in the coastal provinces, MAFF highlighted the presence of the Fishery Research Centre, in Sihanoukville	The Agriculture directorate informed that the current MAFF policy acts to enhance food security in the country by increasing the production by use of bio-fertilizers and modern technology, while not expanding the area of the agriculture, thereby increasing

	the CCTT.	PPCR.			Province, funded by Japan.	deforestation. Diminishing soil quality within the coastal zone due to floods and soil intrusion, were also noted. No current projects/activities are being implemented within the coastal zones; however the directorate showed an interest for future potential collaboration with the project.
Ministry of Industry, Mines and Energy (MIME)	Ministry has some focal work on climate change mitigation and consultations revealed potential points of collaboration, cooperation and education. Among the projects on renewable energy, which is worthy to follow up on and further discuss, is the plantation of Lucana sp. in the back mangrove areas in selected coastal localities. This species is fast growing, providing a sustainable source of livelihood for the local population with regards to fuel wood, furniture production, railways projects, etc.	The experience gained on this project, could be highly valuable for potential replication in the project.	L	L	The Ministry showed sincere interest in further detailed discussions on this approach both as a learning opportunity for the project as well as potential ways of cooperation.	The Ministry reinforced the importance of capacity building in government as an essential process for effective implementation of the project.
Ministry of Economy and Finance (MEF)	The Ministry of Economy and Finance (MEF) is playing an increasingly prominent role in Cambodia's efforts to respond to climate change, particularly as greater volumes of international climate change finance and development assistance in support of climate change programming become available. Specifically, the MEF has been the lead agency in development of the Pilot Program on Climate Resilience (PPCR) in Cambodia, supported through the Climate Investment Funds in partnership with the Asian Development Bank and the World Bank.	The MEF is the focal point for the Pilot Programme on Climate Resilience, for example.	H	L	There is increasing attention to climate change in the context of these agreed responsibilities in Cambodia, precipitated in part by the efforts of the NCCC, as well as the availability of international climate finance from development partners	There are many issues that the MEF has to grapple with, however, and work remains to be done to fully integrate climate change issues into its on-going roles and responsibilities.
Ministry of Land Management Urban Planning	Ministry of Land Management Urban Planning and Construction (MLMUPC) discussed the action plan developed in	Natural resource management maps and land use maps were also	H	H	The MLMUPC mentioned that predictions regarding climate change impacts, including SLR, were very	Local officers require training on utility of land use maps in the planning

and Construction (MLMUPC)	collaboration with Japan International Cooperation Agency (JICA), and Danish International Development Agency (Danida). The worked focused on community land use planning in ten target areas including three coastal provinces, Kep, Koh Kong, and Sihanouk with a plan to expand to Kampot in 2010.	produced at the local level. At the provincial level, MLMUPC produced maps of sensitive or hot spot areas that should be protected from development.			urgently needed in relation to their planning efforts and zoning within the coastal zone. MLMUPC expressed its interest in collaborating with UN Environment for the development and implementation of the CCCA project.	process.
Ministry of Health (MoH)	MoH operates all across the provinces of Cambodia, and whilst climate change is a relatively new topic for the Ministry, many climate change impacts have affected human health (waterborne disease, diarrhoeas, etc).	The MoH expressed its interest and potential support to the project.	L	L	Minimal input to meetings etc	
Ministry of Public Work and Transportation (MPWT)	Ministry of Public Work and Transportation (MPWT) is responsible for the construction of road and port infrastructure. The MPWT previously prepared a five year master plan for roads and ports, which concentrates on agricultural and industrial development, and also gathers information from the Council for the Development of Cambodia (CDC), and key ministries. Climate change issues are however not considered in all MPWT master plans (roads, ports and wastewater). The MPWT informed that in order to implement and include climate change adaptation activities, additional funds would be needed. The MPWT asked for support on guidelines and procedures on how to apply international funds on climate change.	MPWT have showed an interest in the project within the coastal zone provinces, the MPWT constructed the wastewater management (separate sewers and rain drainage) in Sihanoukville Province with the use of ADB loans in 2006. At the time of writing, no details on this are able to be presented with any authority from the Evaluator.	M	M	The MPWT have showed concerns about the wastewater management and discharge in to the sea in coastal provinces.	Additionally, MPWT started in 2015 a feasibility study on wastewater management in Kep province with a Korean loan, and an environmental master plan on wastewater management, water supply, air quality and solid waste in Phnom Penh, Siem Reap, and Sihanoukville.
Ministry of Rural Development (MRD)	The Ministry of Rural Development (MRD) is responsible for small scale water supply to households (drilling well, digging well, and pond); health care; and infrastructure (road, bridge, pipes, etc.) in the rural regions of		H	H	MRD recognizes the importance of climate change adaptation, as climate change related events such as storms, floods and droughts, SLR, are clear evidence. Consequently climate change impacts different sectors including:	MRD submitted three proposals to the NCCC that considered the: 1.) reduction of diseases; 2.) improvement of water supply; and 3.) improvement of rural roads. The Ministry also highlighted the importance of

	Cambodia.				agriculture; households; infrastructure (rural roads); water; and drainage system. In this framework, MRD reported three projects that are underway or have now been completed: Rural Water Supply, Rural Road and Infrastructure, ethnic minority development.	international organizations and donors to provide grants, and not loans, for the enhanced development of Cambodia.
Ministry of Water Resources and Meteorology (MoWRAM)	Ministry of Water Resources and Meteorology (MoWRAM) is responsible for managing all activities related to water and meteorology development and natural disasters. In addition, from 2009 to 2013, MWRM was responsible for sustainable economic and social development of Cambodia's water resources, in the provision of water for agricultural production, hydropower, fisheries, navigation and tourism.	MoWRAM is recognised as a key institution in Cambodia's response to climate change. World Bank program PPCR (RGC-c, 2011) initiated funds (circa $33 million) to aid investment in irrigation systems and flood and drought management in partnership with MoWRAM	H	H	From 2004 to 2008, MWRM implemented the Rehabilitation of Irrigation Infrastructure, Drought Intervention, Flood Mitigation and Management, Hydrology and Meteorological Basic Information System, and Human Resource Development. In this period, MWRM has managed and mitigated flood and sea water damage, through the rehabilitation of seven flood protection dams, which potentially protect 130,799 hectares of crop land, and six polders, which potentially protect 14,328 hectares of crop land.	MoWRAM developed an action plan for water resources and meteorology management and development that includes: water resources management and development; flood and drought management; the promotion of a draft of law, regulation and water development; water resources and meteorology information management; and the improvement of administration management and human resources development. This action plan also included preparedness for the disaster risk reduction (storms, tsunamis and floods) and climate change adaptation.
National Committee for Disaster Management (NCDM)	The National Committee for Disaster Management (NCDM) is an inter-ministerial body chaired by the Prime Minister. The members of the committee are drawn from all concerned ministries and the armed forces. NCDM plays a key role in disaster management, working both on disaster risk reduction/prevention and response preparedness. NDMC also extensively worked to enhance communes' capacities in integrating DRR and preparedness concepts in commune planning. In Prey Nup district, DRR concepts have been successfully included into the	NCDM confirmed that coastal zone areas in Cambodia still lack warning systems; the fact that fishermen do not have radios/TVs make the situation worse since alert messages cannot reach them through those means.	M	L	The committee recognizes the relevant impacts caused by climate change (e.g. sea level rise and increase in temperature) that affect coastal paddy cultivations, households, and livelihood overall. The NCDM mentioned that information/prediction regarding climate change impacts including sea level rise was very urgently needed in relation to their planning efforts including zoning within the coastal zone.	Among existing NCDM activities, the assessment of the vulnerability of local communities to a natural disasters and their resilience, might provide relevant information to the project. The project was undertaken in 204 for Kampot and Sihanoukville Provinces in collaboration with ISDR and ADPC and an English publication will be made available to the team. Further vulnerability assessments and climate change adaptation could not be completed because of lack of funding.

	planning.					
The National Committee for Sub-national Democratic Development (NCDD)	NCDD is the inter-ministerial mechanism for promoting democratic development through decentralization and de-concentration reforms throughout Cambodia.	NCDD was established by Royal Decree number NS/RKT/1208/1429, dated 31 December 2008.	H	H	The NCDD is working to strengthen institutions at sub-national levels, but integration of climate risks into sub-national planning is still limited.	Agriculture, Rural Development, and Water Resources Management allocate small budgets indirectly to cope with disasters but it the basis for such budgetary allocations are unclear at present. NCDD coordinates a program on natural resource management and livelihoods that has some relevance for environmental management and climate change.
Koh Kong Provincial Authority	Koh Kong coastal length (221 km) represents half of the total coastal zones in Cambodia (435 km length). Among the coastal activities of relevance for the CCCA project, the authorities informed on the FAO funded Fishery provincial department efforts in technical training course on aquaculture (fish, and crabs) to local people. Danida is also supporting fishery and forestry projects in this province until the end of 2010.	Interest in the delivery of the Demonstration project only.	M	M	Koh Kong authority gives high importance to climate change issues and it is seeking fund to adaptation and mitigation, for example through research on climate resistant crops and through construction of dykes.	Problems of inundation and salt intrusion in freshwater have been experienced, with 5000 ha of rice damaged in 2010. Climate change projections in this province estimate a rise in sea level of 0.5 m to 1 m in next 50 years, basing on which nearly half of the Koh Kong would be inundated.
Sihanoukville Provincial Authority	The Provincial Authority appreciated the Danida funded the UN Environment -DHI Centre coastal zone management projects implemented in 2010 and in the same way highly welcomed the current CCCA project. Support from bilateral donors and international organizations was received in the past, such as the AFD work on construction of dykes in Prey Nup; the FAO support for planning develop water resource, reservoir repairing, and irrigation system in Prey Nob and Kompong Sela district (part of the fishery livelihood project of FAO for Cambodia, 2.4 mill USD); training for local communities on shrimps	Authority informed about the importance of focusing on other areas in Stueng Hay district, where fishermen have been affected by storms. Among various problems reported, the province suffers with problems related to storms, sea level rise and sea intrusion in rice field areas. The areas of Prey Nup (in special reference to Taklá and Ream communes) and Ocheurtil were indicated as areas of high vulnerability.	M	M	Some of the past activities implemented in the province, such as the mangrove replanting led by the Fishery Provincial Department in 2006 and the Danida work in support of 15 communities to protect seagrass and coral reef, could have provided useful information for the project.	Impacts of climate change are already visible in Sihanoukville, and according to Provincial Department of Environment, the sea level rise has continually increased in the past years which affect people who live in the Sammaki commune and affected 10,000 ha of rice field. In 2010, 70 ha of rice field were damaged by salt intrusion and additional 176 ha were indirectly impacted in Prey Nob. A reduction in rice harvesting in comparison to previous years, mainly due to inadequate irrigation system, was also noted. Kompong Seila district also noted important problems related

	aquaculture and crabs cultivation; strengthening natural resources, fishery communities and enhancing reforest station.	delivery of the Demonstration project only.				to rice harvesting, due to a lack of effective water irrigation system.
International NGOs	Roles in project: • PEMSEA: Mainly knowledge sharing • National coordination on data and information issues (through the CCCDN) • IUCN and Birdlife International : Piloting international knowledge at local level	Medium	L	M	Most international NGOs do not have a major role in the project and hence their level of engagement and influence is low.. However, some are engaged in the pilot projects and thus have a medium level of engagement. However, the project aims at improving the CCA policy framework, which would also facilitate the implementation of NGO projects, their interest in the project is medium.	International NGOs used on the project (such as IUCN) general have high capacity due to combination of a) large teams of international and national staff and b) technical and practical experience from projects across the world
Local NGOs:	Role in the project: • Save Cambodia's Wildlife - Knowledge sharing between session with NGOs having same environment projects.	Medium	L	L	Local NGOs have a limited role in the project and thus a low level of engagement and influence. However, the project aims at improving the CCA policy framework, which would also facilitate the implementation of NGO projects, their interest in the project is medium.	Local NGOs have a deep knowledge and information of the areas they are operating in. However, their level of technical and managerial capacity varies. It is (at the Inception Phase time) difficult to be precise with regards to whether local NGOs have played a strong role in outreach of th VAAP though this shall be established in the Draft Report. stage
Communities participating in pilot projects	Role in the project: • Communities are at the centre-stage in pilot projects, in which they will apply adaptation measures on the ground at community and farm levels.	High	L	H	The level of interest in the project is very high, since the participation will reduce their vulnerability. Their level of engagement in on-site pilot activities will also be very high. However, their overall influence will be low, except in relation to pilot activities on their lands.	Poverty, low level of education and limited knowledge of the impacts of CC and adaption options are all major constraints, which contribute to the current vulnerability to the impact of CC, such as extreme weather events (drought, floods).