Mid Term Review

"Enhancing Climate Change Resilience of Rural Communities Living in Protected Areas of Cambodia" (AFCPA)"

Final Report

April 2018

This report has been prepared by an independent consultant reviewer. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UN Environment Senior Management.

Review team
Jonathan McCue –Mid Term Review Consultant and Atifa Kassam –Project Task Manager

Adaptation Fund Project "Enhancing Climate Change Resilience of Rural Communities Living in Protected Areas of Cambodia" (AFCPA)
April 2018

ACKNOWLEDGEMENTS

The review involved various individuals. The reviewer 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 review. 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 reviewer is grateful to the Chief Technical Advisor (Nicholas Tye) and the UN Environment Task Manager (Atifa Kassam) for their untiring support throughout the review process. He also wishes to thank the Cambodian Ministry of Environment, particularly Mr. Navann Ouk (National Project Coordinator), Mr. Kim Sarin, Mr Ros Chor ,Mr. By Seng Leang, Mr. Chao Bunthoeun and Mr. Ma Sophal (Boeungper Team for Kampong Thom and Preah Vihear), , Mr. Srey Marona, Mr. Meas Sothunvathanak and Mr. Khoeun Sokun Viseth (Siem Reap Team for Kulen PN), Mr. Pouk Bunthet and Mr. Heng Hong and Mr Han Sakhan (Mondulikiri Team for field support in Phnom Prech) , for their support during the field missions. Furthermore, his appreciation is extended to all government officials, NGO representatives (Collen McGinn, TANGO International, Phnom Penh) and community members in the target CPAs with whom were met for their time and knowledge. Finally, he would like to acknowledge the 3 separate Khmer translators (Mr. Nith Chhinn and Phouk Samphors for their invaluable assistance at Boeungper, Kulen and Phnom Penh respectively.

Short biography of the consultant

The Mid Term Review (MTR) 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 environmental and coastal management and climate change adaptation. He has a successful mid-term and terminal 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 UN Environment (in Cambodia), IOC-UNESCO and finally for DFID in the Caribbean region. He recently also completed a Terminal Evaluation for UN Environment on coastal adaptation within Cambodia during 2017. A brief CV is presented in Annex IX.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS

AF	Adaptation Fund
AFCPA	Adaptation Fund Project "Enhancing Climate Change Resilience of Rural Communities Living in Protected Areas of Cambodia"
APSARA	Authority for the Protection and Management of Angkor and the Region of Siem Reap
AR5	Assessment Report no. 5 (by IPCC, published in 2014)
BSP	Bali Strategic Plan
C4ES	C4 EcoSolution
CC	Climate change
CCSP	Climate Change Sub-Programme (UN Environment)
CCCSP	Cambodia Climate Change Strategic Plan
COP	Conference of the Parties (the governing body of the United Nations Framework Convention on Climate Change)
CPA	Community Protected Area
DEM	Digital Elevation Model
DoE	Department of Environment
DWA	Department of Women Affairs
DoT	Department of Tourism
DAFCPAF	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
ELC	Economic Land Concession
EO	Review Office
EWS	Early Warning Systems
FAO	Food and Agriculture Organisation
FiA	Fisheries Administration
GDP	Gross Domestic Product
GDLC	General Department of Local Community
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
MAFCPAF	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
MODE	Minority Organization Development Economy
MOE	Ministry of Environment
MOP	Ministry of Planning
MPCC	Multi-Purpose Community Centre
MTR	Mid Term Review
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
NTFPs	Non-Timber Forest Products
PA	Protected Area
PD	Project Document
PIR	Project Implementation Report
PMU	Project Management Unit
PoW	Programmes of Work
PPP	Public-private partnership
PSC	Project Steering Committee
PTWG	Provincial (inter-agency) Technical Working Group
RLA	Reflective Learning Approach
ROtI	Review of Outcomes to Impacts
RUA	Royal University of Agriculture
RUPP	Royal University of Phnom Penh
SP	Sub-Programmes (UN Environment)
ToC	Theory of Change
ToR	Terms of Reference
TRAFCPAO	Tropical Forest Adaptation and Development Project
UN Environment-EO	United National Environment Programme – Evaluation Office
UN Environment	United Nations Environment Programme
WVI	World Vision International
WWF	World Wildlife Foundation
YED	Youth Environmental Debate

PROJECT IDENTIFICATION TABLE

Executing Agency:	**Ministry of Environment**		
Sub-programme:	Climate Change	**Expected Accomplishment(s):**	A
UN Environment approval date:	AFCPA approval 11 July 2012	**Programme of Work Output(s):**	4
GEF project ID:	N/A	**Project type:**	FSP
GEF Operational Programme #:	N/A	**Focal Area(s):**	Climate Change Adaptation
GEF approval date:	N/A	**GEF Strategic Priority:**	N/A
***Expected* start date:**	January 2013	**Actual start date:**	May 2013
***Planned* completion date:**	December 2019 (to be confirmed)	**Actual completion date:**	TBC
***Planned* project budget at approval:**	AFCPA approved $4,566,150	**Actual total expenditures reported as of 1.1.18:**	$3,065,200
GEF grant allocation:	N/A	**GEF grant expenditures reported as of [date]:**	N/A
Project Preparation Grant - GEF financing:	N/A	**Project Preparation Grant - co-financing:**	N/A
***Expected* Medium-Size Project/Full-Size Project co-financing:**	N/A	**Secured Medium-Size Project/Full-Size Project co-financing:**	N/A
First disbursement:	May 2013	**Date of financial closure:**	n/a
No. of revisions:		**Date of last revision:**	n/a
No. of Steering Committee meetings:	4	**Date of last/next Steering Committee meeting:**	Last: 4-6th August 2017 / Next: Jan 2018
Mid-term Review/ Review *(planned date):*	December 2015	**Mid-term Review/ Review (actual date):**	January / February 2018
Terminal Evaluation *(planned date):*	Q3 2018	**Terminal Evaluation (actual date):**	*To be determined*
Coverage - Country(ies):	Cambodia	**Coverage - Region(s):**	Asia
Dates of previous project phases:	N/A	**Status of future project phases:**	N/A

EXECUTIVE SUMMARY

Introduction

This is a Mid Tem Review (MTR) report for an Adaptation Fund (AF) project that was developed by the United Nations Environment Programme (UNEP) and the Ministry of Environment (MoE) in Cambodia to address the vulnerability of rural communities to climate change using ecoagriculture. The project, "*Enhancing Climate Change Resilience of Rural Communities living in Protected Areas in Cambodia*" (AFCPA), has the objective to increase the climate change resilience of communities living around five Community Protected Area intervention sites in Boeungper Wildlife Sanctuary, Phnom Kulen National Park and Phnom Prech Wildlife Sanctuary. The project has three main components:

1. Protocols for ecoagriculture interventions - Component 1 will use bio-physical, ecological and socio-economic research to develop restoration and conservation agriculture protocols to be implemented in Component 2.
2. Concrete ecoagriculture adaptation interventions - Component 2 will ensure that the restored forests and productive agricultural areas are maintained and the benefits maximised. Alternative livelihoods established through the AFCPA project will increase the resilience of local communities to the effects of climate change.
3. Institutional capacity, awareness raising and upscaling of ecoagriculture interventions - Component 3 will create an enabling environment for the ecoagriculture concept to be implemented in other Protected Areas (Pas) in Cambodia through awareness raised at a local and national level, and an upscaling strategy supported by policy revision where required.

Review findings and conclusions

The MTR's overarching conclusions find that the AFCPA project is Highly Satisfactory. It is well designed, proving to be well equipped, and proceeding in a way that contributes to the project's goals and is appropriate given the context of its 5 CPA target project areas (and beyond). The MTR finds governance and project resources to be appropriate to date and that the project has laid the foundations for subsequent actions of capacity building at national level to implement regulatory and administrative system for sustainable eco-agricultural development within PAs around Cambodia.

Regarding Strategic Relevance, AFCPA is contributing 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 AF strategic priorities. The MTR strongly advises that the focus continues to remain on the importance of supporting the provision of water supplies and ecosystem based adaption benefits (planting trees within watersheds as opposed to along roads which is being raised as a possibility into 2018/19).

The project rationale was well-founded and that activities are linked to existing vulnerabilities of CPA families and existing barriers to improving resilience to erratic rainfall events and climate change in general in Cambodia. No tangible evidence can be found regarding economic or social externalities which may have impacted on project implementation to date. In fact, based on interviews conducted during the field mission with project partners, the review finds that certain external risk factors (including institutional change within the MoE) appear to have been mostly well considered and managed.

The project should be very pleased with its achievements to date and the way the project has efficiently completed many tasks under budget. It has clearly and successfully demonstrated the programmed activities and outputs as outlined in the ProDoc for Components 1 and 2. There is no reason to suggest the Component 3 should prove any less successful.

On the Achievement of Direct Outcomes, the combined direct outcomes so far are all "on track" to effectively contribute towards strengthening institutional capacity and policy coordination, mainstreaming climate change and eco-agriculture into national and CDPs. The remainder of the project now needs to focus its resources towards building national and local capacity building on adaptation planning, reduced vulnerability to erratic rainfall events (agricultural cropping etc) and improved protection "green buffers" to climate change within CPAs and outside. These shall all contribute towards improving livelihoods.

With regards to the Likelihood of Impact (and linked to the 3 Intermediate States identified within this review), it does appear to be the will of the local community to continue the projects outcomes is strong. The same cannot be easily confirmed (at this stage) at the provincial and District levels despite national efforts under the decentralisation programme that seek to make a concerted effort for mainstreaming climate resilience. Despite this observation, the replanting of confiscated chamkhars with rosewood species and village focused training events on home gardens should be declared as one of the most successful achievements of AFCPA to date with biodiversity levels hoping to increase within the chamkhar areas before the end of the project.

The AFCA has proven to be highly efficient in terms of under spend of project budget whilst still achieving the intended indicators set for specific outputs. A better balance between project spend and achievements is recommended for the next quarter of 2018 and into the remainder of the year (assuming the project is granted its extension through to December 2019).

Regards to the Monitoring and Reporting criteria, the MTR also finds that suitable monitoring reporting is taking place as planned, in a timely fashion and with adequate attention to detail and content. The project should perhaps adopt a clearer system to track project risks posed by institutional stability and external communication in more detail with these being presented within the Half Yearly reports (currently omitted).

Regarding Sustainability, one key strength of AFCPA has been that has been able to provide a set of strong practical solutions to help sustain and (in time) mainstream climate change impacts into rural community living within PAs. The demonstrated viable adaptation activities undertaken to date within the 5 CPA demonstration communities, and organized training and knowledge dissemination for some stakeholders, as an entry point for mainstreaming climate change under the scope of the current Programme.

AFCPA is also able to demonstrate some catalytic effects as the applied approaches are supporting institutional changes, catalyzing other parallel donor projects and wider stakeholder behaviour towards embracing practical techniques for delivery eco-agriculture to rural communities. The replication potential is good, based on current efforts to disseminate home garden products and seedling production etc and the potential for replicating is likely to be increased through more focus on engaging schools into the activities (to assist with outreach etc)..

The MTR also concludes that the AFCPA 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 track towards achieving its primary objectives. Capacity-building together with awareness building must, however, continue to be conducted during the remainder of the project on a regular basis (subject to funding), targeting all CPA and non CPA member stakeholders, with a particular focus on decision-makers and natural resources and land use managers.

Lessons learned

The project lessons learned are listed below.

Concrete Adaptation Interventions

The most successful aspects of the AFCPA project for the target communities most definitely are those interventions (physical and soft measures) that relate to the supply or management of water. Without doubt, those measures that are water focused (i.e.: pond creation, water tank supply, pipeline installation from catchment spring waters etc) are believed to contribute most towards the achievement sustainable project

outcomes and results. Hence it is recommended that the project keep the focus on the importance on water supply in tandem with the importance of climate change (the latter sometimes being often too technical and not broadly understood as a "concept" unless the focus of discussion relates to the supply or water). Also, only promote Eco-tourism in locations where success is likely to occur.

Community/National Impact

Poor literary levels have resulted in the AFCPA requiring additional PMU "hand holding time" to help deliver the outputs. The sustainability "model" for AFCPA 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 MSG 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 AFCPA). 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.

Knowledge Management (Training and Capacity Building)

Whilst there still remains a significant amount of money left for training (with only 58% of the training budget spent at the end of 2017) it is the view of the MTR that replicate training events are still needed in each of the 5 CPAs on existing trainings (i.e.: undertake the same trainings again). More effort on "hands on" training is still needed for the remainder of the project. Future capacity building support should possibly focus on developing eco-tourist guide skills, more literacy skills and leadership and management skills.

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 AFCPA project) to help craft future discussions are listed below.

Project Design

1. For the remainder of the project, explicitly address the changes in institutional arrangements that may be necessary when the AFCPA project ends.
2. Because stakeholders emphasized these risks, track any new risks that may be posed by institutional stability and external communication in more detail and present these in a more formal manner within the existing reporting avenues (PPR and Half Year Reports).
3 Produce an updated Stakeholder Analysis and Engagement Plan with immediate effect (building on the example started in Annex XII).
4 Introduce training (and in the future, the introduction of specific "indicators") that relate to community nutrition and the health of family units as a measure of improving health and wellbeing prior to having to focus on the implications of climate change.
5. Improvements to the inclusion of national level gender inclusion should have occurred at the project design stage as no gender disaggregated data exists in the logframe at the national level except at the local rural level. This is perhaps something to recommend on any follow on upscaling contract.

Effectiveness

1. Translate into Khmer all project documents (1 page Exec Summaries) and training programmes prepared for the PSC meetings to facilitate communication of the AFCPA to local villages.

2. Continue to support the 3 CPA demonstration site nurseries for the remainder of the project and to encourage the continued production of seedlings to use within (and outside) of the CPA boundaries.

3. Possible better promotion of existing "how to" guides/guidelines (using infographics as far as possible) on a range of topics including home gardening approaches, use of fertilizer, how to prevent insect infestations, how to monitor growth rates of seedlings in chamkhars, how to plant trees and reduce die off.

4. Develop any additional water ring well constructions so they are effective and useable for the coming dry season into 2018/2019

5. Introduce field monitoring strategies (i.e.: to record newly planted tree growth and their subsequent survival monitoring etc) that can be embraced by all sectors of society and are easily implementable (possibly involving local schools from neighbouring villages to generate a positive engagement strategy).

Efficiency

6. Endorse a no-cost extension to the project timeframe up to December 2019 to take into account the additional time needed to support the delivery of Component 3 and the upscaling-up and replication of demonstrated resilient measures carried out to date.

7. Continue with development of "road rest" areas in Skor Krouch though consider a re-titling of "Road Rest" for Chop Tasok CPA (nowhere need a road!) to be more "community centres"). It is recommended that the design of these could better reflect a Multi-Purpose Community Centre MPCC)..

8. Keep training topics specifically on eco-agriculture and livestock related topics (extending to fire breaks if appropriate) but do not focus efforts on peripheral topics such as traditional music/barber skills etc. Motorbike maintenance does have a value and so this topic wold be acceptable (due to the rural nature of the 5 CPA sites).

9. Design a "Train the Trainer" initiative using PMU elected "Champions" (each with a Deputy) to undertake the training and be subsequently rewarded for doing so.

Impact

10. Should any further physical interventions be proposed to communities outside of CPA boundaries, it is recommended that this should be pond creation, water reservoir (storage tanks) or pipeline networks to supply groundwater spring water to rural village communities. The impact of this is potentially considerable, immediate and very visible.

11. Set up a "Reflective Learning Approach" (RLA) that consolidates on current successes within the 5 CPAs. This may involve the undertaking of "Study Tours" to best practice locations for all current CPA beneficiaries as well as other non CPA member stakeholders.

12. Distribute more fruit trees to non CPA members or communities outside of CPA boundaries. The supply to fruit tree and rosewood (for example) seedlings should be encouraged to the Royal Academy compound site where 10% of all seedlings produced may be donated to provide a new nursey area for research and also supply to key beneficiaries.

13. Improve the degree to which the AFCPA project conducts and tracks the way project activities either do or do not interact with and improve the adaptive capacity of women (national and local levels) plus other marginalized indigenous groups.

14. Consider introducing a new training area focusing on nutrition and health, majoring on the new fruits and vegetables being grown as a consequence of the AFCPA and how improved nutritional cooking is key towards livelihood improvements and child health.

15. Focus on how schools can be better engaged in the process, and how the curriculum could benefit from embracing some of the key findings of the project to date.

16. Reconsider the proposed idea to plant seedlings/saplings along roadsides areas. The project should not proactively plant seedlings in "risky" areas where there are too many parameters that may influence the projects very good outcome results to date.

17. Consider new techniques to use social media platforms to help with outreach and awareness of the intentions of the AFCPA.

Institutional and Financial Sustainability

18. Ensure a close involvement of the National Committee for Sub-national Democratic Development (NCDD) in all adaptation mainstreaming activities into Communal Investment Plans to secure ownership of AFCPA activities.

19. Consider extending enrichment replanting activities to non CPA areas on confiscated chamkhar sites to compensate for the poor health of the landscape in these locations. "Back-casting" methodology training events could perhaps be set to assist here to help communities (during the remainder of the project to) help define actions plans to upscale the actions to the chamkhar and then landscape levels.

20. Extend the time period of training activities on home gardens, organic insecticides, nutrition training etc including continuing specific activities begun through AFCPA as appropriate and as budgets dictate. Also consider monitoring work with households already supported and expanding to new households in adjacent villages who are in neighbouring CPAs.

21. Consider strengthening the MSG financial contribution by a further US$1000 per group (as opposed to increasing the number of groups which is more likely to increase administrative burdens etc)). In addition, the project should expand the MSG concept to specific communities in adjacent CPAs located in the same communes.

22. Develop a short communications plan (focusing on the consolidation of the good practices undertaken to date) complete with targets and means of achieving targets up to the end of the project. In particular, it should contain information on lessons learned and best practices.

23. Develop a replication plan (exit strategy) that identifies how techniques such as integrated farming systems (within Chamkhars), home gardens livestock raising, water harvesting, etc. could be replicated.

24. Mainstream eco-agriculture and EbA Protocols into CDPs and Provincial Plans. Guidelines for Integrating Climate Change Considerations into Commune Development Planning need to be produced (in partnership with the Ministry of Agriculture and Forestry).

Monitoring and Reporting

25. Producing an "Exit Strategy" which should involve the production of a Consolidation and Continuation Strategic Plan that formulates the route map for next phases of the AFCPA.

26. Improve the physical monitoring of tree seedling growth in enrichment areas as the PMU team do not follow any formal monitoring approach to record health and growth rates of the plantings. The use of drone technology maybe proposed to assist in calculated forest cover in due course but in the immediate term better transect sampling is recommended plus support training on scientific monitoring techniques.

27. A new detailed Stakeholder Analysis and Engagement Plan is recommended early into 2018 to help support the actions to be completed in Component 3 to ensure that the impact of AFCPA is not lost and is sustained.

28. Should a GCF Concept Note approach be agreed to be taken forward as a recommendation from Component 3's specific upscaling consultancy work, the MTR believes that one interesting focal area could be focus on the nutritional capacity of new eco-agriculture programmes within CPAs (as part of a generic project that focusses on societal aspects of climate resilience).

1 INTRODUCTION

29. This is a Mid Tem Review (MTR) report for an Adaptation Fund (AF) project that was developed by the United Nations Environment Programme (UNEP) and the Ministry of Environment (MoE) in Cambodia to address the vulnerability of rural communities to climate change using ecoagriculture. The project, *"Enhancing Climate Change Resilience of Rural Communities living in Protected Areas in Cambodia" (AFCPA)*, has the overall goal to increase food supply and reduce soil erosion in communities surrounding five CPAs in Cambodia by: i) restoring at least 1,875 ha of degraded forests with plant species that are particularly appropriate for this goal; ii) enrichment planting of rice paddy boundaries and other cultivated areas with multi-use tree species that will enhance crop productivity; iii) trialling plots of several drought-tolerant hybrid rice cultivars in order to assess their potential yield and suitability for cultivation; and iv) intensifying and diversifying the productivity of at least 1,907 family agriculture areas (including home-gardens ranging in size from 0.2 ha to 1 ha) in communities living around the Community Protected Area (CPA) forest sites. The objective of the AFCPA project is consequently to enhance the climate change resilience of communities living around five CPA intervention sites, as well as downstream communities, to the climate change-induced hazard of erratic rainfall.

30. To achieve the above, the project has three main components:

Component 1: Protocols for ecoagriculture interventions - This will use bio-physical, ecological and socio-economic research to develop restoration and conservation agriculture protocols to be implemented in Component 2.

Component 2: Concrete ecoagriculture adaptation interventions – This will ensure that the restored forests and productive agricultural areas are maintained and the benefits maximised. Alternative livelihoods established through the AFCPA project will increase the resilience of local communities to the effects of climate change.

Component 3. Institutional capacity, awareness raising and upscaling of ecoagriculture interventions - This 3 will create an enabling environment for the ecoagriculture concept to be implemented in other Protected Areas (PAs) in Cambodia through awareness raised at a local and national level, and an upscaling strategy supported by policy revision where required.

31. This project is funded through the Adaptation Fund (AF) and adheres closely to the AF's Results Framework. It is designed to directly contribute to the AF's overall objective and outcomes that are outlined. It is also a requirement in all AF projects that at least one outcome and output indicator from the AF Strategic Results Framework must be included at the project design stage which has been complied with at the Project Design phase.

32. The main target groups were the national institutions involved in the implementation of the AFCPA project, particularly the key government and civil society organisations and importantly indigenous groups in the northern and eastern Provinces of Cambodia. The key intended audience for the findings of this MTR 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.

The total budget (US$) based on AF allocation is US$4,566,150 with a scheduled project closure date of July 2018 (excluding Implementing Entity fee). The official project starting date was in May 2013 (Inception Workshop). The official project completion date has not formally been extended at the time of writing though efforts to extend to December 2019 are currently being discussed.

33. AFCPA project activities were directed towards initiating interventions in five Community Protected Areas (CPAs – see Figure 3.1). Three of these CPAs are located within Boeugper Wildlife Sanctuary; Chiork Boeungprey, Skor Krouch, Chorm Thlok. Chiork Boeungprey is within Preah Vihear Province, while Chorm Thlok and Skor Krouch are within Kompong Thom Province. Chop Tasok CPA is in Phnom Kulen National Park, Siem Reap Province. All of these CPAs are located in the Northern Plains region. Ronouk Khgneng CPA is within Phnom Prech Wildlife Sanctuary, Mondul Kiri Province in the North-eastern forests region.

34. A project Baseline Assessment exercise was undertaken by C4ES early into the project (January 2014) and a "Summary of Mid Term Achievements" report was undertaken to outline progress against outcomes up to the end of 2016. Following the recommendations set out within this MTR, a formal process

will be undertaken by the UN Environment to follow up on compliance with the recommendations up to the end of the project scheduled for December 2019 (subject to AF and UN Environment acceptance of the recommendations for a project extension accepted by the Project Board on 26 January 2018 in Phnom Penh).

2 REVIEW/EVALUATION METHODS

2.1 Overview

35. In line with the UN Environment Evaluation Policy and the UN Environment Programme Manual , the MTR is undertaken approximately half way through project implementation to analyse whether the project is on-track, what problems or challenges the project is encountering, and what corrective actions are required. This MTR provides commentary on project performance from its inception (May 2013) through to the end of 2017 which represents a point which is over half way in terms of project delivery.

36. Following the Terms of Reference (ToRs) for the MTR (see Annex I), it specifically evaluates progress towards the project's expected impacts, outcomes, and outputs. The MTR assesses project performance to date (in terms of relevance, effectiveness and efficiency), and determine the likelihood of the project achieving its intended outcomes and impacts, including their sustainability. The review 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 Governments (relevant ministries) of Cambodia. In addition, the MTR assesses and comments on the project's ability to achieve its expected targets based on performance to date. In doing so, the MTR also proposes specific recommendations that are intended to feed directly into the project management processes. Finally, the MTR considers ways in which the project already does and/or could increase the likelihood that its results will be sustained beyond the project end date (see Box 1).

Box 1: Objectives of the MTR

Overarching Objectives of the Mid-Term Review

1. Assess progress towards the project's expected impacts, outcomes, and outputs.
2. Comment on the project's ability to achieve expected targets by project end date and indications that the project is contributing towards its impact goal.
3. Propose recommendations to improve the project's performance, and evaluate the project's likelihood of achieving sustainability.

37. The MTR is therefore an in-depth review using a participatory approach whereby key stakeholders are kept informed and consulted throughout the review process. Both quantitative and qualitative review methods are used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It identifies lessons of operational and strategic relevance for future initiatives within the field of sustainable development and climate change adaptation to support eco-agricultural development in Cambodia.

38. This report follows the format for MTRs provided by the UN Environment-EO and provides individual ratings for each review 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).

2.2 Stages of the MTR

39. The MTR was conducted over a period of two-and-a-half months beginning in early January 2018. The Review included multiple types of data-gathering processes, as well as a thirteen day mission in Cambodia (January 2018) for meeting with key stakeholders in Phnom Penh and visiting the 5 project CPA sites in the northern and eastern provinces. The Review included the following stages to gather information about the project, integrate information into an insightful analysis, and document conclusions.

- Document Review – the MTR began with an in-depth review of both project-related documents as well as relevant national policy and strategy documents. The document review generated an understanding of the project's design and status at the time of the MTR and also guided and informed the field mission for the Review. A full list of documents can be found in Annex VII.
- Field Mission – A field mission of thirteen days was conducted to collect diverse types of primary information. This included conducting: (i) semi-structured interviews with key stakeholders; (ii) focus groups with project beneficiaries including Provincial Working Groups members, targeted communes' leaders, and farmers; (iii) direct observation of project sites, and: (iv) collection of any additional secondary data. A complete agenda and list of interviewees included in the field mission (and meeting notes) can be found in Annex VI.
- Data Analysis – Once primary and secondary data were collected, all information was analyzed to respond to the specific MTR questions. These are spoken about in more detail in the following section.
- Reporting –Following the field mission in Cambodia, preliminary findings for the Review were presented to UNEP and the MoE. A Draft MTR Report, including the overall findings from the Review was submitted to UNEP and the MoE. Comments on this draft were received and addressed prior to despatch to Cambodian stakeholders. A Final Report was compiled after this time.

2.3 Data collection and analysis

40. The findings presented within this MTR are based on the design of a review matrix (see Annex II) which adopted the review 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 Project Steering Committee (PSC) at the start of the consultancy), 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), a purposely designed set of questions were prepared (to reflect the review 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 reviewer 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.

41. The primary methodology for the MTR is based on Results-Based Management (RBM). RBM was used in the MTR to emphasize:

- Context – Understand the project's position in the national and local context, specify the influence of contextual factors on the project, identify the relevant risks and assumptions related to the project, and evaluate the project's relevance with stakeholder and beneficiary needs.
- Performance Measurement – Evaluate program orientation around and progress towards output, outcome, and impact indicators.
- Management – Identify specific management and implementation practices that could improve project performance.
- Linkages – Emphasize linking context, progress monitoring, and management practices in a way that responds to program goals at the output, outcome and impact level.

42. A series of key strategic questions are presented in Box 2 to support the Review Matrix included in Annex II). Triangulation was then used to integrate data together looking for both confirmations from convergence of conclusions as well as potential differences in conclusions or opinions. In this way, triangulation served as a system of checks and balances on information as well as a source of nuance to conclusions. These are questions of interest to UN Environment and to which the project is believed to be able to make a substantive contribution:

Box 2: Key Strategic Questions of the MTR

1. To what extent has the shift from large scale restoration to 'chamkar' (home garden) based restoration in the project ensured that the project has reached its objectives/ targets? *(I.e.: how effective are the "home gardens in achieving Project Outcomes?"*
2. To what extent have the additional suite of interventions (e.g. water and additional livelihood interventions) been successful and can they be up-scaled/ introduced in other CPA's*? (have the additional planting schemes outside of the CPAs actually worked?)*
3. To what extent has the project contributed to an increase in climate change awareness and a reduction of climate change vulnerability in the selected project sites and to the selected communities? Is this likely to be sustained by community members after the project end? *(local beliefs and methods of farming are often difficult to change – has the project helped in this regard at all?)*
4. To what extent has the project contributed to mainstreaming ecosystem-based adaptation approaches/ ecoagriculture in Cambodia? *(eco-agriculture is not new in Cambodia, but has the project helped to set a pathway for this being mainstreamed?)*
5. To what extent has the project enhanced knowledge of good practices on increasing resilience to climate change-induced risks? *(how well have local communities understood the need for new planting approaches in wet/dry seasons etc)*
6. To what extent have the communities and community members been involved in the project activities including the management/execution of activities? Did any disputes arise between Government and communities and has this been dealt with in an amicable fashion. *(list those people that have been involved in the project activities (men/women/youth/elderly etc) and describe any situation that happened where the community disagreed with any approach that was proposed. How was this resolved?)*
7. Are the project indicators and information collected to measure indicators sufficient to ascertain whether the project is producing the desired impact/ outcomes?

2.4 Specific Review criteria and supporting questions

43. The main review 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.

44. The key questions adapted from the ToR were used as the main questions for the Review Matrix. These are set out below and replicated in (Annex II). *(NB: Some slight alterations were made by the reviewer 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 (ii) national development plans and polices on issues of climate change adaptation with specific reference to community protected areas, 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 climate 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 and ecosystem-based adaptation"?*
- *"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 (iii) are there sufficient measures in place to enable and sustain these efforts"?*

45. From the field mission (see Annex IV), approximately 150 stakeholders (governmental officials in Phnom Penh, provincial TWG members and local household beneficiaries in the 5 CPAs) 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 Mid Term Review (MTR).

2.5 Evaluation/Review Limitations

46. Certain review 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.).

47. 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 an understanding of the local situation and any "history" that the reviewer would not have been aware of, certainly helped to overcome any concerns or "local politics" etc.

2.6 Communication and Outreach

48. To ensure that the MTR seeks to promote learning and reflection, and that the key stakeholders find the recommendations relevant and useful, the reviewer has applied the following approach:

- 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 reviewer 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 Project Board (and supporting members) at a wrap-up meeting at the end of the field mission (see PowerPoint presentation in Annex VII);
- The reviewer was available to the PSC and stakeholders throughout the consultancy period (January 2018 to March 2018) via email or Skype for further contact and discussions.
- The draft MTR 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.

3 THE PROJECT

3.1 Context

49. Cambodia is amongst the most vulnerable of all Southeast Asian countries to the effects of climate change. The climate change-induced hazard of erratic rainfall is arguably the chief hazard and one that is already being felt. This affects agricultural productivity by: (1) increasing erosion from floods, which decreases crop production; (2) causing crop failure or reduction in crop yields as a result of droughts; and (3) causing damage to infrastructure from floods/heavy rainfall, which limits access to urban markets (Tye et al., 2014).

50. The climate change-induced hazard of erratic rainfall, which leads to droughts and floods, is decreasing agricultural productivity in Cambodia thereby constraining efforts to reduce poverty levels. These erratic rainfall events are predicted to increase under future climate change scenarios. Some of the most vulnerable groups in Cambodia are rural communities living in Protected Areas (PAs). This is because of the dependence of these communities on ecosystem services and a lack of alternative, climate-resilient livelihoods. As a result of erratic rainfall and consequent decreasing agricultural productivity, these communities are increasingly reliant on forest ecosystems to provide supplementary food sources and income from collecting and selling non-timber forest products (NTFPs) and fuel wood. Widespread degradation of forest ecosystems, however, is reducing the efficacy of this adaptation response. The consequences of the climate change-induced hazard of erratic rainfall include: i) increased erosion as a result of floods which damages crop production; ii) crop failure or reduction of yield as a result of drought; and iii) damaged infrastructure as a result of extreme rainfall events which limits access to urban markets

51. Rural communities living in Cambodia's PAs are particularly vulnerable to climate change effects due to their strong reliance on rain-fed agriculture. Both droughts and floods have become more frequent and severe and this is only expected to worsen. These communities are particularly vulnerable as they have few alternative livelihood options that are climate resilient. In addition, decreased agricultural productivity is resulting in an increased reliance of these communities on forest ecosystems to supplement food sources and income. Yet, widespread degradation of forests is reducing the efficacy of the adaptation response (Tye *et al*., 2014).

52. Rice is the most important crop for livelihoods in all CPAs. Currently, both floods and droughts are negatively affecting yields from rice. A number of villagers are already growing new (i.e. not traditionally grown) species of rice to increase yields. These practices have been implemented because of: (1) observations of farming practices made by villagers travelling to other districts; and/or (2) training and technical support on improved farming techniques provided by district agricultural extension officers, NGOs or other organizations in villages. Generally, local communities are not willing to plant useful tree species around the edges of their rice paddies although some community members plant useful tree species around *chamkar* plots. The local community of Chorm Thlok, for example, currently grows black beans around the edges of their *chamkar* plots.

53. There is a growing need to assist target vulnerable communities to adapt to climate change via Ecosystem-based Adaptation (EbA) and eco-agricultural interventions to ensure the sustainable livelihoods and motivate the local communities to get involved in sustainable management of natural resources. Protecting broad scale "Ecoagriculture landscapes" is seen as a critical strategic move. Such landscapes are defined as a "mosaic of natural, semi-natural, and agricultural lands occurring in an area of importance for conservation and rural development" (Buck *et al* 2006 cited by Oberthür *et al*., 2008). For assessing the

biophysical supply potential of ecoagriculture landscapes, a systematic analysis of this complex system is required. A framework for understanding ecoagriculture must assess how well a given landscape is delivering three sets of benefits: (1) conservation, (2) agricultural production, and (3) livelihood support. The measurement system must provide a holistic view of the landscape over time, considering the effects of individual management interventions as well as the complex interactions among disparate interventions, policies, and trends across the landscape.

54. The AFCPA project mainly aims at restoration of degraded forests, growing variety of plants around the rice/chamkar paddies with a hope to increase vegetation yields, to install irrigation systems to ensure the rice yields and homestead vegetables as well as provide livelihood alternatives for the local target communities. The project intervention sites are located in the three important protected areas (PA) that are officially recognised nature sanctuaries managed by the MoE.[1]

55. Boeung Per Wildlife Sanctuary, Phnom Kulen National Park and Phnom Prich Wildlife Sanctuary (Figure 3.1). Chiork Boeung Per CPA covers a forested area of 2,065 ha, and 189 families (730 people) live within its boundaries. There are approximately 300 ha of degraded forest within the CPA (Tye et al., 2014). Chop Tasok CPA is located in Phnom Kulen National Park in Svay Leu District, Siem Reap Province, covering an area of 306 hectares. It stands on the Phnom Kulen mountain massif with highest elevation of approximately 360 meters above mean sea level. Some of the crops grown are rice and cashew. Ronouk Khnheng is located in Phnom Prech Wildlife Sanctuary in Mondulkiri Province, covering an area of 1734 hectares. It stands on the high land with elevation more than 200 m above mean sea level. (Tye et al., 2014).

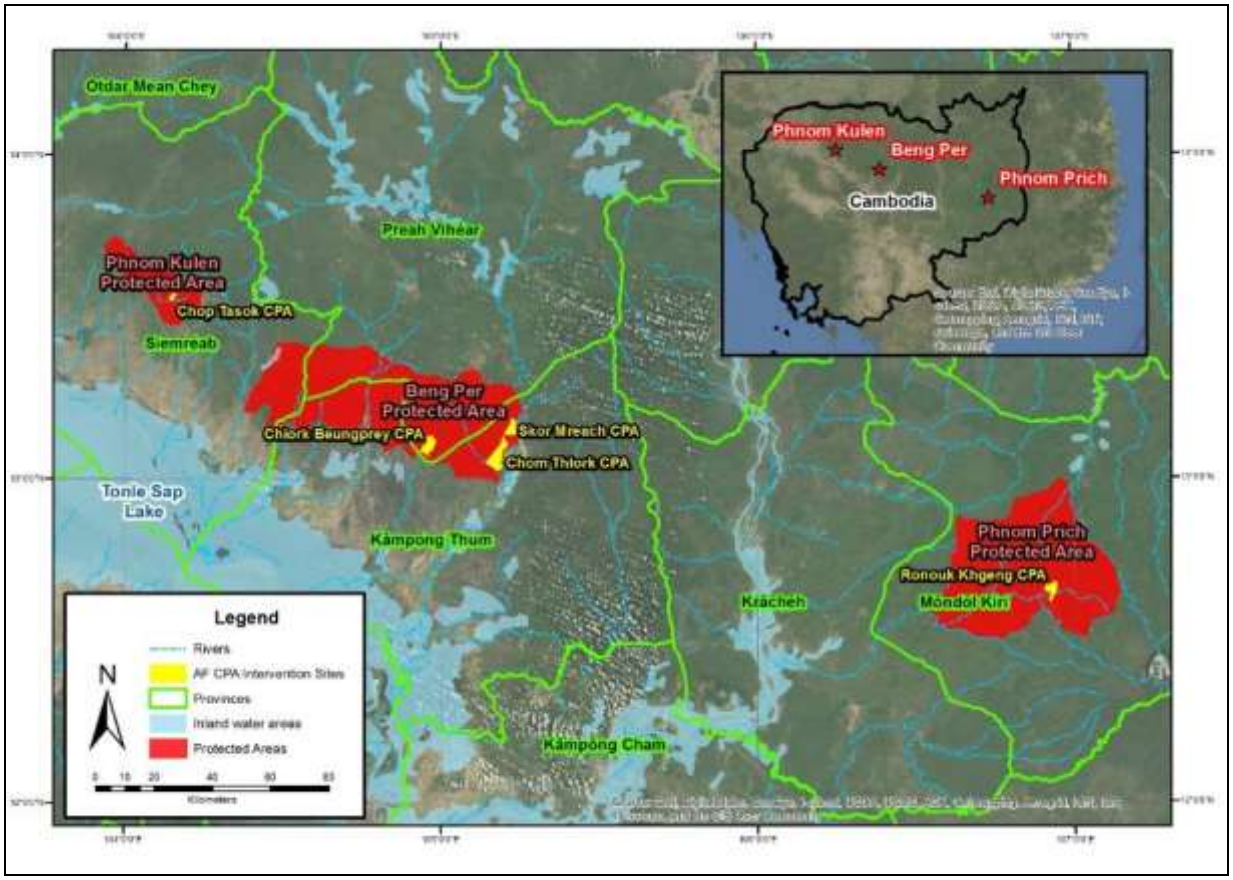


FIGURE 3.1: LOCATION OF THE FIVE TARGET CPAS ((SOURCE: TYE ET AL., 2014)

[1] CPA inhabitants are permitted to continue living in their traditional location and practice home gardening, sustainable collections of non timber forest products (NTFPs) though their rice paddies must be located beyond its traditional borders

3.2 Goals, Objectives, Outcomes and Outputs

56. "Enhancing Climate Change Resilience of Rural Communities living in Protected Areas in Cambodia" (AFCPA) is a project implemented by the MoE in cooperation with United Nations Environment (previously referred to as UNEP). It is financially assisted by AF to improve livelihoods of the people living in and reduce erosion in community protected areas in Cambodia. In its implementation, 5 rural communities within the protected areas were selected; namely (1) Chiork Boeungprey, (2) Chorm Thlok, (3) Skor Krouch in the Boeungprey Wildlife Sanctuary, (4) Chup Tasok in Kulen National Park, and (5) Ronouk Khgneng in Phnom Prech Wildlife Sanctuary.

57. The overall goal of AFCPA is to increase food supply and reduce soil erosion in communities surrounding the 5 CPAs. Its objective is to enhance resilience to the climate change induced hazard of erratic rainfall of the communities living around the 5 intervention sites as well as downstream communities.

58. The outcomes and outputs of the AFCPA are all intended to generate food and revenue and (ultimately) to reduce the pressure on forests. It seeks to achieve its goals through eco-agriculture approaches. Table 3.1 below details each project outcome and output as set out within the baseline assessment by C4ES (2014).

Outcomes	Outputs
Component 1: Protocols for ecoagriculture interventions.	
1. Technical expertise and a local enabling framework for forest restoration and conservation agriculture interventions that build climate resilience developed at CPA intervention sites through a consultative and participatory process.	1.1: Information generated on climate change impacts and preferred ecoagriculture interventions through a consultative and participatory approach. 1.2: Economic assessments undertaken to identify most appropriate ecoagriculture interventions and associated micro-finance and insurance products. 1.3: Forest restoration and conservation agriculture protocols developed for CPA intervention sites based on results from Output 1.1 and 1.2.
Component 2. Concrete ecoagriculture adaptation interventions.	
2. Multi-use forests established and maintained and agricultural practices diversified/intensified to supply a diverse range of food and stabilize topsoil, despite an increase in climate change-induced droughts and floods.	2.1: Capacity of local community for building climate resilience increased, including capacity to plan, implement and maintain ecoagriculture interventions under Output 2.2. 2.2: Forest restoration and conservation agriculture protocols implemented to build climate resilience (developed in Component 1) in CPA intervention sites. 2.3: Local communities' livelihoods enhanced and diversified through sustainable development of NTFPs and the promotion of sustainable alternative livelihood strategies. Output 2.4: Socio-economic and ecosystem monitoring of AFCPA project impacts downstream of CPA intervention sites.
Component 3. Institutional capacity, awareness raising and upscaling of ecoagriculture interventions.	
3. Restoration and conservation agriculture interventions to build climate resilience of local communities mainstreamed into	3.1: Awareness increased at a local level of the importance of ecoagriculture for protecting and enhancing commercial and subsistence activities. 3.2: Ecoagriculture activities promoted through institutional capacity

Cambodia's adaptation framework and related sector policies.	building and proposed revisions to policies, strategies and legislation. 3.3: National ecoagriculture upscaling strategy developed and institutionalized for CPAs in Cambodia.

TABLE 3.1: PROJECT COMPONENTS, OUTCOMES AND OUTPUTS

3.3 Stakeholders

59. Stakeholders under the AFCPA project include government ministries (implementers), civil society (NGOs/academia), provincial/commune/district officers (demonstration beneficiaries), and local agriculturalists/foresters/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).

60. 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).

61. The AFCPA projects connection to local beneficiaries took place, in large part, through its collaboration during the baseline Assessment phases, which was essentially designed to implement more "on-the-ground" activities within communities. The AFCPA project has also interacted with local communities specifically through its activities on awareness building and vulnerability assessment trainings etc.

62. A detailed mapping exercise of the stakeholders, their capacities and their roles, interests, and influence in relation to the project has actually not been produced to date by the project, however the MTR has presented a draft (for later development by the AFCPA project team) in Annex XII. It has been prepared on the basis of a) inputs from the Project Management Unit (PMU), Project Government Counterparts (PGC) plus field visit preliminary assessments, and b) a review of the documents listed in Annex VIII.

3.4 Project Implementation Structure and Partners

63. UNEP is the Multilateral Implementing Entity (MIE) for the AFCPA project. UNEP has significant experience in implementing projects of this nature, and has expertise in ecosystem-based adaptation, terrestrial ecosystems and agroforestry with dedicated groups in Climate Change Adaptation and Terrestrial Ecosystems. UNEP administers the grant on behalf of the AF, although it has no presence in Cambodia.

64. The lead national executing partner is the MoE who host the National Climate Change Committee (NCCC) and the Cambodia Climate Change Department (CCCD). The Committee is cross-sectoral and multidisciplinary and is composed of high-level government representatives (Secretaries and Under-Secretaries of State) of 19 Ministries, including the Ministry of Finance (MOF), and government agencies. The CCCD is responsible for *inter alia*: i) planning and policy formulation; iii) implementation of the UNFCCC; iii) assessment of new technologies on climate change adaptation and greenhouse gas emission mitigation; and iv) capacity building and awareness raising. Together with the Department of Research and Community Protected Area Development (DRCPAD) of the General Department of Administration for Nature Conservation and Protection (GDANCP), the NCCC and CCCD are ultimately responsible for the timely delivery of inputs and outputs and for coordinating the activities of the other responsible parties in the AFCPA project. An organogram depicting the AFCPA project management arrangements is shown below (Figure 3.2).

65. The **Project Board (PB)/ Project Steering Committee (PSC)** is responsible for making management decisions for the AFCPA project. In addition, the Board: i) undertaking project assurance (monitoring and evaluation); ii) ensures performance improvement; and iii) ensures accountability and learning. The PB

comprises of designated senior technical representatives (Director Generals) from relevant ministries (e.g. MoE and MAFCPAF), and representatives from local District Administrator offices. The Project Manager serves as secretary to the PB. The PB will approve annual work plans and procurement plans, and review project periodical reports as well as any deviations from the approved plans.

66. The **Project Management Unit (PMU)** comprises the National Project Coordinator (Navan Ouk), the Chief Technical Advisor (CTA – Nicholas Tye), a project accountant and a Project Assistant. A separate grouping of Project Government Counterparts (PGC) work as the field advisors to the project and are set up as 3 separate teams (reflecting the 3 PAs covered by the project). Each PGC team consists of a Team Leader and a supporting Team Assistant.

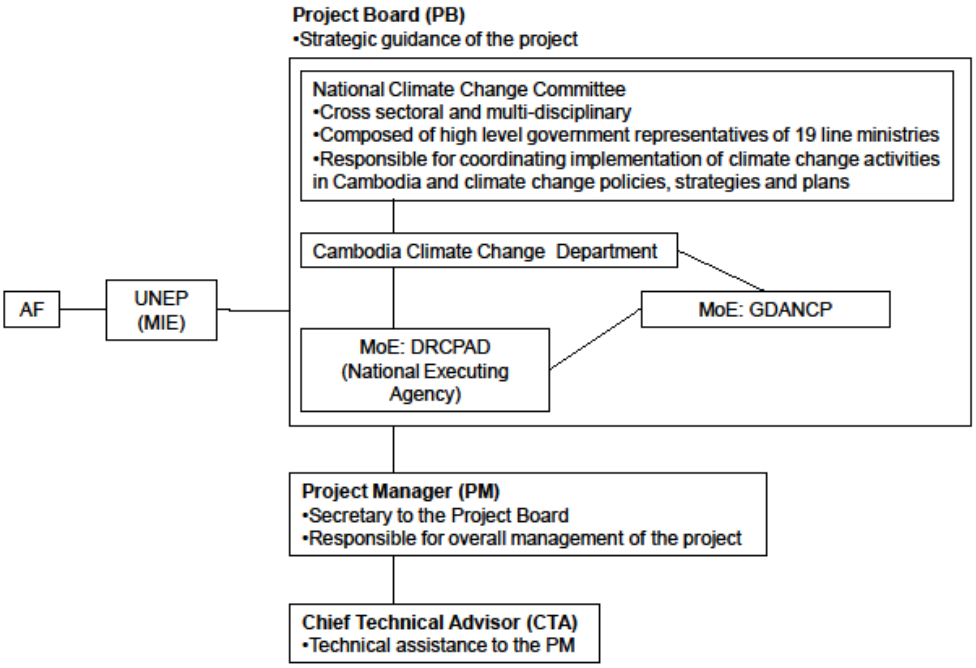


FIGURE 3.2: PROJECT IMPLEMENTATION STRUCTURE AND PARTNERS

3.5 Changes in Design during Implementation

67. 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 Tye *et al* (2014) which was endorsed by the PSC in mid-2014. A simple vulnerability index was also developed to assist in monitoring and evaluating of the overall project objective.

68. The report (Maninga 2015) recommended that a number of changes should be made to the project indicators to ensure that they be SMART (specific, measureable, attainable, relevant, and time-bound) which embraced AF criteria reviews to help update the original indicators set. The PMU did not officially change any indicators based on the produced by Dr Maninga. The only officially endorsed changes were made following the baseline study (Tye et al 2014). It is that results framework that is still reported against in the PPR.

69. Out of the original 21 indicators set within the Project Document, 8 were slightly modified, 9 were altered and 2 were removed. Furthermore, 5 new indicators were added. An important alteration has been made to the indicator for measuring extensive restoration interventions in each CPA (Indicator 2.2.3). This alteration was made because the baseline assessment found that, since the project was originally

formulated, there had been a significant change in the socio-economic context of the intervention sites. Over the past two years, the granting of economic land concessions and an increasing demand for cassava and cashew, has led to the majority of degraded forest within CPAs being converted to agricultural land (chamkar). Local communities depend on these chamkar for their livelihoods. Furthermore, the local communities consider these chamkar to be individually owned. This contrasts with the situation when the project was formulated, where degraded forest within CPAs was understood to be communally owned, and therefore extensive restoration of this land would be beneficial to the entire community.

70. Because of this change in socio-economic conditions at the project intervention sites, an alternative type of restoration, termed chamkar-based agroforestry, was recommended, which was based on similar principles to the original restoration interventions (i.e.: useful and indigenous plant species will be introduced to enhance the supply of ecosystem goods and services to the local communities). It differed from the original restoration interventions in that it intended to take place in dispersed, individually owned chamkar plots rather than in large tracts of communally owned land within the CPA. The target for extensive restoration in communally owned land was thereby reduced, while a new indicator and target for the chamkar-based agroforestry approach to restoration was added. Finally, building on the results of the indicator assessment, a protocol for the verification of project indicators was also developed.

71. This MTR reiterates the observation presented in the latest PPR (2017) which stated that the AFCPA 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 5 CPA Management Plans for each demonstration site CPA which reside within each of the 3 provinces and 4 PAs). These points are elaborated further in Sections 5.9.

3.6 Project Financing

3.6.1 Project Contributions (at Project Document Design Phase)

72. Table 3.2 outlines the initial budget of the AFCPA project components (taken from the ProDoc).

Project Component	Outcomes	Grant Amount ($)
Component 1: Protocols for ecoagriculture interventions.	Outcome 1: Technical expertise and a local enabling framework for forest restoration and conservation agriculture interventions that build climate resilience developed at CPA intervention sites through a consultative and participatory process.	405,000
Component 2: Concrete ecoagriculture adaptation interventions.	Outcome 2: Multi-use forests established and maintained and agricultural practices diversified/intensified to supply a diverse range of food and stabilize topsoil, despite an increase in climate change-induced droughts and floods.	3,391,950
Component 3: Institutional capacity, awareness raising and upscaling of ecoagriculture interventions.	Outcome 3: Restoration and conservation agriculture interventions to build climate resilience of local communities mainstreamed into Cambodia's adaptation framework and related sector policies.	373,800
Project Execution Costs		295,400
Monitoring and \Evaluation		100,000
Total Project Costs		**4,566,150**

Table 3.2: Project Contributions

73. The financial figures in Tables 3.2 show the total project budget of US$4.566 million defined from the Prodoc (excluding the Project Cycle Management Fee charged by the Implementing Entity of US$388,123). More detailed assessment of this (and final project spend) is presented in Section 5.5.

3.7 Project Costs

74. Table 3.3 displays the total expenditure (as of 31 Dec 2017) 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 that Components 1 and 2 have both efficiently underspent (mostly completed according to August 2017 Progress Report), and sufficient funds remain to complete Component 3 (circa US$197k). Project Execution costs appear high (88% spend to date) and so some re-adjustment of fuds may appear necessary from underspend in Components 1 and 2 if needed). The reallocation of excess funds from Components 1 and 2 are proposed to re-use as Project Execution management costs (due to the needs of the National team) and this is being formalised based on advice presented at an Additional Meeting to the Fifth Project Steering Group Committee Meeting held on 25 January 2018). A more detailed review of these figures is presented in Section 5.5 and in Annex V.

Table 3.3: Project Costs

Component	Planned project budget (see Section 3.6.1) (US$)	Total expenditures reported (as of 1.1.18)	Total Remaining Budget (1.1.2018 to project completion)	Expenditure ratio (actual/planned)
Component 1: Protocols for ecoagriculture interventions.	405,000	323,380	81,620	80%
Component 2: Concrete ecoagriculture adaptation interventions.	3,391,950	2,253,772	1,138,178	66%
Component 3: Institutional capacity, awareness raising and upscaling of ecoagriculture interventions.	373,800	176,237	197,563	47%
Monitoring and Evaluation	100,000	29,016	70,984	29%
Project Execution Costs	295,400	260,323	35,077	88%
TOTAL	**4,566,150**	**3,042,728**	**1,523,422**	**62%**

3.7.1 Co-financing

75. No co-financing arrangements were set up for the project at the outset. GoC “in kind” contributions were agreed upon (i.e.: office equipment, vehicles etc) though example figures for these have not been forthcoming at the time of writing (January 2018). 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.

4 THEORY OF CHANGE

76. 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 was constructed to frame the research questions that guides in impact monitoring. The elements of the ToC are based on the project Logframe and the reports that were submitted by a number of different experts. The ToC maps out the direction of the project. Conceptually, a ToC is:

- **A conscious and creative visualization exercise** that enables us to focus our energy on specific future realities which are not only desirable, but also possible and probable;
- **A set of assumptions and abstract projections** regarding how we believe reality could unfold in the immediate future, based on i) a realistic analysis of the current context, ii) a self-assessment about our capabilities of process facilitation, and iii) a critical and explicit review of our assumptions;

- **A thinking-action approach** that helps us to identify milestones and conditions that have to occur on the path towards the change that we want to contribute to happen;

- **A multi-stakeholder and collaborative experiential learning exercise that encourages the development of the flexible logic needed** to analyze complex social change processes;

- **A semi-structured change map** that links our strategic actions to certain process results that we want to contribute to happen in our immediate environment;

- **A process tool** that helps us to monitor consciously and critically our individual and also collective way of thinking and acting.

77. The ToC of the AFCPA project was first drafted by an individual project M&E consultant (Maningo 2015) who based his observations on the original Baseline Assessment (Tye et al 2014) and was comprised of the following elements:

- Problems and Community Needs;
- Resources and Enabling Environment;
- Results and Desired State or Impacts;
- Strategies, Interventions and Inputs;
- Assumptions;
- Influencing Factors.

78. The different elements and factors of the projects TOC is shown in Figure 4.1 below (taken from Maningo 2015). It outlines the original ToC "linkages" that exist between the project outcomes and outputs as set out within the ProDoc.

79. The AFCPA project has already successfully contributed towards achieving many 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 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).

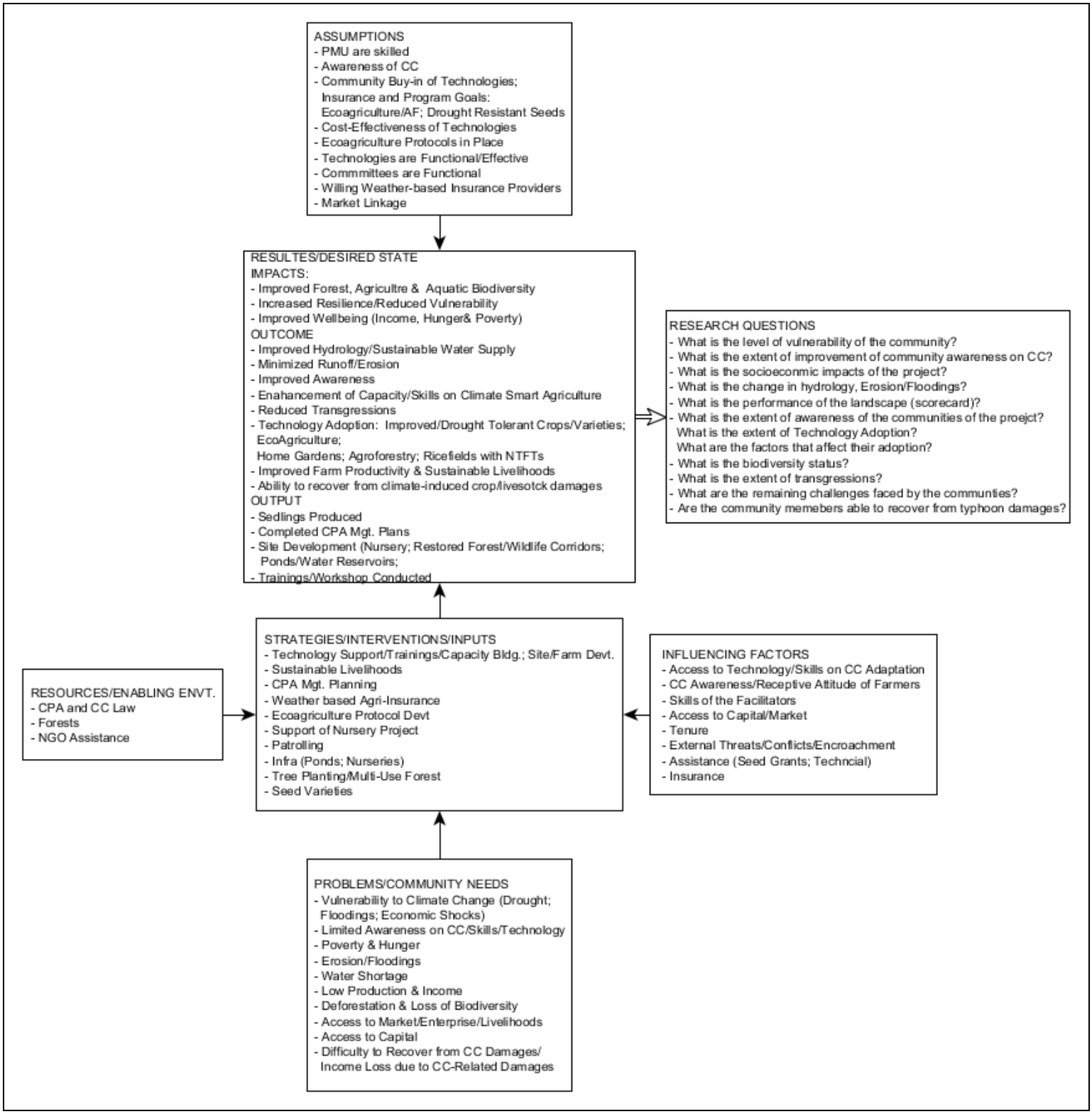


FIGURE4.1. THEORY OF CHANGE OF THE AFCPA PROJECT (FROM MANINGO 2015)

5 REVIEW FINDINGS

5.1 Strategic Relevance

5.1.1 Global, Regional and National Environmental Issues and Needs

80. Climate change increasingly becomes one of the defining factors to sustainable socio-economic development across the globe (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.

81. Cambodia's mean surface temperature has increased by 0.8°C compared to 1960 (SNC 2015) 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 SNC, (2015). 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).

82. 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.

83. AFCPA 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 research and baseline data collection reporting systems and processes. With regards to Outcome 2 (the production of concrete eco-agriculture interventions for the CPAs), coupled with part delivery of Outcome 3 through effective training activities on delivering reforestation and agricultural focused actions, all provide clear evidence of how the project has contributed to regional and international climate change challenges and issues surrounding food security in Cambodia.

5.1.2 UN Environment Mandate and Policies

84. The latest UN Environment's Medium Term Strategy 2018-2021 (MTS) is a new document that guides UN Environment's programme planning over the immediate four-year period. The new agenda acknowledges the integrated nature of the many challenges that humanity faces, from gender inequality to inadequate infrastructure and from youth unemployment to environmental degradation. It is informed by relevant resolutions and decisions of the United Nations Environment Assembly, the General Assembly and the UNEP Governing Council, and by the strategies and plans of multilateral environmental agreements and other internationally agreed environmental goals.

85. Those mandates presented of relevance to the AFCPA project include climate change which remains a pressing issue and must be addressed through enhanced adaptation and a reduction in greenhouse gas emissions. Equally important is resilience to natural disasters, which are becoming more frequent and

more damaging with the warming climate. Biodiversity is also raised as being key to maintaining healthy and productive ecosystems, which in turn are necessary for conserving flora and fauna, and to providing a large range of ecosystem services such as drinking water and secure food systems. There is also a need to make better use of our natural resources for economic and social growth, to improve management of waste and chemical products and set up effective laws, policies and institutions to govern actions that affect the environment.

86. 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.

87. 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 eco-agriculture and biodiversity particularly at the terrestrial ecosystem level.

88. Table 5.2 presents a review on whether the project is aligned with the Bali Strategic Plan (BSP)[2], 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-Review Rating: Satisfactory (S)

5.1.3 UN Environment Strategic priorities and operational programme(s)

89. With reference to UN Environment Programme of Work (PoW) (2018 -2019) the project seeks to respond to: i) changes in rainfall levels and patterns; ii) increased temperatures; and iii) increased frequency of climatic hazards (such as droughts, episodes of erratic rainfall and flooding). The AFCPA contributes to to the UN Environment PoW sub-programme 1 (Climate Change) in particular with regards towards the expected accomplishment (a) namely that *"Countries increasingly advance their national adaptation plans which integrate ecosystem-based adaptation".* This is measured through three indicators of which the AFCPA contributes most directly to indicator ii) "*increase in the number of countries that have technical capacity to integrate ecosystem-based management into national adaptation plans".*

90. The projected impacts are expected to have a negative impact on livelihoods, water supply and quality and soil erosion in the 5 Community Protected Areas (CPAs) of Cambodia. CPAs were established to accommodate longstanding villages within these PAs and recognize that local people can participate in managing natural resources. Section 5.4 and 5.5 stress that the projects effectiveness had much to do with the fact that the AFCPA project is designed to make best attempts to structure institutional arrangements to mimic national governance frameworks, especially in the format/composition of committees and steering groups etc. This relates towards the achievement of UNEP PoW) sub-programme 1 UNEP Secretariat accomplishment "*(a) Countries increasingly advance their national adaptation plans which integrate ecosystem-based adaptation".*

91. It is felt that strategic benefits may have been clearly demonstrated if more research could have focused on specific technical areas that have not been focused on in tandem to the work in 2014 by C4ES on watershed hydrology etc. Complimentary effort could possibly have been placed on enhanced studies on soil chemistry, market research on eco-tourism and community wildlife feasibilities. Soil chemistry in particular is one of the important components to enhance crop production. If planted fruit trees and/or crops on the improper soil, it will be less productive. Plant species selected for planting need to be compatible with the receiving soil types. In this regard, a soil study at Chiork village that focused on soil structure, pH and mineral could have been be conducted at minimal cost to the project and (in fact) is seen

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

as a project oversight. It is proposed that this technical area should be considered in any future follow on support work for additional CPA interventions.

Strategic Relevance Review Rating: Satisfactory - the AFCPA has largely contributed to the fulfilment of UN Environment's mandate and policy. AFCPA 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**.**

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

Project Components		UN Environment Medium Term Strategy (2018-2022)	Link to Bali Strategic Plan (BSP)?	Link to UN Environment Gender Policy and Strategy (GPS)	Human Rights Based Approach (HBRA)?	Example of South-South Co-operation?	Evidence of UN Environment Safeguards followed?
Component	**Outputs**						
Component 1: Protocols for ecoagriculture interventions.	Output 1.1: Information generated on climate change impacts and preferred ecoagriculture interventions through a consultative and participatory approach. Output 1.2: Economic assessments undertaken to identify most appropriate ecoagriculture interventions and associated micro-finance and insurance products. Output 1.3: Forest restoration and conservation agriculture protocols developed for CPA intervention sites based on results from Output 1.1 and 1.2.	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 2018-22) is addressed (**Climate resilience:** Countries increasingly advance their national adaptation plans which integrate ecosystem-based adaptation) in the AFCPA.	BSP objective to develop national research, monitoring and assessment capacity was undertaken through the set-up of the Climate Change Data Network (CCDN) to support data collection, analysis and monitoring of environmental trends and in establishing infrastructure for scientific development and environmental management.	*NB: this project was developed and approved PRIOR to the gender policy being put in place.* GPS Sub-programme 1 (Climate Change) is not specifically referred to in the ProDoc for Outcome 1. No specific gender related information possible is disaggregated for this Outcome though it is included in Component 2 and 3.	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 Climate Change Data Network (CCDN) 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.
Component 2: Concrete ecoagriculture adaptation interventions.	Output 2.1: Capacity of local community for building climate resilience increased, including capacity to plan, implement and maintain ecoagriculture interventions under Output 2.2. Output 2.2: Forest restoration and ecoagriculture protocols		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.	*NB: this project was developed and approved PRIOR to the gender policy being put in place.* No specific gender related information possible that is disaggregated for this Outcome (according to the AFCPA Completion	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	Platform is set (through completion of Provincial level Vulnerability Assessment Plans for improving institutional capacity-building, including through the exchange of expertise, experiences,	

	implemented to build climate resilience (developed in Component 1) in CPA intervention sites.			Report (2016).	the 4 Provinces focused on.	information and documentation	
	Output 2.3: Local communities' livelihoods enhanced and diversified through sustainable development of NTFPs and the promotion of sustainable alternative livelihood strategies.						
	Output 2.4: Socio-economic and ecosystem monitoring of AF project impacts downstream of CPA intervention sites						
Component 3: Institutional capacity, awareness raising and upscaling of ecoagriculture interventions.	3.1 Awareness increased at a local level of the importance of ecoagriculture for protecting and enhancing commercial and subsistence activities		Environment -related technology support and capacity-building was provided (in part) throughout Outcome 3 (training events and new pilot demonstration projects etc.).	*NB: this project was developed and approved PRIOR to the gender policy being put in place.* According to the AFCPA Completion Report (2016), for Outcome 3, 94% of those interviewed claim improved livelihoods, 91% of men and 97% of women.	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.	
	3.2 Ecoagriculture activities promoted through institutional capacity building and proposed revisions to policies, strategies and legislation	Proposed revisions to national strategies which take into account Ecosystem based Adaptation/ Ecoagriculture also address MTS (2018 -2022) expected accomplishment 1 (a) on Climate Change – see above.	The BSP promote 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 (i.e.: outcome 4's strategy for ecosystem reliance etc.)	Obj 2 Number of project beneficiaries, gender disaggregated benefitting from the project's ecoagriculture interventions.	As above	South-South best practice on mangrove planting techniques is possible in the future.	
	3.3 National ecoagriculture upscaling strategy developed and institutionalised for CPAs in Cambodia						

5.2 Quality of Project Design

92. As stated in Section 4 (ToC), the PSCs approach to update the project results framework with revised indicators, confirmed baseline values and updated targets (endorsed by the PSC towards the end of 2014) 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 which were identified as the principle negative climate events in Cambodia. Additionally, the modified indicators better included gender disaggregated metrics, though only for rural situations (not at the national GoC level). Finally, the Baseline Assessment (Tye *et al* 2014) reorganized outputs and activities to create a more coherent division.

93. Overall, the updates to the project design presented in the ProDoc, in the view of the MTR, the approach centred itself (correctly) on identifying just two principle challenges that relate directly to well-known climate change risks facing communities in Protected Areas (PAs). 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 as well as nutrition levels (though this point was not clearly made in the ProDoc). Secondly, local, provincial, and national capacity is low (financial and human) with regards to eco-agriculture and hence the ability to mitigate vulnerabilities to climate change will remain low in the future unless actions are taken to address this proactively. Improvements to the inclusion of national level gender inclusion should have occurred at the project design stage as no gender disaggregated data exists in the logframe except at the local rural level.

94. Cost-effectiveness was an important consideration in the design of the project, and thus the risk that interventions are found not to be cost-effective is low. In addition, an Agricultural Market Assessment expert was hired with the specific objective to analyse the cost-benefit of selected interventions. The findings of the CTA were used to guide further project interventions. Procurement procedures followed by the AF project ensure that cost-effective implementation arrangements are followed.

95. An important issue concerning the quality of the project design relates to enforcement of land usage within PAs which links directly to regulations within CPAs. In addition this relates to the accuracy of CPA boundary setting. Whilst there appears to be transparency and agreement over the setting of CPA areas (via the work of Tye *et al* 2014), there are inevitable issues surrounding the formal participatory community setting of CPA boundaries and hence boundary enforcement of such over time. This is important to raise as the original project design "strategy" was to encourage the scale of interventions as being at a "landscape scale", followed by the "chamkhar" scale and the finally the individual homestead. Of note, the project appears to be proving far more successful at the homestead level with inevitable challenges being faced at the larger scales of intervention, essentially due to the enforcement of CPA boundary issues etc. The delivery of project objectives at the landscape scale is (in the view of the MTR) some way off as many challenges remain on this aspect. However, it is not impossible but the next tier of focus (for the remainder of the project) needs to be how to upscale the existing approach at the chamkhar level. One example of how this may be achieved is being tested in Siem Reap Province whereby a "trade off" partnership was presented between the non-member CPA community and those who are within the CPA community. Here the former would pass over lands (chamkhar) to the CPA in return for livestock animals/pigs/chickens etc.

96. Annex XI of this MTR has undertaken a more detailed new review of the Project Design. This MTR finds that the edits made to the AFCPA impact, outcome, and output statements as well as corresponding indicators, at the project outset and review period (Maningo 2015) 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*[3]
Project context and complexity	5
Project preparation	4
Strategic relevance	5
Intended results and causality	4
Logframe and Monitoring	5
Governance and supervision arrangements	5
Partnerships	4
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	**4.69**

Quality of Project Design Review Rating: Satisfactory (S): The MTR 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

97. Externalities and risks that possibly could have affected the project implementation context were identified in the Project Performance Report (PPR) for Year 1 (2014). Of interest, the text relating to projects risks are not presented within any of the Half Year Reports reviewed (2014-7). Despite this, any externalities or "risks" to the project that were identified within the ProDoc, were recorded as being of either a low or medium risk (Table 9 of the agreed ProDoc 2014). 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 MTR finds that certain external risk factors appear to be mostly well considered by project partners even though administratively these do not appear to have been recorded within the Half Yearly Reports too well. It is proposed that this issue is addressed into the last phases of the project.

98. With reference to political instability, there is no recorded evidence of any situation (electoral or non-electoral) that has occurred to date (during the projects duration) that has impacted on project performance over and above normal government operating procedures. In fact, between 2011 and 2016 (including the Local Commune Elections in 3 June 2012[4] 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). There have been changes to government following the election (new Minister), but this did not negatively impact the project. The project has in fact adapted well to integrate new directors into the projects operational structures. Hence there are no extra-ordinary political circumstances that appear to have affected project performance to date.

[3] 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 review report is calculated by taking a weighted mean score of all rated quality criteria,

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

99. Regarding environmental conditions, activities within the 5 project demonstration CPA site interventions, which all may have been influenced as a result of flooding during the wet seasons, appear to have been well planned in most cases to ensure that any activities are implemented during the most appropriate season (rainy season for home gardening etc). Delays in funding release have, however, resulted in some activities having to be carried out during inappropriate seasons (enrichment planting during dry seasons) though whilst some delays have occurred, these cannot explicitly be pin-pointed directly to environmental conditions.

Nature of the External Context Review Rating: Moderately Satisfactory (MS)

5.4 Effectiveness

5.4.1 Achievement of outputs

100. 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 AFCPA PMU (progress up to 2016) which declares that the project has delivered virtually all its planned outputs for Components 1 and 2. Table 5.4 outlines a comprehensive list of achievements for all 3 Components. The following text provides some exemplars of output achievements to date per Component (as appropriate).

Output Summary within Component 1 Sub-Review Rating: Highly Satisfactory (HS)

101. According to progress reported in the Fifth PSC Meeting held on 4 August 2017, the AFCPA project has (to date) completed a number of key Component 1 outputs (see Table 5.4 for full list) though some notably achievements include the following:

- Ten GoC counterparts recruited into project teams;
- 12 technical reports submitted by the end of Year 1 (6 specialist reports and 5 economic assessment reports);
- 15 MSc students fully funded by the AFCPA;

102. Despite the obvious recorded successes outlines in Table 5.4, some observations relating to Component 1 performance is now briefly considered. The MTR believes that improvements to the effectiveness of consultancy research outputs could have taken place with more effort taken towards a more effective way of communicating the research outcomes and results. Reports could have all (as a minimum) had a simple Khmer Executive Summary that was disseminated to local groups via the PMU teams. In addition, when consultants (national and international) came to visit local villagers on separate consultancy missions, they should have been supportive to the PMU to better communicate project progress and also some technical advice on the specific topic being currently researched. This was raised specifically at the community group discussion at Chiork Boeung Prey though a number of local villagers, when consulted upon, all commented in the lack of feedback on findings to date. This also relates to examples where advice may have been provided by local villagers on how improvements to the project could be made, yet nothing appeared to have been adapted in the approach adopted by the PMU.

103. An example of this relates to the local understanding that soil conditions in enrichment proposed areas would not be of sufficient quality to ensure growth of certain tree seedlings. The production of simple outputs (text or video imaging due to poor levels of literacy in many villages) could have easily been adopted. It may be considered that this community feedback approach is adopted in future indicator setting exercises on similar projects. Such an action (listening and responding to local villagers that related to project design ideas) would go a long way to reduce jealousy/suspicion amongst local commune members about the effectiveness of large donor funded projects (whose perception in some cases proposes a strong belief that money is not often used for intended beneficiaries).

104. In addition to the above, some stakeholders have stated that the research undertaken in Component 1 was devoid of local cultural and context awareness issues and that awareness of local Khmer seasonality issues was occasionally overlooked in some research reports. Consequently, to a small degree, the MTR believes that project effectiveness has been affected (in part) by engrained local cultural believes and the challenge towards changing mind-sets on what to grow that is different to the norm (i.e.: climate resilient crops etc). Standards of local village education are often quite low and so villagers often want to continue to follow traditional ways of agriculture and avoid new "modern" ideas of change. Importantly, and credit to the Project Coordinator in coordinating, is that the PMU mitigated this challenge by spending more time in the field, coaching villagers on new techniques and giving justification and proof that new ways will work. The impact of this on the project was that more staff time (and hence expenses) were needed especially in the early stages of Component 2 (activity set up and training delivery etc).

Output Summary within Component 2 Sub-Review Rating: Highly Satisfactory (HS).

105. The AFCPA has completed a number of key Component 2 outputs (see Table 5.4 for full list) though some notably achievements include the following:

106. According to progress reported in the Fifth PSC Meeting held on 4 August 2017, the AFCPA project has (to date) distributed a total of 172,592 fruit trees (92,592 fruit trees distributed to the 5 CPA project target sites and now an additional 80,000 fruit trees distributed to other CPAs that are outside of the original project target areas. In general, the AFCPA has planted around 900,000 trees which represents circa 500hectares of enriched forest (thus over-achieving its target significantly). Within the 5 project targeted CPA sites, the AFCPA project has also constructed 119 small pumping wells, 47 open ring wells and 10 large pumping wells for 2017 water infrastructure supply activities. It has also planted in total 321,276 indigenous trees in 2017 reforestation activities of which 256,276 are planted whilst 65,000 indigenous trees have been planted outside project targeted areas.

107. It cannot be questioned that based on these statistics, this is a significantly credible effort, though the reviewer is unable to confirm the success rate of (for example) certain planting interventions to confirm overall effectiveness. Some minor observations relating to Component 2 performance is now briefly considered.

108. The effectiveness of Component 2 interventions, whilst clearly impressive, has (in part) been jeopardised by the scheduling of certain actions which have either not coincided with seasonal needs (wet or dry season planting or harvesting needs) or possibly with more day to day time scheduling adopted by local farmers/foresters. This latter point is one that was more noticeable during field research work during Component 1. Locals are very reserved and often complied to respond to the requests of consultants even though it was to comprise their daily routine and chores.

109. Finally, it could be argued that the 3 constructed "Road Rest" areas (within Romni commune, Gnorn village be possibly retitled. A fourth construction is under construction at Khla Khmum (demonstration village) though it is more of a communal area that a "road rest" area. It is the view of the MTR that a new term should be adopted for these specific constructions if possible. No further information has been sought on this construction, and whilst its approach mirrors others being constructed, consideration of disaster shelter issues and eco-tourism possibilities" may have benefitted the design of the site (i.e.: not cyclone proof/future visitor seating areas for cultural shows etc). Consideration of creating (or slightly adapting these existing Road Rest Areas as "Multi-Purpose Community Centres (MPCCs) should be considered).

Outputs Summary within Component 3 Sub-Review Rating: Moderately Satisfactory (MS).

110. According to progress reported in the Fifth PSC Meeting held on 4 August 2017, the AFCPA has completed a reduced number of key Component 3 outputs (see Table 5.4 for full list) though some notably achievements include the following:

111. Most of the activities and outputs being produced under this Component are yet to be delivered. Output 3.1.1, however, is already circa 80% achieved to date, with a number of high profile training events taking place plus the distribution of climate resilient rice species, home garden equipment and seedlings including livestock provision. To date, based on 48 project training events, AFCPA has trained more than

4,500 participants (50% being women). Many of these activities importantly have been broadcast through TV channels, use of posters, radio, camping events, school visits and events at Road Rest Areas. The project has started a web based data network though more work on this is required. In addition, 6 separate video documentaries are in the early stages of production.

112. With reference to Output 3.1.3 (number and type of REDD+ feasibilities studies produced), AFCPA has recruited an expert to produce a draft report on this though conclusions suggest that it is too early to investigate the potential to integrate/promote eco-agriculture or species from multi-use forests into REDD+ at the present time.

Achievement of Outputs Review Rating: Highly Satisfactory (HS). - AFCPA has delivered virtually all its planned outputs in Components 1 and 2. The focus for delivery lies squarely into Component 3 to continue the good work so far. Based on an review of available reports, coupled with key stakeholder consultation in Cambodia, the delivery of a high percentage of outputs have collectively contributed significantly towards improving an understanding of climate change concerns in Protected Areas.

5.4.2 Achievement of Direct Outcomes

113. The Review 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 are going a long way towards helping Cambodia to have strengthened institutional capacity and policy coordination, mainstreaming climate change in national and local development plans, capacity building for eco-agriculture and adaptation planning etc. A considerable knowledge base has also been gained, which can feed into work plans or programs of relevant departments, local administrations and ministries. Table 5.4 outlines a comprehensive list of outcome achievements.

114. Based on a review of Outcomes 1, 2, and 3 (see Section 5.4.2) the achievements of the various outputs and outcomes have positively set a platform for guiding and communicating a clear national direction on sustainable eco-agricultural development in the future. Importantly, the AFCPA has set the platform for "Climate Smart" agriculture and forestry within PAs 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 it is often very difficult to encourage mind-set changes within rural communities, and to get them to think in different ways regards cropping etc. For example, the project has faced challenges in getting communities to motivate them to start their own businesses, especially diversifying into new business areas (such as eco-tourism). However, the establishment of the MSG approach (a revolving loan from ACELDA Bank) in all 5 CPAs has proved a success (inaugural workshop held on 23 February 2017). In fact within one CPA (Ronouk Khgneng CPA), despite a slow uptake (due to poor literacy levels), 91 out of 95 families have joined the MSG Scheme. The scheme has "snowballed" once families could see the benefits. This is deemed a powerful project success in light of the social educational challenges that faced the project here as such a high percentage of the CPU community all want to be involved. A savings management team has also been selected amongst CPA committee members to help manage day to day revolving savings.

Achievement of Direct Outcomes Review Rating: Satisfactory (S). The direct outcomes progress is setting the platform towards strengthening institutional capacity and policy coordination, mainstreaming climate change in national and local development plans, capacity building for reduced vulnerability etc. 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

115. 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 review 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). The MTR has adopted some new Intermediate State "sub titles" (based on understandings collated during the mission) that are now used within this section.

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 eco-agriculture in PAs

116. On a very positive note, the success of the AFCPA demonstration projects within the 5 CPAs (in part due to successful PMU delivery approach) has helped to support a successful set of demonstration pilot exercises. These now have the real potential for duplications and / or upscaling of existing activities to communities outside of CPA boundaries through within PAs. An important observation from AFCPA to date is that there does appear to be the political will at the national and sub-national (provincial and District levels) to make a concerted effort for mainstreaming climate resilience, through the implementation of the national decentralisation policy and through updated sectoral policies and national vision documents on rural agriculture, forestry and PA management. Despite this, in the view of the MTR, funds being released for this by GoC are often inadequate to really sustain the effective implementation of policy direction to address climate change (for operation and maintenance, basic agricultural development needs, and supporting livelihood security at the village level). This inevitably influences project "impacts" at all levels, but particularly so at the district and commune intended beneficiary levels. More financial commitment is therefore likely to be needed at the national level to achieve effective policy implementation, (through the delivery and implementation of Commune Development Plans (CDPs) supported by detailed Commune Investment Plans (CIPs) that are able to demonstrate committed national financial resources to help promote conservation and rural livelihood security.

117. A key challenge often relates towards how to improve two way communications between the Village Chiefs and the Commune Council and then up to District Governors on the work being undertaken at the village level. Commune meetings do regularly take place and this remains the fulcrum for all Village Chiefs to convey issues and concerns to the Commune Council. This inevitably appears to include debate and concern over CPA boundary encroachment issues (regulation and patrolling etc). The CDPs need to be reviewed and encouraged to include the concepts/protocols and byelaws set up by the AFCPA to date. Currently any action will only be supported by the Commune Council if it is included clearly as a budgeted line item within the CIP. This issue needs to be focused on within the remainder of the project to ensure this communication line is clearly coordinated and understood by all parties. This is important as the GoC are currently pursuing a decentralisation policy under the Ministry of Interior who appear committed towards supporting devolution activities and tasks from sub-national, to District, to Village levels, however, only a small amount of money is set aside for this to occur (circa US$1,000 per year per Province). This potentially has ramifications with regards the long term sustainability of any devolved activity proposed.

118. Another key challenge (linked to the point above) that faces the project is that of CPA boundary patrol. Land encroachment due to the high market value of cashew continues although the frequency of this appears to be reducing through concerted efforts of the AFCPA. Often, encroachers are all non CPA members. Land can be confiscated from non CPA members that may then be enriched with new tree plantings. The challenge remains that newly planted saplings are not specifically watered by the project if planted during dry seasons, and so the success rate of planting is not always positive and dependent upon seasonal rains to assist with growth. A strong sustainability message is actually provided by the Chorm Thlok CPA demonstration site as up to 2014, forest areas were cleared for cashew plantations whereas

now, a new thriving rosewood plantation is taking shape very well. In the future, this area is planned to become a chamkhar for rosewood trees which shall provide high value products that shall be directly protected by members of the CPA and protected by CPA byelaws (set by the AFCPA project). The area hopes also to provide as an "eco-lab" for University students to study from.

119. Regardless of this Chorm Thlok CPA example, the patrolling of CPA boundaries continues to remain a challenge and will continue to be the key risk after the project concludes unless new ways of raising sufficient funds (coupled with education of non CPA members) are improved upon. Despite 5 patrolling committees being set up across each of the 5 demonstration CPAs, often the CPA concept is actually not well understood fully by all families in some CPAs (e.g.: Skor Krouch CPA) due to a limited educational background of most community members. At Chorm Thlok CPA, patrollers operate 4 times a month at a cost of US$50 each reconnaissance trip, however the AFCPA only offers costs to cover 3 trips to sites. It commonly appears to take 5 trips per month with up to 10 rangers per trip and so it requires a joint effort between the community, the police and the Local Authority. Therefore the AFCPA currently only covers circa 30-40% of the costs of the patrolling operation. The remainder is contributed via community funds including some money from Money Saving Groups (MSGs). Others sources of money come from land rent charges from the CPA and a small 500Riel per family member contribution from the CPA member families per month. Efforts are therefore needed to better engage all families to pay this fee to help raise as much money as possible (so far 1113 households from 7 villages for all Chorm Thlok CPA but only 50 households are not members). Therefore, "organic" growth of this fund money is almost saturated. Despite this, only 60% of the 95% actually pay this fee. Therefore, 40% of the 95% do not pay because of poverty reasons.

Intermediate State 1: Review of Outcomes to Impacts (ROtI) Score: B Outcome rating=B+, Intermediary state rating=B+.

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

120. The AFCPA impact is often best determined through its approach towards setting the framework for how climate resilience of CPA communities, agricultural systems and ecosystems is being achieved to address the impacts of climate change. Eco-agriculture is (in fact) not new to Cambodia as much work has been undertaken on this topic by Oxfam, however, the focus being placed on this within the MoE and the gravitas this commands nationally has to be a positive aspect and one of key strategic relevance towards addressing climate change adaptation to address the specific hazard of erratic rainfall.

121. During interviews with the CPA communities (see Annex IV), both men and women presented different impact benefits that they have witnessed. *"Life before the AF was miserable"* was a quote received from a women in Skor Krouch CPA (see Annex IV) but now much more diversity of foodstuffs are on offer (ranging from fruits to a range of vegetables – cabbage, cucumber, morning glory amongst others). 4 households now produce honey whilst circa 120 households use climate resilient rice strains. There is reduced pollution and fertilizer content as a result of a more organic farming approach being adopted. Women regularly quoted that before the AFCPA, the community was often very poor and their health was suffering though this has now improved significantly. Women are now also trained on how to protect chickens from mongooses (at night) through the project support in building chicken sheds.

122. When men were asked what benefits the AFCPA has provided since its start, the key responses included improved life skills in terms of advice on setting up savings accounts, new skills with regards to how to cultivate and grow wild plants, home gardening skills, fruit tree growing and planting (following climate resilient protocols that were researched and designed during Component 1). This latter point is particularly pertinent as before the project, villagers would go to the forest to forage and gather fruit, but would never consider growing it themselves to harvest. A positive example is presented from Chop Tasok CPA (see Annex IV Meeting Notes) which relates to the new chicken raising skills which have proven important to the community and the lessons learned from the trainings received are likely to be continued into the future. Men can now, for example, build shelters to contain and protect the chickens in one place and new advice of feed stocks and raising chicks is proving of value.

123. Awareness-building and improved understanding of eco-agriculture concepts and approaches will all influence the impact that the project has on its beneficiaries. These activities need to commence during Component 3 with a specific focus on at all sub-national levels of administration, as well as within the

private sector (operating within PA's), and especially amongst women and vulnerable groups. When interviewed, many responders stated how much money they have saved by growing their own vegetables and fruit as opposed to having to buy these in from the local market. The increased nutritional capacity of the new diet being embraced by the communities (as opposed to just fried fish and rice) is (anecdotally speaking) resulting in improved heath (especially amongst children and the elderly) and hence reduced medical or medicinal payments at local clinics. The promotion and preparation of an innovative AFCPA "Cook Book" that uses home garden products in tandem with existing rice and fish staples could possibly be considered to help raise needed funds for maintenance/upscaling etc.

124. A key focus on schooling is also recommended so that efforts to introduce the new concepts of eco-agriculture are something embraced within existing curricula for example. The MTR is pleased to record the close collaboration and consultation that has (and is) taking place with local communities through especially so during the planning and early implementation phases of AFCPA which has certainly contributed to the beneficial impacts that are witnessed towards improving the relevance and sustainability of the project investments to date.

125. There is evidence that outreach support is being provided to neighbouring villages and communities on support such as home gardening and chicken raising. To improve the project impact on local beneficiaries, a continuation of the training approaches should be continued for all 5 CPA communities. Positively, a range of training approaches have been undertaken by the AFCPA project (cricket and chicken raising, rice planting, tree planting etc) and training manuals have also been produced Training undertaken either by the project, or by willing villagers from Khla Khmum (Chop Tasok CPA demonstration village) is occurring and this should (must) be encouraged for the remainder of the AFCPA where possible. The whole approach of "training of trainers" (ToT) is something for the AFCPA to embellish where possible (see recommendations). The importance of this is clearly seen during the MTR mission and visiting home gardens in nearby Popel village (outside of the Chop Tasok CPA though within their own CPA). Clearly the success of these initiatives that have been started is being diluted as a result of poor (or no) access to water supplies during the dry seasons.

126. One proposal is to consider the introduction of CPA "field schools" which could be established for CPA and non-CPA communities. What appears very positive from the AFCPA is the effort made to embrace the role of women in all training activities, including tree planting, chicken raising and home gardening skills (see Meeting Notes in Annex IV). This is important within CPA communities as women and the elderly (in particular) have been identified as being most 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 "field school" concept is considered within the remainder of the project to help with the delivery of intensive training programmes (working alongside Commune Council members and the Agricultural Marketing Office (AMO) as they currently run programs to train farmers (men and women) to improve product marketing and quality). The AMO program is called the "Farmer Marketing School" and whilst the focus is different to that being set up through AFCPA, there may be benefit in linking the MSG business plan approach with ideas/concepts from the AMO. The idea of designing "train the trainer" programmes so that representatives from the 5 CPA demonstration sites are able to visit other CPAs to cross communicate lessons learned and best practice could prove valuable and support stronger sustainability opportunities for the project. The promotion of new eco-agriculture techniques to other non CPA communities (bordering the 5 CPA demonstration villages) could prove highly valuable to help formulate "model approaches" which could be used as future research facilities for agriculture/forestry which may then potentially represent good focal businesses for the private sector to invest into[5].

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

Intermediate State 3: CPA demonstration villages apply ecosystem-based eco-agriculture within CPA and non-CPA boundaries.

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

127. The impact that AFCPA has had on biodiversity levels coupled with the success of the enrichment planting exercises around the 5 CPA sites is too early to predict though early signs (e.g.: in Chop Tasok tree nursery area) is that biodiversity levels are increasing within the local "chamkhar" areas. Improved monitoring of this is required.

128. Impact and legacy are often achieved best when interventions are very focused on one specific "theme" or "topic". AFCPA has a focused agenda to deliver (eco-agriculture and forestry within CPAs to improve livelihood security, however, there is a risk that the project is remembered for too many disparate activities unless it re-focuses its agenda for the remainder of the project. For example, the variance of livelihood alternative training options that the project are seeking to offer during 2018 (e.g.: traditional music/hair cutting etc), whilst very commendable as ideas for changing livelihoods from a "cut and burn" traditional approach to agriculture, perhaps need to be reconsidered in favour of more pragmatic eco-agricultural skills.

129. Likelihood of the project impact may be influenced by the challenge surrounding the setting of CPA boundaries. The concept of eco-agriculture, as a working concept, now requires large scale landscapes to be trialled upon. Whilst conceptually (and academically) this is the preferred approach, logistically it is very difficult to achieve. In fact, as the project has had to help provide support for communities outside of the CPA boundary suggests that the original boundary setting concept (in certain instances) is technically flawed. The reality is that local villagers (despite their local knowledge) are often not educated highly enough to properly define the boundaries of their CPAs let alone regulate and "police them" with any convincing argument. Boundary limits are therefore often dictated by tracks or clearings as opposed to any geographical (topographic) feature. Component 1 studies included preliminary hydrological assessments though the findings of this work do not appear to have been effectively communicated to villagers. It is the view of the MTR that catchment related (watershed) issues should, in fact, be the focus of the CPA boundary as all ecosystems and "life" (habitats and biodiversity etc) are ultimately dependent upon water supply and its quality.

130. Another challenge relates to the legislation surrounding CPAs. The CPA law currently prevents any cultivation within the CPA boundary and so this activity must be undertaken outside its boundary. This law actually creates many challenges for the AFCPA as it essentially dilutes the importance of cultural practices operating within a CPA boundary. The recent 2017 "Guidelines for CPAs" (Step IV) provides a very loose explanation of what should be carried out in order to define a CPA boundary. It ironically avoids any discussion or advice on what "buffer" activities should be allowed and how these should be managed in terms of any community conflict. CPA management plans do, however, exist for each of the target CPAs which define what activities can be undertaken (including sustainable harvesting plans).

131. Impact inevitably goes hand in hand with the national capacity and human ability to make a difference on the ground. The lack of proven man power skills in applying eco-agriculture (e.g.: adopting enrichment approaches within confiscated "chamkhar" to support biodiversity restoration), coupled with continued and institutional capacity development, should be placed as high priorities, both at the province, district and commune levels. This should include ToT which is being developed during the remainder of the AFCPA, and provision of "easy to understand" guidelines and lessons learned (with clear Khmer summaries). Both are needed as a "package" to help with impact improvements relating to outreach. The MTR believes this is necessary not only because the present capacity in relation to climate change adaptation remains low in all the 5 CPA demonstration sites (and surrounding rural villages), but also that because so much good work has been produced by the AFCPA project to date, it is good practice to "take stock" and consolidate on what is working best, and what is proving more difficult to deliver (i.e.: a "Reflective Learning Approach" (RLA))

132. Finally, another key observation from stakeholders clearly stated that they welcome the training, but more effort should be spent on "hands on" showing of what to do, as opposed to writing any "guide manual". Often after a training event, villagers said they had forgotten the technique and needed to be shown again. Despite manuals, posters and summaries being produced by the project, in many instances these have never been looked at due to literacy incapability's in the village. More applied training (and regularly spaced) is needed along with a specific train the trainer approach on agreed techniques. In Ronouk Khgneng CPA (for example), the community openly admitted that when the trainer had left the village, they had forgotten what to do. Therefore, regularly "hands on" demonstrations of what to do are

needed and budget re-allocations may need to be considered to revisit trainings already taken place to date (as opposed to introducing new trainings on topics outside of the intended outcomes of the project.

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

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

5.4.4 Summary of Project Objectives, Outcomes and Outputs

Table 5.4 demonstrates considerable progress has been made with Components 1 and 2 with both intended outcomes on track towards being successfully completed. It should be noted that Table 5.4 is based on the latest AFCPA Logframe.

Table 5.4: Project Progress on Achieving Objectives, Outcomes and Outputs (adapted from AFCPA latest PPR 2017)

Type of Indicator	Indicators	Baseline	Progress since inception	Target for project end
Objective: Enhance the climate change resilience of communities living around at least three CPA intervention sites, as well as downstream communities, to the climate change-induced hazard of erratic rainfall.	**Obj 1** Percentage change in the climate change vulnerability index at each target CPA.	The following table shows the current climate change vulnerability index score at each CPA. The maximum vulnerability index score is 120, but normally ranges between 0 and 50. Chiork Boeungprey (10.4) Chorm Thlok (15.2) Skor Krouch (25.8) Chop Tasok (12.1) Ronouk Khgneng (27.6)	The climate change vulnerability index for each target CPA was measured in mid-2016 (approximate mid-point of the project) by the Research and Monitoring consultants. Overall, the climate change vulnerability index has increased in each target community, contrary to the anticipated result (see Figure to the right). However, as noted by the consultants, the increase in vulnerability was driven by an increase in exposure risk, outside the control of the project. On the other hand, the adaptive capacity of communities - which the project could influence - has greatly increased (see Figure to the right). The consultants summarise: "The analysis showed that the vulnerability of the target respondents has increased compared to the baseline. As discussed earlier, the exposure of the community to climate change has significantly increased compared to the time when the baseline was conducted. Even if the adaptive capacity has improved, this is not enough to overcome the risk that the community experienced. The data would show that the extent by which the respondents are exposed to climate change (i.e. based on the scores they attribute to the indicators of exposure to climate change) is significantly high compared to the baseline. The overall score on CC exposure was not overturned even with the increase in Adaptive Capacity of the community members. It should be noted further that the average sensitivity index has also slightly increased which further aggravated the Vulnerability. But then, the scenario could have been worse without the project. The result highlights the importance of the project in mitigating the impact of climate change to the vulnerable communities."	A 20% decrease in the climate change vulnerability index at each target CPA by the end of the project.
	Obj 2 Number of project beneficiaries, gender dissagragated, benfitting from the project's ecoagriculture interventions.	No beneficiaries before the start of the project	3 nurseries have been constructed and community nursery management teams have been established. 126 community members (52 at Beung Per, 35 at Phnom Kulen and 39 at Phnom Prich) are actively involved in the community nursery management teams. 1891 households in total have received fruit trees for planting around their homestead (54 households in Chop Tasok, 57 in Ronouk Khgeng, 198 in Chiork Beungprey, in 600 Chom Thlork and in 982 Skor Krouch). 872 households (64 in 2014, 329 in 2015 and 479 in 2016) in total have recieved and planted drought-resilient rice varieties. (4 Chirok Beungprey, 507 Chom Thlork, 351 in Skor Krouch, and 10 in Chup Tasok).	At least 1000 people, 50% of which are women, are benefitting from the project's intervention by the end of the project.

			1193 households (244 in 2014 and 279 in 2015 and 670 in 2016) in total are benefitting from homegarden activities. (43 households in Chop Tasok, 60 in Ronouk Khgeng, 100 in Chiork Beungprey, 573 in Chom Thlork and 417 in Skor Krouch). 155 households (10 in 2014, 140 in 2015) in total are benefitting from household chicken farming activities. (14 households in Chop Tasok, 25 in Ronouk Khgeng, 28 in Chiork Beungprey, in 54 Chom Thlork and in 34 Skor Krouch). 60 families in total have received cricket raising training skills with supply of cricket nestling. 48 training events and 2 exchange studies have taken place (with ~100 participants per event). For water supply infrastructure, project teams have dug 3 ponds for Chiork Boeungprey nusery together with its automatic solar water pumping system and storage tankers. 150 open ring wells, 132 small pumping wells and 10 large pumping wells have been supplied to most households in project target areas and somewhere downstream communities (Open ring well: 37 in Chiork Beungprey and 63 in Chorm Thlork and 47 in other CPAs; Small pumping well: 52 in Skor Krouch, 13 in Rounouk Khnheng and 67 in other CPAs; Larger pumping well: 10 in others CPAs). In Ronouk Khgeng, 74 rain harvesting and storage tankers have been distributed to 74 households. In Chop Tasok a complete water supply system, which links a natural spring to all households and the project nursery has been constructed together with its 7 storage tankers. Furthermore, two storage tankers have been built for Skor Krouch CPA. In addition, 2 spill dumps have been finally constructed by May 2016 at Chorm Thlork and Chup Tasok. Water supply infrastructure, reforestation activities and the strengthening of community management committees is benefitting all households within the five project intervention sites.	
Outcome 1: Technical expertise and a local enabling framework for forest restoration and ecoagriculture interventions that build climate resilience developed at CPA intervention sites through a consultative and	**Outcome 1.** Change in the capacity of national and local government officials to implement forest restoration and conservation agriculture interventions that build climate resilience.	National and local government officials have limited capacity to implement forest restoration and conservation agriculture interventions that build climate resilience.	The technical knowledge required to implement forest restoration and conservation agriculture interventions has been acquired through at least 11 technical assessments and reports. The technical knowledge developed through these assessments, including climate-resilient species selections, market assessments and hydrological studies, will build the capacity of the government to implement forest restoration and conservation agriculture interventions. These reports have been shared with government officials. Government officials involved with the implementation of the project (1 project manager, 3 department/general directors, 11 government counterparts, 10 additional support staff from the Local Community Livelihood Department, and 30-40 field	15 national and local government officials in the Research and Community Protected Area Development Department have fully developed capacity to implement forest restoration and conservation agriculture interventions that build climate resilience.

participatory process.			rangers from the GDANCP (General Department of Administration for Nature Conservation and Protection - Protected Area Management). ~20 field rangers have attended training events on climate change, ecoagriculture, forest patrolling, nursery management and land tenure rights. Furthermore, through their experience implementing the project, these government staffs continue to develop the capacity to implement forest restoration and conservation agriculture.	
Output 1.1: Information generated on climate change impacts and preferred ecoagriculture interventions through a consultative and participatory approach.	**1.1.1** Number and type of specialist reports developed for the project – through a participatory approach with local communities where relevant – in the first year.	No specialist reports on climate changes impacts and the preferred ecoagriculture interventions.	National consultants were recruited to undertake the necessary assessments. The 6 reports required have been submitted and cleared by the PMU and Chief Technical Advisor.	At least 6 specialist reports submitted to the PMU by the end of the first year of the project. These reports must include: • 1 x gap analysis (including the results of an institutional mapping exercise); • 1 x multi-use plant species assessment (including identification of climate-resilient indigenous plant species), with results disaggregated by CPA; • 1 x crop variety assessment (including identification of climate-resilient crop varieties), with results disaggregated by CPA; • 1 x planting schedule (based on useful plant species assessment); • 1 x improved rice variety assessment report; and • 1 x hydrological assessment report (including water challenges, potential water sources and proposed interventions), with results disaggregated by CPA.
	1.1.2 Number of MSc research projects on	No MSc research projects on ecoagriculture in	11 MSc students have thus far been supported through the project - 6 from Royal University of Agriculture and 5 from the Royal University of Phnom Penh. 4 additional	At least 5 MSc projects on ecoagriculture initiated at local

	ecoagriculture initiated at a local university.	Cambodia.	students will be supported starting in September 2017.	universities over the duration of the AF project.
Output 1.2: Economic assessments undertaken to identify most appropriate ecoagriculture interventions and associated micro-finance and insurance products.	**1.2.1** Number and type of economic assessment reports developed for the project – through a participatory approach with local communities where relevant – in the first year.	No economic assessment reports on the preferred ecoagriculture interventions and associated micro-finance/insurance products.	Consultants have been recruited to undertake the necessary assessments. The five reports required have been developed, submitted and cleared by the PMU and Chief Technical Advisor.	At least 5 economic assessment reports submitted to the PMU by the end of the first year of the project. These reports must include: • 1 x report identifying locally available weather index-based insurance and micro-finance products; • 1 x market assessment of micro-finance opportunities for farmers at CPA intervention sites (including potential business plans for such products); • 1 x local agricultural market assessment; • 1 x cost-benefit analysis of potential crop/tree species to be planted; and • 1 x socio-economic assessment of proposed ecoagriculture approaches.
Output 1.3: Forest restoration and conservation agriculture protocols developed for CPA intervention sites based on results from Output 1.1 and 1.2.	**1.3.1** Number and type of technical protocols – informed by output 1.1 – for ecoagriculture interventions developed in the second year of project.	There are no formal, technical protocols specific to the ecoagriculture approaches and project sites proposed by the AF project.	5 technical protocols have been completed and submitted to the PMU.	At least 5 technical protocols (1 per CPA) for the preferred ecoagriculture interventions submitted to the PMU in the second year of the project. These reports must include protocols for: • restoration; • chamkar-based agroforestry; • homegarden establishment; • planting useful species around chamkar; • growing climate-resilient rice; and

				• implementing additional activities.
Outcome 2: Multi-use forests established and maintained and agricultural practices diversified/intensified to supply a diverse range of food and stabilize topsoil, despite an increase in climate change-induced droughts and floods.	**Outcome 2** Number of households that have benefited from chamkar-based agroforestry plots and intensified/diversified homegardens at the target CPAs.	No *chamkar*-based agroforestry plots have been established at the five target CPAs. 1891 households in total have received fruit trees for planting around their homestead and in their *chamkar* (54 households in Chop Tasok, 57 in Ronouk Khgeng, 198 in Chiork Beungprey, in 600 Chom Thlork and in 982 Skor Krouch). By August 2017, there are 321,276 of indigenous trees have been planted in the 5 CPA project targeted sites and in other downstream communities forest areas. 1193 (244 in 2014 and 279 in 2015 ansd 670 in 2016) households in total are benefitting from home garden activities. (43 households in Chop Tasok, 60 in Ronouk Khgeng, 100 in Chiork Beungprey, 573 in Chom Thlork and 417 in Skor Crouch). There is 1 intensified/diversified home garden at Chop Tasok. There are no intensified/diversified home gardens at the other four target CPAs. Therefore only 1 household has benefited an intensified/diversified home garden.		1000 households have benefited from chamkar-based agroforestry plots and 800 households have benefited from intensified/diversified homegardens at the target CPAs by the end of the project.
Output 2.1: Capacity of local community for building climate resilience increased, including capacity to plan, implement and maintain ecoagriculture interventions under	**2.1.1** Number of CPA Management Committees, local authority members and agricultural extensions officers located throughout Cambodia trained on climate change and ecoagriculture	There has been no formal training encompassing the full ecoagriculture approach preferred by the AF project.	The CPA management committees, local authorities and extension officers have taken part in 7 different training events. 70 CPA Management Committees have been trained. 30 local authority members have been trained. 20 agricultural extension workers have been trained. Recently, there are two additional training events about climate change and eco-agricultural intervention and natural reource conservation targeted 137 country wide CPA committees (02 CPA committee members and 01 commune council from 137 CPA country wide) and they	Mid-term: At least 30 CPA Management Committees; 10 local authorities members; and 5 agricultural extension officers throughout Cambodia trained on climate change and ecoagriculture interventions over the duration of the AF project.

Output 2.2.	interventions.		are now expected to become principle of training for trainers.	End of project: At least 60 (i.e. 50%) CPA Management Committees; 20 local authority members; and 10 agricultural extension officers throughout Cambodia trained on climate change and ecoagriculture interventions over the duration of the AF project.
	2.1.2 Number of CPA community members, gender disaggregated, at project intervention sites trained on climate change and ecoagriculture interventions.	There has been no formal training encompassing the full ecoagriculture approach preferred by the AF project.	48 training events (9 topics in each of the 5 CPAs) have been undertaken on nursery management and seed propagation, climate change, ecoagriculture, sustainable livelihoods, livestock farming, land tenure, financial management, our community our hope, patrolling strategy and leadership in providing eco-tourist services as well as two exchange studies . On average, 100 people have been involved in each training event. Therefore, approximately 4800 CPA community members have been trained. Recently, there are some additional vocational trainings carried out by the project Livelihood Expert Group including 1) The training on the establishment of 5 CPA saving groups with saving management procedures, 2) The training on crafting roof thatch from Khamna leave, 3) The training on bee keeping, 4) The follow up training on livestock raising and vegetable growing techniques etc,. It is noticeable that there will be more women than men participated in any training carried out in their local areas but there will be more men participated in any training carried out far away from their home towns.	Mid-term: A total of at least 1250 CPA community members (30% of which should be women) trained on climate change and ecoagriculture interventions. End of project: A total of at least 2500 CPA community members (30% of which should be women) trained on climate change and ecoagriculture interventions.
	2.1.3 Number of patrolling committees established/strengthened.	1 formal patrolling committee at Ronouk Khgneng.	A patrolling committee has been established at all 5 CPAs. A reporting mechanism has been established and each team submits a monthly report to government counterparts. These patrolling teams are supported with $150 per month for food and petrol costs.	4 patrolling committees established (Chiork Boeungprey, Chorm Thlok, Skor Krouch and Chop Tasok) and 1 patrolling committee strengthened (Ronouk Khgneng).

	2.1.4 Annual number of transgressions in each CPA between July 2014 and the end of the AF project.	1 incident in 2012–2013 at Ronouk Khgneng. No reliable data on the current incidence of transgression was available for the remaining four CPAs. The baseline number of transgressions per year in each CPA will be measurable once patrolling committees have been established in each CPA.		At least a 40% reduction in the annual number of transgressions in each CPA between July 2014 and the end of the AF project.
Output 2.2: Forest restoration and ecoagriculture protocols implemented to build climate resilience (developed in Component 1) in CPA intervention sites.	**2.2.1** Number of community-managed nurseries established at project intervention sites.	No functioning nurseries at any of the five CPAs.	The first AF nursery has been established to service the three CPAs within Beungprey Wildlife Sanctuary. The nursery was officially inaugurated by the Minister of the Environment on July 14, 2014. The Second AF nursery in Chup Tasok CPA of Kulen National Park was inaugurated on 06 March 2015 and the third AF nursery in Rounouk Khgneng CPA of Phnom Prech Wildlife Sanctuary was inaugurated on 18 May 2015. All three nurseries have their own nursery management teams who have been well trained on nursery management and seedling propagation.	At least 3 nurseries established during the first year of the AF project, including: • 1 in Boeungper, • 1 in Phnom Kulen; and • 1 in Phnom Prech.
	2.2.2 Number of qualified community-liaison planting officers contracted to assist with implementation of project activities at intervention sites.	0 community liaison planting officers have been contracted.	10 Government counterparts (fulfilling the role of community liaison planting officers) have been contracted and continue to work for the project.	10 community liaison planting officers contracted in the first year, including: • 4 in Boeungper, • 3 in Phnom Kulen; and • 3 in Phnom Prech.
	2.2.3 Hectares of degraded forest within target CPAs restored.	No forest restoration has taken place at the five target CPAs.	In June 2015, 40,000 indigenous tress were used to restore 27.5ha area of reclaimed, degraded land within Chorm Thlork. In addition, in 2016, 15000 indigenous trees were planted on a confiscated cleared land of around 2.5 hectares in Chop Tasok CPA of Kulen National Park.	At least 30 ha of degraded forest restored in Chorm Thlok CPA before the end of the project.

			By August 2017, there are 321,276 of indigenous trees have been planted in the 5 CPA project targeted sites and in other downstream communities forest areas. These indigenous trees have been used in the reforestation of degraded land, have been planted in *chamkar*, and have been used in enrichment planting in moderately degraded forest.	
	2.2.4 Number of intensified/diversified home gardens established at the target CPAs.	There is 1 intensified/diversified home garden at Chop Tasok. There are no intensified/diversified homegardens at the other four target CPAs.	1193 (244 in 2014 and 279 in 2015 and 670 in 2016) households in total are benefitting from home garden activities. (43 households in Chop Tasok, 60 in Ronouk Khgeng, 100 in Chiork Beungprey, 573 in Chom Thlork and 417 in Skor Crouch). A demonstration agroforestry plot has been established at Chom Thlork. Chamkar-based agroforestry plots have been piloted since August 2015.	Mid-term: 300 intensified/diversified homegardens established at the five target CPAs. A diversified/intensified homegarden should include at least 20 species, of which: i) at least 5 are indigenous fruit/soil-binding tree species; and ii) at least 8 are different vegetable species. Furthermore, the species planted within the homegarden should be representative of at least 4 different canopy layers (emergent, canopy, understory, shrub and herb). End of project: 800 intensified/diversified homegardens established at the five target CPAs. A diversified/intensified homegarden should include at least 20 species, of which: i) at least 5 are indigenous fruit/soil-binding tree species; and ii) at least 8 are different

				vegetable species. Furthermore, the species planted within the homegarden should be representative of at least 4 different canopy layers (emergent, canopy, understory, shrub and herb).
	2.2.5 Percentage of households at each CPA growing climate-resilient rice.	No households in any of the CPAs are growing climate-resilient rice varieties.	Consultants have been recruited to design the appropriate, scientific protocols for this intervention. In addition, project teams have distributed climate-resilient rice varieties for trialling for 64 households by August 2014 of which each family received 25kgs of rice resilience seeds species and 329 households by June 2015 of which each household received 20kgs of climate-resilient rice varieties. In early June 2016, 489 households received around 10 kgs of climate-resilient rice varieties. In total, there are 872 families have trialled climate rice resilience species. This represents ~45% if the ~1900 families living in the target CPAs.	Mid-term: 5% of households at each CPA growing climate-resilient rice varieties introduced by the AF project. End of project 15% of households at each CPA growing climate-resilient rice varieties introduced by the AF project.
	2.2.6 Proportion of households in the five target CPAs that report an improvement in i) access to water; ii) access to new seed varieties; and iii)	The percentage of farmers who irrigate their crops is: 0% at Chiork Boeungprey; 12% at Chorm Thlok; 6% at Skor Krouch; 6% at Chop Tasok; and 19% at Ronouk	Project teams have dug 3 ponds for Chiork Boeungprey nursery together with its automatic solar water pumping system and storage tankers. 150 open tube wells fitted with hand pumps, 132 small pumping wells and 10 large pumping wells have been supplied to most households in CPA project targeted areas and some downstream communities. (Open ring well: 37 in Chiork Beungprey and 63 in Chorm Thlork and 47 on other CPAs; Small pumping well: 52 in Skor Krouch, 13 in Ronouk	Mid-term: 50 % of households in the five target CPAs report an improvement in i) access to water; and ii) access to new seed varieties as a result of additional interventions.

	access to improved rice storage techniques, as a result of additional interventions.	Khgneng. No climate-resilient rice seeds have been introduced at the five target CPAs. No households at Chorm Thlok or Chop Tasok have access to improved rice storage techniques.	khnheng and 67 in other CPAs; Large pumping wells: 10 in other CPAs). In Ronouk Khgeng, 74 rain harvesting tankers have been distributed to all 74 households. In Chop Tasok a complete water supply system, which links a natural spring to all households and the project nursery has been constructed together with its 7 water storage tankers. Further more, 2 water storage tankers were also constructed for Skor Krouch CPA. In addition, 2 spill dumps have been finally constructed by May 2016 at Chorm Thlork and Chup Tasok. An average of 63% of households report improved access to water in Chiork Boeungprey, Skor Krouch and Chorm Thlork CPA, while 100% of households in Ronouk Khnheng and Chup Tasok report improved access to water.	50% of households in Chorm Thlok and Chop Tasok report an improvement in access to improved crop storage techniques as a result of additional interventions. End of project: 80% of households in the five target CPAs report an improvement in i) access to water; and ii) access to new seed varieties as a result of additional interventions. 80% of households in Chorm Thlok and Chop Tasok report an improvement in access to improved rice storage techniques as a result of additional interventions.
Output 2.3: Local communities' livelihoods enhanced and diversified through sustainable development of NTFPs and the promotion of sustainable alternative livelihood strategies.	**2.3.1** Number of sustainable alternative livelihood strategies developed – through a participatory approach with local communities where relevant – through the project.	No sustainable alternative livelihood strategies have been developed by experts at any of the five target intervention sites.	Consultants have been recruited to identify appropriate alternative livelihood strategies. At least 3 alternative livelihood strategies have been identified in each site. These include chicken-raising, cricket-raising, ecotourism ventures, vegetable-selling, production and selling of roofing.	At least 3 alternative livelihood strategies developed per CPA by consultants contracted by the AF project. These will include: micro-finance insurance products and small-scale businesses for NTFPs identified in Component 1.
	2.3.2 Percentage of target households adopting sustainable alternative livelihood strategies	34% of household at Chorm Thlok and 45% of households at Skor Krouch derive income from labour.	The project team have distributed to 214 households (10 in 2014, 145 in 2015 and 59 in 2016) in total to start household chicken farming activities. (48 households in Chop Tasok while the additional 39 families in 2016 have both chicken and pigs (19 families are under project's alternative support mechanisms in exchange for return plots of	25% of households in the five target CPAs have adopted at least 1 sustainable alternative livelihood strategy or alternate source of income

	(dissagregated by gender).	43% of households at Ronouk Khgneng derive income from livestock sales. 14% of household at Chorm Thlok, 12% of households at Chop Tasok and 31% at Ronouk Khgneng derive income from NTFP products. < 10% of households at all CPAs derive income from any other sources.	land for reforestation activities), 50 in Ronouk Khgeng while the additional 20 families in 2016 have both chickens and pigs, 28 in Chiork Beungprey, 54 in Chom Thlork and 34 in Skor Krouch). In addition, there are 60 families from the 5 CPAs were trained on cricket raising skills and were equipped with cricket raising nestling. 15 families have been trained to make roofing using leaves from the forest.	developed by the AF project. At least 30% of the beneficiaries of these alternative livelihood strategies should be women.
Output 2.4: Socio-economic and ecosystem monitoring of AF project impacts downstream of CPA intervention sites	**2.4.1** Number of socio-economic and ecological monitoring reports and research protocols (for project duration and long-term) developed to measure impacts of the project: i) in the intervention sites; and ii) downstream of the intervention sites.	No formal specialist reports on socio-economic and ecological monitoring developed.	Both an International and a National Research and Monitoring Coordinator have been recruited to develop a research and monitoring plan and produce monitoring tools. Workplans and tools have been presented to the PMU. The coordinators are also guiding the MSc students regarding their research topics. The project team is also consistently collecting relevant monitoring data (for example information related to the climate-resilient rice trials) which will be consolidated in the monitoring reports to be produced by the coordinators. Thus far 3 research and monitoring reports have been submitted and approved by the PMU.	Mid-term: • At least 1 research/monitoring tool developed and implemented to measure the impact of AF project interventions in downstream communities. • At least 5 ecological and socio-economic baseline monitoring reports (1 per CPA). End of project: • Research/monitoring tool to measure the impact of AF project interventions in downstream communities implemented at least 3 times. • At least 10 ecological and socio-economic monitoring reports (2 per CPA, 1 for baseline values and 1 for end of project).

Outcome 3: Integration of climate change risks and ecoagriculture into Cambodia's adaptation framework and related sector policies.	**Outcome 3**: No., type, and sector of policy revisions to address climate change risks proposed .	No proposed revisions to integrate climate change and ecoagriculture into agricultural, forestry and development policies, strategies and plans.	An Institutional Expert has been recruited to undertake an institutional mapping exercise. A final report has been submitted. This consultant, together with the project team, has also updated/developed a CPA Management Plan for all five targeted communities. These management plans designate different usage zones within the CPAs, specify sustainable harvesting targets for NTFPs, and climate change adaptation strategies for each of the target communities. A consultant will be hired during the final year of the project to proposed specific revisions to other development policies and strategies building on lessons learned through the project.	At least 3 revisions to incorporate climate change and ecoagriculture into relevant environmental, agricultural, forestry and/or development policies/plans proposed by the end of the AF project.
Output 3.1: Awareness increased at a local level of the importance of ecoagriculture for protecting and enhancing commercial and subsistence activities.	**3.1.1** Number of 'events' held and/or products developed to raise awareness on climate change and the benefits of adaptive agricultural techniques.	No previous 'events' to raise awareness, and no existing use of the ecoagriculture approach in Cambodia.	An Awareness Campaign Expert has been recruited to design an appropriate campaign. In addition, another consultant for training was also hired to design a relevant training course. As a result, 48 training events and 2 exchange studies have taken place with approximately 100 participants per event. Furthermore, a project web site has been developed and is awaiting official approval from the MoE. Posters demonstrating the concept of ecoagriculture have been distributed to the target CPAs. Brochures about nursery management have also been developed. Recently, two road rest areas have been constructed and equipped with awareness-raising materials. An additional two road rest areas have started its construction and expected to finished by mid-2018. There are three camping events have been organized with participants from university students, school children, Phnom Penh youth club and women staff from the ministry of environment. there are also many forest planting evens organized with T-shirt informing about project feasibility and activities distributed to participants. These planting activities have involved thousands of community members, raising their awareness of forest conservation and climate change.	At least 28 'events' held and/or products developed to raise awareness of climate change and ecoagriculture, including workshops, campaigns, education initiatives at schools/universities, a web-based data network portal and a documentary film.
	3.1.2 Percentage change in the climate change awareness index and understanding of ecoagriculture in the target communities.	The following table shows the current values for the climate change awareness index at each CPA (based on the results of the household survey). The climate change awareness index can vary between 0 and 100%.	Climate change awareness was measured by the research and monitoring experts through household surveys. Climate change awareness has increased at project intervention sites. See table alongside. The average climate change awareness is 45.3%.	Mid-term: • Average awareness index score of 30% at the five target CPAs. • 30% of community members at the five target CPAs understand the concept of ecoagriculture. End of project: • Average awareness index score of 50% at the five target CPAs. • 50% of community members at the

				five target CPAs understand the concept of ecoagriculture.
		CPA	Climate change awareness index	At least 1 REDD+ feasibility study and Project Idea Note (if applicable) investigating the potential to integrate/promote ecoagriculture or species from multi-use forests into REDD+ projects developed in the first year of the AF project.
		Chiork Boeungprey	16%	
		Chorm Thlok	10%	
		Skor Krouch	30%	
		Chop Tasok	12%	
		Ronouk Khgneng	42%	
		Chiork Boeungprey	6%	
		Chorm Thlok	4%	
		Skor Krouch	6%	
		Chop Tasok	0%	
		Ronouk Khgneng	0%	
	3.1.3 Number and type of REDD+ feasibility studies	No REDD+ feasibility study that investigating the	A consultant was recruited to undertke a REDD+ feasibility study. The final report has been submitted and approved. Based on the finding of this report, it was	At least 1 REDD+ feasibility study and Project Idea Note (if applicable)

	and Project Idea Notes (if applicable).	potential to integrate/promote ecoagriculture or species from multi-use forests into REDD+ projects exists.	recommended that REDD+ is not a feasible option for this project, and therefore no Project Idea Note will be produced.	investigating the potential to integrate/promote ecoagriculture or species from multi-use forests into REDD+ projects developed in the first year of the AF project. At least 5 CPA management plans developed/revised to incorporate the ecoagriculture approach by the end of the AF project.
Output 3.2: Ecoagriculture activities promoted through institutional capacity building and proposed revisions to policies, strategies and legislation.	**3.2.1** Number of CPA management plans developed/revised to incorporate the ecoagriculture approach.	Ronouk Khgneng and Chiork Boeungprey (due to be revised) have a CPA management plans, but they do not include strategies for the implementation or maintenance of ecoagriculture interventions. CPA management plans have yet to be developed for Chorm Thlok, Skor Krouch and Chop Tasok.	A land tenure specialist and institutional expert have been recruited to contribute to the development of CPA management plans. Final reports from both of these consultants have been submitted. The institutional expert, together with the project team, has developed/updated CPA management plans for each of the target CPAs (updating the CPA management plan for Ronouk Khgeng and Chiork Beungprey and developing new plans for the other three CPAs). These four CPA Management Plans are completely finished.	At least 5 CPA management plans developed/revised to incorporate the ecoagriculture approach by the end of the AF project. 1 national ecoagriculture upscaling strategy developed by the end of the AF project.
Output 3.3: National ecoagriculture upscaling strategy developed and institutionalised for CPAs in Cambodia.	**3.3.1** Number of national ecoagriculture upscaling strategies developed.	No national ecoagriculture upscaling strategy exists in Cambodia.	During the 5th PSC meeting it was decided to develop a Project Idea Note for up-scaling of the AF project. Will this will be done in late 2017/early 2018. In addition, a consultant will be hired to develop an upscaling strategy.	1 national ecoagriculture upscaling strategy developed by the end of the AF project.

Summary of Results Review Rating: In general, Effectiveness is rated <u>"Highly Satisfactory"</u> – With regards to the overall project objective and outcome, for all indicators set, it shows that the targets have been more than achieved to date.

5.5 Financial Management

133. According to financial figures presented within project documents, despite some early project start up challenges (declared clearly in the PPR 2014), AFCPA has proven successful financial resource disbursements particularly after the Inception. AFCPA was a fixed price contract (US$4,566,250) and payments have been made to date in relation to linked outputs/progress reporting and payment schedule. The summarized spending of AFCPA (see Annex V) shows that 62% of the funds have been spent for implementation to date. From spreadsheets and reports offered to the reviewer (again see Annex V), the project appears to have made strong progress towards its outputs thus far in Components 1 and 2. In fact there is a considerable underspend (to date) despite the achievement of targets set out in Table 5.4. US$3,042,728 has been spent to date leaving US$1,523,422 remaining up to project completion (circa 38% of the budget remains). Key underspend areas include most of the training courses and the use of national consultants (savings of circa US$88,600). The Project Coordinator should be applauded for his negotiation skills on this aspect.

134. The use of the whole project budget to date (per outcome) has been shown in Table 3.3 (summary) and in Annex V (detailed). There is no evidence of any major dissent to these observations recorded during the MTR consultations held.

135. The MTR 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 MTR has noted some frustration from the PMU during times when the UN Environment accounting system changed (during the project) resulting in procurement related delays which made aspects of the project (at that time) more cumbersome that perhaps was needed). The MTR has noted real efforts by the PMU team in Cambodia during these teams to remedy and expedite payments caused by this accounting system change which should be highly commended, as this problem certainly was not caused by any irregularity from Cambodia. Whilst such situations are difficult to predict within large donors organisations (e.g.: transfer of financial accounting systems such as “umoja”,) efforts should be made by UN Environment in future to better inform (as far ahead as possible) when situations like this are to arise so that the local PMU can plan accordingly and mitigate project problems regarding financial transfers etc.

136. Table 5.5 outlines the review of project financial performance as requested within the ToR MTR.

Table 5.5: Review of Financial Performance

ADAPTATION FUND PROJECTS				
Attention paid to compliance with procurement rules and regulations			HS:HU	HS
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 reviewer:				
	A.	An up to date co-financing table	N/A	
	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 (MTR not seen these - to be forwarded)	
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 (only scored "S" on the grounds that not enough budget has been spent to date, despite demonstrating very efficient cost savings during Components 1 and 2.		**S**

5.6 Efficiency

137. The cost-effectiveness and timeliness of project execution (see Section 5.5) 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.

138. The first two years of the project (following the Inception Phase) was focussed on developing appropriate protocols for the implementation of eco-agriculture interventions, as well as building trust within the beneficiary communities. The MTR believes this has contributed (and in fact has been integral) to the successful implementation of interventions during the later years (2016-2017) though this did result in project spend being relatively slow during the initial phases (despite activities and outputs still being achieved). The project has been able to achieve its targets for less-budget than expected. Consequence of this efficiency is that more time is actually required to spend the saved money as a result, a "no-cost extension" is being proposed up to December 2019 to enable the project to exceed its targets and in the process, reduce the vulnerability of a greater number of communities inside and outside of CPA boundary lands.

139. As stated following an interview with the Chief Technical Advisor (CTA) on this matter, it was quoted that *"Cambodia should not be disadvantaged for the efficient delivery of interventions to date"*. The MTR agrees whole heartedly with this statement made. It is therefore clear that the team has focussed on implementing on-the-ground activities under Component 2 (in part in an effort to increase spending as stated earlier). This has meant that activities under Component 3 have been delayed. The MTR confirms that the project should not be penalised for this, and that it would be a pity not to capitalise on the successful outputs that the project has achieved to date (in Components 1 and 2) and as a consequence of this, not have the time to complete the planned institutional strengthening and knowledge sharing targets scheduled under Component 3 which in fact are critical to ensure the sustainability of the project (see Section 5.8).

140. A review of project implementation schedules (in certain instances during Component 2 activities) may have been more efficiently implemented. The MTR noted that on occasion, scheduling had gone slightly awry as a consequence of some budget decision delays from the Project Board (see Section on Financial Management). The CTA and the PMU in fact diligently attempted to streamline and merge many of the individual research contracts undertaken in Component 1 in an attempt to better streamline administrative burdens on the PMU. Without this approach being adopted the administration of Component 1 would have been demanding at best.

141. From a cost efficiency perspective, the PMU has worked very hard to reduce the costs of all ecoagriculture interventions made and this coincides with (since the start of the project) that the GoC has ceased granting Economic Land Concessions (ELCs), and this has further reduced this risk. Through the planned partnership model adopted by the PMU with community members to assist towards local delivery (e.g.: the extensive involvement of community members in planting activities), this is likely to reap significant benefits in terms of promoting and embracing a range of approaches that shall seek to assist in the mainstreaming of project interventions into the everyday duties of government staff. However, one must bear in mind that the cost-cutting mechanisms adopted can work negatively in that they may constrain the scale at which future interventions can be undertaken (i.e.: if upscaling activities needs to be increased to the chamkhar scale instead of home garden scale).

142. Project sites (especially access to sites within Mondulkiri province) are very remote. They were selected for various technical and social reasons however the access to these sites (50km) in the wet season, travel time can take up to 7hrs on motorbike. Efficiency of outcome in certain locations is also influenced by the fact that local commune leaders have only limited ability to read and write. In fact at

Mondulkiri, out of the 9 Committee members only 1 can read and write and everything needs to be translated into the local Khmer language. Local peoples are also very humble and often reluctant to speak out about specific problems they are having, This has had to be addressed by the PMU by the staff spending longer in the field with communities to better understand the challenges they are facing and from this to come up with coherent remedial strategies to address any problem that arises. In addition, these remote sites often have very poor telephone access and often these do not work making communication very challenging. The resulting impact is the increased cost of staff transportation and accommodation plus the need to spend longer in the field to accommodate for the telecommunication challenges thus impacting on PMU staff time away from home and hence expenses and time budget. Despite this, budgets for travel appear to be only slightly over expectations (see Section 5.1).The flow of some funds to the local communities has been slow. In some instances taken up to 6 months to release which has impacted on seasonal needs (wet season planting challenges etc). The PMU staff attempted to mitigate this by addressing the issue in the field face to face where possible providing local technical advice on what and where to plant to address adverse drought or flooding conditions.

143. Efficiency of performance is also influenced greatly by the calibre of the staff taking forward the project. To date, the project has been blessed with a very committed PMU, led through strong leadership skills from the Project Coordinator who is supported very ably by a technically strong technical team for each Protected Area (National Park). It has been noted by the MTR that the 3 staff teams are (and have been) operating at full capacity. The consequence of this is there is limited opportunity to increase the scale of the interventions to any great degree (i.e.: from home garden level up to chamkhar scale intervention). Secondly, involving large numbers of community members in planting activities (ranging from hundreds to thousands of people) requires a significant amount of logistical arrangement time. This limits the number of events that can take place per year, and the project is unlikely to be able to upscale its interventions beyond the project targets. Similarly, reforestation and agricultural activities are limited to certain seasons/time of the year. The team therefore has limited time available to scale up activities beyond the project targets.

144. Finally, it is of interest to record no project specific detailed stakeholder analysis assessment has been carried out since the production of a similar version within the ProDoc (see Section H of the final agreed Prodoc signed in 2013) which is very minimal in content. No further comprehensive stakeholder analysis appears to have been undertaken during the Inception Phase after the project implementation commenced. The AFCPA perhaps could demonstrate improved institutional efficiencies by basically building on new institutional frameworks that now exist. This perhaps is now needed as Component 3 is about to commence in earnest to help ensure that efficiency levels improve with regards to institutional arrangements and where key stakeholders (line ministries) now stand on eco-agriculture delivery (see Annex XII as a draft).

Efficiency Review Rating: <u>Highly Satisfactory (HS)</u> – Despite a few issues raised in this section, the efficiency (financially) of the project has been remarkable considering the potential challenges of accessing and working in very rural parts of Cambodia.

5.7 Monitoring and Reporting

145. The MTR has reviewed M&E activities carried out to-date. This includes the review and edits made to the project indicators during the Baseline Assessment (Tye *et al* 2014) and Maningo (2015), collection of baseline values for indicators, Half-yearly Progress & Financial Reports completed etc and PPRs for 2015, 2016 and 2017. From the assessment of these documents, it is considered that the project's documentation, analysis, and tracking of risks to be appropriate and proposed actions have been clearly presented and subsequently implemented well. Project risks are not well documented within the Half Yearly Reports despite Section 2 of the template having a title of "Project Progress and Risk Management". Instead, it appears that project risks that arise are articulated within the corresponding PPRs (2015, 2016 and 2017) which outlines specific risks and mitigation recommendations for risks judged as substantial or higher.

146. Thorough work plans have been developed for the project to enable the government counterparts the opportunity to manage their time and set aside time to work on the project in advance. Through the involvement of high-level government officials in project activities, the project has garnered significant support within the MoE with GoC staff proactively encouraged to work on the project.

147. Project reports produced include the following: Inception Workshop Report 2013; Follow-up Inception Workshop Report 2013; Baseline Study; Project Progress at Mid-term summary (not the formal mid-term review). Regarding Technical Reports the following have been produced since the project inception (see Annex IV):

- gap analysis (including the results of an institutional mapping exercise);
- multi-use plant species assessment (including identification of climate-resilient indigenous plant species),with results disaggregated by CPA;
- crop variety assessment (including identification of climate-resilient crop varieties), with results disaggregated by CPA;
- planting schedule (based on useful plant species assessment);
- improved rice variety assessment report;
- hydrological assessment report (including water challenges, potential water sources and proposed interventions), with results disaggregated by CPA;
- economic assessment of interventions;
- technical protocols for eco-agriculture interventions;
- REDD+ feasibility assessment;
- 5 CPA management plans;
- Training needs assessment; and
- Livelihood needs assessment.

148. The MTR also finds that, to date, suitable monitoring reporting has taken place, as planned, in a timely fashion and with adequate attention to detail and content. The Projects MTR (this report) may arguably be a year behind schedule (possibly should have been commissioned earlier in 2017) though the impact of this being possibly later than planned has (pleasingly) not caused the project any major harm based on the successes that it is able to demonstrate to date. Should there have been limited progress on the ground at the time of the MTR, this could perhaps have caused more significant problems in order to rectify any challenges faced. Budgeting and funding for M&E activities, such as the MTR appears to be funded in a timely fashion during implementation. 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 AFCPA.

149. One monitoring observation that requires possible attention relates to the physical monitoring of tree seedling growth in enrichment areas. The PMU team do not follow any formal monitoring approach to record health and growth rates of the plantings. Eye scanning of growth only is adopted with some sporadic photos but these photos are not formally stored within any database etc. The use of drone technology maybe proposed to assist in calculated forest cover in due course. One drone exists within the MoE but is not used for monitoring forests. This could also be valuable in patrolling the borders of CPA from encroachers. In the immediate term better transect sampling is recommended plus support training on scientific monitoring techniques.

150. Apart from the PPR annual reporting of risks, the key concern of the MTR is the relatively “loose” approach towards risk monitoring. The PMU may perhaps wish to adopt a clearer system to track risks for the remainder of the project, especially the need to identify new risks such as institutional stability, external communication risks and future upscaling donor fun opportunity risks (e.g.: the current budgetary constraints facing some donors including the AF) 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 AF safeguarding issues, beyond those that are presented within the PPRs for 2015, 2016 and 2017. Constant informal communication does, however, take place to help identify if risks arise.

151. Finally, (whilst perhaps not of relevance directly to the initial project design), indicators do not include any reference to the importance of home gardens towards improving nutritional levels and as a consequence, community health in general (enhancing a staple diet of fried fish and rice with new fruit and vegetables). This is understandable as the project focus is essentially on enhancing agro-forestry to address climate change as opposed to the focus being directly on health. However, it may be an interesting opportunity in the future to integrate climate adaptation projects with health related projects. The two (in terms of addressing climate change) are essentially closely intertwined and the inclusions of indicators that encourage improvements to societal health to help become more resilient to climate change possess a lot of possible value. A healthier society, as well as a better educated society is more likely to be in a far stronger position to be able to reduce their vulnerabilities to climate change. This may be something that a future upscaling Concept Note idea may focus on (i.e.: indicators that encourage the consumption of home grown produce and not directly all sold at a market).

Monitoring and Reporting Review Rating: Satisfactory (S) - the project's documentation, analysis, and tracking of risks to be appropriate and were implemented well through future risk presentation may wish to be formalized better for the remainder of the project within PPRs and Half-Yearly Reports up to project completion.

5.8 Sustainability

152. The Sustainability of the AFCPA 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

153. Political stability throughout Cambodia has led to fast economic growth during the last decade. Such rapid growth also needs a lot of inputs especially natural resources and land. Growing land competition for development has in many cases lead to conflict between investors and local communities as well as between the local communities themselves. The chaotic population movement (eviction from population birth places) throughout the country by Khmer Rouge regime has also greatly contributed to todays' challenges and land distribution. In an effort to cope with land competition and illegal land grabbing, the Government established and approved many laws such as the Land Law, Forestry Law, Water Law, Law on Environmental Protection and Natural Resources Management. Acquisition of land through occupation is now no longer feasible in Cambodia and consequently, communities are facing significant challenges to make a decent living and to survive.

154. Proof of the intended outcome of AFCPA is, even at this MTR stage, too early to predict, however the focus on educating rural communities of alternative farming and forestry practices is likely to prove a strategically appropriate approach to follow. For example, when various communities were asked which interventions are most at risk from a lack of continuation (see Annex IV Meeting Notes), the clear response was that any activity that requires significant capital maintenance would be most at risk. It was stated that *"once the project closes, the spirit may be reduced to continue certain aspects".* The maintenance of the water pond (e.g.: at Chiork Boeungprey CPA) is likely to continue as this provides a vital commodity for living (for the community and associated livestock). Anything that requires significant dredging, clearing through use of machinery or the failure of water pumps will most likely to be not fixed if significant machinery related works are required. Of course, additional MSG contributions (from the project – see recommendations) should reduce this project sustainability risk.

155. Importantly, the sustainability of the AFCPA (to date) is seen as being positive from a training perspective (though continuity of approach is going to be needed to a range of stakeholders). Ownership by direct beneficiaries is also linked to uptake of the project's demonstration measures within the 5 CPA demonstration areas. In fact, the MTR is able to ratify that in general, communities are willing to voluntarily

participate in project interventions, and therefore buy-in of the wider community (into the objectives of the AFCPA) is positive. Furthermore, by providing tangible benefits to communities (especially during the early stages of the project) the AFCPA project has encouraged commitment of local communities to all project activities.

156. To reduce political risks over time, 10 government counterparts (team leaders, assistant team leaders and field leaders) have been hired by the project to facilitate the implementation of project activities. This demonstrates that GoC have a vested interest to maintain its support of project activities during and importantly, beyond the life span of the AFCPA. In addition, regular government stakeholder consultations have taken place to keep them informed of project progress and the benefits that the project offers to their ongoing agriculture and forestry programmes. Several high-level government officials, including the Minister of Environment, have also been involved in the inauguration of project intervention sites. The physical demonstration of project activities to government officials has ensured their continued support of the project.

157. There is a minor risk of delay or a lack of follow-up (after the end of AFCPA) due to the possibility of a changing political agenda and/or commitment which cannot be ruled out despite the GoC commitment towards its decentralisation reform programme. Political decentralisation basically involves the transfer of power and functions from central to local government and this is based on political representation. Commune councillors are locally elected on a proportionate basis, which means more than one political party can be represented by local people who live in the area of territorial jurisdiction of the local government. Therefore, to ensure eco-agricultural approaches are sustained and supported, there may be a need for securing consistent commitment of senior policy decision makers (within MoE and at the national and provincial levels) by activating discussions on the projects successes to date and supporting recommendations with existing coordination bodies, such as 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 various agencies' mandates and responsibilities.

158. Positive sustainability outcomes are demonstrated by villagers who have been trained on home garden production which have shown and encouraged them to witness how their livelihoods can be improved upon by following new agricultural and forestry approaches, however, evidence from some CPA demonstration sites suggests that in some instances, chickens (but more readily, more seedlings/saplings etc) have already died off after planting. The exact cause of rosewood tree die off is, however, unknown at the time of writing although poor soils, planting in the dry season and insect swarms are seen as key reasons to date. The MTR can confirm good progress towards improving beneficiary understanding of the adaptation opportunities that face them within CPAs and this is mostly attained through meaningful applied training which helps to relay an appreciation of what seasonal climate change means to families, and communities and from this appreciation, they are better tasked within devising suitable coping strategies that embrace the implications of variable seasonal conditions. This is seen by the MTR as a major beneficial outcome of the AFCPA. In time, more exposure to planting/growing/cropping patterns and new eco-agricultural techniques adopted within villages will result in the approaches becoming mainstreamed and techniques passed on to next generations.

159. Despite the above, how AFCPA outputs can be up-scaled has been questioned on a number of occasions by interviewees, especially how Commune Development Plans be used to recommend the use of AFCPA approaches/outputs/guidance to help replicate the AFCPA approaches (within CPAs and more broadly at the PA scale) over time. Likewise, the mainstreaming of the Guidance on Procedure and Process of Community Protected Areas (CPA) Establishment (2017) produced by the GoC needs to be assessed carefully as it is important that principles of CPA protection and takes place for all PA and not just the three where demonstration interventions have taken place. The model of “homesteads” or (integrated farming systems (IFS)), importantly, has been adopted and integrated in Commune Development Plans (CDPs) and Commune Investment Plans (CIPs) by Commune Councils (Provincial Development Authorities (PDAs) elsewhere around Cambodia. In fact the model of Climate Resilient IFS’s 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 coastal areas of Cambodia (Koh Kong Province etc) to improve local livelihoods. Climate Resilient IFS essentially needs to be followed up and expanded to villages within other CPAs and a strong expectation of this happening is expected with support from specific international consultants during Component 3 who shall seek to identify donor (and non-donor) financial

support for such a project (NB: as a Global Climate Fund (GCF) "Ideas Note" and follow on "Concept Note" application maybe one possible avenue to pursue or even to reconsider approaching the AF once more based on current good progress on the AFCPA).

160. Mainstreaming the approaches (and climate resilience) into national and provincial development policies and plans requires time and efforts beyond the duration of the AFCPA however efforts should be made during the remainder of the project (Component 3) to set a solid foundation for this success. It is likely to a long-term learning process of adjusting and adapting socio-economic systems and to reduce the frequency of illegal land grabbing but the long term benefits of success are very clear to see and very worthwhile to help preserve Cambodia's PA's and National Parks.

161. Finally, although the AFCPA project has delivered on its intentions in Component 2 to provide tangible support on the ground to local communities within 5 CPAs, however, the approach cannot be deemed totally sustainable in terms of social development in rural areas. It is the view of the MTR that the CPA concept is fundamentally flawed and that the whole aspect is reviewed in more detail. A compromise is needed to encourage sustainable levels of cropping and cultivation within a CPA boundary. In addition, a thorough review of the current CPA legislation is recommended to better accommodate cultural activities and practices within the boundary of a CPA. Importantly, the 5 intervention sites are situated within CPAs, which by law cannot be sold as ELCs. In fact, a Land Tenure Expert has undertaken a study to confirm the legal status of CPAs and educate local community members about their land tenure rights.

Sub-Review Rating: Satisfactory (S).

5.8.2 Financial Resources

162. A few examples are now used to convey whether the MTR believes that AFCPA has provided the basis for financial sustainability in the future.

163. Financial sustainability of the project cannot be accurately determined at this mid-term stage. However, the inherent debt that is apparent in many local communities in the Provinces could be arguably reducing through the project interventions as a consequence of being able to reduce the purchase of vegetables and fruits. This aspect has not been studied in any detail and may prove to be a useful exercise should budgets been made available. More ready cash may then possibly be available to local families to spend on other consumables or house repairs, improved or larger water tanks etc. thus improving livelihood stability in rural areas.

164. Based on the recommendations of the baseline study (Tye *et al* 2014), the project restoration interventions have been adjusted to focus on agricultural land within CPAs in addition to the degraded forest areas which were initially targeted by the project. This is due to the recently identified increased risk of land clearance within CPA's following the ELC's which has resulted in less communally owned areas of degraded forests available for restoration. Because local communities continue to derive income and livelihoods from these lands, this is likely to reduce the threat of land clearance once project activities have ended. In addition, local community members in the Chorm Thlok CPA (where this risk is high) have signed contracts with the government pledging not to clear additional areas of forest within the CPA. Training on land tenure and community land tenure rights has also been provided to local communities. This training has emphasised the fact that CPA's cannot legally be sold as a ELC, and therefore community members do not need to clear land in order to "claim" it.

165. As mentioned earlier, a key financial sustainability challenge relates to the lack of government budget to continue supporting the AFCPA work represents a common issue not only for local development projects, but in general for climate change-related activities and adaptation projects in PAs and CPAs. Discussions and negotiations on the establishment of a national climate change fund are currently in progress at the national level between various key ministries such as MEF, MOE, MAFCPAF, and MOP, but this needs more time before final arrangements and approaches can be put in place. Future funding from the AF for the least developed countries like Cambodia is unlikely to be a possibility due to a reduction in AF budget allocations globally. In fact, the AF "Direct Access" modality which is an option for Cambodia in the future is actually not very appealing at present for Cambodia. Current financial challenges of AF make this option not attractive for Cambodia and there is no additional benefit of direct access instead of using

UNEP as the intermediary body. Possible applications to the GCF have been mooted and may prove a more viable proposition beyond the timeline of the project.

166. Concern was raised by many local stakeholders over the approach towards replicating/duplicating and sustaining any demonstration project that has started to date. Despite the demonstration interventions within the 5 CPAs being mostly small in scale (home gardens/water tanks/ring wells/ponds etc), 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 villagers to sustain despite the early successes being shown through the various MSGs. 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 AFCPA, if replicated elsewhere, are likely to require significant initial investment costs or "grants" (pond creation/nursery creation etc). Component 3 needs to look into detail as to how the institutional sustainability structures (Committees etc) are structured to best ensure success.

167. Provincial Investment Plans (PIPs) should (or perhaps could) be better used as a lever to request additional budget from GoC for pond construction and maintenance in addition to improving road access to the most rural locations (for example, bridge construction is urgently needed to better access Ronouk Khgneng. This poor transportation network is one contributing factor to why for Ronouk that climate resilient species have not been provided to local villagers (along with the issue of traditional practices). 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 Council and the Ministry of Interior to help divide up and enforce specific responsibilities for road repairs within PAs into the long term.

168. Financial sustainability within the AFCPA has been focused on very well through the introduction of village savings and loans schemes (MSGs). Positively, the establishment of the MSGs, 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 to support home garden creation or similar 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. Villagers are granted a loan that they pay back with low interest after six months. The project has been able to conduct one cycle of disbursal and repayment of these loan mechanisms, though this is not enough time to create experience or assess the effectiveness of the scheme. Despite this, these schemes are attracting a lot of interest with more families wishing to join the scheme as the project has progressed (deemed a "snowball effect". Regarding the financial sustainability of the new tools and approaches (through the MSG), families are becoming more savvy and adaptive towards being climate resilient. It is recommended that should additional project funds become spare, a positive legacy may be to increase the current US$1,000 "seed fund" provided by the AFCPA project by an additional US$1,000 per MSG.

169. Finally, the introduction of "Payment for Ecosystem Services (PES)" is something that needs consideration in the longer term. This approach is embedded within the principles of the Ridge to Reef process which is critical to ensure that (for example) the Kulen National Park provides the necessary ecosystem services to help protect Siem Reap watershed and town from flash flood events and water quality issues (including siltation etc). Rehabilitated buffers (as the AFCPA is starting to achieve) needs to be replicated and up-scaled to other Provinces as soon as practical, possibly within a new project Concept Note application).

Sub-Review Rating: Satisfactory (S).

5.8.3 Institutional Framework

170. The MTR 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 by the AFCPA. These represent positive signs of potential institutional sustainability. The institutional set-up and anchorage of the PMU and the MoE is a relevant issue to consider. The nature and quality of the relationship between the MoE and partnering Ministries (such as MWRM, MAFCPAF, MOP and MLMUPC) has certainly helped towards making AFCPA a success to date. The Project was also designed to be flexible enough to accommodate any

unforeseen institutional change that may occur. In fact, during the project implementation, the GoC has had a number of new institutional changes imposed on it from within the MoE. New Departments have been set up (e.g.: Dept of Ecotourism and Dept of Natural Heritage) which all potentially could add value to the project, though no specific scope has been set up for this a yet. To date, an Institutional capacity expert has undertaken an institutional mapping exercise and gap analysis in relevant government departments and research institutions to determine potential shortfalls for the planning and implementation of ecoagriculture interventions in CPAs. The results of this assessment have been used to ensure that the necessary and appropriate government departments have been included in the implementation of project activities (e.g. staffs from the Ministry of Agriculture have been involved in the training on ecoagriculture and the selection of drought-resilient rice varieties). In addition, national experts have been hired where appropriate to contribute specialised technical expertise. These experts have transferred knowledge and skills to government officials.

171. A key livelihood sustainability finding is that AFCPA has helped local beneficiaries (CPA villagers) to think differently with regards to climate resilience and what this means at the very basic household level. The MTR process confirms that capacity-building, together with awareness building must continue to be conducted on a regular basis for the remainder of the AFCPA project, targeting all stakeholders, especially non CPA members, neighbouring CPA villagers that were not directly targeted as beneficiaries, school children and land owners. Outcomes 1 and 2 and their associated outputs, in particular, have made a positive contribution to the institutional strengthening for eco-agriculture in Cambodia, though whether the output "message" is clearly integrated into CDPs and CIPs 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 within other Cambodian Provinces. Undoubtedly, Component 3 outputs require additional focused work to be undertaken during the remainder of the project before the project can officially announce it is sustainable from an institutional perspective.

172. Nevertheless, institutional sustainability is influenced by having the necessary capacity to help upscale the work done to date. There is in fact a key shortage of trained nationals available to take forward the work being done. Coupled with this, the net migration of populations away from the rural areas to the cities is currently being recorded thus potentially impacting on long term sustainability of the AFCPA intended outcomes. Efforts to engage GoC (MoE) to help subsidise or "buy back" products grown as part of a "micro-finance" or "money saving groups" approach may be a possible way forward. Without this the long term impact of the project is possibly threatened. 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 eco-agricultural perspectives into principal plans, and consequently, there is no guarantee that the concepts of IFS or climate resilience would be embraced within Provincial Plans.

173. Regarding stakeholders involved outside of the public sector (apart from local communes), there has been some attempt to engage the tertiary education sector into AFCPA. The project has supported 15 scholarships for university students to get involved in local agriculture/forestry planting projects and so, indirectly, universities do get to hear about the various research initiatives taking place in the local CPAs. There does not, however, 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 AFCPA. The MTR did, however, determine that an International Research and Monitoring Coordinator (in addition to a National Research and Monitoring Coordinator) has been recruited to guide the research and monitoring activities of the students, national experts and project monitoring team.

174. Finally, there appears to be confusion amongst local communities over the definition of sustainability and what it actually means. For example, local communities believe that the termination of training events after the AF contract is completed means that the project will not be sustainable. This in fact is the opposite in trust as the "how to do" training events (animal husbandry/maintenance of equipment/planting techniques etc) help to ensure that the project outcomes are sustained into the future. Having said this, efforts to evolve the "how to do" type of training into more "how to improve" type

training (e.g.: “how to improve your market sales of produce etc) could be a positive way forward in the future.

Sub-Review Rating: Moderately Satisfactory (MS).

5.8.4 Environmental

175. A couple of demonstrated environmental sustainability aspects are now described. Environmental sustainability is essentially sound as there are minimal (if any) environmental safeguard risks associated with the EbA type intervention approaches adopted. Good examples of environmental actions (such as firebreak creation, fish release activities and the organisation of Earth Day (campaign)) all are examples contributing towards the achievement of environmental sustainability. Concern has, however, been raised over the issue of “fenced protected areas” in Chiork Boeungprey CPA. The aim of this is to create a natural wildlife conservation area with a 2240m radius covering 28 hectares of land. The project has “released” 2 roe deer, 3 musk deer, 27 wild pigs and 3 porcupines into the area. There is a debate over “fencing” wild animals into large areas, however one must not forget that local communities have little alternative in terms of making money (small home farm produce is not at a scale yet to supply sufficient economic returns and hence they need to make money). The establishment of the “fenced protected areas” concept does enable the “potential” for eco-tourism visitors to witness local wildlife in a safe (though arguably not a wild) environment; the same wildlife (especially feral pigs) can also command a high price on the market place. A sustainability plan for these areas may be a recommendation prior to any follow on project is designed.

176. New laws are being initiated to encourage sustainable harvesting of bush meat. Poaching is managed quite effectively via village patrols of CPA margins though improved education (where possible) to poachers is needed to prevent conflict escalations occurring. Preventing the encouragement of the wild bush meat trade to restaurants in Siem Reap needs also to be encouraged through the marketing of “sustainable meats” to tourists and to local markets. It is without doubt that environmental sustainability will succeed where efforts are focused on diversification of the local economic market and to encourage (for example) ecotourism to develop where suitable. This however will require significant investment (trail feasibility studies etc) though the concept (over time) has great potential. In fact, Annex IV Meeting Notes convey that although the cost of patrolling the borders of the CPA’s are quite minimal, many village communities all raised this issue as being something that may cease once the project terminates. Consequently, the whole issue of eco-tourism within the CPA is unlikely to have a sound platform to build upon unless there is some “seed funding” from donors to kick start the process.

177. To ensure environmental sustainability, it is proposed that more focus should be placed on restoration ecology as a concept within future project designs. The poor soil conditions in certain areas perhaps should have been better acknowledged at the outset of the project so that efforts to encourage seedling growth could have been better managed. The paucity of detailed soil chemistry research work and investigative feasibility studies appears to have possibly compromised long term environmental sustainability of AFCPA planting programmes (enrichment sites). Challenges being faced in Chiork Boeungprey CPA (as an example) included poor soils in the CPA reforested areas, where there is significant evidence of rosewood saplings dying off after 18 months. Those that are alive are at risk from death from invasive climbers wrapping their root systems around the saplings and suffocating them. This is an issue surrounding many trees in the forest but remains a real concern for the long term success of any planting programme. The need for possible silviculture support has been mooted for these impacted reforested areas. This may need to be considered as the market cost of rosewood (a highly dense tree) can be as high as US$53/kg. Whilst some pre-construction vulnerability assessment related studies were undertaken in Outcome 1, detailed pre-planting studies (within Outcome 2) appear to have been limited in scope. Hence, decisions regarding soil quality and planting specifications appear to have been made prior to undertaking a robust pedological (soil) assessment being carried out at receiving locations.

178. There is evidence starting of a “blame game” as part of the reforestation aspect of the project which is partly influenced by the fact that villagers receive small cash donations for planting seedlings, whether they survive or not. In fact, there have been a number of instances where the local villagers know very well that the seeds will not grow in a certain soil, though plant them anyway to ensure they receive the cash

donation. This working strategy is not sustainable and requires reconsideration along with the need to consider developing silviculture skills within the country.

179. Finally, and perhaps most critically in terms of project impact, the sustainability of the interventions (e.g.: ponds/pumps/wells etc.) essentially should relate to how they should all be maintained and whether (as a result) crop yield within home gardens (and future upgraded "chamkhars" will increase and whether this is actually due to adaptation measures that AFCPA has been instrumental towards creating. For example, one key problem currently being faced by villagers is that of insect infestation which appears to a problem only in 2017 but prior to 2016. This may well be linked to weather extreme situations but if this is so, they it falls directly into the objectives of the project and it may be argued that the project (on this aspect) sustainability is questioned as insect infestations are directly a climate change related factor and concern to agricultural focused projects. A similar issue appears to be linked to the growing of cabbage and long beans which has been a challenge (individuals remaining small in size) and many villagers actually don't grow them anymore (pressure to use pesticides is high unless a natural alternative is offered which has not at present). This is an issue for the project to address in the final year.

Sub-Review Rating: Moderately Satisfactory (MS).

5.8.5 Catalytic Role

180. AFCPA has demonstrated some catalytic effects as the applied approaches are supporting institutional changes, catalysing 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.

181. Put simply, the MTR believes that the AFCPA has represented the starting point of a growing process of capacity and institution building on eco-agricultural practices in Cambodia (building on some initial work carried out in the country by Oxfam). In terms of national catalytic impacts, however, continued effort will be needed to engage those village communities that did not receive direct demonstration activities. In addition, future up-scaled demonstration activities should (when funding is found through Component 3 specific activities) to either work more intensively with specific non CPA member households or to include more non CPA households to broaden the beneficiary opportunities. Of course, it is acknowledged that this is in many cases donor budget dependent.

182. A main catalytic finding from the MTR field mission is that AFCPA has provided the opportunities for local Cambodian stakeholders to "think differently". It has contributed effectively in providing a catalytic role in educating villagers within CPAs on new eco-agriculture techniques which has proven vital for both the delivery of home gardening in the dry seasons.

183. Finally, it is worth noting that the basic premise of the project was a fixed with a very limited budget compared to some other AF projects). The issue of donor budget support long term, coupled with national budget commitments are both critical factors towards ensuring the good work undertaken so far is maintained.

Catalytic Role Review 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 the CPA communities within the 5 CPAs in "leading by example" has also not to be underestimated in achieving the rating attained.

5.8.6 Replication

184. Considering the implementation period of AFCPA (circa 5 years), and that this MTR is occurring into Year 4, an important issue to start to be considered relates to the sustainability of the activities implemented and their replication and expansion to other CPA/non CPA village areas. As re-confirmed with all CPA demonstration site stakeholders as part of this review (see Annex IV meeting notes), a clear message received from the stakeholders was that they would like to have the AFCPA to continue the eco-agriculture activities if the project can be extended into 2019. This would provide an opportunity to follow-

up and expand the conducted demonstration activities and thereby increase the likelihood for sustainability. Replication of activities undertaken at the 5 AFCPA demonstration sites to non CPA members was agreed by the Project Board at the 5th PSC meeting in August 2017.

185. The project focus on livelihood security, whilst very positive and useful, has not considered how to "make money" from the home gardens concept (linked to delivering financial sustainability). In fact, home gardens only work during the wet season and not the dry season when crops are unable to grow due to water shortages (unless suitable water irrigation/pumping techniques exist to counter the drought conditions experienced between November and April each year. Replication is therefore likely to require some new ideas and delivery "models" to be considered. Whatever model is pursued, the primary activity MUST be the provision of clean regular water supplies (or at least the collection and storage of water for use in home gardens etc). At Chiork Boeungprey CPA, for example, perhaps the most critical intervention that provides maximum impact link to those activities associated with water supply. The village water pond (circa 200m x 50m x 3m) was designed by the Project Coordinator and cost only US$7,500 to construct. It was carefully designed to use groundwater aquifer springs to supply the pond. This was also sensitively designed to ensure a ledge on the outer edge (5m) was incorporated in the design to ensure children/animals don't fall directly into it. Water quality testing has not appeared to have taken place since its construction (2015) though water quality issues do not appear to have generated any concern to the immediate term.

186. When the community were asked which interventions are most at risk from a lack of continuation (see Annex IV – Meeting Notes), the clear response was that any activity that requires significant capital maintenance would be most at risk. Cricket raising still requires more training as the cricket breeders have provided villagers with the skills, but the execution element still remains weak. Organic farming techniques are now strong, but the villagers do not feel they are experienced enough to sustain a constant self sufficient supply of produce. They need to continue crop and product diversification within the MSG business model Action Plans and to ensure that there is variety between the families in what they produce (communication between themselves should continue to diversify the product). "Stronger together" concept which should be a catch phrase of the community if possible.

187. Maintaining project awareness is very dependent upon providing the institutional support and advice to the CPA Committee. This must remain strong and be seen as a respected body to help direct a new path towards engagement and sustainable agricultural practices. One possible suggestion is to formalise lessons learned by engaging nominated "village outreach champions" (selected by the local PMU teams) to engage and encourage involvement from neighbouring villages and non CPA stakeholders early in any "follow on" design process. Linked to this is the continuing challenge of CPA boundary control and the risk of encroachment of CPA lands by non-members. Whilst the boundary of the CPA is clear to the Khla Khmum (Chop Tasok CPA demonstration village), it is often far from clear for the surrounding villages. The MTR believes that engagement of other non CPA members should be easy as the benefit of the project work has already been clearly communicated to others through the provision of livestock, seedlings and fruits. To this end, continuation, should be encouraged and promoted, however, it is dependent on budget, and national and donor priorities. Both of which are often beyond the control of MoE, the AF and UN Environment.

188. The supply of water interventions (ponds/pumps/wells/water tanks etc) should be the priority of any intervention in the view of the MTR as this provides co-benefits in terms of reducing vulnerability to climate change impacts and improved livelihoods and nutritional value opportunities. Regular maintenance of ponds and wells are important tasks (for example) and these will become more critical in the future. Within Outcome 2, 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.

189. The potential for upscaling home gardens and also the enrichment of confiscated "chamkhars" is in part dependent on land ownership issues, and the cost effectiveness of increasing labour intensive approaches that are linked with upscaling home garden approaches to a chamkhar level. A strong sign of sustainability/replication of this can be shown in some of the AFCPA initiatives, particularly the role of

village members in maintaining the tree nurseries which has been very welcome to see. Despite, this, the 5 CPA demonstration villages perhaps should now be encouraged to "test" what they have learned to a much larger chamkhar scale to assess whether IFS is actually viable at larger scales in the CPAs, plus what the impact this has on local households (employment/crop production) over various wet and dry seasons. The home garden activities have showed a significant increase in household income compared to baseline (some families able to construct new toilet blocks or have satellite dishes on their houses) 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 is needed but it is expected that some CPA village communities seeing the overall benefits could have the possibility to implement it stepwise to generate funds for enhanced 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 (per Province) to provide support during implementation. It is expected that the MSGs could provide start-up financing for interested families but this process could be accelerated if key ministries could assist by providing a funding source.

190. Finally, it is recommended that rosewood tree planting replication plan (using nurseries to provide the seed stock) 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 enrichment rehabilitation within local plans, however links to the Royal Academy (University) are being made to provide areas to plant trees for use within enrichment sites. This aspect should be continued and developed during the remainder of the project. What is important for the AFCPA project to ensure is at the front of its strategy is to ensure that any intervention complies with the intended AF outcomes at all times. Any intervention approach must have a consistent message assigned to it, in other words, planting programmes are not directly about the individual trees themselves, but more about what the tree does for the wider ecosystem (i.e.: it provides an ecosystem "service" to society). Tree planting programmes (enrichments) should be (in the view of the MTR) focused within watersheds for the remainder of the project. This is important as there is an assumption that wherever tree planting occurs that the Commune Council will maintain them which if course is a vast assumption which cannot be guaranteed.

Replication Review Rating: Satisfactory - one of the key factors to assist with replication that was adopted by AFCPA 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

5.9 Factors Affecting Performance

5.9.1 Preparation and Readiness

191. One of the key factors adopted by AFCPA 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 (see Figure 3.5). This strategy has provided the opportunity for a number of AFCPA outputs to potentially be replicated to other CPAs, though in particular those villages adjacent to the demonstration villages that did not directly receive the direct Demonstration project financial and logistical support. A clear recommendation from existing village recipients was that they would like to continue with the training activities that they have already received from the AFCPA. They declared regularly at meetings that they are still very novice in the techniques being provided and it will take time for the "hand holding" to stop.

192. A key dimension towards the "technical" success of the AFCPA to date is linked to ensuring that priority interventions (early on) focused on water. The provision of a supply of fresh clean water for human consumption and for carrying out new agricultural practices during the dry seasons has proven critical to most of the 5 CPA demonstration villages. In fact it is very apparent from the interviews with the communities that the new constant supply of fresh clean water is the fundamental ingredient towards creating the platform for climate resilience and adaptation to take place. Once this important factor is

achieved, individual health and wellbeing within the village will improve. Communities are then able to review and consider changing their livelihood approaches and economies leading to their ability and mental capacity to consider the issues of climate change (i.e.: think beyond a "week by week" cycle and consider changing seasonal conditions in weather states instead). The selection process was conducted through a thorough participatory approach, with multiple meetings/workshops with local communities. At each project site, the relevant CPA Community Management Committees have identified the specific sites for project activities.

193. One of the key factors adopted by AFCPA 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 (see Figure 3.5). This strategy has provided the opportunity for a number of AFCPA outputs to potentially be replicated to other CPAs, though in particular those villages adjacent to the demonstration villages that did not directly receive the direct Demonstration project financial and logistical support. A clear recommendation from existing village recipients was that they would like to continue with the training activities that they have already received from the AFCPA. They declared regularly at meetings that they are still very novice in the techniques being provided and it will take time for the "hand holding" to stop.

194. The success of this approach to date is also linked to the PMU team (national and local) having a good understanding of the local area and also of the technical topic. The PMU staffs all have sound technical backgrounds, strong PM leadership skills (Project Coordinator) and they all have existing connections and employment via the MoE on rural agricultural and forestry projects prior to the AFCPA project commencing. Staff also have been continuously employed throughout the project (same names seen at the Inception Workshop event in 2013) and also that their employment status is deemed relatively safe (whilst cannot be guaranteed) after the end of the project. One factor affecting the successful performance of the project (especially Component 2) was that the PMU staffs have pre-project experience in dealing with rural community projects in agriculture, forestry and animal husbandry. The local community appears very satisfied with the PMU leadership and structure. A success factor linked to this is the ability of staff to communicate the alternatives to forestry (timber) as a series of NTFPs and new markets for these products. They also have the ability and capacity to help locals to draw "maps" to clarify the vision of what the project was seeking to achieve. Likewise, PMU staff members were always present to help support the various specific training events that have taken place and were purposely present AFTER the training to help with (for example) transferring seedlings over to specific households/community members.

195. It may be considered of value to create an informal "Village Champion Group" made up of selected families who have demonstrated early successes in eco-agriculture from a number of perspectives (cricket raising, chicken raising, fruit tree planting and harvesting, water tank installation and maintenance etc). This "model" could be used to improve the dissemination of findings and successes from AFVPA to date from the demonstration villages adopted and from this to better combine local level participation (e.g.: with Commune Councils, neighbouring Village Chiefs etc) with local level implementation. This may be undertaken though the use of (for example) existing (or new) methods of local communication between Province to District, and District to Commune and down to Village levels.

196. Additional CPAs that receive support from the project are also selected through a transparent process. The Provincial Environmental Department sends a request for a specific CPA that it has identified as being in need of support. Members of the National Project Team then assess the request based on pre-determined criteria. These criteria for additional sites are: i) need for additional water supply infrastructure; and ii) need and capacity to undertake tree planting (in forest and home gardens). If the CPA meets these requirements then support in the form of water supply infrastructure and seedlings for re-forestation and home-gardening are supplied.

Preparation and Readiness Review Rating: Highly Satisfactory (HS)

5.9.2 Project Implementation and Management

197. Another factor influencing performance is the flexibility of the programme and the adaptability of the PMU. When there has been the need to alter the specific activities, location of intervention or type of

approach, the PMU (including the CTA and UNEP team) have been very proactive and supportive of the change. This flexibility has reaped many benefits to the project such as initiatives to diversify the water and sanitation aspects of the project and beyond. For example, most CPA project target sites have been provided with a number of additional water infrastructure related interventions such as ponds, wells, cascade dams and rain harvest systems (e.g.: water tankers etc). From this work, the project quickly learnt that CPAs outside of project targeted areas are in urgent need of similar water supply infrastructure. The same "model" of flexibility was applied to reforestation techniques.

198. During the Fourth PSC meeting (2016) it was suggested to expand activities on reforestation (and complimentary water supply infrastructure provision) to other CPAs outside project targeted areas to increase the extent/impact of these interventions and also increase the rate of spending. The justification for this request is that project staffs had already planted trees (and fruit trees of which 338,542 have already been planted across 5 CPAs and non CP areas over the past 4 years) in most available lands within the 5 CPA forested target areas. However, there are many CPAs outside of the targeted project sites that require support in providing seedling for reforestation as well as fruit trees for household plantation. Following Project Board approval, each Provincial Environmental department (PED) should submit a request letter to GLDC for seedlings to be provided, clearly informing them about the number of trees needed and planting localities. After receiving the requested letter, the review team from the PMU shall undertake a site inspection. A decision was made to provide circa 138,000 fruit trees, circa 320,000 indigenous trees, 119 small pumping wells, 47 open ring wells and 10 large pumping wells for 2017 water infrastructure supply activities to sites within the following Provinces:

(1) Preah Sdach district of Prey Veng province;

(2) Damnak Chang Eu district of Kep province;

(3) O Raing Ov district of Tbong Khmum province;

(4) Samrong district of Takeo province;

(5) Svay Leu district of Siem Reap province;

(6) Sandan district of Kampong Thom province;

(7) Rovieng district of Preah Vihear province;

(8) Oral district of Kampong Speu province;

(9) Sre Ambil district of Koh Kong province;

(10) Malay district and Thmor Pouk district of Bantay Meanchey province;

(11) Toeuk Phos district of Kampong Chhang province; and

(12) Veal Veng district of Pursat province.

199. Overall, considering the nature of the Project, UN Environment has also proven to be quite effective in providing supervision and backstopping throughout the project to date. The Executing Agency (MoE) has (in particular) 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. At times, it appears that some internal administrative delays in responding to draft PPRs (for example) has occurred (PPR acceptance for Year 5 in 2017) in addition to delays from the country team in putting together the PPR though these examples have not (in the view of the MTR) significantly impacted on the projects implementation programme.

200. AFCPA was designed to provide the guidance of the MoE 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 AFCPA as local communes were involved early on into the process and so the AFCPA team already knew the capabilities of the local counterparts. Linked to this point, one observation made by the MTR is the relative "insular" nature that the AFCPA project has adopted since its inception. Despite a collaborative acceptance of the projects interventions from the outset in 2014, the relative engagement and outreach of findings to other ministries of relevance (namely the Ministry of Agriculture, Forestry and Fisheries -MAFCPAF) appears to have been

"conservative" at best. Normal practice in AF (and other donor) funded projects positively demand some Technical Working Group (TWG) concept to be set up at the outset of the project or some mechanisms (inter-Ministerial Group) that reviews technical performance. This isn't the case in the design of AFCPA with the main project management responsibilities falling squarely on the PMU (Project Coordinator, Chief Technical Advisor, Project team members and the Project Board). One cannot argue with the projects achievements to date and it could be justified that the project "model" adopted to date is something for donors to consider. The MTR has experienced situations where a project's progress has been stifled by delays in Board Meetings (due to key Minister scheduling etc) or where there is a "personal" or "technical" impasse between Ministries/Departments on specific issues thus impacting on project progress. Now that the AFCPA is reaching a key period on terms of consolidating its findings, and seeking best ways to mainstream and upscale its successes, there is an argument for considering either the broadening of Ministerial participation within the existing project Board structure (including others outside of the MoE) or a separate outreach strategy is set up which focuses on message findings from the project to other Ministries/Departments.

201. Finally, it is noted that the Project Board meets once a year. This could be more efficiently operated if each member was to produce specific technical working papers on certain issues of potential relevance to the project (i.e.: institutional change impacts for the project to consider etc) ahead of the event to help engage them better in the process as opposed to just being a "sounding board" for financial / administrative issues.

Project Implementation and Management Review Rating: Highly Satisfactory

5.9.3 Stakeholder Participation, Cooperation and Partnerships

202. Wide and meaningful forms of stakeholder participation actually represent a crucial issue in the development and implementation of AFCPA. 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.

203. The MTR has noted that no detailed and robust stakeholder analysis has been undertaken for the project to date. It is something that now requires attention into the remainder of the project (building on a draft that the MTR has produced in Annex XII. Extensive community consultations have been held since the initiation of the project. These consultations have been conducted during the baseline study and as part of the duties of the 18 National experts. Therefore local knowledge is included in the design of project interventions and activities, reducing the risk that local communities may not adopt the project interventions. In addition to the work conducted by consultants to the project, the national government counterparts (team leaders, assistant team leaders and field leaders) visit each of the target communities regularly to inform community members of project activities and ensure their continued support.

204. During one such visit, each household within all five CPA intervention sites was visited to assess their willingness to participate in the project activities and obtain a "family profile". Based on this information, 279 households were selected to participate in project activities during the second and third year. Because these households were selected based on their willingness and capacity to participate, the risk of them not adopting project activities is low. Additional households have since indicated their willingness to participate in the project because of the tangible benefits that they observed in other households. Therefore, through demonstration of interventions with willing households during the first few years of the project, the communities are willingly adopting the activities of the AF project and are considered likely to continue these activities once the project has ended.

205. Another observation that has been noted is 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 MTR is that the potential success of AFCPA stakeholder links closely to the "working partnership" arrangements that have been established between the PMU and the local communities. Whilst links have been made with the University of Phnom Penh in terms of providing bursaries for scholarships on climate change (Output 1.1), this is seen as being important to develop for the remainder of the project as the sustainability of the project (over the long term) has to be questioned without the ability for the next

generation of agriculturalists to be available to implement any mainstreaming policy that arises over time. In particular, any physical interventions (pond constructions, well constructions, machinery/pump maintenance etc.) need continued funds that may be larger than any MSG can provide. 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 (eco-agriculture/water supply/organic insecticides etc) can be piloted and tested in other CPAs.

206. 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 committees in each province (under the leadership of the Ministry of Land Management). The AFCPA project (during Component 3) should focus its input on how committees can be better integrated into this existing process. New ideas on engaging stakeholders through social media should now be seriously considered for national stakeholders (not for rural communities for obvious reasons associated with internet access etc).

207. Finally, the project is, and will continue to, undertake training in local communities to promote ecoagriculture and highlight the benefits provided by the AF project interventions. To date, training has been provided on nursery management, seed propagation, climate change awareness, ecoagriculture, land tenure, family livestock farming and family financial management. *NB: according to Output 3.1.2 findings to date (from the Local Monitoring Coordinator), an average score of 45% of climate change awareness index score has been recorded (see Table 5.4).* One interesting example is the success of a chicken seed farmer in Chiork Thlok who has been successful enough to produce enough mature chickens for his sons' wedding party (over 150 individuals agreed to be used for the wedding). How sustainable that individual action was is questionable however the endorsement for the action came from the PMU and the community. It does show the success of the approach being taken, regardless who the end recipient actually was (the son in this instance) as it proves that a significant number of chickens can be generated by one farmer as a result of the projects training).

Stakeholder Participation, Cooperation and Partnerships Review Rating: Overall, when considering the baseline situation, progress is still needed regards Stakeholders participation and awareness, it is therefore considered <u>Moderately Satisfactory (MS).</u>

5.9.4 Responsiveness to Human Rights and Gender Equity

208. What has proven positive to date is the effectiveness of engaging local women into the project activities at the village level and this has proven very encouraging thus supporting the indicators being set for gender disaggregated participation and involvement in training etc. When women were asked what benefits the AFCPA has provided since its start, the key responses were the improved opportunity to have learned about new approaches and techniques, a new diversity of skills from weaving to fertilizer making and importantly the fact that the new access to fresh water (ring wells and ponds etc) has seen a tangible improvement in the health of their children.

209. Other relevant observations made by the MTR (e.g.: at Chop Tasok) are that women are less likely to speak out (to a male MTR consultant!) when asked how successful the project has been in changing their day to day routine and lives. They are also less likely to speak in groups, though when asked individually (in their home garden for instance) they are able to speak more openly about their work and how their lives have improved. One lady at Chop Tasok was very excited about the future and of the health of her family stating *"I can now see a future ahead"* was one reply, which is a valuable phrase in terms of being able to start considering and thinking about the issue of climate change (health first, worry about climate change later!). The cultural challenge in rural locations is something that the remainder of the project should try to consider efforts to better involve and to listen to the needs of women and mothers (and young women) is critical and should be pursued.

210. What has been less effective is the effort involved (and possible missed opportunities) to better and more effectively engage women into the project at a more national level (i.e.: within the MoE etc). It was understood that a gender focus was not being thoroughly adopted for the nominations and applications of

the 15 Masters (MSc) scholarships in Natural Resources Management at the Royal University of Phnom Penh (RUPP) (Output 1.1) and the Royal University of Agriculture. However, upon closer scrutiny, it appears that the 2015 intake of 3 students at RUPP (all male) was taken based on the fact that the female applicants were short of having the necessary qualifications required to comply with the criteria requested for entry. The more recent intake in 2017 at RUPP has seen 2 female candidates being successfully enrolled onto the course with 1 male. This is of course very important for the future sustainability of eco-agriculture in the country and the enrolment of female candidates onto this (or the supporting BSc on Climate Change) should be encouraged wherever possible.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

211. The MTR's overarching conclusions find that the AFCPA project is **Highly Satisfactory**. It is well designed, proving to be well equipped, and proceeding in a way that contributes to the project's goals and is appropriate given the context of its 5 CPA target project areas (and beyond). The MTR finds governance and project resources to be appropriate to date.

212. The MTR recommends, however, that the PMU (for the remainder of the project) should better formalize their communications, replication, and strategy that consolidates sharing lessons learned. Beyond these elements, the project interventions and functioning are appropriate for the achievement of the projects expected results. The project has laid the foundations for subsequent actions of capacity building at national level to implement regulatory and administrative system for sustainable eco-agricultural development within PAs around Cambodia.

213. Regarding **Strategic Relevance**, AFCPA is contributing 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 AF strategic priorities. AFCPA 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 Components 1 and 2. The importance of a key focus on continuing to deliver the institutional capacities required is now needed during Component 3. It is also important for the project to keep "on track" with regards to its project relevance and not be too deviated away from the AFCPA intentions, for example, whilst the provision of training activities on different livelihoods (traditional music/barber training) are all of value, the MTR strongly advises that the focus remains on the importance of supporting the provision of water supplies and ecosystem based adaption benefits (planting trees within watersheds as opposed to along roads which is being raised as a possibility into 2018/19).

214. On the **Quality of the Project Design**, this MTR finds that the project rationale was well-founded and that activities are linked to existing vulnerabilities of CPA families and existing barriers to improving resilience to erratic rainfall events and climate change in general in Cambodia.

215. 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 to date. In fact, based on interviews conducted during the field mission with project partners, the review finds that certain external risk factors (including institutional change within the MoE) appear to have been mostly well considered and managed.

216. Regarding the **Achievement of Outputs**, the project should be very pleased with its achievements to date and the way the project has efficiently completed many tasks under budget. It has clearly and successfully demonstrated the programmed activities and outputs as outlined in ProDoc for Components 1 and 2. There is no reason to suggest the Component 3 should prove any less successful.

217. On the **Achievement of Direct Outcomes**, the combined direct outcomes so far are all "on track" to effectively contribute towards strengthening institutional capacity and policy coordination, mainstreaming climate change and eco-agriculture into national and CDPs. The remainder of the project now needs to focus its resources towards building national and local capacity building on adaptation planning, reduced vulnerability to erratic rainfall events (agricultural cropping etc) and improved protection "green buffers"

to climate change within CPAs and outside. These shall all contribute towards improving livelihoods. A considerable knowledge base has also been gained, which can feed into work plans or programs of relevant departments, local administrations and ministries.

218. With regards to the **Likelihood of Impact** (and linked to the 3 Intermediate States identified within this review), it does appear to be the will of the local community to continue the projects outcomes is strong. The same cannot be easily confirmed (at this stage) at the provincial and District levels despite national efforts under the decentralisation programme that seek to make a concerted effort for mainstreaming climate resilience. National funds to encourage decentralisation appear inadequate to really sustain the effective implementation of policy direction to eco-agriculture. This may influence project "impacts" at all levels, but particularly so at the district and commune intended beneficiary levels. Despite this, the new ways of "climate resilient agricultural delivery" thinking introduced by AFCPA are most likely to encourage the adoption of 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 confiscated chamkhars with rosewood species and village focused training events on home gardens should be declared as one of the most successful achievements of AFCPA to date with biodiversity levels hoping to increase within the chamkhar areas before the end of the project.

219. Regarding **Project Efficiency**, the AFCA has proven to be highly efficient in terms of under spend of project budget whilst still achieving the intended indicators set for specific outputs. A better balance between project spend and achievements is recommended for the next quarter of 2018 and into the remainder of the year (assuming the project is granted its extension through to December 2019).

220. On the **Monitoring and Reporting** criteria, the MTR also finds that suitable monitoring reporting is taking place as planned, in a timely fashion and with adequate attention to detail and content. The project should perhaps adopt a clearer system to track project risks posed by institutional stability and external communication in more detail with these being presented within the Half Yearly reports (currently omitted). Visibility of the AFCPA through the use of house "plaques" has proven an effective way to report work completed in the field. The installation of a sign is still needed for the pond at Chiork Boeung Prey CPA. It is also positive to see evidence of high-level government officials, including the Minister of Environment, have also been involved in the inauguration of project intervention sites. This has ensured awareness of, and support for, the project across multiple government departments.

221. Regarding **Sustainability**, in general, one strength of AFCPA has been that has been able to provide a set of strong practical solutions to help sustain and (in time) mainstream climate change impacts into rural community living within PAs. The demonstrated viable adaptation activities undertaken to date within the 5 CPA demonstration communities, and organized training and knowledge dissemination for some stakeholders, as an entry point for mainstreaming climate change under the scope of the current Programme.

222. With regards to the projects **Catalytic Role**, AFCPA has demonstrated some catalytic effects as the applied approaches are supporting institutional changes, catalyzing other parallel donor projects and wider stakeholder behaviour towards embracing practical techniques for delivery eco-agriculture to rural communities. The **replication** potential is good, based on current efforts to disseminate home garden products and seedling production etc. The potential for replicating is likely to be increased through more focus on engaging schools into the activities (to assist with outreach etc). One easy task could be a youth "environmental awareness" forum approach which could be seriously considered for adoption to assist towards replication approaches to other CPA communities. This is because many topics relating to forestry, agriculture, water resources management and EbA techniques can be selected for debate, interpretation and discussion, which can then be used to better communicate specific information and ideas on good practice, behaviour, wise decisions, and best practices addressing climate change impacts and good governance.

223. Regarding the **Theory of Change (TOC),** 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 track towards achieving its primary objectives. This denotes a key strength of AFCPA, as this has helped to deliver a platform for long term EbA delivery within Cambodia. Capacity-building together with awareness building must, however, continue to be conducted during the remainder of the project on a regular basis (subject to

funding), targeting all CPA and non CPA member stakeholders, with a particular focus on decision-makers and natural resources and land use managers.

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

Table 6.1: Mid Term Review Ratings for AFCPA

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 AF strategy and priorities (see Section 5.1)	**S**
B. Achievement of Outputs	The project outputs to date have been impressively completed in an effective and efficient manner within programme to date (for Components 1 and 2). 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 as yet, the Project has succeeded in promoting a new way of thinking on ecoagriculture 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.	**HS**
2. Likelihood of impact	The impact of the project to all beneficiaries has been felt, especially to local household or community beneficiaries.	**S**
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 moderately likely. (see Section 5.8)	**MS**
2. Socio-political	Proof of the intended outcome of AFCPA is, even at this MTR stage, too early to predict, however the focus on educating local villagers of alternative farming practices, tree nurseries and improving water supplies etc is likely to prove a strategically suitable approach to follow.	**S**
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, MAFCPAF, MOP and MLMUPC) has certainly helped towards making AFCPA a relative success.	**S**
4. Environmental	In general, environmental sustainability (long term) should be achieved. This is certainly the case from work undertaken for Outcome 2, whereby the replanting of chamkhar rosewoods related species and environmental awareness-building should be declared as one of the most successful achievements of AFCPA.	**MS**
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.	**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)	**HS**
F. Factors affecting project performance		
1. Preparation and readiness	AFCPA 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 AFCPA as local communes were involved early on into the process and so the AFCPA team already knew the capabilities of the local counterparts.	**HS**
2. Project implementation and management	AFCPA 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 AFCPA as local communes were involved early on into the process and so the AFCPA team already knew the capabilities of the local counterparts.	**HS**
3. Stakeholders participation and public awareness	AFCPA has provided the opportunities for local Cambodian rural protected area stakeholders to "think differently". It has contributed effectively in providing a catalytic role in educating farmers of new "garden" farming techniques which has proven vital.). (see Section 5.9)	**MS**
4. Country ownership and driven-ness	One of the key factors adopted by AFCPA 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 AFCPA outputs to potentially be replicated to other community protected areas around Cambodia, though in particular those CPAs (and associated villages within demonstration Site CPAs) that did not experience direct project financial support.	**S**
7. Monitoring and review		
a. M&E Design	Individual consultants (Maningo 2015) were engaged early in the project to help with the redesign of M&E indicators for the betterment of the project.	S
Overall project rating	**Highly Satisfactory**	

6.2 Lessons Learned

224. In general project terms, the most important lessons learned to date are listed below using sub-titles that are used within the PPR reporting structure to help assist the CTA and PMU team in continued reporting

Lesson 1: Concrete Adaptation Interventions

225. The lessons learned, both positive and negative, in implementing concrete adaptation interventions (relevant to the design and implementation of future projects/programmes that seek to implement concrete adaptation interventions) is as follows:

- Keep the focus on the importance on water supply in tandem with the importance of climate change (the latter sometimes being often too technical and not broadly understood as a "concept" unless the focus of discussion relates to the supply or water);
- Only Promote Eco-tourism in locations where success is likely;

Lesson 2: Community/National Impact

226. The most successful aspects of the AFCPA project for the target communities most definitely are those interventions (physical and soft measures) that relate to the supply or management of water. Without doubt, those measures that are water focused (i.e.: pond creation, water tank supply, pipeline installation from catchment spring waters etc) are believed to contribute most towards the achievement sustainable project outcomes and results.

227. It is the view of the MTR that subsequent measures that may have been considered to put in place that may have improved project results even more to include a more thorough analysis of soil chemistry at receiving demonstration sites (especially the locations in chamkhars where enrichment planting is being initiated. It is understood that the latter is arguably too late to introduce now within the project but perhaps something for future consideration should the project be up-scaled to other CPAs. Other types of data that perhaps may have helped with the implementation of a more robust water resource management focus to the project would have been greater clarity on catchment boundaries and how these "map" against the CPA boundaries.

228. Poor literary levels have resulted in the AFCPA requiring additional PMU "hand holding time" to help deliver the outputs.

229. The review has found that the long-term success of AFCPA 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 chamkhar activities (Section 5.4.2). The sustainability "model" for AFCPA 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 MSG 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 AFCPA). 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.

Lesson 3: Knowledge Management (Training and Capacity Building)

230. The baseline assessment work undertaken by Tye *et al* (2014) provided the project with an excellent baseline of knowledge from which to launch a proactive and meaningful project. Field surveys and existing habitats and environments coupled with community surveys certainly went a long way towards helping the design of the project to be as workable as possible within the constraints of project budget etc.

231. The main difficulties associated with accessing community knowledge (and retrieving this existing information relates directly to the educational capacity of the local community, indigenous language conveyance challenges for the team and also the challenges (and costs associated with) physical accessing the sites especially during rainy seasons. The review found that literacy levels are low in many of the 5 CPAs (especially in Ronouk).

232. Possible suggestions for improving access to the relevant data range from the better engagement of schools in the outreach process through to the apparent challenges associated with establishing a project website on the MoE website platform which currently is causing the project challenges.

233. The review found that where those pilot projects had the best impact is where techniques introduced (regarding installation, planting maintenance etc) 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.

234. The construction of new water ponds (requested by the villagers in Skor Krouch CPA) 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.

235. 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.

236. There still remains a significant amount of money left for training with only 58% of the training budget spent at the end of 2017. The proposal put forward to reallocate US$100,000 from saved training costs during Component 2 is recommended to be used (reallocated) to Project Execution costs (see Annex V). This is supported through needs to be carefully managed, as it is the view of the MTR that replicate training events are still needed in each of the 5 CPAs on existing trainings (i.e.: undertake the same trainings again). More effort on “hands on” training is still needed for the remainder of the project.

237. The MTR has deduced that in order to improve the impact on local beneficiaries, a continuation of existing training approaches should be undertaken, especially building on the training engagement work for community members involved in home gardening practices in particular (see Section 5.4.3). The remainder of the project it may wish to consider the initiation of a “Village Champion Group” which may lead towards the creation of a “CPA eco-agriculture school” over time (a possible interesting legacy for the project to aspire to possibly?). 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 eco-tourist guide skills, more literacy skills and leadership and management skills.

6.3 Recommendations

238. Taking into account the scope of the review 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 AFCPA) to help craft future discussions with the Project Board to help implement the remainder of the AFCPA project.

Recommendations: Project Design

1. For the remainder of the project, explicitly address the changes in institutional arrangements that may be necessary when the AFCPA project ends.

2. Because stakeholders emphasized these risks, track any new risks that may be posed by institutional stability and external communication in more detail and present these in a more formal manner within the existing reporting avenues (PPR and Half Year Reports).

3 Produce an updated Stakeholder Analysis and Engagement Plan with immediate effect (building on the example started in Annex XII).

4 Introduce training (and in the future, the introduction of specific "indicators") that relate to community nutrition and the health of family units as a measure of improving health and wellbeing prior to having to focus on the implications of climate change. Possibly promote the preparation of a AFCPA "Cook Book" that may be sold to visitors in Siem Reap and focuses directly on recipes that use home garden products in tandem with existing rice and fish staples.

5. Improvements to the inclusion of national level gender inclusion should have occurred at the project design stage as no gender disaggregated data exists in the logframe at the national level except at the local rural level. This is perhaps something to recommend on any follow on upscaling contract.

Recommendations: Effectiveness

239. Translate into Khmer all project documents (1 page Exec Summaries) and training programmes prepared for the PSC meetings to facilitate communication of the AFCPA to local villages.

240. Continue to support the 3 CPA demonstration site nurseries for the remainder of the project and to encourage the continued production of seedlings to use within (and outside) of the CPA boundaries.

241. Possible better promotion of existing "how to" guides/guidelines (using infographics as far as possible) on a range of topics including home gardening approaches, use of fertilizer, how to prevent insect infestations, how to monitor growth rates of seedlings in chamkhars, how to plant trees and reduce die off etc etc.

242. Develop any additional water ring well constructions so they are effective and useable for the coming dry season into 2018/2019

243. Introduce field monitoring strategies (i.e.: to record newly planted tree growth and their subsequent survival monitoring etc) that can be embraced by all sectors of society and are easily implementable (possibly involving local schools from neighbouring villages to generate a positive engagement strategy).

Recommendations: Efficiency

244. Endorse a no-cost extension to the project timeframe up to December 2019 to take into account the additional time needed to support the delivery of Component 3 and the upscaling-up and replication of demonstrated resilient measures carried out to date.

245. Continue with development of "road rest" areas in Skor Krouch though consider a re-titling of "Road Rest" for Chop Tasok CPA (nowhere need a road!) to be more "community centres"). It is recommended that the design of these could better reflect a Multi-Purpose Community Centre MPCC). The underlying reason for the implementation of MPCCs is to bring government services closer to people and to provide the community with the opportunity to communicate with government. MPCCs could be then identified as the projects primary approach for the implementation of development communication and information programmes (i.e.: showing AFCPA produced information short films etc). The introduction of solar panels installation at Chop Tasok may help improve energy efficiency at each road rest area (reduce pressure on generators etc) should be continued.

246. Keep training topics specifically on eco-agriculture and livestock related topics (extending to fire breaks if appropriate) but do not focus efforts on peripheral topics such as traditional music/barber skills etc. Motorbike maintenance does have a value and so this topic wold be acceptable (due to the rural nature of the 5 CPA sites).

247. Design a "Train the Trainer" initiative using PMU elected "Champions" (each with a Deputy) to undertake the training and be subsequently rewarded for doing so.

Recommendations: Impact

248. By far the greatest immediate project impact is where concrete interventions focus on water supply or storage for rural communities. Where water has been the focus of the intervention, it is felt that the activity will continue though the cost of maintaining pumps/sprinklers etc in the nursery may prove an inhibiting factor to success. Those activities that are not directly "water focused" (e.g.: patrolling etc) are more likely to not be continued after the project finishes as they (arguably) are not life dependent issues). Should any further physical interventions be proposed to communities outside of CPA boundaries, it is recommended that this should be pond creation, water reservoir (storage tanks) or pipeline networks to supply groundwater spring water to rural village communities? The impact of this is potentially considerable, immediate and very visible.

249. Set up a "Reflective Learning Approach" (RLA) that consolidates on current successes within the 5 CPAs. This may involve the undertaking of "Study Tours" to best practice locations for all current CPA beneficiaries as well as other non CPA member stakeholders.

250. Distribute more fruit trees to non CPA members or communities outside of CPA boundaries. The supply to fruit tree and rosewood (for example) seedlings should be encouraged to the Royal Academy compound site where 10% of all seedlings produced may be donated to provide a new nursey area for research and also supply to key beneficiaries.

251. Improve the degree to which the AFCPA project conducts and tracks the way project activities either do or do not interact with and improve the adaptive capacity of women (national and local levels) plus other marginalized indigenous groups.

252. Consider introducing a new training area focusing on nutrition and health, majoring on the new fruits and vegetables being grown as a consequence of the AFCPA and how improved nutritional cooking is key towards livelihood improvements and child health.

253. Focus on how schools can be better engaged in the process, and how the curriculum could benefit from embracing some of the key findings of the project to date. Considerations on how secondary schools could be involved in monitoring tree planting growth factors may provide a valuable aspect to consider (ecological quadrat monitoring usage etc). The use of drone technology may be assessed / proposed to assist in calculated forest cover in due course. In the immediate term better transect sampling is recommended plus support training on scientific monitoring techniques.

254. Reconsider the proposed idea to plant seedlings/saplings along roadsides areas. Instead, it is recommended to keep the planting focus (where possible) on the objectives of the project (watershed focus and EbA principles). Decisions to use the AFCPA produced seedlings in other areas (e.g.: road sides) should be a judgement made by District/Commune Councils. The project should then support any council decision with specific training and guidance on successful approaches to implement any approach taken. However, the project should not proactively plant seedlings in "risky" areas where there are too many parameters that may influence the projects very good outcome results to date.

255. Consider new techniques to use social media platforms to help with outreach and awareness of the intentions of the AFCPA.

Recommendations: Institutional and Financial Sustainability

256. Ensure a close involvement of the National Committee for Sub-national Democratic Development (NCDD) in all adaptation mainstreaming activities into Communal Investment Plans to secure ownership of AFCPA activities.

257. Consider extending enrichment replanting activities to non CPA areas on confiscated chamkhar sites to compensate for the poor health of the landscape in these locations. It may prove beneficial to introduce incentives that encourage non CPA members to donate chamkhars in return for livestock and home garden seedlings/produce. "Back-casting" methodology training events could perhaps be set to assist here to help communities (during the remainder of the project to) help define actions plans to upscale the actions to the chamkhar and then landscape levels.

258. Extend the time period of training activities on home gardens, organic insecticides, nutrition training etc including continuing specific activities begun through AFCPA as appropriate and as budgets dictate. Also consider monitoring work with households already supported and expanding to new households in adjacent villages who are in neighbouring CPAs.

259. Consider strengthening the MSG financial contribution by a further US$1000 per group (as opposed to increasing the number of groups which is more likely to increase administrative burdens etc)). In addition, the project should expand the MSG concept to specific communities in adjacent CPAs located in the same communes. This may help to transform MSGs (in time) into microfinancing groups (possibly with continued financial contributory support from other donors such as WWF etc). A clear model for how to scale up the MSG concept is required into Component 3. Specific target activities that could benefit from the additional MSG money are presented in Annex IV (Meeting Notes).

260. Develop a short communications plan (focusing on the consolidation of the good practices undertaken to date) complete with targets and means of achieving targets up to the end of the project. In particular, it should contain information on lessons learned and best practices.

261. Develop a replication plan (exit strategy) that identifies how techniques such as integrated farming systems (within Chamkhars), home gardens livestock raising, water harvesting, etc. could be replicated.

262. Mainstream eco-agriculture and EbA Protocols into CDPs and Provincial Plans. Guidelines for Integrating Climate Change Considerations into Commune Development Planning need to be produced (in partnership with the Ministry of Agriculture and Forestry) which should be the next major focus of the project (budget re-allocations may need to be made by the PMU to address this). This and other existing AFCPA produced documents are needed on how to formulate "government ready" climate resilient CDPs and Provincial Plans. This works should also seek to introduce mechanisms to help mainstream eco-agriculture and livelihood resilience within the activities of the MoE (financial evidence of commitments to this cause and how much is likely to be allocated (and in what form) to ensure this occurs from MoE, to Provincial Govt, District Govt, Commune Council and then to villages.

Recommendations: Monitoring and Reporting

263. Producing an "Exit Strategy" is an important task for UN Environment/Implementing Agency and the GoC to help capture the best practice events that have occurred during AFCPA to date (consolidation of successes) and to help set an Action Plan to take forward a focused outreach programme to various stakeholders. This should involve the production of a Consolidation and Continuation Strategic Plan that formulates the route map for next phases of the AFCPA.

264. Improve the physical monitoring of tree seedling growth in enrichment areas. The PMU team do not follow any formal monitoring approach to record health and growth rates of the plantings. Eye scanning of growth only is adopted with some sporadic photos but these photos are not formally stored within any database etc. The use of drone technology maybe proposed to assist in calculated forest cover in due course. In the immediate term better transect sampling is recommended plus support training on scientific monitoring techniques.

265. A new detailed Stakeholder Analysis and Engagement Plan is recommended early into 2018 to help support the actions to be completed in Component 3 to ensure that the impact of AFCPA is not lost and is sustained. This is founded from consultation from the Cambodian stakeholders who state that they would like to see AFCPA continue the eco-agriculture based activities as a specific continuation phase into 2018. This would provide an opportunity to follow-up and expand the conducted demonstration training events to non CPA members and thereby increase the likelihood for sustainability. Replication of the AFCPA demonstration projects into other CPAs within the existing 4 PAs would certainly require the role and input

of local communes and stakeholders early in the design process (as part of a separate upscaling strategy that considers donor and non-donor financial support mechanisms).

266. It is acknowledged that significant effort, outreach and lobbying is taking place for follow up work, including the draft preparation of a GCF Concept Notes possibly into 2018 (following on from a meeting in Bali I 2017 where the development of a Project Ideas Note (PIN) was agreed upon). Despite this, neither MoE nor UN Environment has the authority to assure that this happens. Should this be taken forward as a recommendation from Component 3's specific upscaling consultancy work, the MTR believes that one interesting focal area could be focus on the nutritional capacity of new eco-agriculture programmes within CPAs (as part of a generic project that focusses on societal aspects of climate resilience). Any future PIN will need to ensure a fully endorsed programme can commence from 2020 onwards.

ANNEX I. TERMS OF REFERENCE FOR THE MID TERM REVIEW

TERMS OF REFERENCE
Mid-Term Review of the UN Environment/Global Environment Facility project
"Enhancing Climate Change Resilience of Rural Communities Living in Protected Areas of Cambodia "

Section 1: PROJECT BACKGROUND AND OVERVIEW

- **Project General Information**

Table 1. Project summary

Executing Agency:	Ministry of Environment			
Sub-programme:	Climate Change	**Expected Accomplishment(s):**	A	
UN Environment approval date:	AF approval 11 July 2012	**Programme of Work Output(s):**	4	
GEF project ID:	N/A	**Project type:**	FSP	
GEF Operational Programme #:	N/A	**Focal Area(s):**	Climate Change Adaptation	
GEF approval date:	N/A	**GEF Strategic Priority:**	N/A	
***Expected* start date:**	January 2013	**Actual start date:**	May 2013	
***Planned* completion date:**	May 2018	**Actual completion date:**	TBC	
***Planned* project budget at approval:**	AF approved $4,566,150	**Actual total expenditures reported as of [date]:**	2,367,738	
GEF grant allocation:	N/A	**GEF grant expenditures reported as of [date]:**	N/A	
Project Preparation Grant - GEF financing:	N/A	**Project Preparation Grant - co-financing:**	N/A	
***Expected* Medium-Size Project/Full-Size Project co-financing:**	N/A	**Secured Medium-Size Project/Full-Size Project co-financing:**	N/A	
First disbursement:	May 2013	**Date of financial closure:**	n/a	
No. of revisions:		**Date of last revision:**	n/a	
No. of Steering Committee meetings:	4	**Date of last/next Steering Committee meeting:**	Last: 10th August 2016	Next: 4th August 2017
Mid-term Review/ Review *(planned date):*	December 2015	**Mid-term Review/ Review (actual date):**	July 2018	
Terminal Review *(planned date):*	Q3 2018	**Terminal Review (actual date):**	*Not applicable*	
Coverage - Country(ies):	Cambodia	**Coverage - Region(s):**	Asia	
Dates of previous project phases:	N/A	**Status of future project phases:**	N/A	

- **Project rationale**

The climate change-induced hazard of erratic rainfall, which leads to droughts and floods, is decreasing agricultural productivity in Cambodia thereby constraining efforts to reduce poverty levels. These erratic

rainfall events are predicted to increase under future climate change scenarios. Some of the most vulnerable communities in Cambodia are rural communities living in Protected Areas (PAs). This is because of the dependence of these communities on ecosystem services and a lack of alternative, climate-resilient livelihoods. As a result of the erratic rainfall and consequent decreasing agricultural productivity, these communities are increasingly reliant on forest ecosystems to provide supplementary food sources and income from collecting and selling non-timber forest products (NTFPs) and fuelwood. Widespread degradation of forest ecosystems, however, is reducing the efficacy of this adaptation response. The consequences of the climate change-induced hazard of erratic rainfall include: i) increased erosion as a result of floods which damages crop production; ii) crop failure or reduction of yield as a result of drought; and iii) damaged infrastructure as a result of extreme rainfall events which limits access to urban markets.

The Adaptation Fund (AF) project aims to use the Ecosystem based approaches to Adaptation (EbA)/ eco-agricultural concept to build the resilience of rural Cambodian communities living in PAs to climate change. The project employs a "landscape approach to natural resource management that seeks to sustain agricultural/food production, conserve biodiversity and ecosystems and support local livelihoods". It is implemented using two approaches: i) an extensive approach in which degraded forests are being restored into multi-use forests in Community Protected Areas (CPAs) at a landscape-level, by planting predominantly indigenous tree species that provide food, diverse NTFPs and a range of ecosystem services such as erosion control and water flow regulation; and ii) an intensive approach in which interventions include planting multi-use tree species along rice paddy boundaries and other existing cultivated areas to enhance crop productivity, establishing trial plots of drought-tolerant hybrid rice cultivars and intensifying/diversifying existing agricultural areas and introducing conservation agriculture practices. These interventions have been identified through two separate CPA Community Surveys of vulnerable rural communities living around CPAs i.e. they have been designed following a participatory approach and in response to community requests.

The CPA intervention sites where the AF project is being implemented have been selected on the basis of the two CPA Community Surveys. The five CPA intervention sites are: Chiork Beungprey, Chom Thlork, Skor Mreach (all in Beung Per Wildlife Sanctuary), Ronouk Khgeng (Phnom Prech Wildlife Sanctuary) and Chop Tasok (Phnom Kulen National Park). The increased agricultural productivity will provide communities with food and revenue and reduce the pressure on forests. Ensuring that both the forests and the services they provide to local communities are more resilient to climate change. Further benefits as a result of landscape management to enhance ecosystem services will accrue in downstream communities, outside of CPA intervention sites.

The AF project approach of restoring the natural capital of forests on which the communities depend, and intensifying agriculture using a limited area within PAs is a highly cost-effective approach to adaptation with numerous environmental, social and economic benefits. Protection of restored forests and agricultural areas, and thus the sustainability of the AF project interventions, will be ensured by: i) collaborating with communities, fostered by the AF project's consultative and participatory approach; ii) intensive training of local communities on climate change adaptation responses; iii) recommending revisions to policy and legislation, including recommended budget allocations; iv) establishing multi-use forests that will incentivise protection of the trees because of the value of the productive landscape; v) training communities on business plan development to ensure that alternative livelihoods are successfully implemented; vi) utilising the existing culture of protecting homegardens in Cambodia; vii) ensuring effective management and protection of restored landscapes; and viii) the legislative protection afforded by the formal inclusion of restored forests into CPA management plans. An upscaling strategy will be developed for implementing the AF project ecoagriculture approach in other CPAs in Cambodia.

- **Project objectives and components**

The overall **goal** of the AF project is to increase food supply and reduce soil erosion in communities surrounding five CPAs in Cambodia by: i) restoring at least 1,875 ha of degraded forests with plant species that are particularly appropriate for this goal; ii) enrichment planting of rice paddy boundaries and other cultivated areas with multi-use tree species that will enhance crop productivity; iii) trialling plots of several drought-tolerant hybrid rice cultivars in order to assess their potential yield and suitability for cultivation; and iv) intensifying and diversifying the productivity of at least 1,907 family agriculture areas (including homegardens ranging in size from 0.2 ha to 1 ha) in communities living around the CPA forest sites. The **objective** of the AF project is consequently to enhance the climate change resilience of communities living around five CPA

intervention sites, as well as downstream communities, to the climate change-induced hazard of erratic rainfall.

The AF project delivers on this objective through three components, namely:

- Protocols for ecoagriculture interventions;
- Concrete ecoagriculture adaptation interventions; and
- Institutional capacity, awareness raising and upscaling of ecoagriculture interventions.

Component 1 uses bio-physical, ecological and socio-economic research to develop restoration and conservation agriculture protocols to be implemented in Component 2. This first component is necessary to ensure that the protocols are grounded in a participatory approach and capture indigenous knowledge, as well as being scientifically appropriate for the selected intervention sites. Component 2 ensures that the restored forests and productive agricultural areas are maintained and the benefits maximised. Alternative livelihoods established through the AF project are aimed at increasing the resilience of local communities to the effects of climate change. Component 3 creates an enabling environment for the ecoagriculture concept (EbA) to be implemented in other PAs in Cambodia, through awareness raised at a local and national level, and an upscaling strategy supported by policy revision where required.

Table 2. Project components, outcomes and outputs as defined in the project document.

Outcomes	Outputs
Component 1: Protocols for ecoagriculture interventions.	
1. Technical expertise and a local enabling framework for forest restoration and conservation agriculture interventions that build climate resilience developed at CPA intervention sites through a consultative and participatory process.	1.1: Information generated on climate change impacts and preferred ecoagriculture interventions through a consultative and participatory approach. 1.2: Economic assessments undertaken to identify most appropriate ecoagriculture interventions and associated micro-finance and insurance products. 1.3: Forest restoration and conservation agriculture protocols developed for CPA intervention sites based on results from Output 1.1 and 1.2.
Component 2. Concrete ecoagriculture adaptation interventions.	
2. Multi-use forests established and maintained and agricultural practices diversified/intensified to supply a diverse range of food and stabilize topsoil, despite an increase in climate change-induced droughts and floods.	2.1: Capacity of local community for building climate resilience increased, including capacity to plan, implement and maintain ecoagriculture interventions under Output 2.2. 2.2: Forest restoration and conservation agriculture protocols implemented to build climate resilience (developed in Component 1) in CPA intervention sites. 2.3: Local communities' livelihoods enhanced and diversified through sustainable development of NTFPs and the promotion of sustainable alternative livelihood strategies. Output 2.4: Socio-economic and ecosystem monitoring of AF project impacts downstream of CPA intervention sites.
Component 3. Institutional capacity, awareness raising and upscaling of ecoagriculture interventions.	
3. Restoration and conservation agriculture interventions to build climate resilience of local	3.1: Awareness increased at a local level of the importance of ecoagriculture for protecting and enhancing commercial and subsistence activities.

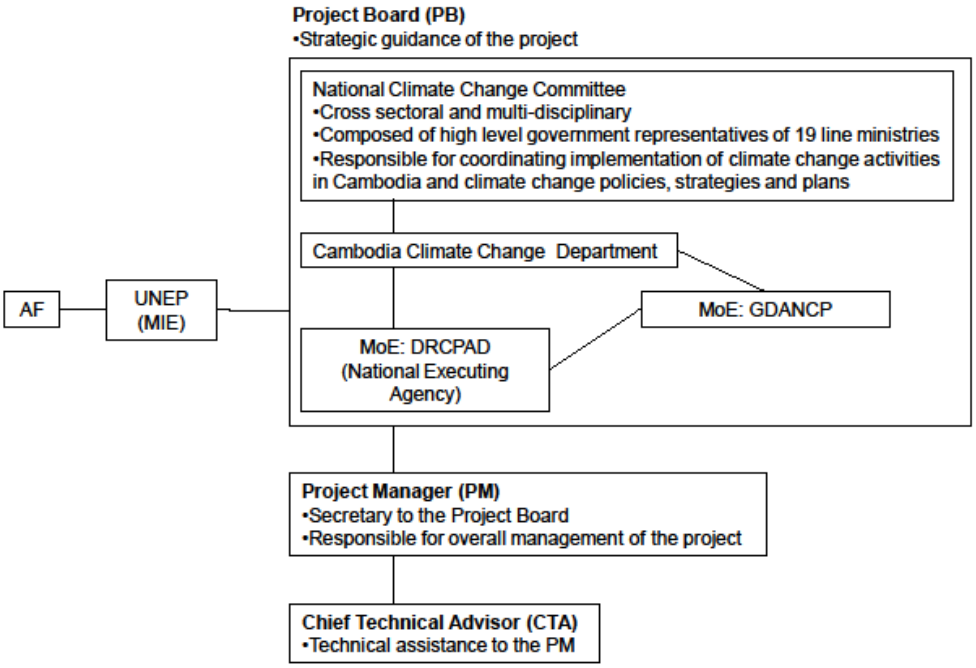
communities mainstreamed into Cambodia's adaptation framework and related sector policies.	3.2: Ecoagriculture activities promoted through institutional capacity building and proposed revisions to policies, strategies and legislation. 3.3: National ecoagriculture upscaling strategy developed and institutionalised for CPAs in Cambodia.

○ **Executing Arrangements**

UNEP is the Multilateral Implementing Entity (MIE) for the AF project. UNEP has significant experience in implementing projects of this nature, and has expertise in ecosystem-based adaptation, terrestrial ecosystems and agroforestry with dedicated groups in Climate Change Adaptation and Terrestrial Ecosystems.

The lead national executing partner in the Ministry of Environment. The MoE hosts the National Climate Change Committee (NCCC) and the Cambodia Climate Change Division (CCCD). The NCCC was established in 2006 and is responsible for *inter alia*: i) coordinating the implementation of climate change activities in Cambodia; ii) developing climate change policies, strategies, legal instruments, plans and programs; and iii) integrating climate change concerns into relevant government policies, strategies and legal instruments. The Committee is cross-sectoral and multidisciplinary and is composed of high-level government representatives (Secretaries and Under-Secretaries of State) of 19 Ministries, including the Ministry of Finance (MOF), and government agencies. The CCCD is responsible for *inter alia*: i) planning and policy formulation; iii) implementation of the UNFCCC; iii) assessment of new technologies on climate change adaptation and greenhouse gas emission mitigation; and iv) capacity building and awareness raising. Together with the Department of Research and Community Protected Area Development (DRCPAD) of the General Department of Administration for Nature Conservation and Protection (GDANCP), the NCCC and CCCD will be ultimately responsible for the timely delivery of inputs and outputs and for coordinating the activities of the other responsible parties in the AF project. An organogram depicting the AF project management arrangements is shown below.

The **Project Board (PB)/ Project Steering Committee (PSC)** is responsible for making management decisions for the AF project. In addition, the board: i) undertaking project assurance (monitoring and evaluation); ii) ensures performance improvement; and iii) ensures accountability and learning. The PB comprises of designated senior technical representatives (Director Generals) from relevant ministries (e.g. MoE and MAFF), and representatives from local District Administrator offices. The Project Manager serves as secretary to the PB. The PB will approve annual work plans and procurement plans, and review project periodical reports as well as any deviations from the approved plans.



- **Project Cost and Financing**[6]

Project Component	Outcomes	Grant Amount ($)
Component 1: Protocols for ecoagriculture interventions.	Outcome 1: Technical expertise and a local enabling framework for forest restoration and conservation agriculture interventions that build climate resilience developed at CPA intervention sites through a consultative and participatory process.	405,000
Component 2: Concrete ecoagriculture adaptation interventions.	Outcome 2: Multi-use forests established and maintained and agricultural practices diversified/intensified to supply a diverse range of food and stabilize topsoil, despite an increase in climate change-induced droughts and floods.	3,391,950
Component 3: Institutional capacity, awareness raising and	Outcome 3: Restoration and conservation agriculture	373,800

[6] As per latest budget revision

upscaling of ecoagriculture interventions.	interventions to build climate resilience of local communities mainstreamed into Cambodia's adaptation framework and related sector policies.	
Project Management Costs		295,400
Monitoring and \Evaluation		100,000
Total Project Costs		4,566,150

- **Implementation Issues**

The project is progressing very well with minimal risks/ implementation issues being identified.

Progress was slow during the first two years of implementation, with minimal spending, however execution has gained momentum and there has been a lot of progress thus far, especially with regard to the demonstration/ on the ground activities. The project has reached most of the stated targets and there needs to be a shift in focus regarding upscaling results. A strategy needs to be identified for the remaining funds and time.

In order to understand how to move forward, the efficacy of the shift from large scale restoration to 'chamkar' based restoration needs to be reviewed and evaluated.

Critical Risks identified in PPR at the start of the project include[7]:

I. The perceived threat of CPA land being sold as an Economic Land Concession has led to communities clearing land within the CPA for farming activities, which threatens the project's restoration objectives.

II. Government counterparts, assigned to work part-time with the project do not have sufficient time to dedicate to the project, which negatively the implementation of project activities.

Section 2. OBJECTIVE AND SCOPE OF THE REVIEW

- **Key Evaluation principles**

Review findings and judgements should be based on **sound evidence and analysis**, clearly documented in the review report. Information will be triangulated (i.e. verified from different sources) as far as possible, and when verification is not possible, the single source will be mentioned (whilst anonymity is still protected). Analysis leading to evaluative judgements should always be clearly spelled out.

The "Why?" Question. As this is a Mid-term Review particular attention should be given to identifying implementation challenges and risks to achieving the expected project objectives and sustainability. Therefore, the "Why?" question should be at the front of the consultants' minds all through the review exercise and is supported by the use of a theory of change approach. This means that the consultants need 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. This should provide the basis for the lessons that can be drawn from the project.

Baselines and counterfactuals. In attempting to attribute any outcomes and impacts to the project intervention, the evaluators/reviewers 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/reviewers, along with any simplifying

[7] PPR 2016 – risks identified at the start of the project.

assumptions that were taken to enable the evaluator/reviewer to make informed judgements about project performance.

Communicating review results. A key aim of the review 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 review process and in the communication of review findings and key lessons. Clear and concise writing is required on all review deliverables. Draft and final versions of the main report will be shared with key stakeholders by the UN Environment Task Manager. There may, however, be several intended audiences, each with different interests and needs regarding the report. The Task Manager will plan with the consultant(s) which audiences to target and the easiest and clearest way to communicate the key review findings and lessons to them. This may include some or all of the following; a webinar, conference calls with relevant stakeholders, the preparation of a brief or interactive presentation.

- **Objective of the Review**

In line with the UN Environment Evaluation Policy[8] and the UN Environment Programme Manual[9], the Mid-Term Review (MTR) is undertaken approximately half way through project implementation to analyze whether the project is on-track, what problems or challenges the project is encountering, and what corrective actions are required. The MTR will assess project performance to date (in terms of relevance, effectiveness and efficiency), and determine the likelihood of the project achieving its intended outcomes and impacts, including their sustainability. The review 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 Governments (relevant ministries) of Cambodia.

- **Key Strategic Questions**

In addition to the review criteria outlined in Section 10 below, the review will address the **strategic questions** listed below. These are questions of interest to UN Environment and to which the project is believed to be able to make a substantive contribution:

To what extent has the shift from large scale restoration to 'chamkar' (home garden) based restoration in the project ensured that the project has reached its objectives/ targets?

To what extent have the additional suite of interventions (e.g. water and additional livelihood interventions) been successful and can they be upscaled/ introduced in other CPA's?

To what extent has the project contributed to an increase in climate change awareness and a reduction of climate change vulnerability in the selected project sites and to the selected communities? Is this likely to be sustained by community members after the project end?

To what extent has the project contributed to mainstreaming ecosystem-based adaptation approaches/ ecoagriculture in Cambodia?

To what extent has the project enhanced knowledge of good practices on increasing resilience to climate change-induced risks?

To what extent have the communities and community members been involved in the project activities including the management/execution of activities? Did any disputes arise between Government and communities and has this been dealt with in an amicable fashion.

Are the project indicators and information collected to measure indicators sufficient to ascertain whether the project is producing the desired impact/ outcomes?

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

[9] http://www.unep.org/QAS/Documents/UNEP_Programme_Manual_May_2013.pdf . *This manual is under revision.*

- **Review Criteria**

All review criteria will be rated on a **six-point scale**. Sections A-I below, outline the scope of the criteria and a link to a table for recording the ratings is provided in Annex 1). A weightings table will be provided in excel format (link provided in Annex 1) to support the determination of an overall project rating. The set of review criteria are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the achievement of outputs, achievement of outcomes and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I) Factors Affecting Project Performance. The review consultants can propose other review criteria as deemed appropriate.

A. Strategic Relevance

The review will assess, in line with the OECD/DAC definition of relevance, 'the extent to which the activity is suited to the priorities and policies of the target group, recipient and donor'. The review 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[10] (MTS) and Programme of Work (POW)*

The review should assess the project's alignment with the MTS and POW under which the project was approved and include reflections on the scale and scope of any contributions made to the planned results reflected in the relevant MTS and POW.

2. *Alignment to UN Environment /AF/Donor Strategic Priorities*

Donor, including AF, strategic priorities will vary across interventions. UN Environment strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building[11] (BSP) and South-South Cooperation (S-SC). The BSP relates to the capacity of governments to: comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international environmental policies. S-SC is regarded as the exchange of resources, technology and knowledge between developing countries. AF priorities are specified in published programming priorities and policies.

3. *Relevance to Regional, Sub-regional and National Environmental Priorities*

The review will assess the extent to which the intervention is suited, or responding to, the stated environmental concerns and needs of the countries, sub-regions or regions where it is being implemented. Examples may include: national or sub-national development plans, poverty reduction strategies or National Adaptation Programmes of Action (NAPAs) or regional agreements etc.

4. *Complementarity with Existing Interventions*

An assessment will be made of how well the project, either at design stage or during the project mobilization, took account of ongoing and planned initiatives (under the same sub-programme, other UN Environment sub-programmes, or being implemented by other agencies) that address similar needs of the same target groups . The review will consider if the project team, in collaboration with Regional Offices and Sub-Programme Coordinators, made efforts to ensure their own intervention was complementary to other interventions, optimized any synergies and avoided duplication of effort. Examples may include UNDAFs or One UN

[10] 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 Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes.

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

programming. Linkages with other interventions should be described and instances where UN Environment's comparative advantage has been particularly well applied should be highlighted.

Factors affecting this criterion may include: stakeholders' participation and cooperation*;* responsiveness to human rights and gender equity and country ownership and driven-ness.

B. Quality of Project Design

The quality of project design is assessed using an agreed template during the review inception phase, ratings are attributed to identified criteria and an overall Project Design Quality rating is established. This overall Project Design Quality rating is entered in the final review/evaluation ratings table as item B. In the Main Review Report a summary of the project's strengths and weaknesses at design stage is included.

Factors affecting this criterion may include (at the design stage): stakeholders participation and cooperation and responsiveness to human rights and gender equity, including the extent to which relevant actions are adequately budgeted for.

C. Nature of External Context

At the inception stage of the review a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval). This rating is entered in the final review ratings table as item C. Where a project has been rated as facing either an Unfavourable or Highly Unfavourable external operating context, the overall rating for Effectiveness may be increased at the discretion of the Review Consultant and Task Manager together. A justification for such an increase must be given.

D. Effectiveness

The review will assess effectiveness across three dimensions: achievement of outputs, achievement of direct outcomes and likelihood of impact.

i. Achievement of Outputs

The review will assess the project's success in producing the programmed outputs (products and services delivered by the project itself) and achieving milestones as per the project design document (ProDoc). Any *formal* modifications/revisions made during project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, a table should, for transparency, be provided showing the original formulation and the amended version. The achievement of outputs will be assessed in terms of both quantity and quality, and the assessment will consider their usefulness and the timeliness of their delivery. The review will briefly explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards.

Factors affecting this criterion may include: preparation and readiness and quality of project management and supervision[12].

ii. Achievement of Direct Outcomes

The achievement of direct outcomes is assessed as performance against the direct outcomes as defined in the reconstructed[13] Theory of Change (TOC). These are the first-level outcomes expected to be achieved as an

[12] In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UN Environment.

[13] UN Environment staff are currently required to submit a Theory of Change with all submitted project designs. The level of 'reconstruction' needed during an review will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any changes made to the project design. In the case of projects pre-dating 2013 the intervention logic is often represented in a logical framework and a TOC will need to be constructed in the inception stage of the review.

immediate result of project outputs. As in 1, above, a table can be used where substantive amendments to the formulation of direct outcomes is necessary. The review should report evidence of attribution between UN Environment's intervention and the direct outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UN Environment's contribution should be included.

Factors affecting this criterion may include: quality of project management and supervision; stakeholders' participation and cooperation; responsiveness to human rights and gender equity and communication and public awareness.

iii. Likelihood of Impact

Based on the articulation of longer term effects in the reconstructed TOC (i.e. from direct outcomes, via intermediate states, to impact), the review will assess the likelihood of the intended, positive impacts becoming a reality. Project objectives or goals should be incorporated in the TOC, possibly as intermediate states or long term impacts. The Evaluation Office's approach to the use of TOC in project reviews is outlined in a guidance note available on the EOU website, web.unep.org/review and is supported by an excel-based flow chart called, Likelihood of Impact Assessment (see Annex 1). Essentially the approach follows a 'likelihood tree' from direct outcomes to impacts, taking account of whether the assumptions and drivers identified in the reconstructed TOC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact described.

The review will also consider the likelihood that the intervention may lead, or contribute to, unintended negative effects. Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental, Social and Economic Safeguards.[14]

The review will consider the extent to which the project has played a catalytic role or has promoted scaling up and/or replication[15] as part of its Theory of Change and as factors that are likely to contribute to longer term impact. Ultimately UN Environment and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-term or broad-based changes. However, the review will assess the likelihood of the project to make a substantive contribution to the high level changes represented by UN Environment's Expected Accomplishments, the Sustainable Development Goals[16] and/or the high level results prioritised by the funding partner.

Factors affecting this criterion may include: quality of project management and supervision, including adaptive project management; stakeholders participation and cooperation; responsiveness to human rights and gender equity; country ownership and driven-ness and communication and public awareness.

E. Financial Management

Financial management will be assessed under three broad themes: completeness of financial information, communication between financial and project management staff and compliance with relevant UN financial management standards and procedures. The review will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output level and will be compared with the approved budget. The review will assess the level of communication between the Task Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach. The review will verify the application of proper financial management standards and adherence to UN Environment's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted.

---

[14] Further information on Environmental, Social and Economic Safeguards (ESES) can be found at http://www.unep.org/about/eses/

[15] *Scaling up* refers to approaches being adopted on a much larger scale, but in a very similar context. Scaling up is often the longer term objective of pilot initiatives. *Replication* refers to approaches being repeated or lessons being explicitly applied in new/different contexts e.g. other geographic areas, different target group etc. Effective replication typically requires some form of revision or adaptation to the new context. It is possible to replicate at either the same or a different scale.

[16] A list of relevant SDGs is available on the EO website www.unep.org/review

Factors affecting this criterion may include: preparation and readiness and quality of project management and supervision.

F. Efficiency

In keeping with the OECD/DAC definition of efficiency, the review will assess the cost-effectiveness and timeliness of project execution. Focussing on the translation of inputs into outputs, cost-effectiveness is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. Timeliness refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The review will also assess to what extent any project extension could have been avoided through stronger project management and identify any negative impacts caused by project delays or extensions. The review will describe any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe and consider whether the project was implemented in the most efficient way compared to alternative interventions or approaches.

The review 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. The review will also consider the extent to which the management of the project minimised UN Environment's environmental footprint.

Factors affecting this criterion may include: preparation and readiness (e.g. timeliness); quality of project management and supervision and stakeholders participation and cooperation.

G. Monitoring and Reporting

The review will assess monitoring and reporting across three sub-categories: monitoring design and budgeting, monitoring of project implementation and project reporting.

i. Monitoring Design and Budgeting

Each project should be supported by a sound monitoring plan that is designed to track progress against SMART[17] indicators towards the achievement of the projects outputs and direct outcomes, including at a level disaggregated by gender or groups with low representation. The review will assess the quality of the design of the monitoring plan as well as the funds allocated for its implementation. The adequacy of resources for mid-term and terminal evaluation should be discussed if applicable.

ii. Monitoring of Project Implementation

The review will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards projects objectives throughout the project implementation period. It will also consider how information generated by the monitoring system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The review should confirm that funds allocated for monitoring were used to support this activity.

iii. Project Reporting

UN Environment has a centralised Project Information Management System (PIMS) in which project managers upload six-monthly status reports against agreed project milestones. This information will be provided to the Review Consultant(s) by the Task Manager. Projects funded by AF have specific review requirements with regard to verifying documentation and reporting (i.e. the Project Performance Reviews, and project document template[18]), which will be made available by the Task Manager. The review will assess the extent to which both UN Environment and donor reporting commitments have been fulfilled.

---

[17] SMART refers to indicators that are specific, measurable, assignable, realistic and time-specific.

[18] The Review Consultant(s) should verify that the annual PPR have been submitted, and that the tracking against AF indicators is done.

Factors affecting this criterion may include: quality of project management and supervision and responsiveness to human rights and gender equity (e.g. disaggregated indicators and data).

H. Sustainability

Sustainability is understood as the probability of direct outcomes being maintained and developed after the close of the intervention. The review will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes. Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolve over the life of the intervention. Where applicable an assessment of bio-physical factors that may affect the sustainability of direct outcomes may also be included. The review will ascertain that the project has put in place an appropriate exit strategy and measures to mitigate risks to sustainability.

i. Socio-political Sustainability

The review will assess the extent to which social or political factors support the continuation and further development of project direct outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards. In particular the review will consider whether individual capacity development efforts are likely to be sustained.

ii. Financial Sustainability

Some direct outcomes, once achieved, do not require further financial inputs, e.g. the adoption of a revised policy. However, in order to derive a benefit from this outcome further management action may still be needed e.g. to undertake actions to enforce the policy. Other direct outcomes may be dependent on a continuous flow of action that needs to be resourced for them to be maintained, e.g. continuation of a new resource management approach. The review will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained. Secured future funding is only relevant to financial sustainability where the direct outcomes of a project have been extended into a future project phase. The question still remains as to whether the future project outcomes will be financially sustainable.

iii. Institutional Sustainability

The review will assess the extent to which the sustainability of project outcomes is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure.

Factors affecting this criterion may include: stakeholders participation and cooperation; responsiveness to human rights and gender equity (e.g. where interventions are not inclusive, their sustainability may be undermined); communication and public awareness and country ownership and driven-ness.

I. Factors and Processes Affecting Project Performance

These factors are rated in the ratings table, but are discussed as cross-cutting themes as appropriate under the other review criteria, above.

i. Preparation and Readiness

This criterion focuses on the inception or mobilisation stage of the project. The review will assess whether appropriate measures were taken to either address weaknesses in the project design or respond to changes that took place between project approval, the securing of funds and project mobilisation. In particular the review will consider the nature and quality of engagement with stakeholder groups by the project team, the confirmation of partner capacity and development of partnership agreements as well as initial staffing and

financing arrangements. (Project preparation is covered in the template for the assessment of Project Design Quality).

ii. Quality of Project Implementation and Execution

Specifically for AF funded projects, this factor refers separately to the performance of the executing agency and the technical backstopping and supervision provided by UN Environment, as the implementing entity.

The review will assess the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (including Steering Groups etc.); communication and collaboration with UN Environment colleagues; risk management; use of problem-solving; project adaptation and overall project execution. Evidence of adaptive project management should be highlighted.

iii. Stakeholder Participation and Cooperation

Here the term 'stakeholder' should be considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs and target users of project outputs and any other collaborating agents external to UN Environment. The assessment will consider the quality and effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximise collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise. The inclusion and participation of all differentiated groups, including gender groups, should be considered.

iv. Responsiveness to Human Rights and Gender Equity

The review will ascertain to what extent the project has applied the UN Common Understanding on the human rights based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context the review will assess to what extent the intervention adheres to UN Environment's Policy and Strategy for Gender Equality and the Environment.

The report should present the extent to which the intervention, following an adequate gender analysis at design stage, has implemented the identified actions and/or applied adaptive management to ensure that Gender Equity and Human Rights are adequately taken into account. In particular, the review will consider to what extent project design (section B), the implementation that underpins effectiveness (section D), and monitoring (section G) 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; (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

v. Country Ownership and Driven-ness

The review will assess the quality and degree of engagement of government / public sector agencies in the project. The review will consider the involvement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices. This factor is concerned with the level of ownership generated by the project over outputs and outcomes and that is necessary for long term impact to be realised. This ownership should adequately represent the needs and interests of all gender and marginalised groups.

vi. Communication and Public Awareness

The review will assess the effectiveness of: a) communication of learning and experience sharing between project partners and interested groups arising from the project during its life and b) public awareness activities that were undertaken during the implementation of the project to influence attitudes or shape behaviour among wider communities and civil society at large. The review should consider whether existing communication channels and networks were used effectively, including meeting the differentiated needs of gender or marginalised groups, and whether any feedback channels were established. Where knowledge

sharing platforms have been established under a project the review will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.

Section 3. APPROACH, METHODS AND DELIVERABLES

The Mid-Term Review will be an in-depth review using a participatory approach whereby key stakeholders are kept informed and consulted throughout the review process. Both quantitative and qualitative review methods will be used as appropriate 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 review implementation phase in order to increase their (and other stakeholder) ownership of the review findings. Where applicable, the consultant(s) should provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-reference photographs of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.)

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

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

a. Relevant background documentation, inter alia UNEP MTS 2013-2017, Cambodia NAPA, NAP roadmaps, relevant adaptation plans/policies and strategies, relevant development frameworks for Cambodia, United Nations Development Assistance Frameworks (UNDAF) etc;
b. Project design documents; Annual Work Plans and Budgets or equivalent, revisions to the project, the logical framework and its budget;
c. Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence and the Project Performance Reviews etc.;
d. Baseline study report;
e. Annual Research and Monitoring reports prepared by the International and National Research and Monitoring Coordinators;
f. Reports/Assessments prepared by international and national consultants;
g. Community Protected Area Management plans for the five target CPAs;
h. Reviews/reviews of similar projects.

(b) **Interviews** (individual or in group) with:

i. UN Environment Task Manager;
j. Project management unit – Project Manager, Administrative officer and Finance officer;
k. Government counterparts working with the project;
l. Chief Technical Advisor;
m. Project Board/ Steering Committee members;
n. International and National Research and Monitoring Coordinators
o. UNEP Fund Management Officer;
p. Other relevant staff at Ecosystems Division Climate Change Adaptation Unit;
q. Project partners, including University of Phnom Penh etc…
r. Representatives of the communities where the project demonstration components were implemented;
s. Other relevant resource persons such as national and international consultants who were contracted by the project.

Field visits: The consultant(s) will travel to Cambodia and visit project sites.

Other data collection tools: as will be discussed an agreed between the review consultant and task manager

○ Review Deliverables and Review Procedures

The review team will prepare:

- **Preliminary Findings Note:** typically in the form of a PowerPoint presentation, the sharing of preliminary findings is intended to support the participation of the project team, act as a means to ensure all information sources have been accessed and provide an opportunity to verify emerging findings. In the case of highly strategic project/portfolio reviews or reviews with a Review Reference Group, the preliminary findings may be presented as a word document for review and comment.
- **Draft and Final Review Report:** (structure to be discussed with Task Manager) containing an executive summary that can act as a standalone document; analysis of the review findings organised by review criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table.

Review of the draft report. The review team will submit a draft report to the Task Manager and revise the draft in response to their comments and suggestions. Once a draft of adequate quality has been peer-reviewed and accepted, the Task Manager will share the cleared draft report with the Project Manager, who will alert the Task Manager in case the report contains any blatant factual errors. The Task Manager will then forward revised draft report (corrected by the review team where necessary) to other project stakeholders, 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 as well as providing feedback on the proposed recommendations and lessons. Any comments or responses to draft reports will be sent to the Task Manager for consolidation. The Task Manager will provide all comments to the review team for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

○ **The Consultants' Team**

For this review, the review team will consist of a Lead Consultant who will work under the overall responsibility of the UN Environment Implementing Agency (the Climate Change Adaptation Unit) represented by the UN Environment Task Manager, in consultation with the, Fund Management Officer and the Sub-programme Coordinators of the relevant UN Environment Sub-programme. The consultant will liaise with the Task Manager on any procedural and methodological matters related to the review. It is, however, the consultants' individual responsibility to arrange for their visas and immunizations as well as to plan meetings with stakeholders, organize online surveys, obtain documentary evidence 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 consultants to conduct the review as efficiently and independently as possible.

The consultant will be hired for 5 months spread over the period September 2017 to January 2018 and should have: an advanced university degree in environmental sciences, international development or other relevant political or social sciences area; a minimum of 10 years of technical / review experience, including of evaluating large, regional or global programmes and using a Theory of Change approach; a broad understanding of climate change adaptation, ecosystem based approaches to adaptation, natural resource management etc…; excellent speaking and writing skills in English; team leadership experience and, where possible, knowledge of the UN system, specifically of the work of UN Environment.

The consultant will be responsible, in close consultation with the UN Environment Implementing Entity, for overall management of the review and timely delivery of its outputs, described above in Section 11 Review Deliverables, above. The consultant will ensure that all review criteria and questions are adequately covered.

○ **Schedule of the review**

The table below presents the tentative schedule for the review.

Table 3. Tentative schedule for the review

Milestone	**Deadline**
Inception and Review mission – 15 days	Quarter 4 2017
Telephone interviews, surveys etc.	Quarter3 2017
Preliminary findings note and recommendations	Quarter 4 2017
Draft report to Task Manager (and Peer Reviewer)	Quarter 4 2017

Draft Report shared with Project Manager and team	Quarter 4 2017
Draft Report shared with wider group of stakeholders	Quarter 4 2017
Final Report	Quarter 1 2018
Final Report shared with all respondents	Quarter 1 2018

- **Contractual Arrangements**

Review Consultants will be selected and recruited by the UN Environment Implementing Agency under an individual Special Service Agreement (SSA) on a "fees only" basis (see below). By signing the service contract with UN Environment/UNON, the consultant(s) certify that they 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. All consultants are required to sign the Code of Conduct Agreement Form.

Fees will be paid on an instalment basis, paid on acceptance by the UN Environment Implementing Agency of expected key deliverables. The schedule of payment is as follows:

Schedule of Payment:

Deliverable	**Percentage Payment**
Preliminary Findings Note	30%
Approved Draft Main Review Report (template to be agreed with TM)	30%
Approved Final Main Review Report	40%

Fees only contracts: Air tickets will be purchased by UN Environment and 75% of the Daily Subsistence Allowance for each authorised travel mission will be paid up front. Local in-country travel will only be reimbursed where agreed in advance with the UN Environment Implementing Agency and on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

The consultants may be provided with access to UN Environment's Programme Information Management System (PIMS) and if such access is granted, the consultants agree not to disclose information from that system to third parties beyond information required for, and included in, the review report.

In case the consultants are not able to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by the UN Environment, payment may be withheld at the discretion of the Director of the Task Manager until the consultants have improved the deliverables to meet UN Environment's quality standards.

If the consultant(s) fail to submit a satisfactory final product to UN Environment in a timely manner, i.e. before the end date of their contract, the Implementing Agency reserves the right to employ additional human resources to finalize the report, and to reduce the consultants' fees by an amount equal to the additional costs borne by Implementing Entity to bring the report up to standard.

Annex 1 : Tools, Templates and Guidance Notes for use in the Review

The tools, templates and guidance notes listed in the table below, and available on the Evaluation Office website (www.unep.org/review), are intended to help Task Managers and Review Consultants to produce review products that are consistent with each other and which can be compiled into a biennial Review Synthesis Report. The biennial summary is used to provide an overview of progress to UN Environment and the UN Environmental Assembly. This suite of documents is also intended to make the review process as transparent as possible so that all those involved in the process can participate on an informed basis. It is recognised that the review needs of projects and portfolio vary and adjustments may be necessary so that the purpose of the review process (broadly, accountability and lesson learning), can be met. Such adjustments should be decided between the Task Manager and the Review Consultant in order to produce review reports that are both useful to project implementers and that produce credible findings.

Document	Name	URL link
1	Review/ Evaluation Process Guidelines for Consultants	Link
2	Review/ Evaluation Consultants Team Roles *(Team Leader and Supporting Consultant)*	Link
3	Review/ Evaluation Ratings Table	Link
4	Weighting of Ratings (excel)	Link
5	Review/ Evaluation Criteria *(summary of descriptions, as in these terms of reference)*	Link
6	Matrix Describing Ratings by Criteria	*(under development – search 'Working With Us' on website)*
7	Structure and Contents of the Inception Report	Link
8	Template for the Assessment of the Quality of Project Design	Link
9	Guidance on Stakeholder Analysis	Link
10	Use of Theory of Change in Project Reviews/ Evaluations	Link
11	Assessment of the Likelihood of Impact Decision Tree (Excel)	Link
12	Possible Review/ Evaluation Questions	Link
13	Structure and Contents of the Main Review/ Evaluation Report	Link
14	Cover Page, Prelims and Style Sheet for Main Review/ Evaluation Report	*(under development – search 'Working With Us' on website)*
15	Financial Tables	Link
16	Template for the Assessment of the Quality of the Review/ Evaluation Report	Link

ANNEX II. REVIEW FRAMEWORK METHODOLOGY

This review matrix represents the core aspect of the project is structured along the five review 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 review matrix below serves as a general guide for the MTR. It provides directions for the review; particularly for the collection of relevant data. It is designed to provide overall direction for the review 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
Review Criteria: (1) Strategic Relevance (REL) *– How strategically relevant was the Project Design at the outset and during subsequent revisions (e.g.: baseline assessment in 2014 completed by C4ES)?*				
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 agricultural, forestry and climate resilient issues and needs? Was the project aligned with UN Environment and AFCPA strategies in mind as well as alignment to relevant global processes? Did the project consider gender related issues in its design	**1. Has the AFCPA project, and its focused project activities, helping to address your country's 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 AFCPA project results consistent with what your country intended at the outset of the project?** **4. To what extent are the AFCPA project results complementary to other donor activities / interventions?** **5. Should the AFCPA 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 CCA etc. • Degree to which project was coherent and complementary to other donor programming in climate resilient agriculture, climate adaptation and eco-agricultural security issues. REL 2 – national priorities • Degree to which the project supports national climate change and climate resilient agriculture objectives, priorities, policies and strategies; • Degree of coherence between the project and national priorities, policies and strategies in the area of climate resilient agriculture 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 toCCA 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 agriculture, thel 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
Review Criteria: (2) Attainment of objectives and planned result (EFFECT) ***To what extent have the expected outcomes of the AFCPA/DCF been achieved?***				
How successful was the project in creating an inclusive process to undertake eco-agricultural 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 AFCPA project enhanced Cambodia's institutional capacity for eco-agricultural development and CCA?** **2. To what extent have the planned AFCPA direct outcomes been achieved?** 3. **Has the AFCPA project delivered the identified outcomes?** **4. To what extent does the AFCPA project's contribution improve livelihood security and poverty reduction for local communities?** **5. To what extent does the AFCPA 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 farming community resilience Quality of outcomes EFFECT 3 – project progress Change in social response to eco-agricultural 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 CCA or related to the rural 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
Review 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 AFCPA 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 AFCPA project in aiding effective resolution of /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 CCA or related to the rural 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
Review 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 climate resilient agriculture 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 CC through ecosystem-based eco-agricultural?	**1. How well has the AFCPA 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 the AFCPA outputs/ results?** **3. Have project activities made, or are likely to make, communities more resilient and less vulnerable to climate change impacts t? 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 CCA responses. • Insufficient knowledge of rural communities to ensure sustainable resources are available. • Absence of scientific baseline vulnerable 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 CPA rural provinces. Evidence of community feeling safer/more secure from climate impacts. Evidence of feedback loop with community with regards to agricultural planning.	• Project documents • National policies and strategies to implement CCA or related to the rural 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
Review 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 climate resilient agriculture 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. tree planting etc, 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 AFCPA 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 climate resilient agriculture or related to environment more generally • Key government officials and other partners • Websites • 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 REVIEWERS

Typographical errors and advisory comments were sent through by the National Coordinator on 7 March 2018 and the CTA on 3 March 2018. These points have been updated in this Final Report. No further comments were raised regarding the proposed lessons learned or recommendations put forward and so remain as formal points for consideration as part of this Final Mid Term Review.

ANNEX IV. EVALUATION/REVIEW ITINERARY, STAKEHOLDERS INTERVIEWED AND MEETING NOTES (JANUARY 2018)

Date	Time	Activities
15 January 2018	15:00	Arrival of Mr. Jonathan McCue (Jon), Mid Term Review Consultant ***(Stay at Katari Hotel, Phnom Penh)***
16 January 2018	All day	Document Review (Hotel Katari)
17 January 2018	09:00-10:00	Meeting and presentation of AF project Evaluation by Colleen McGinn (TANGO International) at the project office in the Ministry of Environment
	10:00-12:00	Individual PA team brief meetings (Chop Tasok team; Phnom Prech team; Kampong Thom team)
	15.00 – 15.30	Meeting with Khieu Borin (Director General – MoE)
	15.30 – 16.00	Individual dialogue with , H.E Dr. Tin Punlok, PSC Member and Secretary General Sustainable Development Council
18 January 2018	10.00 – 11.00	Individual dialogue with Secretary of State Yin Kim Sean, Ministry of Environment
	13.45 - 14.30	Individual meeting with Edward Maningo (Local Environmental M&E Specialist)
	14.30 – 15.15	Individual meeting with Kim Soben (Vice Dean of Graduated School, Royal University of Agriculture, Phnom Penh
	15.30 – 16.00	Individual meeting with Ms Sophay Uch, ACTIS Co Ltd (Livelihood Expert)
19 January 2018	08:00-11:00	Departure to Kampong Thom province ***(Stay at Vormeas DK Hotel)***
	11:00-12:30	Lunch Break at Kampong Thom
	12:30-13:30	Departure to Chiork Boeungprey CPA
	13:30-17:00	Visit the project site ChiokBoeungprey CPA (of PreahVihea province) and meeting with CPA members
20 January 2018	07:00-08:30	Departure to Chorm Thlok CPA
	08:30-12:00	Meeting with ChormThlok CPA Committee members
	12:00-12:30	Lunch Break

	12:30-16:00	Meet with the Skor Krouch CPA members
	16:00-17:30	Depart to Kampong Thom Province
21 January 2018	08:00-17:30	Depart for Siem Reap province and visit Angkor Wat as a tourist ***(Stay at Holy Angkor Hotel)***
22 January 2018	07:00-09:30	Depart to Chop Tasok CPA
	09:30-12:00	Meeting with Chop Tasok CPA member
	12:00-13:30	Lunch Break
	13:30-17:00	Chop Tasok CPA site visit and return to Siem Reap province
23 January 2018	07:30-17:00	Departure to Mondulkiri ***(Stay at Tepi Hotel)***
24 January 2018	07:30-11:00	Departure to the project site ***(Home Stay)***
	11:30-12:00	Lunch Break
	12:00-16:00	Meeting with CPA members and site visit
	16:00-19:00	Return to Phnom Penh ***(Stay at Katari Hotel)***
25 January 2018	08:00-12:00 15.00 – 17.50	Project Board Meeting and "Preliminary Findings" presentation to Project Steering Committee (PPT) Draft Report Writing
26 January 2018	08:00-12:00 14:00-17:00	Draft Report Writing Final debrief meeting with staff in the project office (with CTA) and to conclude the mission
27 January 2018	Whole Day	Working on Draft Report
28 January 2018		Depart Cambodia for UK

Stakeholders interviewed on Field Mission

Name	Project Board	Project PMU	Project Staffs at National Level	Project Staffs at Provincial Level
HE. Yin Kimsean	Secretary of State, Chair PSC			
HE. Mey Butwithya	Under Secretary of State, Vice Chair PSC			
HE. Tin Ponlok	Secretary General, Vice Chair of PSC			
HE. Khieu Borin	Director General, Member of PSC			
Mr. Sy Ramony	Deputy Director General, Member of PSC			
Mr. Sokheng Novin	Deputy Director General, Member of PSC			
Mr. Sum Thy	Director Department, Member of PSC			
Mr. Nicholas Tye		Chief Technical Advisor		
Mr. Ouk Navann		National Project Coordinator		
Mr. Moy Vathana		Financial Assistant		
Mr. Sun Kolvira		Admin Assistant		
Mr. Kim Sarin			Team Leader for Boeungper WS	
Mr. Ros Chor			Government Counterpart for Boeungper WS	
Mr. By Seng Leang			Government Counterpart for Boeungper WS	
Mr. Chao Bun Thoeun				Government Counterpart for Boeungper WS, Kampongthom province
Mr. Ma Sophal				Government Counterpart for Boeungper WS, Preah Vihear province

Mr. Han Sakhon				Government Counterpart for Phnom Prech WS, Mondulkiri province
Mr. Kheun Sokun Viseth				Government Counterpart for Kulen NP, Siem reap province
Mr. Pouk Buntheth			Team Leader for Phnom Prech WS	
Mr. Heng Hong			Government Counterpart	
Mr. Srey Marona			Team Leader for Kulen NP	
Mr. MeasSothu Vathanak			Government Counterpart for Kulen PN	

Field Meeting Observation Notes (19-24 January 2015 – Jonathan McCue)

Field Mission to Chiork Boeung Prey CPA (19 January 2018) (25 attendees 10 women 15 men)

Chiork Boeungprey CPA is locatedBoeungper wildlife sanctuary, Chiork village, Romany Commune, Roveang District, Preah Vihear Province. The highest elevation is approximately 70 meters above mean sea level. Chi AeokBeong Prey CPA covers a forested area of 2,065 ha and 189 families (730 people) live within its boundaries. There is approximately 300 ha of degraded forest within the CPA (Oeurng, 2014).

More than 80% of the employed population in Chiork BeongPrey CPA have been working in the agriculture including; rice production, vegetable growing and livestock husbandry, is the main source of family's income. Addition, some farmers also have Chamkar where they plant various crops such as rice, cassava, sesame, banana, etc. Chamkar is mostly located within the CPA area. Besides the agriculture, the villagers also earned some incomes from off-farm activities such as selling labour to work for the other farmers, worked for rubber companies, and selling groceries, etc.

Promoting the Protected Area and income for the communities who are living in the CPA area, Adaptation Fund (AF) project has been developed by UNEP and the Ministry of Environment (MoE) in Cambodia to address the vulnerability of rural communities to climate change using eco-agriculture.

Key Points raised and comments received have been able to assist the MTR reviewer to ascertain the following:

a) The interventions carried out during Component 2 have had a significantly positive impact on the lives of community members at Chiork Boeung Prey. "Out of box" thinking and delivery from the PMU (with support from the local community members) has resulted in a range of delivery outcomes. These range from a new seedling nursery, a "penned" wildlife community "fenced protected area", 37 ring water pumps to assist with water supply, a new water pond to service the village community, enriching the forest with total 90,331 indigenous trees and distributed 69500 fruit trees, honey production in 4 households, cricket raising (for market sale), a road rest area and home gardens within 80 houses which all previously did not exist before the project, wooden shelter constructions (with thatch roofs made by the community) and finally a money saving group (that benefited from US$1000 set up bank account credit for initial use) and the assistant of carried out of many trainings and awareness raising campaigns.

b) Perhaps the most critical intervention that provides maximum impact is those activities linked to water supply. The village water pond with its 50 meter width and 100 meter long was designed by the Project Coordinator and cost aroundUS$7500 to construct and was carefully designed to use groundwater aquifer springs to supply the pond. This was sensitively designed to ensure a ledge on the outer edge (5m) was incorporated in the design to ensure children/animals don't fall directly into it. Water quality testing has not appeared to have taken place since its construction (2016) though water quality issues do not appear to have generated any concern to the immediate term.

c) When the community were asked which interventions are most at risk from a lack of continuation, the clear response was that any activity that requires significant capital maintenance would be most at risk. It was stated that "once the project closes, the spirit may be reduced to continue certain aspects". The maintenance of the water pond, however, is likely to continue as this provides a vital commodity for living (for the community and associated livestock). Anything that requires significant dredging, clearing through use of machinery or the failure of water pumps are most likely to be not fixed if they fail. Of course, additional MSG contributions (from the project – see recommendations)

should reduce this project sustainability risk. In addition the cost of patrolling the borders of the CPA whilst quite minimal, were all raised as being something that may cease once the project terminates. Often, encroachers are all non CPA members. Land can be confiscated from non CPA members which may then be enriched with new tree plantings. A challenge is that newly planted saplings are not watered by the project, so the success rate of planting is not always successful and dependent upon seasonal rains to assist with growth.

d) Patrolling CPA boundaries is a continuing problem. One solution is to increase patrol costs with money forum the MSGs. Efforts to use the Village Chief to convey the benefits of being a CPA Member have been used to spread the key messages plus the use of religious ceremonies to bring all villagers together and to each of those families that are not become members to reading out who has (and who has not!) paid their monthly fee of 500 Riel per family member). Entertainment activities (as well as CPA patrolling) are paid for by the monthly contributions.

e) Consequently, the whole issue of eco-tourism within the CPA is unlikely to have a sound platform to build upon unless there is some "seed funding" from donors to kick start the process.

f) When women were asked what benefits the AFCPA has provided since its start, the key responses were the improved opportunity to have learned about new approaches and techniques, a new diversity of skills from weaving to fertilizer making and importantly the fact that the new access to fresh water (ring wells and ponds etc) has seen a tangible improvement in the health of their children.

g) When men were asked what benefits the AFCPA has provided since its start, the key responses were the improved life skills the project has provided in terms of advice on setting up savings accounts, new skills with regards to how to cultivate and grow wild plants, home gardening skills, fruit tree growing and planting (following climate resilient protocols that were researched and designed during Component 1). This latter point is particularly pertinent as before the project, villagers would go to the forest to forage and gather fruit, but would never consider growing it themselves to harvest.

h) The presence of home gardens within individual houses has increased considerably since the project start (when only 10 families were partaking in this during rainy seasons). The number of households now (January 2018) was communicated as being 60 families out of 80 possible families signed up within the CPA partaking. The AFCPA can take full credit on this significant increase as before the project, villagers would visit the forest to forest and bring back to their homes fruit and vegetables. A few home gardens were viewed and of interest, the species that appeared the most suitable to climate variances was that of morning glory which provides a good cash return, demands full sun and does not require as much water during the dry seasons. It does require more machinery to grow and cultivate. When home owners were asked about selling spare produce to market, they all stated that consumers prefer the organic nature of the vegetables being produced stating that the produce is of higher quality, less fertilizer use and a better taste.

i) Challenges being faced include the poor soils in the CPA reforested areas, where there is significant evidence of rosewood saplings dying off after 18 months. Those that are alive are at risk from death from invasive climbers wrapping their root systems around the saplings and suffocating them. This is an issue surrounding many trees in the forest but remains a real concern for the long term success of any plating programme. The need for possible silviculture support has been mooted for the reforested areas. This maybe needed as the market cost of rosewood (a highly dense tree) can be as high as US$53/kg.

j) Challenges in chicken farming include the risk posed by mongooses taking chickens at night time.

k) Outreach signs at each house (AF signs though not the AF logo interestingly!) appear on those houses cooperating in the programme and who are signed up as being CPA members.

Should surplus money be available within the project budget by the end of 2018, it is proposed that an additional US$1000 is added to the accounts of each Money Saving Group. This is seen as a possible option to consider as various discussions with the community (especially at Chiork Boeung Prey) clearly stated their appetite for the MSG to continue. Specific target activities that could benefit from the additional MSG money are presented below. Due to the current high market demand of safe vegetable and chicken in both local and national markets (curren market price for chicken is US$4.5/kg) including the member's skills and capacity in producing these products for the markets so the CPA member agreed and proposed to establish a group of community business to collectively sell the products to the markets. Market prices for pineapple ($2/per piece); Jack Fruit 9$2.5 per piece); chilli (US$/kg); cucumber (US$1.25/kg). Some recommendations included:

- Provide more capacity building on “organic” chicken raising techniques (mainly focus on breed selection, feeding, prevention of disease and disease treatment, etc.) 28 households are able to raise chickens at present within Chiork Boeung Prey CPA, and in fact when asked what additional focus would be preferred, the increase in chicken raising was raised a number of times by the community when questioned.

- Facilitate to form the chicken producer groups with clear objectives, roles and responsibility of group leaders and members, as well as clear work plan discussed and prepared among the members.

- Study possibility of linking with other value chain actors. Market expansion will be depending on the quantity of chicken produced by the farmers.

- Contract arrangement may be needed. Capacity of the chicken producer groups to supply in good quality, quantity, and regularity is very important to gain trust from the buyers.

- Implement and monitor the progress/performance of the chicken producer groups.

NTFPs have contributed a lot as source of food and income for livelihood of the villagers. Therefore, natural resources in that CPA should be further improved and well-managed to be used for a sustainable livelihood of the people in the CPA. Strengthening capacity and providing support to existing management committee of the CPA to fulfil their roles and responsibility would be very helpful. For instance, the management committee should patrol the CPA frequently and regularly.

Field Mission to Skor Krouch CPA (20 January 2018) (27 attendees 13 women 14 men)

The CPA is located in Beng Per Wildlife Sanctuary in Sandan district, Kampong Thom Province. Skor Krouch CPA is one among the 5 selected CPAs of the project. The CPA was created in 2010 and covers an area of 3,449 in 5 villages in Sandan Commune. It is close to Stung Sen, a major tributary of Tonle Sap Lake Basin, with highest elevation of approximately 66 meters above mean sea level (Oeurng, 2014). This CPA consisted of 642 families (Yim, 2014). The major problems (pre-project) in this area were as follows:

- Farmers had limited knowledge and technical capacity in resilient agricultural practices (specifically, rice seed selection and purification, soil nutrient improvement, water management, mulching, etc.)

- The knowledge on rice intensification was limited, for example soil levelling, selection of full grain seed, weeding were not practiced appropriately.

- The farmers relied heavily on the rainwater for farming activities, and the shortage of irrigation water was a main problem in the dry season. Water from the drilled well was mainly used for drinking, so it was not enough for the crop planting in the dry season.

- There were some water sources (natural lakes) available for planting crops in the dry season but the farmers did not make use of the water.

- Farmers' understanding of resilient agricultural practices was limited. For example, mulching technique, soil preparation, were not appropriately prepared adapt to drought.

- These climate change-induced events have damaged rice crops, killed livestock, threatened food security, caused the spread of disease in the community, increased poverty and caused community members to migrate to cities to take up work as labourers.

- Most of the soil was sandy soil. Organic matter or cow dung was not collected properly to make compost for improving the soil fertility.

- The natural forest in the CPA was being cleared to expand the agricultural land for farming activities and it will negatively affect the water source of the natural stream if more forest is cleared.

- Farming and growing produce in home gardens is limited by a shortage of water, a lack of seedlings, compost and improved agricultural technique within the community, and insect damage to crops.

Key project benefits (to date) identified for women at the strategic level included:

a) "Life before the AF was miserable" – now much more diversity of foodstuffs on offer (ranging from fruits to a range of vegetables – cabbage, cucumber, morning glory amongst others). 4 households produce honey whilst circa 120 households use climate resilient rice strains.
b) Reduced pollution and fertilizer content as a result of a more organic farming approach being adopted.
c) Before the AF the community was often very poor and their health was suffering though this has now improved significantly.
d) Health and diet of the children has improved as a result of reduced fertilizer use.
e) New skills have been learned on homestead, water conservations, practical skills in terms of maintaining equipment and money saving group ideas (19 households enrolled in the scheme).
f) A new cascade waterfall exists to help with water supply.
g) Reforestation techniques carried out

Challenges include the fact that a key problem to villagers is the problem of insect infestation which appears to a problem only in 2017 but prior to 2016?. This may well be linked to weather extreme situations but if this is so, they it falls directly into the objectives of the project and it may be argued that the project (on this aspect) sustainability is questioned as insect infestations are directly a climate change related factor and concern to agricultural focused projects. A similar issue appears to be linked to the growing of cabbage and long beans which has been a challenge (individuals remaining small in size) and many villagers actually don't grow them anymore (pressure to use pesticides is high unless a natural alternative is offered which has not at present). This is an issue for the project to address in the final year.

Key project benefits identified for men at the strategic level included:

a) Improved livelihoods as new foodstuffs are being grown (increase in homestead farming as opposed to traditional ways of foraging in the forest etc). At present at least 20% of families are carrying out homestead gardening. When asked this point, there appeared confusion over the statistics presented

in the 2014 work (which presented the case that 50% of CPA Members" undertook homestead gardening. Now 20 % of all families (members or not) carry this out to one degree or another).(NB: in 2014 150 members of the CPA existed and only people within land inside the CPA could be members, but now, anyone without and inside the CPA can join, hence, skewing the results somewhat.

b) Know how to grow and when to plant client resilient rice species. Irregular rainfall events caused many problems and the wrong seeds would be planted at the wrong times.
c) Skills learned on how to raise chickens and how to use organic fertilizers.

Challenges included:

a) Land encroachment due to the high market value of cashew nuts which require the forests to be cleared to make space. This causes a major problem to regulate CPA boundaries.
b) Patrolling of the CPA boundary. This is a challenge and will continue to be the key risk after the project concludes unless new ways of raising sufficient funds (coupled with education of non CPA members) is improved upon. The CPA concept is actually not well understood fully by all families in Skor Krouch due to a limited educational background of most community members. Plus also due to a lack of participation of the whole CPA community.

The long term issues (post project) are set out as follows:

a) Homestead gardening shall continue and the risk of this stopping after the project has finished is deemed as being small. Women will continue with chicken raising the fruit tree growing.
b) Patrolling the boundary of the CPA is at high risk unless additional funds are found or more effort involved in "naming and shaming" non-members (via temple announcements etc).
c) Strategies to prevent people falling away after the project finished should be to reinforce the MSGs perhaps with additional seed funding should this money be available (current value of the saving account is circa Riel 7,000,000 (circa US$1750) which is close to double the initial investment of US$1000
d) Community still needs training issues to be developed and continued as experience still needs to be developed. Training is also needed to help communication between commune and villages up to the District Govt level (limited response is currently given back the communities when a question is asked. Therefore AFCPA should focus its energy in the final period of the project on improved institutional development issues (check VAAP recommendations).

Field Mission to Chorm Thlok CPA (20 January 2018) (27 attendees 13 women 14 men)

Chorm Thlok CPA is one among the 5 selected CPAs and it covers an area of 5,204 ha. There are 7 villages in this CPA which was created in 2010. This CPA consisted of 948 families, equal to a 4,607 population (2,419 women or 52.48% of the total population). 145 families, equal to 15% of the total families in the studied village are Kuoy indigenous minority group (Yim, 2014).

In 2014 (pre project), the major problems in this area were as follows:

- Droughts, storms and floods are increasing in intensity and frequency having a "major" impact on the community, resulting in flood damage to crops, drying out of rice fields with consequent reduction in yields and the death of livestock
- The farmers have limited understanding and technical capacity in climate smart agricultural practices.
- The farmers encountered to pest problems on cashew but they did not have proper solution to deal with the problem.

- Most of the agricultural land was covered by the sandy soil which is not good quality for farming. At the same time, the farmers lacked of effective mechanisms to improve the soil fertility. Organic matters, animal dung were not collected to be used for improving the soil fertility.

- The CPA forest has been illegally logged and cleared for farmland.

- Farming and growing produce in home gardens is constrained by a lack of water for irrigation, degradation and erosion of the available land, insect damage, and lack of improved agricultural technique and a limited availability of compost, rice seeds and tree saplings.

- Erosion is a problem along rivers and canals.

Key current (2018) project benefits at the strategic level include the following:

a) A roadside rest area
b) New wells and pumps have helped home gardening delivery during dry seasons
c) Fencing and posts to assist with the home garden approach.
d) Strong sustainability message is provided by the Chorm Thlock CPA example as up to 2014, forest areas were cleared for cashew plantations whereas now, a new thriving rosewood plantation is taking shape very well. In the future the area shall be a chamkhar for rosewood trees which shall bring high value products that shall be directly protected by members of the CPA and protected by CPA byelaws (set by the project). Rosewood trees take 10 yrs to grow 10-15m high. Over 150,000 trees of all kinds have been planted in the area since the project start in 2014 and over 79500 of local fruit trees distributed tio individual households for their home garden plantation. The area hopes also to provide as an "eco-lab" for University students to study from.
e) Men state that home-gardening has reduced poverty and they have generated new skills to raise chickens and crickets.
f) Women declare that the health of their family has improved due to a reduced use of pesticides, they have improved skills to grow their own vegetables and they now know how to intercrop home gardens, how to use cow dung as fertilizer and how to sell surplus stock to markets.
g) Cricket harvesting (45 days to maturity) is a success story for the community and very popular.

Challenges that were raised by the communities are as follows:

a) Still a challenge associated with a constant source of water in some places and so a pond/reservoir is often requested
b) Need to continually receive training on use of alternative fertilizers and on how to grow new organic crops/fertilizer approaches. Also need training on treating ill animals. Women asked for skills on organic fertilizers and how to stop insect infestations.
c) Encroachers are all non CPA members. Land can be confiscated from non CPA members which is then re-nourished with new trees, however, growth rates are much better for trees anted within the forested areas and not the "cut down" open prairie areas (which have poor sandy soils which are not conducive to growth). New saplings are not watered by the project, so the success rate of planting is not always successful and dependent upon seasonal rains to assist with growth.
d) Patrolling CPA boundaries is a continuing problem. One solution is to increase patrol costs with money forum the MSGs. Currently patrollers operate 4 times a month at a cost of US$50 a trip, however the AFCPA only offers costs to cover 3 trips to sites (ie: AFCPA doesn't cover the whole cost of the patrolling operation with the remainder having to be found by the community). It normally appears to take 5 trips per month with up to 10 rangers per trip and so it has to be a joint effort between the community and the policy and the Local Authority. Therefore the AFCPA only covers circa 30-40% of the costs of the patrolling operation. The remainder is contributed via community funds including some money from the MSGs however more is needed to make this sustainable.

Others sources of money come from land rent charges from the CPA and a small 500Riel per family member contribution from the CPA member families per month. Efforts are therefore needed to better engage all families to pay this fee to help raise as much money as possible.(so far 1113 households from 7 villages for all CPA but only 50 households are not members - 95% are members!). Therefore, "organic" growth of this fund money is almost saturated. However only 60% of the 95% actually pay this fee. Therefore, 40% of the 95% do not pay because of poverty reasons.

e) Efforts to use the Village Chief to convey the benefits of being a CPA Member have been used to spread the key messages plus the use of religious ceremonies to bring all villagers together and to each of those families that are not become members to reading out who has (and who has not!) paid their monthly fee of 500 Riel per family member). Entertainment activities (as well as CPA patrolling) are paid for by the monthly contributions.

f) PMU just monitor growth rates, but no formal monitoring approach is taken to record health and growth rates. Eye scanning of growth only is adopted with some sporadic photos but these photos are not formally stored within any database etc. The use of drone technology maybe proposed to assist in calculated forest cover in due course. One drone exists within the MoE but is not used for monitoring forests. This could be valuable in patrolling the borders of CPA. In the immediate term better transect sampling is recommended plus support training on scientific monitoring techniques.

When the community were asked which interventions are most at risk from a lack of continuation, the clear response was that any activity that requires significant capital maintenance would be most at risk. Cricket raising still requires more training as the cricket breeders have provided villagers with the skills, but the execution element still remains weak. Organic farming techniques are now strong, but the villagers do not feel they are experienced enough to sustain a constant self sufficient supply of produce. They need to continue crop and product diversification within the MSG business model Action Plans and to ensure that there is variety between the families in what they produce (communication between themselves should continue to diversify the product). *"Stronger together"* concept which should be a catch phrase for the future if possible.

Field Mission to Chop Tasok CPA (22 January 2018) (30 attendees 15 women 15 men and 5 children under 4)

Chop Tasok CPA is located on Phnom Kulen National Park in Kulen district, Siem Reap Province, covering an area of 306 ha (Oeurng, 2014). Khla Khmum is a village located in Chop Tasok CPA which is where the direct beneficiary action is located. The village is located in Khnang Phnum Commune, Svay Leu District of Siem Reap Province. According to the early project work (Yim 2014) there were 65 families in the village, which is equal to 53 households.

In 2014 (pre project), the major problems in this area were as follows:

- CPA forest has been illegally cleared for farming, resulting in soil being lost (i.e. eroded) in the wet season.
- Farming and growing produce in home gardens is constrained by insect and rodent damage, crop/vegetable disease and an unreliable water supply. Additionally, some farmers have small homestead that is difficult for them to prepare the home gardens. Shade and competition from other plants/trees was also a constraint in home gardening.
- Rice seed selection and purification was not well-conducted by the farmers.

- Water is only available in the rainy season because the farmers can use the rainwater for farming activities. Irrigation water for crop planting in the dry season is limited. The spring water is used mainly for drinking.

- Lack of water storage and supply facilities for the farming activities in the dry season. The farmers encountered some pests / diseases on cashew but they did not have appropriate prevention / solutions to deal with those problems.

- Top soil erosion was also a main problem happening in the studied village.

- Limited understanding of resilient agricultural practices (e.g., soil preparation, distance from one plant to another plant, etc.).

- The farmers have limited access to market information, so they decided to sell their agricultural products in the wrong prices.

Key current (2018) project benefits at the strategic level include the following:

- Women declare that they have benefitted from understanding how to raise chickens and how to undertake home gardening. The project training on these issues was particularly raised as being of value.
- Men declared that life was difficult before the AFCPA, having to forge in the forest and regularly collect water from the spring up in the catchment. Visits to the Chankhar had to be carried out to collect fruits and food. Now water is regularly supplied via a new project pipe and pump network from the spring. Clean water has subsequently improved the community health considerably.
- Before the project, knowledge on climate resilient agriculture was poor but now they are far more aware of the potential alternative livelihood opportunities that exist. Despite this, the community stress they are way short of being experts in these new areas and require continued support to take forward what the project has supported and initiated to date. A positive example relates to the new chicken raising skills which have proven important to the community and the lessons learned from the training are likely to be continued into the future. Men can now build cages to contain the chickens in one place and new advice of feed stocks and raising chicks is of value. Women are now also trained on how to protect and young (from mongooses) through the project support in building chicken sheds where they are stored at night.
- There is evidence that outreach support is being provided to neighbouring villages and communities on support such as home gardening and chicken raising. Training undertaken either by the project, or by willing villagers from Khla Khmum (demonstration village) is occurring and this should (must) be encouraged for the remainder of the AFCPA where possible. The whole approach of “training the trainer” maybe something for the AFCPA to embellish where possible. The importance of this is clearly seen during the MTR mission and visiting home gardens in nearby Popel village (outside of the Chop Tasok CPA though within their own CPA). Clearly the success of these initiatives that have been started is being diluted as a result of poor (or no) access to water supplies during the dry seasons
- Fish ponds (x2) have been experimentally set up within 2 villages by the project. It is too early to determine the success of this exercise though it does demonstrate a new way of thinking that the project has instilled into the community way of thinking.
- Money Saving Groups are being used by 18 families and 10 people are currently applying for a loan from the account. New family members to the MSG need to apply and are only accepted if they comply with the criteria clearly set by the project.
- Cricket harvesting takes place by a couple of families. 45 day maturity period is allowing suppliers to eat the produce or to supply small amounts to other villagers (small set up so far and needs to be up-scaled).

- Lychees are a natural forest fruit within the Kulen National Park but perhaps is not actively pursued as a key NTFP within the NP. According to one interviewed community member, over US$1000 can be attained from Lychees in 1 season.

Challenges that were raised by the communities are as follows:

- Maintaining project is very dependent upon providing the institutional support and advice to the CPA Committee. This must remain strong and be seen as a respected body to help direct a new path towards engagement and sustainable agricultural practices. Linked to this is the continuing challenge of CPA boundary control and the risk of encroachment of CPA lands by non-members. The boundary of the CPA is clear to the Khla Khmum (demonstration) villagers but it is far from clear for the surrounding villages. Continued support to properly communicate (in simple Khmer) where the boundaries are, why they should be protected and also what the 2017 CPA Guidelines (including the new CPA Bylaws set up through the AFCPA project) are proposing, what communities have the legal right to prevent etc must be focused upon for the remainder of the project (Component 3). Enforcing the prevention of logging/tree felling etc needs to be very clear in terms of what can be done (with support from the Commune Police Force).
- Introduction of Payment for Ecosystem Services (PES) is something that needs consideration in the longer term. This approach is embedded within the principles of the Ridge to Reef process which is critical to ensure that the Kulen National Park provides the necessary ecosystem services to help protect Siem Reap watershed and town from flash flood events and water quality issues (including siltation etc). Rehabilitated buffers (as the AFCPA is starting to achieve) needs to be replicated and up-scaled to other Provinces as soon as practical).
- Remoteness of many of the Chamkhar sites and borders of the Chop Tasok CPA make enforcement a major challenge. It is proposed that a solution is to encourage other villages on the more remote areas of Chop Tasok CPA to "donate" chamkhar sites so they may be turned into enrichment sites (as oppose to these sites being "confiscated) and in return the non CPA member community/villager received training/chickens/fruit from the Khla Khmum (demonstration village). New "Train the Trainer" programmes should be set up, with nominated individuals specifically trained (from Khla Khmum village) to train invited representatives from all other villages within the Chop Tasok CPA (plus other CPAs). The activities undertaken to date by the project need to be communicated effectively and easily to a wider group if the sustainability of the project is to continue. The phrase "Stronger Together" could be adopted (once translated into Khmer) as a project strapline for the final period of its implementation. This is workable as interviews with the community suggest that other villages are not jealous of how Khla Khmum has received the AF support but in fact are very proud that such work is happening. Benefits are being felt to a lesser extent to non-demonstration villages (seedling provision/fruits/chicken/crickets/honey etc).
- Challenge often relates towards how to improve two way communication between the Village Chiefs and the Commune Council and then up to District Governors on the work being undertaken at the village level. Commune meetings to regularly take place and this is the fulcrum for all Village Chiefs to convey issues and concerns to the Commune. This if course appears to include debate and concern over CPA boundary encroachment issues. The Commune Development Plans (CDPs) need to be reviewed and encouraged to include the concepts/protocols and byelaws set up by the AFCPA to date. Currently any action will only be supported by the Commune Council if it is included clearly as a budgeted line item within the Commune Investment Plan (CIP). This issue needs to be focused on within the remainder of the project to ensure this communication line is clearly coordinated and understood by all parties. This is important as the GoC are currently pursuing a decentralisation policy under the Ministry of

Interior who are happy to help support devolution activities and tasks from sub-national, to District, to Village levels, however, a paltry amount of money is set aside for this to happy (circa US$1,000 per year per Province) and so this does have ramifications regards the long term sustainability of devolved activities.

Field Mission to Ronouk Khgneng (24 January 2018) (35 attendees 18 women 17 men)

The CPA is located in Ronouk Village, Memang Commune, Keo Seima District of Mondulkiri Province. Ronouk Khgneng CPA is one among the 5 selected CPAs of the AF project. Ronouk Khgneng CPA covers an area of 1,734 ha (Oeurng, 2014). Ronouk Village consisted of 91 families with 405 population, including 214 women, in 67 households (village chief, 2013). Or there were 4 members per family on average (Yim, 2014). About 90% of the total populations in this studied CPA are Phnong ethnic group.

In 2014 (pre project), the major problems in this area were as follows:

- High temperature, especially in March or April, some fruit trees died during the extreme high temperature.
- Flood along the natural stream (O Tei). The farmers could not plant permanent crops, but they could plant some vegetables after the water receding.
- Lack rainwater harvesting facilities to store the rainwater for later used in the drier months
- There were only 2 drilled wells in the village, but the water quality is not good for drinking. Normally, the villagers used the water from drilled wells for washing.
- The intensity of disasters as a result of droughts, floods and storms is increasing (e.g. droughts occur annually).
- Fertile soils have been washed away (i.e. eroded) near rivers.
- Farming and growing produce in home gardens is constrained by a shortage of water (the community relies on rainfall, which is increasingly irregular).
- The farmers lacked of good quality rice, vegetables, and fruit trees seed for planting.
- Lacked of agricultural extension. There was only one development organization (WWF) working in the village.

Key current (2018) project benefits at the strategic level include the following:

- 13 water wells have been constructed along with installation of 69 water tanks for storing water/rainwater. (1500 litres each)
- 15000 seedlings (fruit trees) have been supplied from the nursery to chamkhar enrichment sites
- 10,000 rosewood spp trees have been provided from the nursery in 2016 and a further 15000 other spp covering 22ha of enrichment sites
- AFCPA has provided US$150/month for fuel costs and nursery maintenance at US$200/month. These issues are of concern after the project finishes.
- Green netting, hand tools and posts (barbed wire) has been provided by the project (netting needs replacing every 3 years)
- Pig raising for 10 families (2 pigs per family)

- 91 out of 95 families have joined the Money Saving Group Scheme. Whilst slow at the outset, this has "snowballed" once families could see the benefits. The poor literacy and education level in the village meant that the uptake of the MSG approach was going to be slow. A project success (and credit to the consultants and PMU team involved) is that such a high % of the CPU community want to be involved.

Key Challenges listed are as follows:

a) Demonstration site is very rural and difficult to access especially during the rainy season when it is common to take circa 7hrs to travel from Senmonorom (Modulkiri Province).
b) Some saplings are not growing in the enrichment site areas. This is due to soil chemistry and due to fires or invasive insect species.
c) Road access remains a major problem and this is likely to influence any potential eco-tourism potential. It also causes problems regarding patrolling issues.
d) No Road Rest area is in place (though the term should be adapted accordingly should a community type hall ever be constructed.
e) Efforts to improve the flow of finance are needed to support the decentralization process in Cambodia (National Govt, Provincial Govt, District Govt, Commune Council to Village Chief).
f) It is proving difficult to stop illegal practices within the CPA boundaries with encroachment taking place most commonly during the rainy season.
g) When asked how effective the PMU team has proven in the project to date, responses say this has been vital as only 8% of the villagers are literate and able to read anything that maybe sent through to them. Personal contact is therefore vital for the success of the project to date. Villagers would prefer a constant team presence if possible.
h) Where water has been the focus of the intervention, it is felt that the activity will continue though the cost of maintaining pumps/sprinklers etc in the nursery may prove an inhibiting factor to success. Those activities that are not directly "water focused" (eg: patrolling etc) are more likely to not be continued after the project finishes as they (arguably) are not life dependent issues).
i) AFCPA should focus attention on education and curriculum support related activities. The project request to build local schools has not been accepted by Commune Councils, through the provision of chairs once the school has been built) has been accepted. Education and outreach is important (using a range of non-printed techniques) should be pursued to showcase what the AFCPA has achieved to date and simple messages for upscaling/replication in areas outside of the CPA.
j) Training approaches needed to spend much more time on "hands on" examples of how to plant seedlings, how to raise chickens, how to grow crops etc etc. Often after a training event, villagers said they had forgotten the technique and needed to be shown again. Despite manuals, posters and summaries being produced by the project, in many instances these have never been looked at due to literacy capabilities in the village. More applied training (and regularly spaced) is needed along with a specific train the trainer approach on agreed techniques.
k) Road improvements have (in part) been funded by the "Biological Corridor Conservation Project (BCC). Any future bridge construction would need to be funded through the CIP to benefit other communities in addition to Ronouk. This is not an AFCPA concern at this time.

ANNEX V. STATEMENT OF BUDGET REVISIONS BY ACTIVITY (TO END DEC 2019) - (TAKEN FROM MINUTES OF THEADDITIONAL FIFTH PROJECT STEERING COMMITTEE MEETING – 25 JANUARY 2018)

5. Budget revisionsfor project extension

The PMU presented budget revisons that would be required to extend the project until December 2019.

The following budget lines require additional funding:

1101	Project Coordinator	36000
1102	National financial manager	18000
1216	International adaptation expert (CTA)	45000
1219	National forestry/agricultural expert (community liaison planting officers)	60000
1250	National English language expert	3600
1301	Admin officer	14400
1302	Driver	3600
1303	Cleaner	2700
3301	Inception and Steering meetings	4000
		187300

This budget will be reallocated from:

Savings on consultants:

1206	National agricultural expert (adaptation)	7600
1217	National adaptation expert (training course)	25000
1228	National socio-economic/ecological/hydrological expert	6000
1230	International adaptation researcher	9000
1231	National campaign expert (public awareness)	19000
1232	International short-film producer	10000
1237	National REDD+ expert	4000
1238	National adaptation expert (capacity-building)	8000
		88600

The project has not spent as much as anticipated on consultants. This is because: i) the roles of consutlants have been combined, resulting in savings; and ii) consultants have been able to complete their outputs in less time than initially anticipated.

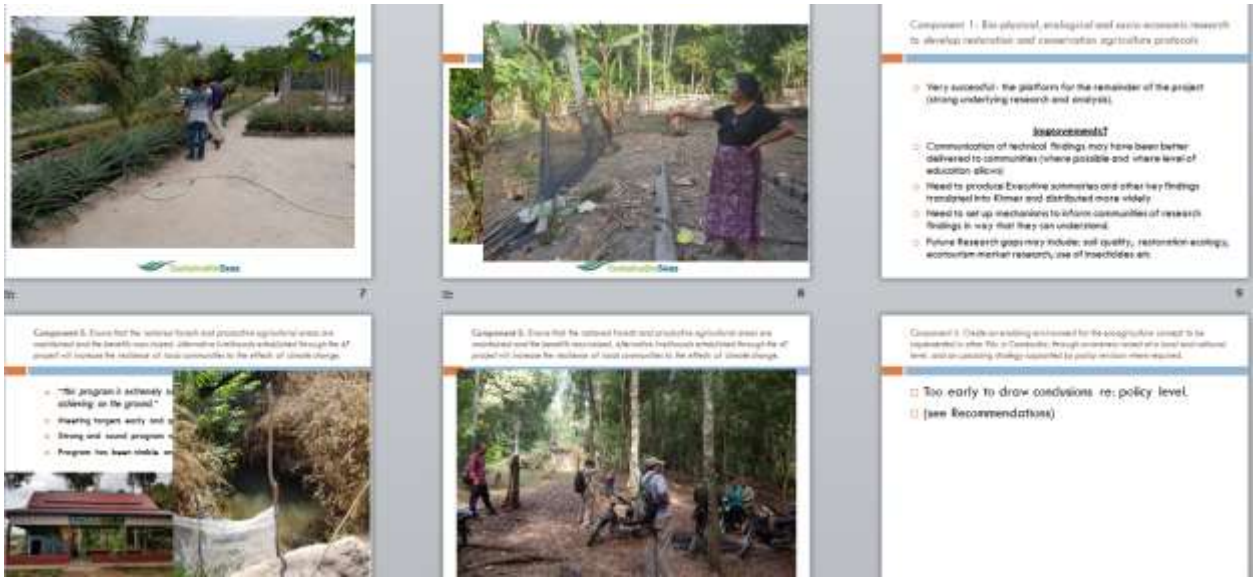
Reallocation from training budget lines:

- At the end of 2017, $324773 (58%) of the $558,243 total budget allocated to training had been spent.
- Training events have been less expensive than anticipated because the project has been able to provide training to multiple stakeholders (local authorities, CPA management committees, agricultural extensions officers and community members) at a single event, thereby reducing costs.
- It was therefore proposed to reallocate **$100,000** from the various training budget lines (3201 - 3207) to cover costs associated with an 18-month project extension.

The PSC approved budget revision for 18 months extension period until December 2019.

ANNEX VI. PROJECT PRELIMINARY FINDINGS PRESENTATION

Presentation slides of preliminary findings given to the Project Board on 25 January 2018.



13

14

15

Findings to date (Strategic Relevance)

- *"To what extent has the project contributed to an increase in climate change awareness and a reduction in climate change vulnerability in the selected project sites….is this likely to be sustained"*
- *YES – with effort on institutional support and continued outreach work*

Findings to date (Effectiveness)

The AFCPA project has constructed:
- Constructed 119 small pumping wells,
- Constructed 47 open ring wells
- constructed 10 large pumping wells for 2017 water infrastructure supply activities
- Planted 321,276 indigenous trees in 2017 reforestation activities of which 256,276 are planted within the 5 project targeted CPA sites
- Planted 65,000 indigenous trees have been planted outside project targeted areas.

19

Findings to date (Effectiveness)

- *Project effectiveness has been affected (in part) by local cultural believes and the challenge towards changing mind-sets on what to grow that is different to the norm (ie: climate resilient crops etc).*
- *Local farming education is often quite poor and as they continue to wish to follow traditional ways of agriculture and avoid change. The PMU addressed this by spending more time in the Field*
- *Could Road Rest areas have been more efficiently designed to embrace disaster management needs/eco-tourism needs?*

20

Findings to date (Efficiency)

- Preparation and readiness (e.g. timeliness). The flow of some funds to the local communities has taken up to 6 months to release which has impacted on seasonal needs (wet season planting challenges etc).
- Stakeholders participation and cooperation (efficiency of outcome in certain locations is also influenced by the fact that local commune leaders have only limited ability to read and write)
- Sometimes scheduling delays have occurred as a consequence of some budget decision delays from the Project Board.

21

Findings to date (Financial Management)

Component	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]

Findings to date (Sustainability)

- Buy in and involvement of all members of the village communities
- Protection of CPA boundary issues
- Several high-level government officials, including the Minister of Environment, have been involved in the inauguration of project intervention sites.
- The physical demonstration of project activities to government officials has ensured their continued support of the project
- A thorough review of the CPA legislation is recommended to better accommodate cultural activities and practices within the boundary of a CPA. A compromise is needed to encourage sustainable levels of cropping and cultivation within a CPA boundary

Findings to date (Sustainability)

- Additional work is recommended on training to help communication between commune and villages up to the District Govt level. Limited response is currently given back the communities when a question is asked.
- AFCPA should focus its energy in the final period of the project on improved institutional development issues.
- To ensure environmental sustainability, it is proposed that more focus should be placed on restoration ecology as a concept within future project designs.
- The poor soil conditions in certain areas perhaps should have been better acknowledged at the outset of the project so that efforts to encourage seedling growth could have been better managed.

Gender and Social Inclusion

- AFCPA is meeting international expectations for gender/social inclusion at community level.
  - Beneficiaries are indigenous minorities
  - Stakeholders – include women – express satisfaction
  - Women's participation and leadership in villages appears high
  - High level of overlap between program activities and women's roles within community
  - At Choup Tbeck, women appear less likely to speak out (when asked how successful the project has been in changing their day-to-day routine and lives).
  - They are less likely to speak in groups, though one lady at Choup Tbeck was very excited about the future and of the health of her family. "I can now see a future ahead" was one reply, which is a notable phrase in terms of being able to start considering and thinking about the issue of climate change (health first, climate change later!).

25

Findings to date (Monitoring and Reporting)

- Sound review and update in 2014 and 2015
- Indicators did not include any reference to the importance of home gardens towards improving nutritional levels and as a consequence, community health in general (enhancing a staple diet of fried fish and rice with new fruit and vegetables).

26

Preliminary Suggestions

- Important to consider the appropriateness and scale of the interventions at the level of the beneficiary (chamkar level + household level)
- Key recommendation for remainder of project is to promote effort to build institutional capacity (CPA Committees etc)
- Important to consider whether new climate data is needed (post 2016) to continually feed into updates/maintenance needs for the wider project area and in the context of Commune Development Plan (CDP) level and hence Commune Investment planning

27

Preliminary Suggestions

- Inevitably, Component 3 appears to need the greatest attention for the remainder of the project.
- Components 1 and 2 have been delivered well and many practical solutions now are apparent for all project CPA sites
- Continue the need to make the project message simple is still required for maximum impact (to help with outreach to neighbouring villages inside and outside of any specific CPA boundary)!

Preliminary Suggestions

- In the longer term, the AFCPA approach (if up-scaled using national or donor funds) offers a potentially winning combination of awareness building and training at commune, district and provincial levels.
- Recommend AFCPA is extended to Dec 2019

Preliminary Suggestions

- Main finding is that AFCPA has provided the opportunities for local stakeholders to "think differently". It has (to date) achieved this objective - educating communities on new eco-agricultural techniques is vital for both dry and wet seasons!
- Sustainability long term has to be questioned without future funding commitments – possible increase to the MSG project contribution by a further US$1000 per group)
- Partnerships needed with international experts and "best practice" (insect infestation techniques etc).

Intended Programme

- 6 February 2016 – Zero Draft MTR Report to UNEP
- Mid February 2018 – Dissemination of UNEP accepted Draft Report to Cambodian stakeholders
- By end of March 2018 - Update and Final Reporting

SustainableSeas

Information Requests

- Final AFCPA Financial Reporting (per outcome) spreadsheets for 2017 and 2018
- Status on applications for other donor funds to continue/upscale AFCPA work?
- PMU view on increasing MSG contributions by 2018?

SustainableSeas

ANNEX VII. LIST OF DOCUMENTS CONSULTED

Adaptation Fund "Operational Policies and Guidelines for Parties to Access Resources from the Adaptation Fund

Adaptation Fund (2012) "Agreement between the AFB and UNEP for the "Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia" project in Cambodia (AFCPA).

AFCPA (May 2013) Proceedings of the Project Inception Workshop, Himawari Hotel Phnom Penh.

AFCPA (July 2013) Proceedings of "Follow up to the Project Inception Workshop", Himawari Hotel Phnom Penh.

AFCPA (2013) Proceedings of the Training Course on Nursery Management and Seedling Propagation to Community Protected Areas, Royal University of Agriculture, Phnom Penh.

AFCPA (May 2014) Proceedings of the Training Course on Nursery Management and Seedling Propagation to Community Protected Areas in Chiork Boeungprey, Chorm Thlork and Skor Krouch (in Khmer).

AFCPA (July 2014) Report of Land Tenure Policy for Project Targeted Areas (by Dr Beng Hong Socheat Khemro, Land Tenure Policy Expert)

AFCPA (Sept 2014) Report of Crop Species in Ronous Khnheng Community Protected Area (by Yim Soksophors, National Agricultural Adaptation Expert)

AFCPA (Sept 2014) Report of Crop Species in Chiork Boeung Prey Community Protected Area (by Yim Soksophors, National Agricultural Adaptation Expert)

AFCPA (Sept 2014) Report of Crop Species in Scor Krouch Community Protected Area (by Yim Soksophors, National Agricultural Adaptation Expert)

AFCPA (Sept 2014) Report of Crop Species in Chop Tasok Community Protected Area (by Yim Soksophors, National Agricultural Adaptation Expert)

AFCPA (Sept 2014) Report of Crop Species in Chorm Thlok Community Protected Area (by Yim Soksophors, National Agricultural Adaptation Expert)

AFCPA (Oct 2014) Report of the Study on Finance and Insurance for Project Targeted Areas (by Yun Yean, Finance and Insurance Expert)

AFCPA (Oct 2014) Report of the Baseline Study on Climate Forecasting for CPA in Preah Vihear, Siem Reap, Kamong Thom and Mondulkiri Provinces (by Dr Heng Chan Thoeun, Climate Forecasting Expert)

AFCPA (Sept 2014) Report of Adaptation capacity Building (by Mr Kim Nong, Capacity Building Expert)

AFCPA (Oct 2014) Agricultural Market Assessment Report of Community Protected Areas

AFCPA (2017) Summary Report of Mid-Term Achievements (Achievements by 2016)

ACPA (April 2014) REDD+ Feasibility Assessment for CPAs in Cambodia (by Nguon Pheakkdey, National Consultant – REDD+ Expert)

AFCPA (March 2015) Research and Monitoring Programme (by Edward Maningo)

AFCPA (April 2016) Business Plan (2016-2019) for Chiork Boeungprey (by ACTIS)

AFCPA (April 2016) Business Plan (2016-2019) for Chorm Thlork (by ACTIS)

AFCPA (April 2016) Business Plan (2016-2019) for Chub Tasok (by ACTIS)

AFCPA (April 2016) Business Plan (2016-2019) for Ronouk Khneng (by ACTIS)

AFCPA (April 2016) Business Plan (2016-2019) for Skor Krouch CPA (by ACTIS)

AFCPA (June 2014) Assessment of Water Catchment and Infrastructure Intervention to Enhance Climate Resilience of Rural Communities Living in Protected Areas of Cambodia (report by Oeurng Chantha)

AFCPA (February 2014) Climate Change Adaptation Training (report by Kim Soben)

AFCPA (2014*)* Understanding Public Awareness of Climate Change in the Adaptation Fund Project- Sites (report by Sum Cheat)

AFCPA (February 2014) IDENTIFICATION OF POTENTIAL INDIGENOUS PLANT AND FRUIT TREE SPECIES FOR FOREST RESTORATION AND AGROFORESTRY IN CHIORK BOEUNG PREY COMMUNITY PROTECTED AREA

AFCPA (February 2014) DRAFT Report on Socio-Economic Study of "Enhancing Climate Chang Resilience of Rural Communities living in Protected Areas in Cambodia" Project *Report by SAU Sisovanna

AFCPA (February 2014) The Web-Based and Data Management System (Report by SRENG Anouvath)

Kingdom of Cambodia (2017) "Guideline on Procedure and Process of Community Protected Areas 9CPA) Establishment

Tye, N.; McClure, A.; and Mills, A. 2014. Baseline information and indicators for the AFCPA Project: "Enhancing Climate Change Resilience of Rural Communities living in Protected Areas in Cambodia". C4 EcoSolutions. January 2014

PM Reporting

AFCPA (2014) Report of the First Half Yearly Progress. Reporting Period 21 May 2013 to 31 December 2013)

AFCPA (2015) Report of the Second Half Yearly Progress. Reporting Period 1 June 2014 to 31 December 2014)

AFCPA (June 2014) Minute of the Second Project Steering Committee 2 June 2014)

AFCPA Project Performance Reports (PPRs) for 2015, 2016 and 2017

The following are documents listed within the Baseline Assessment Report (C4ES 2014) and have been reviewed during the post Field Mission (16-28 January 2018) phase since returning from Cambodia.

AminuzzamanTalukder. (2003). *Handbook for Home Gardening in Cambodia*.126p. Helen Keller Worldwide. Cambodia.

Andrew McDonald. (1998). *Herbarium Development and Forest Inventory Capacitation in Cambodia*.28p. Department of Forestry.Phnom Penh, Cambodia.

Boyce P., KhouEangHourt et al. (2002). *Higher Plants*. In: *Social and Ecological Survey of Phnom Aural Wildlife Sanctuary, Cardamom Mountains, Cambodia*. 11-21. Fauna and Flora International, Cambodiaprogramme Office, Phnom Penh, Cambodia.

Buck, L.E.; Milder,J.C.; Gavin, T.A.; and Mukherjee, I. 2006. Understanding Ecoagriculture: A Framework for Measuring Landscape Performance. Ithaca, New York: Department of Natural Resources, Cornell University and Washington, DC: Ecoagriculture Partners.

Carriger, S. Undated. Monitoring and review indicators for IWRM strategies and plans. Technical Brief 3

Chitakira, M.; Torquebiau, Coudel, E.E.; Devautour, H.; Soulard, C.T.; Hubert, B. 2010. Towards Balancing and Protection participatory Landscape Performance Assessment in Kwazulu-Natal, South Africa. Montpellier, France: ISDA, Cirad-Inra-SupAgro, 13 p.

Community Protected Area officer (2006).37 p. *ChiorkBoeung Prey Community Protected Area Management Plan for 2006 to 2010*. Ministry of Environment, Phnom Penh, Cambodia.

Cambodian Trees Seed Project (2004).*Cambodian Tree species Monographs*. Phnom Penh, Cambodia.

ChaySamith (1994). *Environmental Impact Assessment in PreahPreahSoramriddh-Kosomak National park, Kirirom*.11p. [In Khmer].Ministry of Environment/Department of Nature Conservation and Protection, Phnom Penh, Cambodia.

Davis J., Gordon J., Pearce D. and Templeton D. 2008. *Guidelines for assessing the impacts of ACIAR's research activities*. ACIAR Impact Assessment Series Report No. 58, 120 pp.

DyPhon, P. (2000). *Dictionary of Plants Used in Cambodia*. Imprimerie Olympic, Phnom Penh.

Gagnepain F. (1913-1920). *Flore Générale de l'Indochine*. Muséum National d'HistoireNaturelle, Paris, France.

Gardner S., Pindar S., &Vilaiwan A. (2000).*A Field Guide to Forest Trees of Northern Thailand*.545p. Kobfai Publishing Project, Bangkok, Thailand.

Hourt (2008). *A Field Guide to Rattan of Cambodia*. 68p. WWF-Cambodia, Phnom Penh.

Jean H. Langenhein (2003). *Plant Resin*. 586p. Timber Press Inc. Portland. Cambridge.

Josef Margraf & Paciencia Po Milan. (2006). *Rainforestation farming*. 76p. Haribon Foundation. The Leyte State University and the Institute of Tropical Ecology. The Philippines.

Larsen K., Larsen, S.S., & Vidal, J.E. (1980). Leguminosae-Caesalpinioideae. In: *Flore du Cambodge, du Laoset du Viêtnam,* Vol18, 1-227. Muséum National d'HistoireNaturelle, Paris, France.

Lavit Kham (2004). *Medicinal Plants of Cambodia*.630p. Bendigo Scientific Press, Australia.

Mabberley D. J. (1997): *The Plant – Book*.858p. Cambridge University Press, England.

Madhu Ramnath (2007). *A nursery mannual 100useful plant species*. 104p Keystone Foundation, Tamil Nadu, India.

Max van Balgooy, Jeannette Ridder-Numan, Colin E. Ridsdale [NHN Leiden]; Damien Hicks, Don Kirkup, Rogier de Kok [R.B.G. Kew]. (2004). *An Introductive Key to Malesian Seed Plants*. Nationaal Herbarium Nederland - Universiteit Leiden branch, Leiden.

Nestor T. Baguinon (2007). *Agroforestry and Land Use in the Philippines*.236p. World Agroforestry Centre. The Philippines

Niyomdham C., Pham H. H., DyPhon, P. & Vidal, J.E. (1997).Leguminosae-Papilionoideae, Dalbergieae. In: *Flore du Cambodge, du Laoset du Viêtnam* 29, 1-67. Muséum National d'HistoireNaturelle, Paris, France.

L.S. de Padua, N. Bunyapraphatsara and R.H.M.J. Lemmens (1999).*Medicinal and Poisonous plants 1*.Plant resource of South-East Asia, Bogor, Indonesia.

Oberthür, T.; Lundy, M.; Andersson, M. 2008. Conceptual underpinnings for market opportunity assessment in ecoagriculture landscapes. Cali: Eco-Agriculture Partners

Rundel (1999).*Forest Habitats and Flora in Lao PDR, Cambodia, and Vietnam*.197p. World Wide Fund for Nature, Indochina Programme Office, Hanoi, Vietnam.

Shapiro, J. 1996. Review: Judgment Day or Management Tool? Olive 1996

Smitinand T., Vidal, J.E., & Pham H. H. (1990). Dipterocarpaceae. In: *Flore du Cambodge, du Laoset du Viêtnam* 25, 1-123. Muséum National d'HistoireNaturelle, Paris, France.

Tem Smitinand et al. (1980). *The manual of Dipterocarpaceae of mainland South-East Asia*. 133p. Royal Forest Department, Bangkok

UNDP. Undated. United Nations Development Programme Handbook on Planning, Monitoring and Evaluating for Development Results. http://web.undp.org/review/Handbook/ch2-4.html [Date Accessed: 4/1/2015]

UNFPA. 2004. Planning and Managing an Review Part III: The Data Collection Process. Tool Number 5. UNFPA Programme Manager's Planning Monitoring & Review Toolkit. Division for Oversight Services August 2004.

Van Balgooy, M.M.J. (1998). *Portraits of tree families*. Vol 2: 307p. Malesian Seed Plants.Nationaal Herbarium Nederland-Universiteit Leiden branch, Leiden.

Van Balgooy, M.M.J. (2001). *Portraits of non-tree families*.Vol 3: 260p.Malesian Seed Plants.Nationaal Herbarium Nederland-Universiteit Leiden branch, Leiden.

ANNEX VIII. BRIEF CV OF REVIEW CONSULTANT

The Mid Term Review (MTR) 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 environmental and coastal management and climate change adaptation. He has a successful mid-term and full review track record with over 6 prominent international projects that have involved the setting and appraisal of project review criteria. This includes work for 3 separate international funding institutes, namely the European Commission (Final Review Projects in Gambia, Maldives and Jamaica), UN organisations such as UNDP (Guyana) and IOC-UNESCO and finally also for DFID in the Caribbean region. He recently also completed a Terminal Review for UN Environment on coastal adaptation within Cambodia during 2017. A brief CV is presented in Annex IX

Key skills and experience

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

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 REVIEW REPORT

Review Title: Enhancing Climate Change Resilience of Rural Communities Living in Protected Areas of Cambodia

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

Rating system for quality of review 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 review report is calculated by taking the mean score of all rated quality criteria.

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

Review process quality criteria	**Compliance**	
	Yes	**No**
Independence:		
1. Were the Terms of Reference finalised by the Review Office?	x	
2. Was the final selection of the reviewer(s) made by the Review Office?	x	
3. Were possible conflicts of interest of the selected reviewer(s) appraised?	x	
4. Was the reviewer contracted directly by the Review Office?	x	
5. Does the report indicate whether the reviewer/ review team was able to work freely and without interference or undue pressure from project staff or the Review Office?	x	
Preparation:		
6. Was the review budget agreed and approved by the Review Office?	x	
7. Was inception report delivered and approved prior to commencing any travel?		x
Timeliness		
8. If a Terminal Review: Was the review initiated within the period of six months before or after project operational completion? Or If a Mid Term Review: Was the review 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 review 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 reviewer(s) in planning and conducting review missions?	x	
14. Did the main project stakeholders provide comments on the draft review report?	x	
Quality assurance:		
15. Were the ToC and key review questions in the review ToR peer-reviewed?	x	
16. Was the quality of the draft report checked by the Review Manager and Peer Reviewer prior to dissemination to stakeholders for comments?	x	
17. Did the Review Office complete an assessment of the quality of the final report?	x	
Transparency		
18. **:** Were the draft ToR and review report circulated to all key stakeholders for	x	

comments?		
19. Was the draft review report sent directly by the reviewer to the Review Office?	x	
20. Did the Review 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 review report sent directly to the Review Office	x	
22. Did the reviewer(s) prepare a response to all comments?	x	
23. Did the Review Office share all comments and reviewer responses with the commentators?	x	
Participatory approach		
24. **:** Was close communication to the Review Office and project maintained throughout the review?	x	
25. Were review findings, lessons and recommendations adequately communicated?	x	

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

ANNEX X. REVIEW OF PROJECT DESIGN

A.	Project Context and Complexity		YES/NO	Comments/Implications for the review design *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	Section Rating[19]: 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, floods and droughts. 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 review 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. AFCPA project is founded on a good baseline analysis (carried out in 2014) with regard to local context, needs, and priorities.	
4	Does the project document include a clear and adequate stakeholder analysis?		No	The stakeholder analysis section is very brief (Section H of the ProDoc) there is no mapping or description of the roles and interests of stakeholders and this remains to be done before the commencement of works after the MTR.	

[19] 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 review 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'

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)*		No	Stakeholders were consulted during the project design though the AFCPA documents all demonstrate a clear analysis of local stakeholder needs and vulnerabilities and these are linked 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 2013. Provinces and project site selection was done in consultation with stakeholders, e.g. selection criteria were decided by stakeholders.	
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 eco-agriculture and forestry 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 for rural areas only (not disaggregated at the national level), there are other outcome indicators that potentially should also have been disaggregated.	
		iii)Indigenous peoples	Yes	The project does aim specifically to support vulnerable ethnic groups within Cambodia and reference is made towards these specific indigenous peoples especially in Mondulkiri Province.	
C	**Strategic Relevance**		**YES/NO**	**Comments/Implications for the review design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 4**
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 (agriculture and forestry) plus protected area issues and needs of Protected Areas at the national and local level (Community Protected Areas), but the relevance of the project in relation to these is clearly spelled out.	
		iii) The relevant AF focal areas, strategic priorities and operational programme(s)? (if appropriate)	Yes	AF strategic long-term objective addressed by the project is climate change adaptation, which is mentioned in the ProDoc. But there is also reference to AF operational programmes.	
		iv) Key SDG[20] goals and targets	Yes	It is briefly mentioned that the project will contribute to relevant SDG establishment. Specific UN	

[20]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).

				SDGs to this project include: 1) No Poverty... 2) No Hunger 5) Gender Equality... 6) Clean Water and sanitation 13) Climate Action 15) Life on Land.	
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 review design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 3**
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.	
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 are not specifically identified for each output, though roles are described jointly per activity, even though not specifically for named partners.	
13	Are the outcomes realistic with respect to the timeframe and scale of the intervention?		Yes	The three outcomes are realistic, but outcome 3 may take longer than anticipated to be realised as policy change processes can take time and be delayed. Likewise, forest enrichment and its intended impact to reduce vulnerability to climate change will need close monitoring over time.	
E	**Logical Framework and Monitoring**		**YES/NO**	**Comments/Implications for the review design**	**Section Rating: 4**

				(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	
14	Does the logical framework	i) Capture the key elements of the Theory of Change/ intervention logic for the project?	No	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 (Tye et al 2014). The review was performed by the PMU and supporting consultants (Maningo 2015) 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 contains milestones. The baseline study (2014) 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.	
19	Has a budget been allocated for monitoring project progress?		Yes	There are allocations for an M&E expert, a baseline assessment, the MTR and the final review.	
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 review design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 5**
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	
22	Are roles and responsibilities within UN Environment clearly defined?		Yes		

			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.	
G	**Partnerships**	**YES/NO**	**Comments/Implications for the review 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. The project has not suffered from the lack of a formal inter-ministerial Steering Group though now the project is starting its final 18 months (from January 2018) it is advisable that improved partnerships and outreach initiatives are set up between key Ministries so they are better aware of the projects findings and successes to date. 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 review design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 4**
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 3 is dedicated to knowledge management which (mostly) will need to be translated into Khymer for ease of outreach. All documents will need to be updated onto a working and functioning project website during the remainder of the project (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	This has been achieved for communication to rural communities and at the Village levels. It is less good (to date) at the District/Provincial Levels. A key focus is now needed 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. An Exit Strategy is required to be produced during Component 3	
I	**Financial Planning / Budgeting**	**YES/NO**	**Comments/Implications for the review design** *(e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)*	**Section Rating: 4**

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 financial spreadsheets received on 23 January 2018 and which are subject to acceptance by the Project Board and UNEP.	
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	No project co-funding is used on this project – all support is from the AF. National budgets to support the ongoing work need to be agreed upon and formally notified as being available after the end of the project. This is a requirement of Component 3 work.	
J	**Efficiency**	**YES/NO**	**Comments/Implications for the review 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 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 eco-agricultural initiatives originally set up by GoC with support from Oxfam. It is thus drawing upon major national and NGO programmes, as well as the existing CC coordination mechanisms. It also draws upon the results of other projects (Oxfam and BCC). 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 CPaA and non CPA areas will lead to improved provision of water-related agricultural eco-system services, which in turn will generate economic benefits for communities within CPA boundaries plus those that are not.	
33	Has the project been extended beyond its original end date? *(If yes, explore the reasons for delays and no-cost extensions during the review)*	No	No comments. There were some delays in the project design and inception phase and as a result a no cost extension is currently being considered.	
K	**Risk identification and Social Safeguards**	**YES/NO**	**Comments/Implications for the review 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 and also annual PPRs. These are not however then replicated into the formal Half Yearly Progress reports which is remiss and needs rectifying.	
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 environmental foot-print? *(including in relation to project management)*	No	The ProDoc specifies that no negative environmental footprint is anticipated.	
L	**Sustainability / Replication and Catalytic Effects**	**YES/NO**	**Comments/Implications for the review 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	Not yet. This is an activity to be undertaken in Component 3 during 2018.	
39	Does the project design present strategies to promote/support scaling up, replication and/or catalytic action?	Yes	Different eco-agricultural and forestry related CCA options are tested within 5 Demonstration CPAs. A national adaptation strategy is another output that will promote replication during 2018.	
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 and water related vulnerabilities. Moreover one expected output is a resource mobilisation strategy.	
M	**Identified Project Design Weaknesses/Gaps**	**YES/NO**	**Comments/Implications for the review 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 XI. REVISED FORMULATION OF PROJECT INDICATORS (FROM MANINGO (2015))

<table>
<tr><th></th><th>Indicators</th><th>Baseline</th><th>Targets</th><th>Means of verification</th></tr>
<tr><td rowspan="2">Objective: Enhance the climate change resilience of communities living around at least three CPA intervention sites, as well as downstream communities, to the climate change-induced hazard of erratic rainfall.</td><td>Obj 1 Percentage change in the climate change vulnerability index at each target CPA.</td><td>The following table shows the current climate change vulnerability index score at each CPA.
<table><tr><th></th><th>Vulnerability index</th></tr><tr><td>ChiorkBoeungprey</td><td>10.4</td></tr><tr><td>ChormThlok</td><td>15.2</td></tr><tr><td>SkorKrouch</td><td>25.8</td></tr><tr><td>Chop Tasok</td><td>12.1</td></tr><tr><td>RonoukKhgneng</td><td>27.6</td></tr></table></td><td>A 20% decrease in the climate change vulnerability index at each target CPA by the end of the project.</td><td>Climate change vulnerability index calculated from the results of household surveys at the end of the project.</td></tr>
<tr><td>Obj 2 Number of project beneficiaries, gender disaggregated, befitting from the project's ecoagriculture interventions.</td><td>No beneficiaries before the start of the project.</td><td>At least 1000 people, 50% of which are women, are benefitting from the project's interventions by the end of the project.</td><td>Register of households who received seedlings, home gardens, improved water supply infrastructure, climate-resilient rice species, and additional adaptation interventions. .

Site visits, once every six months, to confirm the establishment of chamkar-based agroforestry plots and intensified/diversified home gardens.</td></tr>
<tr><td>Outcome 1: Technical expertise and a local enabling framework</td><td>Outcome 1. Change in the capacity of national and local government officials to</td><td>National and local government officials have limited capacity to implement forest restoration and conservation agriculture interventions that build climate</td><td>15 national and local government officials in the Research and Community</td><td>Capacity assessment scorecards.</td></tr>
</table>

	Indicators	Baseline	Targets	Means of verification
for forest restoration and conservation agriculture interventions that build climate resilience developed at CPA intervention sites through a consultative and participatory process.	implement forest restoration and conservation agriculture interventions that build climate resilience.	resilience.	Protected Area Development Department have fully developed capacity to implement forest restoration and conservation agriculture interventions that build climate resilience.	
Output 1.1: Information generated on climate change impacts and preferred ecoagriculture interventions through a consultative and participatory approach.	**1.1.1**Number and type of specialist reports developed for the project – through a participatory approach with local communities where relevant – in the first year.	No specialist reports on climate changes impacts and the preferred ecoagriculture interventions.	At least 6 specialist reports submitted to the PMU by the end of the first year of the project. These reports must include: • 1 x gap analysis (including the results of an institutional mapping exercise); • 1 x multi-use plant species assessment (including identification of climate-resilient indigenous plant species), with results disaggregated by CPA; • 1 x crop variety assessment (including identification of climate-resilient crop varieties), with results disaggregated by CPA; • 1 x planting schedule (based on useful plant species assessment); • 1 x improved rice variety assessment report; and • 1 x hydrological	Number and content of specialist reports.

	Indicators	Baseline	Targets	Means of verification
			assessment report (including water challenges, potential water sources and proposed interventions), with results disaggregated by CPA.	
	1.1.2 Number of MSc research projects on ecoagriculture initiated at a local university.	No MSc research projects on ecoagriculture in Cambodia.	At least 5 MSc projects on ecoagriculture initiated at local universities over the duration of the AF project.	Number and content of MSc research reports.

	Indicators	Baseline	Targets	Means of verification
Output 1.2: Economic assessments undertaken to identify most appropriate ecoagriculture interventions and associated micro-finance and insurance products.	**1.2.1**Number and type of economic assessment reports developed for the project – through a participatory approach with local communities where relevant – in the first year.	No economic assessment reports on the preferred ecoagriculture interventions and associated micro-finance/insurance products.	At least 5 economic assessment reports submitted to the PMU by the end of the first year of the project. These reports must include: • 1 x report identifying locally available weather index-based insurance and micro-finance products; • 1 x market assessment of micro-finance opportunities for farmers at CPA intervention sites (including potential business plans for such products); • 1 x local agricultural market assessment; • 1 x cost-benefit analysis of potential crop/tree species to be planted; and • 1 x socio-economic assessment of proposed ecoagriculture approaches.	Number and content of specialist reports.
Output 1.3: Forest restoration and conservation agriculture protocols developed for CPA intervention sites based on results from Output 1.1 and 1.2.	**1.3.1**Number and type of technical protocols – informed by output 1.1 – for ecoagriculture interventions developed in the second year of project.	There are no formal, technical protocols specific to the ecoagriculture approaches and project sites proposed by the AF project.	At least 5 technical protocols (1 per CPA) for the preferred ecoagriculture interventions submitted to the PMU in the second year of the project. These reports must include protocols for: • restoration; • *chamkar*-based	Number and content of technical protocols.

	Indicators	Baseline	Targets	Means of verification
			agroforestry; • home garden establishment; • planting useful species around *chamkar*; • growing climate-resilient rice; and • implementing additional activities.	
Outcome 2: Multi-use forests established and maintained and agricultural practices diversified/intensified to supply a diverse range of food and stabilize topsoil, despite an increase in climate change-induced droughts and floods.	**Outcome 2** Number of households that have benefited from chamkar-based agroforestry plots and intensified/diversified home gardens at the target CPAs.	No chamkar-based agroforestry plots have been established at the five target CPAs. There is 1 intensified/diversified home garden at Chop Tasok. There are no intensified/diversified home gardens at the other four target CPAs. Therefore only 1 household has benefited an intensified/diversified home garden.	1000 households have benefited from chamkar-based agroforestry plots and 800 households have benefited from intensified/diversified home gardens at the target CPAs by the end of the project.	Register of households who received seedlings. Site visits, once every six months, to confirm the establishment of *chamkar*-based agroforestry plots and intensified/diversified home gardens. Field surveys, at mid-term and end of project, to measure the diversity of a sub-sample of *chamkar*-based agroforestry plots and intensified/diversified home gardens.

	Indicators	Baseline	Targets	Means of verification
Output 2.1: Capacity of local community for building climate resilience increased, including capacity to plan, implement and maintain ecoagriculture interventions under Output 2.2.	**2.1.1** Number of CPA Management Committees, local authority members and agricultural extensions officers located throughout Cambodia trained on climate change and ecoagriculture interventions.	There has been no formal training encompassing the full ecoagriculture approach preferred by the AF project.	**Mid-term:** At least 30 CPA Management Committees; 10 local authorities members; and 5 agricultural extension officers throughout Cambodia trained on climate change and ecoagriculture interventions over the duration of the AF project. **End of project:** At least 60 (i.e. 50%) CPA Management Committees; 20 local authority members; and10 agricultural extension officers throughout Cambodia trained on climate change and ecoagriculture interventions over the duration of the AF project.	Reports detailing training workshops, including an attendance register.

	Indicators	Baseline	Targets	Means of verification
	2.1.2 Number of CPA community members, gender disaggregated, at project intervention sites trained on climate change and ecoagriculture interventions.	There has been no formal training encompassing the full ecoagriculture approach preferred by the AF project.	**Mid-term:** A total of at least 1250 CPA community members (30% of which should be women) trained on climate change and ecoagriculture interventions. **End of project:** A total of at least 2500 CPA community members (30% of which should be women) trained on climate change and ecoagriculture interventions.	Reports detailing training workshops, including a gender-disaggregated attendance register.
	2.1.3 Number of patrolling committees established/strengthened.	1 formal patrolling committee at RonoukKhgneng.	4 patrolling committees established (ChiorkBoeungprey, ChormThlok, SkorKrouch and Chop Tasok) and 1 patrolling committee strengthened (RonoukKhgneng).	Interviews with CPA Management Committees once every six months. Half-yearly patrolling reports.
	2.1.4 Annual number of transgressions in each CPA between July 2014 and the end of the AF project.	1 incidence in 2012–2013 at RonoukKhgneng. No reliable data on the current incidence of transgression was available for the remaining four CPAs. The baseline number of transgressions per year in each CPA will be measurable once patrolling committees have been established in each CPA.	At least a 40%[21] reduction in the annual number of transgressions in each CPA between July 2014 and the end of the AF project.	Interviews with CPA Management Committees once every six months. Half-yearly patrolling reports.

[21] This target may be adjusted through a process of adaptive management during project implementation.

	Indicators	Baseline	Targets	Means of verification
Output 2.2: Forest restoration and conservation agriculture protocols implemented to build climate resilience (developed in Component 1) in CPA intervention sites.	**2.2.1**Number of community-managed nurseries established at project intervention sites.	No functioning nurseries at any of the five CPAs.	At least 3 nurseries established during the first year of the AF project, including: • 1 in Boeungper, • 1 in Phnom Kulen; and • 1 in Phnom Prech.	Site visits to confirm nursery establishment.
	2.2.2 Number of qualified community-liaison planting officers contracted to assist with implementation of project activities at intervention sites.	0 community liaison planting officers have been contracted.	10 community liaison planting officers contracted in the first year, including: • 4 in Boeungper, • 3 in Phnom Kulen; and • 3 in Phnom Prech.	Interviews with the Project Management Unit (PMU). Review of employment contracts.
	2.2.3 Hectares of degraded forest within target CPAs restored.	No forest restoration has taken place at the five target CPAs.	At least 30 ha of degraded forest restored in ChormThlok CPA before the end of the project.	Site visits, once every six months, to confirm that restoration has taken place. GIS mapping (based on GPS waypoints collected during site visits) to determine the size of the restored area at end of project.
	2.2.4 Number of intensified/diversified home gardens established at the target CPAs.	There is 1 intensified/diversified home garden at Chop Tasok. There are no intensified/diversified home gardens at the other four target CPAs.	**Mid-term:** 300 intensified/diversified home gardens established at the five target CPAs. A diversified/intensified home garden should include at least 20 species, of which: i) at least 5 are indigenous fruit/soil-binding tree species; and ii) at least 8 are	Register of households who received seedlings for home gardens. Site visits, once every six months, to confirm the establishment of intensified/diversified home gardens.

	Indicators	Baseline	Targets	Means of verification
			different vegetable species. Furthermore, the species planted within the home garden should be representative of at least 4 different canopy layers (emergent, canopy, understory, shrub and herb). **End of project:** 800 intensified/diversified home gardens established at the five target CPAs. A diversified/intensified home garden should include at least 20 species, of which: i) at least 5 are indigenous fruit/soil-binding tree species; and ii) at least 8 are different vegetable species. Furthermore, the species planted within the home garden should be representative of at least 4 different canopy layers (emergent, canopy, understory, shrub and herb).	Field surveys, at mid-term and end of project, to measure the diversity of a sub-sample of intensified/diversified home gardens.
	2.2.5 Percentage of households at each CPA growing climate-resilient rice.	No households in any of the CPAs are growing climate-resilient rice varieties.	**Mid-term:** 5% of households at each CPA growing climate-resilient rice varieties introduced by the AF project. **End of project** 15% of households at each	Register of households who received climate-resilient rice varieties. Site visits, once every six months, to confirm the establishment of climate resilient rice

<table>
<tr><th></th><th>Indicators</th><th>Baseline</th><th>Targets</th><th>Means of verification</th></tr>
<tr><td></td><td></td><td></td><td>CPA growing climate-resilient rice varieties introduced by the AF project.</td><td>trials.</td></tr>
<tr><td></td><td>2.2.6Proportion of households in the five target CPAs that report an improvement in i) access to water; ii) access to new seed varieties; and iii) access to improved rice storage techniques, as a result of additional interventions.</td><td>The following table shows the current methods of accessing water for domestic use in the five target CPAs:

<table><tr><th>Domestic water use (% of households)</th><th>River/ lake</th><th>Bore-hole</th><th>Public pipe</th><th>Rain-water</th></tr><tr><td>ChiorkBoeungprey</td><td>0</td><td>63</td><td>13</td><td>25</td></tr><tr><td>ChormThlok</td><td>0</td><td>96</td><td>4</td><td>0</td></tr><tr><td>SkorKrouch</td><td>0</td><td>87</td><td>0</td><td>13</td></tr><tr><td>Chop Tasok</td><td>60</td><td>6</td><td>88</td><td>0</td></tr><tr><td>RonoukKhgneng</td><td>56</td><td>0</td><td>31</td><td>13</td></tr></table>
The percentage of farmers who irrigate their crops is:
• 0% at ChiorkBoeungprey;
• 12% at ChormThlok;
• 6% at SkorKrouch;
• 6% at Chop Tasok; and
• 19% at RonoukKhgneng.

No climate-resilient rice seeds have been introduced at the five target CPAs.

No households at ChormThlok or Chop Tasok have access to improved rice storage techniques.</td><td>Mid-term:
50 % of households in the five target CPAs report an improvement in i) access to water; and ii) access to new seed varieties as a result of additional interventions.
50% of households in ChormThlok and Chop Tasok report an improvement in access to improved crop storage techniques as a result of additional interventions.

End of project:
80% of households in the five target CPAs report an improvement in i) access to water; and ii) access to new seed varieties as a result of additional interventions.
80% of households in ChormThlok and Chop Tasok report an improvement in access to improved rice storage techniques as a result of additional interventions.</td><td>Site visits, once every six months, to confirm the establishment of dams/ponds.

Interviews with community members to confirm that they have received new seed varieties and storage techniques.

Household surveys of community members, at mid-term and end of project, that include questions about access to water, new seed varieties and improved storage techniques.</td></tr>
<tr><td>Output 2.3: Local communities’</td><td>2.3.1Number of sustainable alternative livelihood</td><td>No sustainable alternative livelihood strategies have been developed by experts at any of the five target</td><td>At least 3 alternative livelihood strategies</td><td>Specialist reports.</td></tr>
</table>

	Indicators	Baseline	Targets	Means of verification
livelihoods enhanced and diversified through sustainable development of NTFPs and the promotion of sustainable alternative livelihood strategies.	strategies developed – through a participatory approach with local communities where relevant – through the project.	intervention sites.	developed per CPA by consultants contracted by the AF project. These will include: Micro-finance insurance products and small-scale businesses for NTFPs identified in Component 1.	Interviews with CPA Management Committee once every six months. Household surveys, at mid-term and end of project, including questions regarding sustainable alternative livelihoods.
	2.3.2 Percentage of target households adopting sustainable alternative livelihood strategies (disaggregated by gender).	34% of household at ChormThlok and 45% of households at SkorKrouch derive income from labor. 43% of households at RonoukKhgneng derive income from livestock sales. 14% of household at ChormThlok, 12% of households at Chop Tasok and 31% at RonoukKhgneng derive income from NTFP products. < 10% of households at all CPAs derives income from any other sources.	**End of project:** 25% of households in the five target CPAs have adopted at least 1 sustainable alternative livelihood strategy or alternate source of income developed by the AF project. At least 30% of the beneficiaries of these alternative livelihood strategies should be women.	Household surveys, at mid-term and end of project, including questions regarding sustainable alternative livelihoods.
Output 2.4: Socio-economic and ecosystem monitoring of AF project impacts downstream of CPA intervention sites	**2.4.1**Number of socio-economic and ecological monitoring reports and research protocols (for project duration and long-term) developed to measure impacts of the project: i) in the intervention sites; and ii) downstream of the intervention sites.	No formal specialist reports on socio-economic and ecological monitoring developed.	**Mid-term:** • At least 1 research/monitoring tool developed and implemented to measure the impact of AF project interventions in downstream communities. • At least 5 ecological and socio-economic baseline monitoring reports (1 per CPA).	Number and content of specialist reports. Number and content of monitoring reports.

	Indicators	Baseline	Targets	Means of verification
			End of project: • Research/monitoring tool to measure the impact of AF project interventions in downstream communities implemented at least 3 times. • At least 10 ecological and socio-economic monitoring reports (2 per CPA, 1 for baseline values and 1 for end of project).	
Outcome 3: Restoration and conservation agriculture interventions to build climate resilience of local communities mainstreamed into Cambodia's adaptation framework and related sector policies.	**Outcome 3** No., type, and sector of policy revisions to address climate change risks proposed.	No proposed revisions to integrate climate change and ecoagriculture into agricultural, forestry and development policies, strategies and plans.	At least 3 revisions to incorporate climate change and ecoagriculture into relevant environmental, agricultural, forestry and/or development policies/plans proposed by the end of the AF project.	Review of specialist reports and proposed policy revisions. Review of relevant policies.
Output 3.1: Awareness increased at a local level of the importance of ecoagriculture for protecting and enhancing commercial and subsistence activities.	**3.1.1** Number of 'events' held and/or products developed to raise awareness on climate change and the benefits of adaptive agricultural techniques.	No previous 'events' to raise awareness, and no existing use of the ecoagriculture approach in Cambodia.	**Mid-term:** At least 14 'events' conducted and/or products developed to raise awareness of climate change and ecoagriculture, including workshops, campaigns, education initiatives at schools/universities and a	Workshop reports and attendance registers. Campaign reports. Education initiatives reports. Existence of web-

<table>
<tr><th></th><th>Indicators</th><th>Baseline</th><th>Targets</th><th>Means of verification</th></tr>
<tr><td></td><td></td><td></td><td>web-based data network portal.

End of project:
At least 28 ‘events’ conducted and/or products developed to raise awareness of climate change and ecoagriculture, including workshops, campaigns, education initiatives at schools/universities, a web-based data network portal and a documentary film.</td><td>based data portal.</td></tr>
<tr><td></td><td>3.1.2Percentage change in the climate change awareness index and understanding of ecoagriculture in the target communities.</td><td>The following table shows the current values for the climate change awareness index at each CPA (based on the results of the household survey).

<table><tr><th>CPA</th><th>Climate change awareness index</th></tr><tr><td>ChiorkBoeungprey</td><td>16%</td></tr><tr><td>ChormThlok</td><td>10%</td></tr><tr><td>SkorKrouch</td><td>30%</td></tr><tr><td>Chop Tasok</td><td>12%</td></tr><tr><td>RonoukKhgneng</td><td>42%</td></tr></table>
The following table shows the percentage of households at each CPA that understand the concept of ecoagriculture.
<table><tr><th></th><th>Concept understood</th></tr><tr><td>ChiorkBoeungprey</td><td>6%</td></tr><tr><td>ChormThlok</td><td>4%</td></tr><tr><td>SkorKrouch</td><td>6%</td></tr></table></td><td>Mid-term:
• Average awareness index score of 30% at the five target CPAs.
• 30% of community members at the five target CPAs understand the concept of ecoagriculture.

End of project:
• Average awareness index score of 50% at the five target CPAs.
• 50% of community members at the five target CPAs understand the concept of ecoagriculture.</td><td>Climate change awareness index calculated from the results of household surveys, at mid-term and end of project.</td></tr>
</table>

	Indicators	Baseline	Targets	Means of verification
		Chop Tasok 0% RonoukKhgneng 0%		
	3.1.3 Number and type of REDD+ feasibility studies and Project Idea Notes (if applicable).	No REDD+ feasibility study that investigating the potential to integrate/promote ecoagriculture or species from multi-use forests into REDD+ projects exists.	At least 1 REDD+ feasibility study and Project Idea Note (if applicable) investigating the potential to integrate/promote ecoagriculture or species from multi-use forests into REDD+ projects developed in the first year of the AF project.	Number of content of specialist reports.
Output 3.2: Ecoagriculture activities promoted through institutional capacity building and proposed revisions to policies, strategies and legislation.	3.2.1 Number of CPA management plans developed/revised to incorporate the ecoagriculture approach.	RonoukKhgneng and ChiorkBoeungprey (due to be revised) have CPA management plans, but they do not include strategies for the implementation of maintenance of ecoagriculture interventions. CPA management plans have yet to be developed for ChormThlok, SkorKrouch and Chop Tasok.	At least 5 CPA management plans developed/revised to incorporate the ecoagriculture approach by the end of the AF project.	Review of CPA Management Plans for each of the five CPAs. Interviews with CPA management committees.
Output 3.3: National ecoagriculture upscaling strategy developed and institutionalized for CPAs in Cambodia.	**3.3.1**Number of national ecoagriculture upscaling strategies developed.	No national ecoagriculture upscaling strategy exists in Cambodia.	1 national ecoagriculture upscaling strategy developed by the end of the AF project.	Number and content of specialist reports.

ANNEX XII. KEY PROJECT STAKEHOLDER ANALYSIS (TO BE UPDATED BY THE AFCPA DURING COMPONENT 3)

Stakeholder	Responsibility/Role	Interest / Role in the Project	Influence (H/M/L)	Engagement (H/M/L)	Capacity and Constraints
Ministry of Environment (MoE)	The Government of Cambodia (GoC) 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). Since the start of the project, it is understood that the GoC has ceased granting ELCs, and this has further reduced this risk. 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 and the implementation of CPAs. They play the pivotal role in the project.	H	H	The CCD 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 (MAFCPAF)	The Ministry of Agriculture, Forestry and Fisheries (MAFCPAF) 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 the CCTT.	MAFCPAF is implementing a programme to Enhancing Climate-Resilient Agriculture and Food Security' in partnership with the Ministry of Environment with the support of the PPCR. They play a supporting role in the project though this should be scaled up during 2018 in	H	H	The Agriculture Directorate informed that the current MAFCPAF 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 deforestation. Diminishing soil quality due to floods and soil intrusion, were also noted. The Directorate showed an interest for future potential collaboration with the project during the Inception Phase .

		the view of the MTR.			
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. 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. They play a supporting role in the project.	L	L	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 (ADB) and the World Bank (WB).	The MEF is the focal point for the PPCR , for example. They play a supporting role in the project.	H	L	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 and Construction (MLMUPC)	Ministry of Land Management Urban Planning and Construction (MLMUPC) discussed the action plan developed in collaboration with Japan International Cooperation Agency (JICA), and Danish International Development Agency (Danida)..	Natural resource management maps and land use maps were also produced at the local level. At the provincial level, MLMUPC produced maps of sensitive or hot spot areas that should be protected from development. They play a supporting role in the project.	H	H	Local officers require training on utility of land use maps in the planning 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. They play a supporting role in the project.	L	L	To be determined by AFCPA (Component 3)
Ministry of Public Work and Transportation	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	MPWT have showed an interest in the project, At the time of writing, no	M	M	Additionally, MPWT started in 2015 a feasibility study on wastewater management in Kep province with a Korean

(MPWT)	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.	details on this are able to be presented with any authority from the Reviewer.			loan, and an environmental master plan on wastewater management, water supply, air quality and solid waste in Phnom Penh, Siem Reap.
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 Cambodia.	At the time of writing, no details on this are able to be presented with any authority from the Reviewer. They play an important supporting role in the project.	H	H	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 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. They play a supporting role in the project though this should be scaled up during 2018 in the view of the MTR.	H	H	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.	NCDM confirmed that rural areas in Cambodia (including all CPAs) still lack warning systems; the fact that local communities do not have radios/TVs make the situation worse since alert messages cannot reach them through those means.	M	L	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 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	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.
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	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 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 AFCPA 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	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).