Mid-term Review of Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin, Cambodia (CoWES Project)

FINAL REPORT

GEF ID number: 4945; PIMS ID 5944, Atlas Project ID/Award ID number: 00090509



Prepared by: Alan Ferguson, Regional Consulting Ltd.

Prepared for: UNDP Cambodia and Ministry of Agriculture, Forestry and Fisheries, Royal Government of Cambodia

March 2, 2019

Table of Contents

Exec	utive Sur	nmary	. iv
1.	Intro	duction	. 1
	1.1	Purpose	. 1
	1.2	Scope of work and methodology	. 2
	1.3	Key issues for the evaluation	. 4
2.	Project	Context	. 5
	2.1	Development context	. 5
	2.2	Problems to be addressed	. 10
	2.3	Project description and strategy	. 11
	2.4	Implementation arrangements	. 14
	2.5	Project stakeholders	. 14
3.	Finding	S	. 16
	3.1	Project Strategy	. 16
		3.1.1 Theory of change and key assumptions	. 16
		3.1.2 Project results framework and indicators	. 17
		3.1.3 Challenges and issues noted by the project team	. 19
	3.2	Progress towards Results	. 20
		3.2.1 Outcome 1 – On-farm soil conservation and agroforestry	
		practices	. 21
		3.2.2 Outcome 2 – Community forests restored and sustainably managed	22
		2.2.2 Outcome 2. Watershed management & monitoring canacity	. 25 24
		3.2.4 Overall progress toward achieving the project objective	. 24
		3.2.5 Critical factors and barriers to achieving the expected results	. 25
	2 2	Project Implementation and Adaptive Management	27
	5.5	3.3.1 Project management	. 27
		3.3.2 Annual work planning	. 29
		· =	

		3.3.3 Finance and co-financing	29
		3.3.4 Stakeholder engagement	33
		3.3.5 Communications and outreach	
		3.3.6 Risk management	
		3.3.7 Gender and inclusiveness aspects	35
		3.3.8 Project monitoring and reporting	35
	3.4	Project Sustainability	
			20
4.	Conclus	sions and Recommendations	
	4.1	Conclusions	
	4.2	Recommendations	40
	4.2		40
	4.3	2019-2020 workplan Advice	

List of Figures

Figure 1	Upper Stung Prek Thnot watershed	7
Figure 2:	CoWES Project Communes Kraing Deivay, Ta Sal, Trapang Chour	7
Figure 3	Project Theory of Change	12
Figure 4:	Suggested project implementation 2019-2020	29

List of Tables

Table 1	CoWES Project Field Activities	13
Table 2	Project Stakeholders	15
Table 3	Capacity Development (CD) Measurement and Results	18
Table 4	Progress toward Project Outcomes	20
Table 5	ELCs in the CoWES project area	22
Table 6	Total project budget and expenditures by project activity, 2017–2018	31
Table 7	2018 Project Budget and Expenditures	32
Table 8	Funds Received and Balance as of December 31, 2018	33
Table 9	Co-financing Commitments	33

Annexes

1.	Annex 1: GEF Midterm Results Tracker, Progress towards Results Matrix	. 47
2.	CoWES Project Results Framework – Progress to January 2019	. 49
3.	Evaluation Matrix	. 54
4.	Interview Guide	. 58
5.	MTR Terms of Reference	. 60
6.	MTR Mission Schedule	. 72
7.	List of Documents	. 74
8.	List of Persons Interviewed	. 75
9.	Summary of Training	. 76
10.	Signed UNEG Code of Conduct form	. 80
11.	Signed MTR final report clearance form	. 81
12.	Audit trail from received comments on draft MTE report (separate)	

Project Title	Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin, Cambodia	
GEF Implementing Agency:	United Nations Development Programme (UNDP)	
Implementing Partner:	Ministry of Agriculture, Forestry and Fisheries (MAFF)	
Responsible Parties:	Kampong Speu Provincial, District, village, and commune level governments, NCSD-DCC, MoWRAM, MLMUPC, MOWA	
Project Duration:	June 2017 – June 2020	
Atlas Award ID:	00090509	
Project ID:	00096237	
UNDP-GEF PIMS ID:	5944	
GEF ID:	4945	
Management Arrangements:	National Implementation Modality (NIM)	
Budget:	GEF Trust Fund: \$1,100,917 USD	
Co-Financing:	Government parallel: \$240,000 UNDP/TRAC cash: \$ 150,000 Total Co-financing: \$390,000	
Target Areas:	In Kampong Speu province, Districts of Aural and Phnum Sruoch, and Communes of Krang De Vay, Ta Sal and Trapang Chour in the Prek Thnot watershed, part of the Southern Cardamom Mountain Range in Cambodia	

Executive Summary

The project seeks to promote sustainable land management and to stabilize watershed catchment functions of Upper Prek Thnot River in Aoral and Phnum Sruoch Districts of Kampong Speu Province of Cambodia, two districts identified as priority degraded areas. There are three planned outcomes related to (1) improved on-farm soil conservation and agroforestry practices, (2) community forest areas restored and sustainably managed, and (3) watershed management and monitoring capacity improved.

The project has had a difficult history in getting launched, having had significant delays in the original transfer of the project from ADB, a national election, and flooding problems that affected access to remote areas. In addition, the project document has high aspirations for major change in watershed management arrangements in conjunction with the approval of Cambodia's National Action Plan to Combat Land Degradation, which was only approved in early 2018. A major inception phase update of the project occurred from September 2017 to February 2018, proposing targeted piloting of a landscape-based approach to SLM in Upper Prek Thnoat watershed. The experience since then suggests that expectations have been downsized even further and made conditional on approval and activation of the National Subcommittee on Watershed Management under the NAP which may take another year to occur. The challenges of inter-sectoral coordination led by MAFF and land management initiatives in an area with major deforestation pressures and extensive Economic Land Concessions

present significant constraints for the CoWES project. Nevertheless, the project has productively focused on actions at the local level to protect community forests, to develop sustainable livelihoods as alternatives to forest exploitation, and to increased awareness within government and communities about watershed management and Sustainable Land Management (SLM). *Mlub Baitong*, (MB) the partner NGO, has been instrumental in generating results on the ground.

The MTR ratings below provide a short summary of project performance as per the UNDP/GEF rating system.¹

Measure	MTR Rating	Achievement Description
Project Strategy	N/A	The basic strategy is to develop sustainable livelihoods (primarily through small scale irrigation and community forestry) that offer an alternative to current forest exploitation and to strengthen local management of community forests and protected areas. Demonstration of SLM methods and capacity building for watershed management are also part of the strategy, with less apparent progress.
Progress Towards Results	Objective Achievement Rating: <i>Moderately</i> <i>Unsatisfactory</i> <i>(MU)</i>	Contribution to the objective – progress toward "restore and maintain forest cover and watershed stability" has commenced at local sites where community involvement has been generated with the help of the project NGO partner (<i>Mlub Baitong</i>) but not evident from an overall landscape or sub-basin perspective where loss of forest cover and watershed degradation remain major issues with little signs of improvement at mid-term.
	Outcome 1 Achievement Rating: <i>Moderately</i> Satisfactory (MS)	Model farmers in each of the three pilot communes have effectively demonstrated the benefits of engaging in irrigated farming. These farming systems need to now reach other households, which depends upon enhancing water supply in the communities and expanding the training and opportunity. Adoption of improved SLM practices outside of the villages and on Economic Land Concessions operations also requires further progress.
	Outcome 2 Achievement Rating: Satisfactory (S)	One Community Forest and two Community Protected Areas have been strengthened with enhanced capacity of local committees, new management plans and initial development of alternative sustainable livelihoods and non-timber forest products within the forests/CPAs.

MTR Ratings & Achievement Summary:

¹ UNDP, Guidance for Conducting Mid-term Reviews of UNDP-supported GEF-financed Projects, 2014, P.16

	Outcome 3 Achievement Rating: Unsatisfactory (U)	The expected development of watershed management and monitoring capacity has focussed on improving awareness, completing an economic valuation study and ethnographic study, training in micro-watershed analysis, and a baseline survey. Outcome-level results are limited. A 'roadmap' for advancing and monitoring watershed management was produced but the planned watershed 'collaborative program' has yet to emerge.
Project	Rating:	Given the complexity of introducing collaborative
Implementation	Moderately	watershed management, the overly ambitious design
& Adaptive Management	Satisfactory (MS)	promises and the external factors affecting start-up, the project management has been responsive to the need for longer inception, and concerns about delays and issues at the field level. The one year delay has been a major negative factor on performance but the concentrated effort in 2018 to ramp up deliverables has been laudable.
Sustainability	Moderately Likely (ML)	Without more certainty about NAP implementation and MAFF commitment to developing a results-oriented strategy for Upper Prek Thnoat watershed, the prospects for landscape scale management action are relatively low. The work at the community level however, offers more hope of sustaining local results and expanding the opportunities to encourage less dependence on forest logging. The extent to which local committees can be strengthened over the next year will determine long term potential to sustain the local results.

S - The objective/outcome is expected to achieve its end-of-project targets with only minor shortcomings
 MS - The objective/outcome is expected to achieve its end-of-project targets with significant shortcomings
 MU - The objective/outcome is expected to achieve its end-of-project targets with major shortcomings
 U - The objective/outcome is expected to not achieve its end-of-project targets

MS – Implementation of some of the seven management components is leading to efficient and effective project implementation and adaptive management with some components requiring remedial action. ML - Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Midterm Review

MTR Conclusions

The CoWES project has assisted local authorities (district, commune) to integrate SLM provisions into development plans, strengthen community forest protection, enhance water supply and introduce farming practices and livelihoods that reduce the unsustainable exploitation of forests. The water supply development is important for new agricultural livelihoods that depend upon small scale irrigation such as vegetable and mushroom farming as alternatives to logging activities which currently predominate in the pilot communes.

Significant progress has been made under Outcome 1 to mainstream and demonstrate suitable SLM practices of small holder farmers. However, further progress is needed to expand these activities beyond model farmers, to complete the water supply systems, and to demonstrate the micro-watershed management concept at the local level along with promoting the potential for SLM practices on Economic Land Concession (ELC) lands.

Progress under Outcome 2 has also been substantive, focusing on re-activating one Community Forest and strengthening/expanding two Community Protected Areas. Sustainability is a concern for these committees.

Progress under Outcome 3 has included completion of various studies and mapping, a strategic 'roadmap' for watershed management action, and support for NAP approval and the pending Sub-national Watershed Management Committee. However, the expected results related to "improved watershed management and monitoring capacity" may not be achievable within the project period (to June 2020).

Overall, the project is currently making reasonable progress on outputs at the local level despite the delays during the first year and constraints on collaboration with ELCs and on establishing a watershed management framework. The CoWES project team and Mlub Baitong (NGO partner) are working diligently to speed up implementation.

Intensive management and monitoring over the remaining project period will greatly assist in ramping up deliverables. But the question still remains whether a collection of small-scale capacity building and physical activities, while providing important benefits to poor, water-scarce households, can also push watershed management in Upper Prek Thnoat toward a more sustainable future. Advice on 2019-2020 workplan activities is provided in section 4.3 of the report.

The key challenges for project implementation involve:

- Delays in the start-up inception and first year activities put the project behind schedule;
- Inadequate budget for water supply development necessary for livelihoods development
- Difficulties finding accessible community water sources to address dry season shortages
- Uncertain dissemination and uptake of irrigated farming as an alternative livelihood
- Access to markets to sell new vegetable production needs to be improved
- Development of sustainable forest livelihoods that can support forest conservation
- Insufficient demonstration of larger scale micro-watershed soil and water interventions
- Enhancing the capacity and leadership to sustain local CF/CPA committees for ongoing forest protection and maintaining community water supply
- Difficulties engaging ELCs in watershed management issues as per Output 1.3
- Lack of a policy and legal framework to initiate watershed management in Outcome 1.3

Recommendations

The MTR recommendations are presented below, numbered by priority. Rationale and detail for each of these recommendations are provided in section 4.2.

Rec #	Recommendation	Responsible Party
Outco	me 1:	
1.	The CoWES project team should, as a matter of priority, review the scope of work and budget for the community water supply infrastructure being constructed by the project. The total project budget to effectively complete the three community water systems needs to be increased to a minimum of \$50,000 USD.	CoWES project team
2.	The CoWES project team should immediately identify a demonstration micro-watershed and initiate a set of soil and water conservation measures and related training aimed at stream rehabilitation and stabilization with the participation of ELCs and local authorities.	CoWES project team
Outco	me 3:	
3.	DARLM should provide technical guidance on Upper Prek Thnot watershed management that will assist MAFF in preparation for the program to be initiated by the NAP Sub-national Watershed Management Committee.	MAFF, Dept. of Agricultural Resource and Land Management
	Project Implementation & Adaptive Management:	
4.	The CoWES project team should update the workplan, budget and implementation arrangements to accelerate progress on a clear set of field activities with a focus on (i) alternative livelihoods development, (ii) soil and water conservation demonstrations, and (iii) sustaining community forest and water supply management committees.	CoWES project team
5.	The Project Board should invite the Kampong Speu Department of Water Resources and Meteorology to join the project and to provide technical review and advice on the water storage structures being constructed by the project.	Project Board
6.	The Project Board should seek extension of the project period by at least three months to capture the 2020 planting season, and to plan for this extension in the updated workplan.	Project Board

7.	The CoWES project team should organize monthly meetings with MAFF/DARLM and MB to review workplan implementation progress, to identify any issues that need the attention of UNDP or senior government officials, and to improve overall communications.	CoWES project team
8.	The CoWES project team should refine the monitoring and reporting based on a core set of relevant Outcome indicators (see suggested indicators).	CoWES project team
Sustai	nability:	
9.	The CoWES project team should distribute Information on the project, NAP status and the watershed management concept to senior officials at Provincial, District, commune offices and the major EC agri-business companies in the project areas in order to promote awareness of watershed management. A quarterly e-newsletter should be considered.	CoWES project team

Acronyms

ADB	Asian Development Bank
AEA	Agro-ecosystem Analysis
ANR	Assisted natural regeneration
APFNet	Asia-Pacific Network for Sustainable Forest Management and Rehabilitation
ASPIRE	Agriculture Services Programme for Innovation, Resilience and Extension
CD	Capacity development
CFs	Community Forests
CLIP	Community livelihood improvement plan
CoWES	Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin
CPA	Conservation Protected Area (MoE)
DARM	Department of Agricultural Land Resource Management
DWRM	Department of Water Resources and Meteorology
ELC	Economic Land Concessions
FA	Forestry Administration
GEF	Global Environment Facility
GIS	Geographic information system
HACT	Harmonized Approach to Cash Transfer
KM	Knowledge Management
LW	Living with Dignity (formerly Lutheran World Federation)
M&E	Monitoring and Evaluation
MAFF	Ministry of Agriculture, Forestry and Fisheries
MoWA	Ministry of Women's Affairs
MB	Mlub Baitong (NGO)
MoWRAM	Ministry of Water Resources and Meteorology
NAP	National Action Plan to Combat Land Degradation
NCDD	National Committee for Sub-national Democratic Development
NCSD	National Council for Sustainable Development
NIM	National Implementation Modality
NPP	Net Primary Productivity
NTFP	Non-timber forest products
PDAFF	Provincial Department of Agriculture, Forestry and Fisheries
PDWRM	Provincial Department of Water Resources and Meteorology
PIR	Project Implementation Report
RGC	Royal Government of Cambodia
RTA	UNDP Regional Technical Adviser
SWMC	Sub-national Watershed Management Committee.
SLM	Sustainable Land Management
UNDP	United Nations Development Programme

1. <u>Introduction</u>

1.1 Purpose

Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin (CoWES) is a UNDP-supported Global Environment Facility (GEF)-financed project for promoting sustainable land management and to stabilizing watershed catchment functions in Aoral and Phnum Sruoch Districts of Kampong Speu Province of Cambodia. The area has been identified as a priority by Cambodia's National Action Plan to Combat Land Degradation 2017 – 2026.

The project is funded by the GEF Trust Fund (\$1,100,917), UNDP (\$150,000), and government in-kind co-financing (\$240,000 USD). It is a three-year project which commenced in May 2017 and will end by June 2020.

The purpose of the Mid Term Review (MTR) is to assess the project's performance since the beginning of its implementation and to provide advice and direction for the remaining 15 months of the project. The MTR is an independent review, prepared in accordance with GEF/UNDP guidelines, of the progress made in achieving expected project outcomes; the relevance, effectiveness, efficiency and timeliness of project implementation; the issues requiring decisions and actions; and the lessons learned about project design, implementation and management as well as potential for sustainability. The MTR aims to provide a balanced, evidence-based review of the project activities, outputs and performance to date, drawing upon review of available reports and compiling quantitative and qualitative information through interviews, group discussions and site visits.

CoWES project was originally designed by Asian Development Bank within GEF-5 cycle and endorsed by GEF CEO in July 2014. The project was later transferred to UNDP with approval from GEF Secretariat in July 2016. The project underwent a lengthy revision in consultation with the government agencies and other stakeholders. The project document was signed by UNDP and the implementing partner (IP) - Ministry of Agriculture, Forestry and Fisheries (MAFF) on 30 June 2017. Delays have been attributed to the 2018 election and time required to establish the NAP committees, and to understand and revise the Results Framework.²

1.2 Scope of work and methodology

The MTR complies with the GEF and UNDP Monitoring and Evaluation Policy, and UNDP Evaluation Guidance for GEF-Financed Projects (2011). The evaluation

² UNDP/GEF, 2018 Project Implementation Report, p. 15/17.

components, criteria and questions are presented in the Terms of Reference (Annex 5) provided by UNDP Cambodia. It seeks to compare the baseline conditions to current conditions in relation to the expected results in the Project Document.

The MTR assesses the following four categories of project progress as required by *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* (2004) and MTR Terms of Reference provided by UNDP Cambodia:

- Project Strategy
- Progress Towards Results
- Project Implementation and Adaptive Management
- Sustainability

The evaluation process principally focuses on the project's Results Framework as a yardstick in assessing progress related to the approved project Indicators. A set of evaluation criteria, indicators, sources and methods are proposed to assess performance of the project (**Annex 3** - Evaluation Matrix). The Results Framework is presented in Annex 2 along with summary statements by project staff on *mid-term achievements* under the framework. A summary of physical activities to date in each of the target communes has been prepared to help to ensure representative field sampling of the main interventions (Table 1). Other data was compiled on training activities completed so far (**Annex 9**).

An Interview Guide (Annex 4) will serve as a general guide for the MTE consultants (not a questionnaire). These have been selected to facilitate discussions during the 1 - 2 hour interviews as planned in the proposed itinerary, although questions may also be adjusted depending on circumstances. The field mission schedule (Annex 6), a List of Documents (Annex 7), List of Contacts (Annex 8) and are presented in the annexes.

The evaluation was undertaken in accordance with UNDP and GEF principles and guidelines and the *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects.* These emphasize an independent, objective, evidence-based and participatory process for mid-course review and, where necessary, adjustment of the project strategy and operations. A collaborative and consensus-based approach involving self-assessment by project staff and participants was used in the MTR.

The MTR methodology was primarily based on:

- (a) Explicit evaluation criteria and questions, with a particular focus on the adequacy, efficiency, and effectiveness of project implementation, as well as assessing actual achievements of project outputs and outcomes to date;
- (b) Key evaluation and measurement issues identified at inception and initial preparation;

- (c) Review of documents, reports and surveys that describe progress on project outputs, outcomes and objectives as per indicators, and expected end results in the project design;
- (d) Compilation of available data and draft tables profiling the type of interventions across project sites and confirmation of indicators of climate resilience effects;
- (e) Self-assessment of project achievements by project staff (summarized in an annex with MTR team comments);
- (f) Interviews with project participants and stakeholders to verify achievements and to identify issues related to project design and implementation;
- (g) Site visits to observe field activities;
- (h) Group discussions to review project experiences, issues and lessons learned;
- (i) Triangulation and corroboration of comments by project participants regarding project results, implementation and lessons; and
- (j) Presentation and discussion of preliminary findings.

Representative site visits and field interviews reflected the range of project interventions undertaken in the project sites. Particular attention was given to the factors affecting implementation to date and the options for addressing issues and improving performance.

The MTR was principally guided by the *Evaluation Matrix* (Annex 3) based on the criteria set out in the Terms of Reference. The proposed indicators, data sources and methods of analysis for each of the key evaluation questions are summarized in the matrix.

All of the implementing partners and key participating organisations were interviewed. Site visits to the target communities provided representative review of the project interventions. Challenges and limitations to the evaluation methods included:

- Some of the project indicators are difficult to interpret in terms of the actual results expected and delivered, including the GEF *Capacity Development (CD) Scorecard* (see section 3.1.2).
- The site visits to a few successful model farmers were assumed to be indiactaive of other lead farmers and the potential results that could be achieved by others who adopt small-scale irrigated farming.
- There is no empirical data on the strength of the Community Forest and CPA committees, some of which had earlier become dormant, and therefore concerns remain about post-project survival of the committees.
- There are no systematic data on the condition of the watershed processes mostly anecdotal information on soil erosion and water quality concerns, and uncertainty

about the quality of land and water management within the Economic Land Concessions.

• The short 5-day fieldwork data collection period may have limited the depth of the evaluation.

1.3 Key issues for evaluation

The initial review of the design, monitoring and other information identified several key issues which help to focus the evaluation.

- (1) Inception follow-up and rate of implementation progress The project start-up was delayed for several reasons and the project only effectively commenced in April/May 2018. The first six months of 2018 were considered crucial to the timely implementation and several minimum activities and milestones were specified in the Inception Report for immediate action.³ Evidence of timely progress in accordance with the Results Framework will therefore be a key focus of the MTR.
- (2) Effectiveness of the organizational structure The Inception Report proposed a restructuring of the project organisation. The review should include the problem noted earlier "insufficiency of Gov't counterparts (MAFF) to execute project activities because they are busy with their own department's duties and functions, and the recommended recruitment of additional technical support to provincial authorities."⁴
- (3) Measuring effectiveness, uptake and ownership of soil and water conservation and community forest protection and restoration activities – Outcomes 1 and 2 aim to introduce and facilitate agricultural, forestry and land management innovations to enhance watershed functions and diversify livelihoods. The extent of acceptance and adoption of these measures in the target areas is a question. This includes aspects of mainstreaming project results into government systems, and ownership of and commitment to the project results.
- (4) **Capacity-building, GEF scorecard and management challenges** The generalized rating of capacity as per targets needs to be verified and based on an understanding

³ Inception Report, 2018, p. 60: "Official communication by MAFF to provincial and district authorities regarding project coverage and ground activities by Partner NGO (Mlup Baitiong) assisting the Project — at Kraing Deivay and Trapeang Chhor; Startup action planning workshop with the target District and Commune authorities, preceded by gathering of available site level information jointly by the Local authorities and project staff. Participatory situation analysis and identification of priority location specific interventions. Delineation and assessment of the micro watersheds where activities will be demonstrated; and following milestones: Recruitment of National Coordinator and M& E Officer; Signing of LOA/MoU with field NGO partner and Component 1 Focal Point; Preparation of M& E plan and establishment of project baselines." ⁴ COWES Project Monitoring Report, Date of visit: 25-26 Oct and 01-02 Nov 2018.

of project-related changes in institutional and human capacity needed to address watershed degradation and rehabilitation issues and enhance ongoing watershed management. The scorecard targets indicate a planned tripling of MAFF capacity and doubling of local authorities' capacity but the details need further assessment.

- (5) **Strategy for engaging Economic Land Concessions** Poor land management and environmental governance in ELCs have been identified and the NAP has suggested a priority need to include Sustainable Land Management Techniques in the implementation of Economic Land Concessions. But the project has had some difficulty initiating discussions with ELCs and will need further support from MAFF, which may be uncertain, particularly given personnel changes.⁵
- (6) Verification of involvement of women in project activities The extent to which the project's gender strategy is being implemented and reflected in actual engagement of women in the project needs to be examined.
- (7) **Sustainability and exit strategy** The potential to maintain the enhanced practices after the project will depend upon the particular institutional and human capacity and the NAP enabling strategies, the financial viability of project innovations and other factors that ensure local communities and agribusiness adopt and sustain the results.

2. Project Context

2.1 Development context

Population pressures, economic development and deforestation in Cambodia are the main drivers of loss of vegetative cover and destabilization of watercourses which, exacerbated by climate change, are associated with soil and nutrient loss, high rainfall runoff and flooding, and reduced water retention capacity in the watershed. The *National Action Program to Combat Land Degradation National Action Plan* 2018-2027 (NAP) sets out five strategic objectives, and initiates related programs for promoting land management and climate change adaption, restoring forest cover related to watershed, providing policy support, developing human resource for sustainable agricultural land management, and mobilizing financial resource. These objectives are:

• To facilitate the expansion of technical practices for sustainable and efficient land management, especially agricultural land based on the actual situation in each area.

⁵UNDP Cambodia, Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin, Annual Project Report 2018, p.18/19

- To ease or facilitate relevant stakeholders to contribute in restoring watershed and forest ecological system services.
- To develop relevant policies and regulatory norms to ensure effective and sustainable management and use of land.
- To strengthen human resource capacity for planning and implementing sustainable land and watershed management.
- To develop and implement strategic policies for watershed management with effective financial mobilization to support the implementation of priority activities as described in Chapter 5 of the National Action Program.⁶

The Upper Stung Prek Thnot catchment is located in central western Cambodia with its headwaters in Cardamom Mountains (**Figure 1 and 2**) and includes tributaries - Stung Tasal, Stung Kantout, Stung Kirirum and Stun Srea Thlong. The upper catchment is located in two districts of Kampong Speu province: Aoral District and Phnom Sruoch District, covering 56% of the whole catchment area. Aoral contains 5 communes while Phnom Sruoch has 12 communes. The majority of the population is Khmer with five indigenous Souy villages in Aoral district.

The 'situational analysis' undertaken at the beginning of the project concluded that the current reduction of ecological functions of Preak Thnoat Watershed is caused by an expanded land for agriculture and residences, extensive deforestation, increased soil erosion, reduced soil fertility and water resources (including under-ground water).⁷ The total area of ELCs in Upper Prek Tnoat Watershed is about 64,500 ha (**Table 4**). Within PAs, the coverage of ELCs is 13,175 ha (cambodiadevelment.org data).⁸ Once widely covered by forests, the area has faced dramatic changes with gradually more land commissioned to ELCs and other expanding commercial plantations, and increased rates of rainfall runoff and extreme flooding events.

Approximately 43% of the two districts' territory is located within three protected areas, namely the Central Cardamom Mountains Protected Forest, Phnum Aoral Wildlife Sanctuary and Kirirom National Park. The three protected areas are under the management of the Ministry of Environment (MoE). Approximately 28% of Aoral District and 21% of Phnom Sruoch is dedicated to ELCs, with each district having eleven ELC companies. The ELCs were granted in 1999-2011. Crops being harvested include cassava, sugar and wood pulp.⁹

⁶ Government of Kingdom of Cambodia, *National Action Program to Combat Land Degradation National Action Plan*, 2018-2027, p. iii

 ⁷ UNDP Cambodia, Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin (CoWES), Annual Project Report 2018, p. 13
 ⁸ UNDP Cambodia, Economic Valuation Report, P.64

⁹ Sopheak Chann and Tim Frewer, Commodity Frontiers, An ethnographic study of social-environmental interaction of Upper Stung Prek Thnot River Catchment, Eastern Cardamom Mountains, July 2017, p.3-4



Figure 1: Upper Stung Prek Thnot watershed (Sopheak Chann and Tim Frewer, 2017)



Figure 2: CoWES Project Communes Krang Devay, Ta Sal, Trapang Chour

An ethnographic study undertaken by the project described the rapid changes in land use and development that have occurred in the region, affecting the soil, water and land suitability that support rural livelihoods. In upper sections of the catchment areas of the southern Cardamom mountain range, patterns of land and resources have been altered dramatically with major effects on the downstream area and on subsistence farming. More than 20% of land area in the two districts that cover the upper part of the catchment (Aoral and Phnom Sruoch) have been reserved for economic land concessions and more than 45% is located within protected areas.¹⁰

Most small-scale farmers across the Upper Stung Prek Thnot catchment struggle to continue agricultural livelihoods. In most of the catchment – especially in the upper reaches where land is still used for smallholder agriculture, the majority of the households continue to organise livelihoods around rice production even in the context of decreasing land sizes, severely constrained harvests due to a lack of irrigation infrastructure, low input usage, and low prices.

Rice production is also undergoing substantial changes. People across the catchment increasingly grow fast rice varieties for the market and are increasingly dependent upon inputs. At the same time there is often a shortage of labour available for transplanting rice (most rice cultivators in the watershed transplant rather than broadcast). Similarly, as the land market spreads and land is appropriated by the state for ELCs and conservation areas, there is increasingly less land for cattle to graze. In many places this has resulted in substantial decreases in cattle herds and hence less available fertiliser for farm production.¹¹

The ethnographic study completed by the project suggested that major land use and livelihood changes in the Prek Thnot watershed are related to four processes: (1) the expansion of a hardwood timber market across the province which is linked to national and international demand, (2) the progressive shift of a national charcoal market into the remaining forested areas of the catchment, (3) the expansion of a land market across the province and (4) rapid expansion of a labour market as smallholder agricultural livelihoods become less and less viable.¹² The transition from subsistence farming to commercial agricultural and other land uses has implications for local communities, as described as follows:

"The current system allows foreign investors to grow high value crops, which require high upfront investments, which smallholders cannot afford. While new

¹⁰ Sopheak Chann and Tim Frewer, Commodity Frontiers, An ethnographic study of social-environmental interaction of Upper Stung Prek Thnot River Catchment, Eastern Cardamom Mountains, July 2017, p. 1 ¹¹ Ibid., 2017, p.15

¹² Sopheak Chann and Tim Frewer, Commodity Frontiers, An ethnographic study of social-environmental interaction of Upper Stung Prek Thnot River Catchment, Eastern Cardamom Mountains, July 2017, p. 7

opportunities with new markets for environmental services and in tourism open up now for forest communities, it is in particular the downstream crop farmers which are captured in poverty traps. Smallholders with small land areas and low productivity can usually only – or in the Prek Tnoat Watershed not even, cover their subsistence needs due to low productivity. Currently foreign investors invest solely into their own leased land, profits do not spill over into other benefits for the communities, which would particularly lie in the establishment of a sound credit system, to allow them to enhance their productivity and also diversify their production towards higher proportions of high valuable crops."¹³

The economic valuation study estimated the values associated with watershed functions and services. For example, income effects on agriculture from development are significant: forgone losses per ha of ELC land located in a PA were estimated at \$1980 /ha, which is about equivalent of profits made from rubber farms; flood control benefits (adopting a conservative assumption of 1.5% foregone agricultural yield losses or increased production costs) were calculated as a total value of foregone incomes from agriculture of 344.78 M USD for the larger Prek Tnoat Watershed between 1992 and 2012, and annually 17.24 M USD annual, assuming a linear increase of damages and costs and at 2014 prices.¹⁴

These studies and the 'situational analysis' undertaken by the project highlight concerns related to the economic and land use framework in Upper Prek Thnot watershed involving extensive ELCs, increased commercial plantations (mango, cassava, etc.) and subsistence farming provides incentives for unsustainable and extractive ways of land use, without accounting for the values of certain natural services. The economic valuation study argues that a detailed land use and integrated water management plan in collaboration between Government and location stakeholders based on a sustainable ecosystem management scenario must have the following elements:

- Absolute protection of all forests feasible for REDD projects from timber harvesting
- Sustainable Extraction in multiple use forests
- SLM measures, ANR [assisted natural regeneration] and forest enhancement in all areas which have been degraded due to deforestation after 1992
- SLM measures in agricultural areas
- Erosion, sedimentation flood, drought control, adaptation, and mitigation in hotspot areas which are mostly at risk
- Buffer zones along wetlands
- Improved hydrological management¹⁵

 ¹³ UNDP Cambodia, Valuation of Ecosystem Services in the Prek Tnoat Watershed, draft 18 Nov 2018, p. 68
 ¹⁴ UNDP Cambodia, Ibid., draft 18 Nov 2018, p. 43

¹⁵ Annex 4 (p. 70) of the economic valuation study also suggests a range of technologies appropriate for Prek Thnot watershed.

2.2 Problems to be addressed

Land degradation in Cambodia is often characterized by loss of vegetation, soil fertility and natural watershed functions. It has been attributed to (i) poor land use practices following the unplanned expansion of agricultural area and settlements; (ii) deforestation and forest degradation due to logging and extraction of biomass for fuelwood and charcoal; and unsustainable land use practices on state lands for economic land concessions (ELCs).¹⁶

The Project Inception Report highlighted some key issues and suggested various edits to the Project Document to improve the focus, particularly related to:

- (1) Articulation of Land Governance Issue
- (2) Demonstrating Forest Agriculture Linkage
- (3) Strategic Approach to Community Forestry (CF)¹⁷
- (4) Role of Local Authority in Demonstrating and Sustaining SLM
- (5) Articulating Guidance for Sustainability within Local Authority and MAFF (specify mechanisms for sustainability at the MAFF and at the level of Local Authority.)¹⁸

Project studies suggested insufficient incentives for sustainable land, especially forest management to the detriment of the smallholders and the government. In particular, the current price regime does not cover the social costs of environmental services, meaning the costs which would occur, if those environmental services would not be there. The economic valuation study listed the principal causes of land degradation as: "Lack of Capacity, Corruption, Intransparency, Lack of Law Enforcement, and the Economic System itself".¹⁹

A similar project being undertaken by *Asia-Pacific Network for Sustainable Forest Management and Rehabilitation* (APFNet) found that (i) local people did not understand the function of vegetation cover on the topsoil protection or for streamside management, (ii) farmers who were provided training were confident in their knowledge on forest conservation, but only small numbers applied the knowledge to their land, and (iii) leaders did not explain the knowledge obtained from the workshops to others in their commune.²⁰ Within government, the land allocation maps that were produced were reported to provide

¹⁶ Project Document (Final) 26 May 2017, p.5.

¹⁷ "Among the often-mentioned concerns were the incidence of illegal logging by outsiders; reduction in size due either to Government allocation decisions (including in favor of protected areas) or to encroachments by outside land speculators; and the lack of logistical support for patrolling operations to supplement volunteer efforts." Project Inception Report, Feb 28, 2018, p. 11.

¹⁸ Project Inception Report, Feb 28, 2018, p.10

 ¹⁹ UNDP Cambodia, Valuation of Ecosystem Services in the Prek Tnoat Watershed, draft 18 Nov 2018, p. 15-16
 ²⁰ Mid-Term Evaluation Report of ApFNet's Landscape Approach to Sustainable Management of Forests in Prek Thnot Watersheds, May 2018.

benefits to the Provincial Dept. of Agriculture and Forestry in guiding forest management for the hydrological cycle, wildlife, and agriculture.

2.3 Project description and strategy

The Project Documents states: *The project will involve capacity building and pilot demonstrations of soil conservation and agroforestry measures designed to enhance on-farm productivity on smallholder agriculture lands and on selected economic land concession (ELC) areas.... Furthermore, activities will focus on strengthening community forest (CF) management practices.*²¹ The project is designed to reduce pressures on upland watershed areas from competing land uses by demonstrating collaborative management and rehabilitation of agriculture lands and forest areas. Three pilot communes were selected - Krang Devay, Trapeang Chor and Tasal (the village in the latter was dropped during the inception phase and replaced with Tang Bampong).

The Project Document also states that the project "will promote sustainable land management and stabilize watershed catchment functions in a priority degraded area identified by the NAP. It also contributes to implementation of the Cambodia Climate Change Strategic Plan (CCCSP) 2014-2023, especially though enhancing climate resilience, and improving capacities, knowledge and awareness for climate change."²²

The project also proposed to support enabling conditions to establish and sustain a watershed management authority for Kampong Speu Province, and to draw on case studies and good practices in watershed management in other parts of the region. This was to serve as the basis for consultations with all concerned stakeholders on the appropriate institutional arrangements for a watershed management committee or authority at the provincial level. Support was to be provided to design and initiate a monitoring and assessment system for sustainable land and water management (p. 7).

Figure 3 outlines the theory of change. The Project Inception Report states: "The Theory of Change aspires high impact benefits at catchment level based on the pilot project. The projected results of a small pilot work (covering 2-4 communes in 3 years) will not automatically lead to impact on a catchment-wide basis. There is a need, to include some fundamental processes that must also be present for some "impact" to happen even from a small-scale pilot during the short period covered".²³ The transition from pilot activities and increased income and land/water productivity to long term impacts on sustainable land and forest practices may under-estimate the challenges in the Prek Thnoat watershed.

²¹ Project Document (Final) 26 May 2017, p.6

²² Ibid, 2017, p. 8

²³ Project Inception Report, Feb 28, 2018, p.9

The project document was signed by UNDP and the implementing partner (IP) - Ministry of Agriculture, Forestry and Fisheries (MAFF) on 30 June 2017. The project duration is for three years (06/2017 - 06/2020).²⁴ CoWES aims to restore and maintain forest cover and watershed stability functions while providing for sustainable livelihoods and ecosystem services in the Upper Prek Thnot Watershed.



Figure 3: Project Theory of Change

In order to achieve the objective, "the project demonstrates, or pilots sustainable land management (SLM) technologies with local household (small landholders), provides SLM and technical advice to agribusiness (large landholders and Economic Land Concession-ELCs) and experiments on wider landscape management for protection of ecosystem functional services." The project has 3 components and 7 outputs:

Component / Outcome 1: On-farm soil conservation and agroforestry practices improved

- Output 1.1: SLM priorities mainstreamed into local authority area plans in collaboration with MAFF and partners
- Output 1.2: Suitable SLM practices for small landholders demonstrated
- Output 1.3: Suitable land use practices demonstrated among medium to large scale agribusiness entities

Component / Outcome 2: Community forest areas restored and sustainably managed

• Output 2.1: Prioritized actions to accelerate CF implementation, reflected in local authority and MAFF programs of action

²⁴ UNDP/GEF, 2018 Project Implementation Report, p. 16.

• Output 2.2: Suitable restoration strategies and livelihood enterprises demonstrated

Component /Outcome 3: Watershed management and monitoring capacity improved

- Output 3.1: Capacity of key stakeholders to develop and start a program of action for watershed management in place
- Output 3.2: Participatory monitoring and assessment to support agreed upon program of action is in place.

Table 1 summarizes the field activities that are underway.

Components	Activities and Locations			
	Tasal commune, Aoral District	Trapeang Chor commune, Aoral District	Kraing Deivai commune, Phnum Sruoch District	
Population and No. of Households ²⁵	Pop.=6703 HHs=1548	Pop.=13094 HHs=1906	Pop.= nd HHs=1548	
1.2 Suitable SLM practices for small landholders demonstrated	13 HHs (7F) Farmers planting vegetables, mushroom in Tang Bampong village* Proposed water supply under development	17 HHs (8F) Farmers planting vegetables in Lgem village* Proposed water supply under development	18 HHs (9F) Farmers planting vegetables, 5 (0F) planting mushroom in Dock Por village* - 01 Water tank in Dock Por village*	
1.3 Suitable land use practices demonstrated among medium to large scale agribusiness entities	Community review of medium scale agri- businesses at local Economic Concessions (EC), and identification of potential actions to enhance SLM on EC lands.		Community review of medium scale agri- businesses at local Economic Concessions (EC), and identification of potential actions to enhance SLM on EC lands.	
2.2 Suitable restoration strategies and livelihood	Agroforestry and tree plantation activities to be proposed	Agroforestry and tree plantation activities to be proposed	- 01 Community Pond in Damrey Chakthlok CF was built for agri forestry purpose. *	

Table 1: CoWES Project Field Activities

²⁵ UNDP Cambodia, Valuation of Ecosystem Services in the Prek Tnoat Watershed, draft 18 Nov 2018, Annex III: Forest Community Data of Kampong Speu, p. 106.

	- Prepare land for agro
	forestry at Damrey
	Chakthlok (close to
	community pond in CF)*

*Sites visited during the MTR field mission

2.4 Implementation arrangements

The project is being implemented following UNDP's National Implementation Modality (NIM), according to the Standard Basic Assistance Agreement between UNDP and the Royal Government of Cambodia, and the Country Programme. This places prime responsibility with MAFF, the implementing agency, for all aspects of project delivery and management and reporting, with UNDP providing executive and administrative support.

The Project Board is responsible for making executive decisions, approving the annual budgets and workplans, and providing overall direction and guidance to the Project Management Unit stationed in MAFF.

The project Organisation Structure is presented in the Project Document including:

- MAFF appointment of a National Project Director as executive authority
- Project Management Unit within MAFF and led by a National Project Manager and a Project Coordinator
- Project support team within the PMU including a Project Advisor, Project Assistant, M&E Officer and Administrative Officer along with contracted technical advisors
- NGO Partner, MB, assisting with field delivery of project outputs
- Focal point officers within each of the three project components (outcomes) from DALRM, PDAFF and MAFF²⁶
- Quality assurance and advisory services from UNDP Country Officer and UNDP RTA

The project makes extensive use of contractors to assist government agencies, including government official on leave, to deliver outputs. MB, the partner NGO, is key to the implementation of field activities. The Ministry of Water Resources and Meteorology is not a central part of the implementation, unusual for a watershed management project.

2.5 Project stakeholders

There are 12 groups of stakeholders as outlined on Table 2.

²⁶ MB will produce 4 outputs: 1.1, 1.2, 2.1 and 2.2. DALRM will produce 3 outputs (1.3, 3.1 and 3.2)

Table 2: Project Stakeholders

Project Stakeholder(s)	Roles and Responsibilities
Ministry of Agriculture, Forestry and Fisheries (MAFF)	MAFF serves as the Implementing Partner, and provides strategic decisions for the project, oversees the accomplishment of project objectives and tasks, lead co-funding requirements, and facilitate the process of bringing other stakeholders on board.
Project Management Unit of MAFF	Hosts Project Management Team (PMT). The PMT is responsible for overall coordination with the various national implementing agencies for the delivery of project outputs in a timely and effective manner. It facilitates project-related planning activities such as preparation of annual work plans and is responsible for overall project monitoring and reporting.
Forestry Administration (FA)/Forest Research Institute, MAFF	Provides technical assistance related to reforestation activities, GIS and spatial planning services, policy insights and related support through other, related departments. FA representative sits on the project board
Kampong Speu Provincial Government	Provides regulatory, policy and enabling activities to districts, communes and other target communities within their jurisdiction on watershed management. Collaborate and align with national ministry counterparts.
District, village, and commune level governments and governance committees	Participates directly in relevant project activities, where appropriate, as target beneficiaries, but also facilitates coordination and implementation of technical assistance and capacity building activities.
Ministry of Environment	Provides advice on the development and revitalization of the two Community Protected Areas. Sits on the Project Board.
Other national ministries such as Ministry of Water Resources and Meteorology (MoWRAM), other divisions and departments of MAFF	Provide technical support, advice and inputs where relevant. This would include in higher level steering groups or technical committees and lend insights on policy implications for collaborative watershed management in Kampong Speu, and facilitate or provide the scope for scaling up of good practices.
Ministry of Women's Affairs (MOWA)	MOWA is a representative for the beneficiaries on the Project Board. MOWA's input will be critical given the role and special needs of women in the sustainable land management.
Mlup Baitong, technical and community support NGO	MB provides support to MAFF in agronomic training and community-based soil and water conservation and forestry, including mobilization of community participation.
Royal University of Cambodia, Agriculture Dept	Technical advice and training on agricultural SLM methods; participation in project forums.
Selected agribusinesses, notably including private companies with ELC contracts	Engage in round table forum on sustainable agribusiness created to interact with relevant government bodies, including MAFF, on implications of the proposed Agricultural Land Use Act, application of ELC and related land use regulations and laws.
Local target communities and related project partners	Primary resource users and participants in co-management activities for CFs and CPAs, as well as beneficiaries of capacity- building, training and livelihood support

3. Findings

3.1 Project Strategy

3.1.1 Theory of change and key assumptions

The theory of change (TOC) outlined in Figure 2 remains relevant and functional although it may underestimate the institutional barriers to progress. It recognizes the key role of local communities, governance institutions and public and private entities in shifting land use and farming practices toward a more sustainable model. The scale and degree of change envisioned by this TOC may not be feasible within the remaining project time but significant momentum toward improved local watershed management is achievable through a collaborative community approach.

The project's approach is consistent with UNDP Cambodia's Country Programme Document (CPD) 2016-2018 which specifies "building resilience" by contributing to strengthening environmental services and the system of forest management and protected areas, including sustainable land and watershed management. The project also directly supports the implementation of the NAP workplan, and in particular two recommended actions of NAP that are relevant to the Cardamom area:

- Inclusion of Sustainable Land Management Techniques in the Implementation of Economic Land Concession, and
- The Preparation of Procedures and Instructions to Consider Watershed Approach in planning processes at the levels of sector and local authority as well as line Ministries and Institutions in planning and implementation in watershed areas.²⁷

The project builds upon an earlier GEF project that introduced agro-ecosystem analysis.²⁸ The project design specifies that the direct beneficiaries of the project will be "poor upland farmers, indigenous communities, forest commune households, and women living in and dependent on the forest ecosystem ... In Aural district, women outnumber men in nearly all villages".²⁹ The project Document also includes *Annex 6: UNDP Project Quality Assurance Report*, which provides sufficient environmental and social screening, and gender analysis and incorporates these into the project design.

Technical assessment, training and field demonstration of land management best practices are expected to stimulate awareness, interest and consensus building forwards

 ²⁷ Kingdom of Cambodia, National Action Plan to Combat Land Degradation 2018 – 2026, 2027, p, 33
 ²⁸ UNDP/GEF, Building Capacity and Mainstreaming Sustainable Land Management Project 2008-2011,

implemented by MAFF UNDP with support from GEF4. ²⁹ Project Document (Final) 26 May 2017, p.15

collaborative watershed management.³⁰ The key assumptions underlying the strategy, are as follows:

- A coordinated watershed governance system can be established involving national, provincial, district and commune levels and stakeholder involvement; local CF organisations can be effectively strengthened and empowered to undertake forest protection and restoration activities.
- 2. MAFF, DALRM, FA CF administration and the ELC office are able to raise the profile and commitment to implementing SLM practices and community forest protection in the government operations.
- 3. Best practices for forest conservation and soil and water conservation can be disseminated through agricultural and agroforestry demonstration sites and EC land management initiatives.
- 4. Policy directives are developed through the implementation of NAP to establish a new watershed management action framework for SLM and Community Forestry.
- 5. Financial drivers in the form of enhanced crop yields and income diversification provide incentives for reduced unsustainable forest exploitation.

All of the above assumptions, set out in the project design, are key factors for successful project implementation. The last two – policy drivers under NAP and financial drivers for the spread of best practices will be particularly important for project sustainability.

3.1.2 Project results framework and indicators

The project aims to restore and maintain forest cover and watershed stability through improved soil conservation and agroforestry practices, community forestry and watershed management capacity development as shown in the Results Framework presented in Annex 2. Given the significant deforestation, land degradation and land use issues in the watershed and the scale of the problem, the two year time frame (recognizing the first year had little progress) is inadequate. The extensive preparatory work during the May-Dec 2017 inception phase led to refinements to the framework. But the expectation that targeted community forests and watershed attributes will be restored and community-based management fully established by June 2020 may be over-optimistic.

The Results Framework indicators are mostly quantitative and are sometimes difficult to interpret in terms of the actual results expected and delivered. For example, the GEF *Capacity Development (CD) Scorecard* provides an order-of-magnitude estimate of baseline and targeted capacity change, covering systemic, institutional and individual capacities.³¹ These

³⁰ Project Inception Report, Feb. 28, 2017, p.4

³¹ GEF/UNDP, CD Tracking Tool Indicators

are theoretical, indicative scores based on the GEF tracking tool procedures. They have a limited level of resolution to explain the specific capacity status, gaps and requirements for MAFF, line agencies and local authorities to establish and maintain a realistic Prek Thnot watershed restoration and management system. There have been clear limitations in the ability of the project to enhance watershed management capacity other than provide initial orientation and training. The project has a high dependence on government contractors and on the partner NGO to deliver outputs. The problems with the project indicators are reflected in both Table 3 and 4 of this report: they have in some cases been difficult to apply due to data requirements, or do not accurately measure progress on all of the expected results.

Table 3 summarizes in narrative form, the capacity baseline and current mid-term capacity status. A doubling of MAFF and one-third increase in local authority capacities is indicated in the scorecard ratings. The table provides further interpretation and assessment of the CD Scorecard ratings in relation to the specific conditions that are sought in Prek Thnot watershed. The last column highlights mid-term results. The tripling of management and implementation capacity (CR4) and doubling of M&E capacity are not based on evidence and may assume future NAP implementation.

GEF CD Scorecard categories ³²	Expected capacity development results in the Results Framework	Observed mid-term results relative to CD scores
CD Scoring summary for the project:	MAFF score (14) expected to increase to 30 at mid-term (53%). LA score (13) expected to increase to 20 at mid-term (35%)	Scorecard to be re-calculated in 2020
CR 1: Capacities for engagement Baseline CD score: 2 Target CD score: 7	MAFF outreach and cooperative arrangements with local authorities and communities and Economic Concessions for collaborative approaches to watershed management	Improved dialogue and multi- stakeholder collaboration, formation of working groups and CF committees (?), and integration of SLM concepts and methods into provincial and local planning and budgeting systems. Future of EC stakeholder engagement without the project is questionable.
CR 2: Capacities to generate, access and use information and knowledge Baseline CD score: 1 Target CD score: 5	New technical information produced, disseminated and awareness-raising of local micro- watershed issues and solutions	Significant technical data and mapping by external advisors and discussions of the assessments have raised stakeholder awareness of the issues and options in government and targeted communities, and

Table 3: Capacity Development (CD) Measurement and Results

³² GEF/UNDP, CD Tracking Tool Indicators; Table 2: Quantitative summary of Baseline Scores and Table 3: Quantitative summary of Target Scores, CoWES project.

		initiated the action plans, and watershed monitoring needs
CR 3: Capacities for strategy, policy and legislation development Baseline CD score: 3 Target CD score: 6	NAP development and implementation processes including legal and regulatory changes initiated to assist Prek Thnot watershed	Forthcoming NAP implementation may provide policy direction and commitment but follow-up action by proposed watershed management sub-committee will require more time beyond the project period.
CR 4: Capacities for management and implementation Baseline CD score: 5 Target CD score: 17	Technical skills and human resources development at national, provincial, district and commune organisations involved in soil and water conservation and community forestry in Prek Thnot watersheds	Basic awareness and capacity enhanced although with uncertainties about the watershed scale of impact beyond a few communes and selected households, and questions about extent of decentralized capacity and transfer of knowledge/skills from advisors to stakeholders and access to future possible sources of financing.
CR 5: Capacities to monitor and evaluate Baseline CD score: 3 Target CD score: 6	Mechanisms and staff dedicated to monitoring watershed conditions and evaluating effectiveness of soil and water conservation and community forestry programs	The project training has provided some orientation to micro-watershed assessment but there is no basis to assume Outcome 3 results regarding monitoring and evaluation of watershed management have been achieved.

3.1.3 Challenges and issues noted by stakeholders

There is a complex set of issues that present significant constraints to community-based watershed management:

- Land issues (e.g. land speculation, decreasing farm sizes, land tenure, encroachment of CFs, boundary issues, etc.) may limit adoption of on-farm SLM innovations.
- Obtaining EC commitments to SLM best practices remains a major challenge.
- The means of scaling-up proven SLM and Community Forest practices beyond the project demonstration sites is uncertain.
- A Technical Working Group to Combat Land Degradation and Sub-National Committee for Watershed Management will be established under NAP's guidance, but the formation of the committees and the working group will take time.
- Delays have been also attributed to the 2018 election and time needed for establishing the NAP committees, and revising the Results Framework.³³ The remaining 14 months may not provide inadequate time to achieve the full expected results of the project.
- Employment in unauthorized logging is the main source of income for men in the project villages, some of whom are involved in protecting their local CPA but also claim

³³ UNDP/GEF, 2018 Project Implementation Report, p. 15/17.

to log or transport logs in the adjacent areas outside of their communities. Reducing deforestation may only be possible once the industry runs out of accessible timber.

- Local people complain about salinated groundwater making it unsuitable for domestic or agricultural use. The causes of the contamination have not been identified.
- Reduction in available water for rice growing purposes below some ELCs was mentioned as a watershed issue.
- Some community forests are highly degraded, making the development of sustainable livelihoods more difficult; and clearing trees in some cases has led to delisting of CPAs and eventual sale of the land.

3.2 Progress towards Results

Annex 1 (GEF Midterm Results Tracker, Progress towards Results Matrix). **Annex 2** (staff self-assessment) also provide a summary of Objectives, Outcome and Output progress information. The current status of project outcomes is summarized on **Table 4**, and further described below in the text on each Outcome.

Outcomes	Indicators	Mid-term	Current Status
Outcome 1 On-farm soil conservation and agro-	 Percentage increase in average gross and net income per household in forest areas in project target areas of Aural and Phnom Sruoch districts 	10%	A baseline HH survey completed. See also Annex 2. End of project HH survey planned. This target may have been met in the case of the subsidized model farmers.
practices	2. Land productivity for rice production (tonnes per hectare)	2.2 tonnes/ha	HH survey: avg yield 1.88 t/ha. Project effect on yields not clear
mproved	3. Labour productivity: rice output USD per person/yr	300 USD	No data. Not a useful indicator of Outcome 1. Main aim is to diversify crops. This indicator can remain as of the HH survey.
	 No. of PPP case study developed as model for applying good practices in watershed management 	Not available	Output 1.3 progress with private sector is behind schedule
	 No. of SLM oriented extension support system for men and women in place 	2	Extension system impacts are unlikely from this project. This will measure technical support from the project.
Outcome 2	1. Percentage increase in forest and vegetation cover of commune forest	5%	Integrity and restoration of forest cover in CF and CPAs is the focus,
Community forest areas restored and	in locally prioritized micro community watersheds based on land use management plan, strengthened law		along with actions by local authorities to implement the SLM measures in their development
sustainably managed	sustainable use		plans. Target probably met.

Table 4: Status of Project Outcomes

	2. Percentage increase in average gross and net income per participating	10%	HH survey should be able to capture this indicator. Currently
	household		no data.
	% of CFs with enhanced plans under	-	Only 1 CF in the project. Target
	implementation in pilot communes		achieved.
	No. of men and women benefiting		HH survey should be able to
	from forest-based livelihoods		capture this indicator next year.
Outcome 3	1. A collaborative program of action	underway	Indicator not realistic
	to enforce regulations and establish		
Watershed	provincial level administrative		
management	mechanisms for Prek Thnot watershed		
and	2. Number of measurement	5	No agreement on watershed
monitoring	parameters for management of soil,		management program as
capacity	water, land and forest defined and		originally envisioned for Upper
improved	included in a functional monitoring		Prek Thnoat watershed. The
	and evaluation system that supports		strategies for monitoring
	agreed upon watershed management		implementation are at the site
	strategies		level – e.g., forest cover changes
	Collaborative watershed wide program	1	No agreement on watershed
	of action and interim coordination		management program as
	mechanism in place		originally envisioned.

3.2.1 Outcome 1 – On-farm soil conservation and agroforestry practices

The Project Annual Report and Annex 2 summarize Component 1 achievements. Situation analysis on agricultural productivity and community natural resources has been completed at the three targeted communes using participatory rural appraisal. This involved commune authorities, district administrations, provincial administration, Provincial Department of Agriculture, Forestry and Fisheries (Kampong Speu), Provincial Department of Environment (Kampong Speu) with technical supports from Department of Agricultural land Resource Management (DALRM). Commune and community action plans have been prepared at the three target communes in the form of *community livelihood improvement plan* (CLIP) for the purpose of mainstreaming CoWES project actions/concepts into commune plans. Based on CLIP, agreements between target communes and NGO partner (MB, on behalf of CoWES Project) was signed during the district integration workshop. Communes agreed to include watershed conservation as well as forest projection into their investment plan and development plan. Districts also agreed in principle to include watershed and nature/forest into the plan next mandate (after 2019 council elections).

A 'preliminary assessment' of ELCs was conducted by local authorities with supported from MB field staff and DARLM for seven agribusinesses: Veng Sokleng, Thong Sokheng, Great Field, and Yellow Field, Kim Sour, CPL-Maiysak Plantation (in Tasal commune) and Slak Sannan, Sovann Vuth (in Krang Devay commune). It was reported in the 2018 Project Annual Report that some companies promised to plant trees, grow bamboo along the riverbank to reduce soil erosion and water pollution.

An *agroecosystem analysis report* and power point presentation (training materials) were also developed by a national consultant (under DARLM management and coordination). The consultant's report has introduced concept of sustainable land management (SLM) for Preak Tnoat Watershed to the target communes, including multi-purpose land-cover crops/flora guidance to improve quality of land (nitrogen, carbon and phosphate) and to maintain the ground water table and minimize use of chemical pesticide and fertilizer. Micro-watershed planning and management were introduced to communities and local authorities through training organized in December 2018.

CoWES also supported small scale of water supplies for Krang Devay community with MB facilitation, and micro-irrigation for home gardens in Dok Por village and a pond to demonstrate/pilot agroforest activities. Trainings, exposure visits, technical assistance and on-the-job trainings were provided by MB, DALRM, PDAFF, MAFF and consultants (GIS, Micro-watershed and agroecosystem) to local authorities and communities. Demonstration farms were initiated in Dok Por, Lgem and Tang Bampong villages. The agroforestry-demonstration initiative is expected to provide short-term benefits to CF members. Agroforestry piloting is also in preparation.

Table 5: ELCs in the CoWES project area			
ល.រ	ឈ្មោះក្រុមហ៊ុន Company name	ន្ទៃឌី(ហ.ត) Ha	
ឃុំក្រ	ឃុំក្រាំងឌីវ៉ាយ ស្រុកភ្នំស្រួច Krang Devai commune, Phnom Sruoch district		
១	Forjuna Plantation	1991	
ប្រ	Grandis Timber Limited	3910	
ឃុំត្រពាំងជោ ស្រុកឱរ៉ាល់ Trapeang Chor commune, Aoral district			
១	Cambodia Blotach	3	
ច្រ	Kapong Spue Sugar	4573	
៣	Kampong Speu Sugar	4692	
ឃុំតាសាល ស្រុកឱវ៉ាល់ Ta Sal commune, Aoral district			
១	Future Environment	7119	
២	Great Field	9467	

Output 1.3 to engage ELCs has shown little tangible progress. There are 12 agro-industry ELCs in the project area, as shown on **Table 5**, involving almost 10 percent of the watershed.³⁴

³⁴ The GIS Report calculated watershed area of 666,635 ha and ELCs total of 64,511 ha.

៣	Yellow Field	8076
٩	HLH Agriculture Cambodia Co., Ltd.	9797
હ	New Cosmos	2188
อ	Transol Titan	12549
៧	Kampong Speu Sugar	146
	Total	64,511

The transition away from unsustainable forest work depends primarily upon water supply availability for small-scale irrigation as an alternative and access to extension support. Model farmers have effectively demonstrated productivity and income effects. The mid-term target of 10% of the population adopting SLM practices (Table 4) may be difficult to confirm but the project is generally on the path to generating local interest in this agricultural option. Ability to market the produce is a problem for some of the farmers. Expertise from the ASPIRE program on the outreach strategy could be useful.

3.2.2 Outcome 2 – Community forests restored and sustainably managed

The Project Annual Report and Annex 2 summarize Component 2 achievements. One CF in Damrey Chark Thlork and two CPAs (Reaksmey Samaki in Trapeang Chor Commune and Tang Bampong in Tasal Commune) were selected for forest conservation work. The initial assessment included review of CF/CPA legal documents (registration, ministerial recognition, current status of land tenue) and field observations (zoning and boundary check to these communities). Some ownership issues were identified (for example, Tasal CPA³⁵).

A training course on community organization management was delivered to Tang Bampong and Reaksmey Samaki Community Protected Areas for an improvement of management skill on planning, coordination, budgeting etc. Digitization of forest-cover maps was completed by a GIS national consultant for each target commune, providing maps for forest monitoring and expansion at the commune level. The management plan for Damrey Chark Thlork, CF was updated and endorsed by PDAFF. The management plan for Reaksmey Samaki CPA is under legal application and Tang Bampong CPA is re-starting after transfer of authority/management function from MAFF to Ministry of Environment (MoE) in 2016.

Re-activation and strengthening of the CF and CPAs appears to be broadly supported by local participants and commune officials. The no-cutting rules are said to be respected by local

³⁵ "One target area in Tasal CPA was changed to Tangbampong CPA because most parts of Tasal CPA was rented to ELC.", CoWES Project Monitoring Report, 2018-11-26.

residents. The success for Outcome 2 will be whether the committees can gain enough selfsufficiency to maintain operations on their own after the project.

3.2.3 Outcome 3 – Watershed management and monitoring capacity

The Project Annual Report and Annex 2 summarize Component 3 achievements. A key output of Outcome 3 has been the Economic Valuation Study on Preak Thnoat Watershed, presented in September 4, 2018. It included a *draft roadmap for Preak Thnoat watershed management*. An ethnographic study has also been completed to provide a detailed overview of development and land use issues in the watershed.

Agricultural land and forest maps produced through GIS mapping and remote sensing, were printed and delivered handed to the 3 target communes for future uses. The consultant has also trained communities and local authorities about geography, water system and landscape in December 2018. Household surveys at target communes (pilot-farming areas) were conducted. The baseline survey questionnaires related to poverty, income generation, loan, and benefits from community forestry. The data and information will be used as baseline and to track for project progresses. M&E Training was conducted in November 2018.

Annex 9 summarizes the 23 training and workshop sessions completed to date. This was linked to 23 field assessments/studies conducted by MAFF, DALRM, MB and PDAFF. There were 732 participants (26% females) trained on different skills and theories regarding agricultural technologies. Selected participants visited model farms in Takeo Province and participated in management courses of community forestry and community protected areas (CPA) in Battambang Province. On-the-job training related to home-garden, mushroom growing, making composed fertilizer, making natural pesticide and other technologies was conducted by MB, DALRM, MAFF and PDAFF. As part of the knowledge management and communication strategy, a video producer has been engaged to record field activities and to interview key stakeholders regarding their participation and commitment for the project implementation.

The project document originally proposed a new provincial regulatory and administrative system for watershed management. This was latter downsized in the inception report to a proposed set of collaborative agreements and actions to coordinate stakeholder efforts to address issues and to monitor key watershed program indicators as basis for long term watershed management.³⁶ This has not been possible to complete.

³⁶ CoWES Project, Attachment 2: Revisions to ProDoc, 2018, p.8

3.2.4 Overall progress toward achieving the project objective

The 2018 PIR rated Development Progress as Moderately Satisfactory (June 2018). No tangible results were reported during the reporting period (2017-18) because "the project spent considerable amount of time in establishing a good foundation for project implementation such as understanding and redefining the Project Results Framework including revising the baseline and End of Project target, seeking buy-in of the decision makers in MAFF, and constituting the Project Board."³⁷ However, deliverables have greatly improved in the second half of 2018, with expenditures at 73% of the approved annual work plan.

The progress on the project objective essentially turns on (a) the level of household participation in irrigated farming as an alternative to current forest degradation, (b) the protection and enhancement of community forests and development of sustainable forest livelihoods, and (c) the spread of SLM methods on smallholder and large agribusiness lands. Some progress, though limited in scope, has occurred on the first two aspects. The third one displays less progress.

3.2.5 Critical factors and barriers to achieving the expected results

• The policy and institutional mechanisms needed to initiate watershed management in Upper Prek Thnoat drainage are largely beyond the scope of the project.

There is a general expectation that the NAP and the creation of the Sub-national Committee on Watershed Management will provide the policy impetus and directives to stimulate watershed rehabilitation and management. It may take another year to fully establish the committee. The NAP lists Prek Thnoat as one of ten national priorities. The committee operation is a basis for completion of some of the project outputs (see Annex 2) so this partly affects project results. While local activities can be effectively implemented in the three pilot communities with the support of the partner MB (NGO) to enhance forest conservation and alternative livelihoods, it is not evident that the project has the governance systems in place to deliver the scale of watershed and ecosystem results that are envisioned in the project Objective, especially given the limited time frame available.

• The watershed approach is not sufficiently understood or recognized at both the government and community levels.

The watershed approach, including recognition of the upstream and downstream linkages, was described by stakeholders as a new concept for MAFF and the provincial and local authorities. Understanding how to address inter-related land, hydrology and ecosystem

³⁷UNDP/GEF, 2018 Project Implementation Report, p. 17.
issues at various scales within a watershed context will take time to be developed. It was clear from the MTR mission that few stakeholders and implementing partners could see beyond their individual issues and work tasks/contracts or recognize the particular land use/cover and physical processes that underlie watershed and ecosystem services, including their effects on critical water supply and quality. This lack of a watershed perspective affects the potential for collaborative watershed management.

• MAFF does not have sufficient mandate, capacity and resources to undertake multisector watershed rehabilitation and management.

The project design focuses on watershed conservation and rehabilitation, and restoration of forest cover and ecosystem functions. The project has been able to integrate notional commitments to soil and water conservation and SLM into some commune and district investment and development plans. It has not, however, been able to introduce let alone establish larger-scale landscape level approaches in the selected project communes, to which Outcome 3 is dedicated. The interventions are very limited and delivered principally by contractors, as described below. There is no experience in DALRM and no watershed management unit in MAFF to establish the watershed approach and guide its application in Prek Thnoat or elsewhere. MAFF staff recognize that they do not have the capacity to deliver watershed management programs, or the resources to sustain the current project outputs on completion of CoWES. The general expectation is that this institutional challenge will somehow be addressed by the pending Sub-National Committee on Watershed Management.

• The project reach is limited to small-scale forest protection, livelihood and water supply issues, with only minor impact on watershed threats such as deforestation and streamflow disturbance/diversion.

A review of the project outputs shows the modest level of watershed management change that is being pursued so far in the three pilot communes: strengthening forest protection in two CPAs and one CF, introduction of vegetable and mushroom growing by a few lead farmers, water supply and farm pond development and proposed agroforestry and tree planting. The most important of these activities to the communities is the water supply investments. The larger concerns about high rates of deforestation, watercourse instability, flooding, land slippage and soil erosion, runoff of polluted water into local reservoirs and other matters (as noted in the situational analyses reports prepared by the project) appear to be outside the scope of the project. The project demonstration activities will have only minor contribution to addressing the significant problems facing Upper Prek Thnot. Illegal logging inside and outside of CPAs is a major concern to be addressed by offering alternative livelihoods. • There is no readily available means of engaging private sector Economic Land Concession agri-business in watershed management but further discussions are needed.

The project has yet to engage ELC companies in any significant way in discussion of land and water management issues. Output 1.3 proposes "suitable land use practices demonstrated among medium to large scale agribusiness entities". ELCs (**Table 5**) that involve large scale land conversion and commercial plantations have a significant role in watershed stability and water balance. The project has undertaken some discussion to identify local complaints related to ELC land uses. But there is no formal process for collaboration with ELCs. There is some uncertainty about how to move forward with this activity although the governor of Phnom Schrouch district and the Provincial Administration office have offered to facilitate a technical workshop on SLM methods. Some minor discussion is reported at the field level to identify possible themes for discussion (although no endorsement for this from companies):

- Establishing stream setbacks (undisturbed streamside buffer strips as required by law but it seems largely ignored on the ground), to reduce flooding, soil erosion, biological and water quality impacts, and to encourage bamboo and other vegetative cover to stabilize stream banks; and
- Introduction of cover crops to reduce the adverse effects of rainfall runoff and erosion on lands that have already been cleared of vegetation.
- Linkages between community water supply problems and catchment area management are not well-defined.

The water supply concerns in the pilot villages are being addressed through small scale infrastructure investment but without clear attention to the catchment area sources of water. The water supply development at the three pilot communities could be usefully expanded to include micro-watershed protection and rehabilitation of water sources and drainage systems. Water shortages are severe for three months in the dry season and the development of water supplies is considered key to the introduction of small-scale irrigated farming as an alternative livelihood to cutting trees. The project has also assisted strengthening the management of CPAs but these interventions are not sufficient to fix the watershed degradation problems. The project should ideally be demonstrating a community-based water supply catchment area concept, to show the integral linkages with watershed processes and their important role in supporting community water availability for domestic and agricultural purposes.

3.3 Project Implementation and Adaptive Management

3.3.1 Project management

The 7 month start-up phase after signing the project document has created a backlog on project implementation. As noted elsewhere in this report, there have been extenuating circumstances that explain the lengthy delays in the project. It is nevertheless difficult to be completely satisfied with the management system, heavily dependent on MAFF that until recently has been slow to meet the timetable and remains under pressure to deliver on time.

The Project Board's first meeting was held in January 2018, and clear directives were issued along with an approved workplan and budget. Kampong Speu Provincial Department of Water Resources and Meteorology was not invited to join the board as proposed although their expertise is needed. But management has been pro-active in extensively refining and clarifying the project through a lengthy inception phase. A project technical meeting and reflection workshop was held in November 2018 to further mobilize action.

The project management issues relate directly to the high expectations of the project design and the considerable factors that affect the introduction of watershed management in (see Section 3). Most of the government contractors are ex-government or government staff on leave with duties focussed on producing discrete outputs that may are not always be useful for advancing watershed management during the life of the project. The problems of slow delivery on activities and outputs and assumptions about capacity reflect the need to field test project design outcomes and indicators in the early stages, and to consider the complexities of government modalities for implementation.

PIR comments identified the delays and action needed. UNDP undertook a 'project monitoring report' (Nov 2018) which proposed actions to consider a HACT micro assessment, follow up appointment of a new CoWES NPD, approval on the revised Evaluation Plan, review of different options for cash transfer including direct payment to responsible parties if it could help speed up project implementation, and possibly recruiting contract staff for PDAFF to support the implementation. Nevertheless, there have been difficulties gaining progress on Output 1.3 (ELC participation) and Outcome 3 (watershed management framework) due to the larger issues noted elsewhere in this report (see section 3.2.5).

The Project Board and Project Team have attempted to respond to some of the constraints on progress by – i) hiring a "start-up advisor" to re-focus the project and guide initial steps, b) providing additional support to DARLM to engage in project implementation, and c) shifting more responsibility to MB to facilitate progress on field activities. The project organisation may have been adequate for the early stages of the project but it now needs some simplification to improve focus on final results. It is clear that MB is the lead implementing partner for CoWES and will continue to be the main driver of results. They should be designated the field coordinator for the key agronomic and forestry outputs.

Figure 4 outlines a suggested 2019-20 re-organisation with specific outputs designated for MB, PDAFF and DARLM. Further details of work allocation are presented in section 4.3 of this report. The main reason for this adjustment is to provide more focus on relevant results.



Figure 4: Suggested project implementation 2019-2020

3.3.2 Annual work planning

The work planning appears to have been participatory, although the annual under-spending indicates that the planning has not been good at anticipating actual deliverables.

3.3.3 Finance and co-financing

The project expenditures to December 31, 2018 were 37.4% of the total budget at just past the half-way point of the project period. **Table 6** shows some significant under-spending of several activity budget lines, most notably activities to undertake participatory monitoring and assessment (only 13% delivery), accelerating Community Forestry implementation (15% delivery), demonstrating suitable SLM practices (20%), and developing capacity of key stakeholders (30% delivery)

The scale-up of project activities in 2018 is also evident in **Table 7**. The delivery rate during Year 2 was 85/86% for Components 1 and 2, and 57% for Component 3. The total 2018 expenditures were 73% of the annual budget. Despite the obvious ramp-up of activities the annual expenditures were still under-budget by one-quarter the planned amounts.

Activity 1.3 (*suitable land use practices demonstrated among medium and large-scale agribusiness entities*) was an exception, with annual expenditure 11% over-budget. This may be high given the lack of Output 1.3 progress. The highest expenditure in 2018, (\$112,764) was for Outcome 3 but this was mostly for MAFF overhead costs. The technical activity reports under DARLM provide useful background data and mapping but few short term benefits.

The financial data highlight the need to significantly increase the rate of implementation during the final 14 months of the project. Any application to extend the project timelines would require sufficient justification.

Table 8 shows total funds received of \$656,827 and \$594,089 yet to be received. Total expenditures on **Table 6** were \$464,532, with remaining available funds of \$786,000 (note-differences are due to expenditures approved and disbursements paid). This is a substantial budget available for the remaining implementation period to June 2020. Based on average monthly expenditure in the past six months (\$40,000³⁸), the costs for 18 mths from January 1, 2019 would total \$720,000 in expenditures plus closure costs; a gap of about \$66,000 to be filled by accelerated project implementation or minor project extension.

A spot checking financial audit was undertaken by an independent accounting form, finding some minor issues.³⁹It recommended that management should consider this rating within the context of the recommendation that the Project management team should attempt to strengthen its management practices in the following areas: 1. Accounting recording and documentation and 2. Compliance with law of taxation

³⁸ Information from project finance officer.

³⁹ PWC, Oct 16, 2018 letter. It stated: "the overall level of internal control with respect to the Project's operations is considered to be *Partially Satisfactory*. It should be noted, however, that we consider the level of internal control in recording of financial transactions and compliance with law to be *unsatisfactory*".

Fable 6: Total project budget an	d expenditures by project	activity, 2017–2018
----------------------------------	---------------------------	---------------------

	P 2	roject Budget 017-2020	E	xpenditure o Dec 2018	Ва	alance	Delivery
ACTIVITY1.1: Assessment to define target areas and interventions in Aural and Phnum Sruoch districts	\$	33,482.67	\$	33,482.67	\$	_	100.00%
Activity1.1.1 SLM priorities mainstreamed into local authority area plans in collaboration with MAFF and partners	\$	110,364.82	\$	57,675.89	\$	52,688.93	52.26%
ACTIVITY1.2: Suitable SLM practices for small landholders demonstrated.	\$	84,000.01	\$	17,072.94	\$	66,927.07	20.32%
ACTIVITY1.3: Suitable land use practices demonstrated among medium to large scale agribusiness entities.	\$	50,121.20	\$	31,373.09	\$	18,748.11	62.59%
ACTIVITY2.1: Restoration of selected community-managed forest lands using appropriate methodologies	\$	60.00	\$	60.00	\$	-	100.00%
Activity 2.1.1: Prioritized actions to accelerate CF implementation, reflected in local authority and MAFF programs of action.	\$	86,693.40	\$	12,991.87	\$	73,701.53	14.99%
Activity 2.2: Capacity development to improve local livelihoods in Dam Ray Chak Pluk Community Forest	\$	11,469.05	\$	11,469.05	\$	-	100.00%
Activity 2.2.1: Suitable restoration strategies and livelihood enterprises	\$	201,724.34	\$	77,599.98	\$	124,124.36	38.47%
Activity 3.1: Establishing functional institutional arrangements for watershed management authority in Kampong Speu province	\$	9,531.50	\$	9,531.50	\$	-	100.00%
Activity 3.1.1: Capacity of key stakeholders to develop and start a program of action for watershed management in place.	\$	284,700.00	\$	84,769.14	\$	199,930.86	29.77%
ACTIVITY3.2: Development of basic, scalable monitoring and assessment system for land degradation.	\$	43,669.71	\$	43,669.71	\$	-	100.00%
Activity 3.2.1: Participatory monitoring and assessment to support agreed upon program of action is in place	\$	212,100.30	\$	27,995.74	\$	184,104.56	13.20%
Project Management Cost	Ŷ	\$ 123,000.00	\$	56,840.54	\$	66,159.46	46.21%
TOTAL	L,	250,917.00		464,532.12		786,384.88	37.4%

Table 7: 2018 Project Bu	dget and Expenditures
--------------------------	-----------------------

		2018						
Activity	Description	BUDGET [2018]	EXPENDITURE (JAN-DEC)	BALANCE	Delivery %			
COMPONENT 1: On Farm Soil Conservation and Agroforestry Practices Improved.								
Activity 1.1	SLM priorities mainstreamed into local authority area plans in collaboration with MAFF and partners	\$ 55,559.76	\$ 57,675.89	\$ (2,116.13)	+			
Activity 1.2	Suitable SLM practices for small landholders demonstrated.	\$ 39,714.29	\$ 17,072.94	\$ 22,641.35	43%			
Activity 1.3	Suitable land use practices demonstrated among medium to large scale agribusiness entities.	\$ 26,100.00	\$ 29,053.89	\$ (2,953.89)	+11.3%			
	Sub-total Component 1:	\$ 121,374.05	\$ 103,802.72	\$ 17,571.33	86%			
COMPONENT 2: Community Forest Areas restored and sustainably managed								
Activity 2.1	Prioritized actions to accelerate CF implementation, reflected in local authority and MAFF programs of action.	\$ 20,677.36	\$ 12,991.87	\$ 7,685.49	63%			
Activity 2.2	Suitable restoration strategies and livelihood enterprises demonstrated.	\$ 86,307.14	\$ 77,599.98	\$ 8,707.16	90%			
	Sub-total Component 2:	\$ 106,984.50	\$ 90,591.85	\$ 16,392.65	85%			
COMPONENT	3: Watershed management and monitori	ng capacity						
Activity 3.1	Capacity of key stakeholders to develop and start a program of action for watershed management in place.	\$ 143,676.53	\$ 84,769.14	\$ 58,907.39	59%			
Activity 3.2	Participatory monitoring and assessment to support agreed upon program of action is in place	\$ 55,774.80	\$ 27,995.74	\$ 27,779.06	50%			
	Sub-total Component 3:	\$ 199,451.33	\$ 112,764.88	\$ 86 <i>,</i> 686.45	57%			
PROJECT MAN	IAGEMENT COST	\$ 45,067.42	\$ 36 <i>,</i> 699.54	\$ 8,367.88	81%			
TOTAL for 2018		\$ 472,877.30	343,858.99	\$ 129,018.31	73%			

DONOR	CON	ITRIBUTIONS (U				
	Committed	Rec	eived	Total Received	Contribution Balance	
	Committed	2017	2018			
GEF	1,100,917.00	169,950.00	395,877.30	565,827.30	535,089.70	
UNDP (TRACT FUND)	150,000.00	14,000.00	77,000.00	91,000.00	59,000.00	
TOTAL	1,250,917.00	183,950.00	472,877.30	656,827.30	594,089.70	

Table 8: Funds Received and Balance as of December 31, 2018

Source: CoWES Project Office

Co-financing commitments include in-kind support from the government and UNDP funding of selected activities, as summarized on **Table 9**. These contributions are generally in line with planned commitments and GEF project expectations, although in-kind contributions are not currently tabulated. The practice of contracting on-leave and recently-retired government staff may have affected the actual government co-financing contribution.

Co-financing	Co-	Co-	Planned	Contributions
source	financing	financing	Activities/Outputs	to date
	type	amount	(Project Document)	
Royal	In-kind	\$240,000	Project management	Not accounting of
Cambodian			Domestic travel	these contributions but
Govt			Trainings/conferences	staff time and venues
			Knowledge management	provided are significant
			Surveys	
UNDP	Cash	\$150,000	Carry out assessment on	Table 8 shows 91,000
			ecosystem valuation and	or 61% received to the
			Payment for Ecosystem	end of 2018
			Services Models	
			Project Management	

Table 9: Co-financing Commitments

3.3.4 Stakeholder engagement

The project has endeavored to involve all of the relevant stakeholders, although more direct collaboration with the Dept. of Water Resources would have been preferred. A large number of participants (732) have been involved in meetings and trainings (**Annex 9**). MB has been actively involved with the communities.

Community engagement of village leaders and participating households in the community forestry and agricultural demonstrations of small scale irrigated farming appears to be good based on the field visits. There is active involvement of the stakeholders and MB staff in promoting the livelihoods development and the market access needed to sustain these livelihoods. As noted in this report, not all of the community members and MAFF staff are aware of the larger project objective to address watershed-scale concerns.

3.3.5 Communications and outreach

The project is viewed as a livelihoods and community forest protection project more than a watershed management project. Increased awareness about watershed processes, upstream – downstream linkages and the effects of land use/cover on water availability/shortages /quality would help to expand the project perceptions. Uncertainties also remain about the future implementation of the NAP.

Internally, some of the contractors, for example, within DARLM, were not aware of each other's work. The exchange of information between MB and MAFF counterparts is also only intermittent.

Enhanced outreach to potential farming participants in the agricultural activities, especially to women and unemployed youth in the villages (e.g., farmer field schools, young farmers clubs, local extension group, ASPIRE extension methods) might assist the spread and replication of agricultural livelihoods.

3.3.6 Risk management

Risks were identified in the project design as follows:

Outcome 1 - Shifts in priorities of national and provincial government, with increased emphasis on economic growth at cost to sustainable development; and agribusinesses, particularly ELC companies, reluctant to enter into discussions with government on contentious issues; 1.3 may not be achievable.

Outcome 2 - Farming and village households in project target areas (including CF) reluctant to give up charcoal making as supplementary source of income.

Outcome 3 - Institutional arrangements unwieldy and render implementation slow and uneven.

All of these risks are still valid. Involvement of agri-businesses in SLM is uncertain. Local people are still heavily involved in non-sustainable forest activities and the spread of alternative livelihoods has a long way to go. The necessary institutional arrangements and capacity for watershed management at a river basin or sub-basin scale are not in place. Further risks and constraints are highlighted in section 3.2.5.

3.3.7 Gender and inclusiveness aspects

The gender action plan (GAP) was developed during the inception phase to respond to the needs and priorities of women within the community, and particularly those of poor and vulnerable women. The GAP combines measures to ensure that women have equal opportunity as men, to participate and benefit from project activities.

The Project Inception Report noted that diminishing agricultural returns, reduced access to land resources, and water insecurity place a disproportionate burden on women as they are most often the caretakers of these families, responsible for collecting water for household use and feeding their families, in addition to working as laborers in the fields.⁴⁰ The GAP focusses on raising awareness, ensuring participation of women, and providing specific livelihood opportunities for women. A key target was to ensure at least 30% of the participants and beneficiaries are women. The expected results for women's participation have been met. The household survey also provided gender-disaggregated data collection.

At the project management level, a representative from the Ministry of Women's Affairs (MoWA) is a member of the Project Board providing strategic guidance and gender perspective for the project's execution. At the operational level, it was reported that 27 female participants (61.36%) as representatives of selected 44 smallholders have voluntarily participated in farm demonstrations. There were 732 participants who attended different trainings and workshops organized by project and 30% were female.

3.3.8 Project monitoring and reporting

The project staff and UNDP/GEF advisors have been diligent at regular reporting as required by GEF Secretariat (annual PIR), even if the project indicators are not completely useful or measurable. Table 4 and Annex 2 show the limitations in the project indicators, some of which are not suited to the project scope and scale. They reflect an assumption that NAP policy support was already established for watershed management and that the project could influence watershed processes.

⁴⁰ CoWES Inception Report, Feb 28, 2018, p.43

The 2018 PIR report indicated the problems with delays in establishing the project foundations (in section 3.2.4) However, the PIR did not recognize the critical factors and barriers that are noted in section 3.2.5 that limit the progress toward expected results.

A detailed Annual Report was completed for 2018. A household survey of 33 sample households was also undertaken to "set benchmarks for project monitoring and evaluation to inform on the impact of the CoWES project and to understand the situation of the target beneficiaries for setting project targets to achieve." ⁴¹

A site visit field mission was undertaken and a report produced in Oct-Nov 2018. Observations noted in this report included:

"The project scale is quite small, targeting only three CFs/CPAs. Among the two communities the monitoring team visited, agro-forestry activities are planned for between 2-5 ha of CPA/CF land in addition to family farming land which the project hope to effect through improved farming techniques. Therefore, the potential for the project to have impact at scale on land improvement for better watershed management as part of the much larger Steung Prek Thnot watershed is limited. It is recommended for MAFF and UNDP to ground future watershed management initiatives around the same areas to bring about larger impacts." ⁴²

The monitoring and reporting has been effective and timely but with significant constraints in being able to apply the Results Framework indicators. (See Table 4 and section 3.1.2) The high expectations about watershed level results (Outcome 3), the difficulties in applying some of the indicators, and the need to measure the capacity of local communities to sustain progress are the key concerns with the M&E process. Core indicators for measuring each Outcome are suggested under the Rationale for Recommendation 9.

3.4 Project Sustainability

Financial drivers and risks to sustainability – These are primarily the income effects of engaging in small scale irrigated farming and sustainable forest livelihoods. The extent to which these are financial incentives for households to engage in these project activities will determine sustainability. Model farmers have shown the positive benefits of vegetable and mushroom farming. Will these benefits attract other farmers to the technology? At the midterm stage, there are no data showing the level of uptake of the new livelihoods by others and it is not clear whether these will be sufficient to attract men away from the unsustainable forest harvesting activities that predominate in the project villages. Nevertheless, the

⁴¹ Tosoth Kong, Baseline Survey Report, CoWES, 2019.

⁴² UNDP Cambodia CoWES Project Monitoring Report, Nov 26, 2018.

increased incomes from model farmers demonstrating small scale irrigated farming after one growing season suggest some positive results for sustaining and expanding the farming options. Increasing the dissemination effort and improving market access are suggested actions that would enhance sustainability.

Socio-economic risks to sustainability – The community commitment to forest protection and to maintaining community water supply infrastructure is the main issues for socioeconomic sustainability. The extent to which local people and outsiders respect the rules regarding no tree cutting in community forests and protection of water resources will determine local sustainability. There is some uncertainty given the history of neglected forests and CPAs in the past.

Institutional and governance risks to sustainability – The leadership quality and organizational strengths of local forest and water supply committees and operational and maintenance arrangements are also key factors in sustainability. Discussions with local people indicated a recognition of the ongoing post-project duties and responsibilities. But limited government backstopping (e.g., hand pump damaged and not working at one site) reflect the challenges. Similar doubts exist about MAFF/PDAFF institutional capacity to sustain the project results.

Environmental risks to sustainability – These risks are low but they could relate to the quality of the water structure being constructed, and then quality of water secured for domestic and agricultural use. Both of these aspects will be mitigated through quality assurance on the design and construction of the local infrastructure and through testing of final water supply quality.

Overall, sustainability is rated as *Moderately Likely*. Without more certainty about NAP implementation and MAFF commitment to developing a results-oriented strategy for Upper Prek Thnoat watershed, the prospects for landscape scale management action (Outcome 3) are relatively low. The work at the community level however (Outcome 1 and 2), offers more hope of sustaining local results and expanding the opportunities to encourage less dependence on forest logging. The extent to which community committees can be strengthened over the next year will determine long term potential to sustain the local results.

4. Conclusions and Recommendations

4.1 Conclusions

The overall objective "to restore and maintain forest cover and watershed stability functions" in the Upper Prek Thnot watershed will be difficult to achieve without further development of an effective policy and institutional framework and the necessary capacity and commitment of MAFF, other government agencies and large agri-business operators.

The CoWES project has nevertheless assisted in mobilizing local authorities (district, commune, and village) to integrate SLM provisions into development plans, strengthen community forest protection, enhance water supply and introduce farming practices and livelihoods that help to reduce the unsustainable exploitation of forests. The water supply development is important for promoting new agricultural livelihoods that depend upon small scale irrigation such as vegetable and mushroom farming as alternatives to the logging activities which currently predominate in the pilot communes.

Significant progress has been made under Outcome 1 to mainstream and demonstrate suitable SLM practices of small holder farmers. However, further progress is needed to expand these activities beyond model farmers, and to demonstrate the micro-watershed management concept at the local level along with the potential for SLM practices on ELC lands. The outputs to date, small and dispersed, have limited potential to generate broader scale watershed rehabilitation. The project constraints (see section 3.2.5) are mostly related to the limited reach, integration and impact of project activities within micro-watersheds or sub-basin units in the Upper Prek Thnoat watershed.

Progress under Outcome 2 has also been substantive, focusing on re-activating one Community Forest and strengthening/expanding two Community Protected Areas. Management plans have been updated or created, and initial sustainable livelihoods and NTFPs developed for community forest protection and utilization. Sustaining the community organizations has been a problem in the past. Where possible, linking community forest management to improved catchment area management of local water supply sources at a landscape level would further enhance the results from this component.

Progress under Outcome 3 has included completion of various studies and mapping, a strategic 'roadmap' for watershed management action, and support for NAP approval and the pending Sub-national Watershed Management Committee. However, the expected results related to "improved watershed management and monitoring capacity" are not achievable within the project period given the lack of institutional readiness. The suggested emphasis within the time available in the remaining period is therefore on practical local actions and demonstrations by communities, assisted and led by MB, the partner NGO.

The current project implementation arrangements are essentially based on:

- (i) MAFF (DARLM) undertaking background data collection, technical studies and assessments and training with the help of contracted staff;
- (ii) MB undertaking community forestry, water supply and agronomic and agroforestry activities for alternative livelihoods development;
- (iii) Kampong Speu PDAFF (under contract from MAFF) assisting livelihoods development agroforestry and community forestry management;
- (iv) Kampong Speu DoE collaborating with MB on strengthening the management of CPAs;
- (v) Commune councils, community forest/CPA committees, local water management committees and village leaders facilitating and participating in project activities; and
- (vi) CoWES project team supervising, monitoring and administering the project and drawing out and disseminating lessons and knowledge.

These implementation arrangements need some improved efficiency and results orientation. It may be more efficient for MB to have direct responsibility for community forests/protected areas, on-farm agronomy and water supply development, and MAFF/PAFF to have direct responsibility for SLM methods on agricultural lands including collaboration with ECs. Communications between the implementing partners also needs to be improved to ensure that all have an understanding of the project objective and expected results to which their activities are contributing.

The experience applying the GEF capacity development rating system indicates the need for more precision. GEF project designs should be requested to firstly, have a clear vision of realistic capacity-related outcome results, secondly, pre-test well-defined indicators that are able to clearly measure progress toward such results, and thirdly, add the supplementary GEF Tracking Tool to their M&E Plan to provide an additional quantitative perspective on perceived capacity development progress.

Overall, the project has been making good progress despite the delays during the first year and the constraints on achieving some outputs. Intensive management and monitoring over the remaining project period will greatly assist in ramping up deliverables. But the question still remains whether a collection of small-scale capacity building and physical activities, while providing important benefits to poor, water scarce households, can also push watershed management in Upper Prek Thnoat toward a more sustainable future.

4.2 Recommendations

 The CoWES project team should, as a matter of priority, review the scope of work and budget for the community water supply infrastructure being constructed by the project. The total project budget to effectively complete the three community water systems needs to be increased to a minimum of \$50,000 USD.

<u>Rationale</u>: The original, unrealistic \$15,000 budget for community water supply has presented a problem for MB to design effective infrastructure. Further discussion with communities, communes and government technical advisors is urgently needed to determine the final design, costing and cost-sharing details with communes and users. These water supplies are essential to the strategy of offering alternative farming opportunities in place of logging activities. Local people currently buy poor quality water for domestic use. The groundwater is salinated in some villages and finding reliable and feasible water sources can be a challenge at some locations.

2. The CoWES project team should immediately identify a demonstration micro-watershed and initiate a set of soil and water conservation measures and related training aimed at stream rehabilitation and stabilization with the participation of ELCs and local authorities.

Rationale: Little progress has been made on Output 1.3 - "suitable land use practices demonstrated among medium to large scale agribusiness entities", and the project has not fully demonstrated watershed management methods to address the types of problems that are present on ELC lands and elsewhere as envisioned in Output 1.1/1.3. Ideally, these methods should be showcased on an ELC plantation. If this is not possible, a site(s) could be selected downstream or nearby to show how such methods contribute to better land productivity and water quality. If possible, select the demonstration training site within a community water supply catchment area. The primary interventions have been farm ponds and improved cropping systems. To date, there are no demonstrations of significant soil and water conservation methods or bioengineering land stabilization methods that can be used to manage rainfall runoff, soil erosion and rainwater harvesting. This is a conspicuous gap in the demonstration of landscape level watershed management. Appropriate forms of land shaping, riverbank stabilization, bio-engineering, conservation agriculture, drainage control and rainwater harvesting/detention ponds could be considered, as needed. This activity should be mobilized quickly in order to ensure implementation before the May-June rainy season. The training materials should be designed to provide a simple case study manual on methods suitable for agribusiness operations and local authorities.

3. The CoWES project team should update the workplan, budget and implementation arrangements to accelerate progress on a clear set of field activities with a focus on (i) alternative livelihoods development, (ii) soil and water conservation demonstrations, and (iii) sustaining community forest and water supply management committees.

<u>Rationale</u>: There is a need to re-visit the project allocation of implementation duties and budget lines to simplify responsibilities and enhance measurable results. The field coordination and lead implementation responsibilities of MB should be recognized in the workplan and budget. Suggested adjustments are outlined in Section 4.3 below. Providing adequate resources for community water supply development, reducing overlap in forest conservation work, expanding the livelihoods at farm/community ponds, considering market linkages, adding demonstration of landscape soil and water conservation, utilizing technical expertise of Department of Water Resources and sustaining local committees are the major themes.

The project has had limited effect on initiating watershed management of sufficient scale to address Upper Prek Thnot watershed degradation. Political and institutional challenges can only be resolved through NAP implementation and high level government directive. Aspects of the watershed concept, however, could be assisted through a focus on the community water supply catchment areas surrounding the reservoirs in each of the three project communes. The project should endeavour to show how micro-watershed treatments can be applied at a field level. Some re-allocation of budget amounts and implementation duties is needed to improve project deliverables in a focussed manner.

4. The Project Board should invite the Kampong Speu Department of Water Resources and Meteorology to join the project and to provide technical review and advice on the water storage structures being constructed by the project.

<u>Rationale:</u> The Department of Water Resources and Meteorology has direct experience with the water reservoirs in the project areas and expertise in design and construction of water infrastructure. They have had some earlier input into the project inception and recent consultations with MB about the project's water development activities. It is important for UNDP/GEF to ensure external quality assurance on the engineering of these structures to meet the required design and construction standards. In addition, the department supports any possible measures to enhance the hydrological systems within the catchment areas of the reservoirs and to encourage community involvement in protection of these water sources. Their involvement should be formally requested. 5. The Project Board should seek extension of the project period by at least three months to capture the 2020 planting season, and to incorporate this extension in the updated workplan.

<u>Rationale:</u> The early delays in project start up and the unforeseen challenges in meeting the high project ambitions (e.g., government capacity for watershed management, ELC willingness and process to cooperate) have put the project behind schedule. Overly rushed delivery and disbursements in the final year are not conducive to quality results. The remaining funds, about 60% of total budget at the end of 2018, need to be spread over two planting seasons to achieve the planned outputs and to support sustainability. This scheduled extension should be decided soon in order to ensure effective workplan and budget revisions.

6. The CoWES project team should organize monthly meetings with MAFF/DARLM and MB to review workplan implementation progress, to actively address any issues that need the attention of UNDP or senior government officials, and to improve overall communications.

<u>Rationale</u>: The intensive scale-up of project activities warrants more regular consultations and monitoring of progress. The need to accelerate project field activities was mentioned by several stakeholders. Many of the implementing participants were not aware what others were doing. The limited project time frame warrants increased focus and timelines for output delivery. On-site progress meetings should be encouraged where possible.

7. The CoWES project team should distribute Information on the project, NAP status and the watershed management concept to senior officials at Provincial, District, commune offices and the major EC agri-business companies in the project areas in order to promote awareness of watershed management. A quarterly e-newsletter should be considered.

<u>Rationale</u>: The MTR mission noted the lack of awareness of the watershed approach. There is a need to further explain the project (sometimes viewed as rural development) and to highlight the NAP and the strategy being used by CoWES to contribute to the NAP implementation leading to reduced pressures on forest and land degradation. This should include information sent to the 12 ELCs in the project area to inform them about the project.

8. DARLM should provide technical guidance on Upper Prek Thnoal watershed management that will assist MAFF in preparation for the program to be initiated by the NAP Sub-national Watershed Management Committee.

<u>Rationale</u>: The general 'roadmap' that has already been produced by the project has the potential to be forgotten unless it becomes an active part of NAP implementation. It is not clear who is expected to follow-up and how it aligns with the potential programs of the new SWM Committee. The studies completed by DARM could provide additional technical information to assist the beginning of a provincial strategy for the watershed. See further discussion in section 4.3 below.

9. The CoWES project team should refine the monitoring and reporting based on a core set of relevant Outcome indicators (see suggested indicators).

<u>Rationale</u>: There have been difficulties clarifying achievable and measurable outcomes (See Table 3 and 4 and Annex 2). The following core indicators are suggested for the remainder of the project:

Outcome 1: a) Number of community members participating in small-scale irrigated farming as a result of new water supply, b) list of actions taken by local authorities to implement the SLM measures integrated into their development plans, c) capacity and sustainability attributes of water resource (user group) committees, and d) number of ELC participants involved in the demonstration and training on SLM methods.

Outcome 2: a) Integrity and restoration of forest cover in CF and CPAs, b) number of community members participating in sustainable forest livelihoods in CF and CPAs⁴³ and c) capacity and sustainability attributes of CF and CPA committees.

Outcome 3: Actions taken by Provincial authorities to initiate NAP implementation in Upper Prek Thnoat watershed.

4.3 Advice on the 2019-2020 Workplan

The review and update of the project workplan and budget by the CoWES project team should consider the MTR Recommendations and the following specific suggestions drawn from the MTR field mission. These suggested revisions to activities and budget allocations emphasize three key priorities: 1. completing the community water systems and the scale out of irrigated farming practices, 2. establishing at least one demonstration area in a selected microwatershed to implement a variety of soil and water conservation methods in conjunction with an ELC, and 3. ensuring sustainability of the local committees responsible for CF/CPAs and community water systems management. These priorities also imply less effort on 'restoring'

⁴³ The survey of 33 households targeted by the project should be repeated to assess livelihood diversification improvements, including a comparison of the relative local benefits of different agronomic and forestry activities.

forests (rely on natural regeneration) in Outcome 2, and little or no further studies or training under Outcome 3 (await policy direction for NAP implementation).

(a) <u>Small-scale irrigated farming (Output 1.2)</u>: demonstrate integrated farming systems at farm ponds and community ponds with further consideration to market linkages and outreach methods to scale-up beyond the model farmers.

<u>MB should</u> (in addition to strengthening CF/CPA functions) continue to expand the irrigated farming alternatives based on enhanced water supplies, with more emphasis on outreach to young farmers (gender equity attention) through farmer field school and related approaches, and demonstration and promotion of the significant income effects of 'integrated farming systems' (crop, agroforestry, fish, livestock mixed farming) centered on farms pond and community ponds. If effective access to water, technology and opportunity can be promoted, this would help to establish a distinct and compelling alternative to forest exploitation livelihoods. As noted by some stakeholders, market linkages should be considered in the project support for the small-scale irrigated farming. More budget should be shifted to physical outputs being implemented by MB, particularly given the major task of enhancing water supplies.

(b) Soil and water conservation demonstration training areas (Output 1.2/1.3): create high profile demonstration areas for soil and water conservation demonstrations and training within water supply catchment areas and/or EC lands.

<u>PDAFF should</u> concentrate on addressing gaps not served by MB, notably by establishing a few sites to demonstrate how to manage rainfall runoff, soil erosion, and land degradation, and utilize these sites for training on micro-watershed management methods, preferably (i) in the catchment areas of local reservoirs and (ii) on the large scale plantations (at least one site) of agri-business EC companies. The outputs for budget lines 2.1.4-2.1.9 and 2.2.3-2.2.8 should be re-assessed to focus on tangible results.

Specific opportunities to reduce soil erosion and sedimentation, and to improve and manage hydrological inputs into the reservoirs along with exposure training should be proposed within the budgets available under a results-oriented work package for PDAFF. Three reservoirs are currently providing sources for community water supply improvements to support small scale irrigated farming and domestic needs. Potential sites for SLM rehabilitation on the drainage systems that feed Chrok Reusey reservoir (Dokpor village), Ou Anchea reservoir (Taing Bompong village) and Peamlvea reservoir (Lgem village) reservoirs could be identified in a reconnaissance survey in the catchment areas. Available budgets and feasible interventions need to be determined. Provincial agriculture

and water resource department and district irrigation experts should be involved in this process.

With the assistance of Provincial Administration and District Governors' offices, SLM demonstration training from MAFF/CoWES should be initiated on or near ELC lands. The agri-business companies should be consulted and invited for proposed technical training and demonstration of appropriate SLM methods at a case study site offered by an ELC company. MAFF ELC Secretariat and government technical experts (PDAFF) could cooperate to facilitate on-site training aimed at showing how land and watercourse degradation can be reduced and land productivity enhanced through soil and water conservation and drainage management techniques. The workplan directive could be as follows:

Identify one or two SLM demonstration training areas where watershed management issues are occurring (e.g., soil erosion, land slippage, soil fertility loss, riverbank instability, overland flooding, downstream water quality impacts, high sedimentation of reservoirs, groundwater depletion or contamination, etc.), and propose demonstration methods to mitigate or remediate these issues and to maintain good land and water management practices.

(c) <u>Kampong Speu readiness for NAP implementation (Output 3.1)</u>: provide practical technical guidance for Kampong Speu province readiness to implement NAP through the new SWM Committee (it is too early to promote sub-basin planning and AEA methods).

<u>DARLM should</u> assist Kampong Speu in developing realistic, practical advice on how the province can be ready to implement NAP in Upper Prek Tnot, including potential multisector roles for relevant land management programs (eg., REDD, ASPIRE, LWD, etc.) and for mobilizing the government systems for watershed management action. This institutional planning for NAP next steps should take account of the capacity and resource limitations within MAFF and line agencies to deliver results on the ground. The province's internal plan to advance SLM in Upper Prek Thnoat watershed in collaboration with the SWM Committee could offer an important contribution to guide other provinces in NAP implementation. Most of the DARLM outputs have been aimed as some future watershed management scenario of questionable likelihood. They need to focus on a useable short term product from Output 3.1. The workplan directive could be as follows:

Prepare a technical analysis and guidance for the SWM Committee to initiate watershed management in Prek Thnoat watershed that draws upon the technical assessment and mapping already completed by DALRM and CoWES studies. This technical advice should highlight the key priorities and general pathways for NAP implementation in Upper Prek Thnoat.

(d) <u>Technical and advisory role for Dept. of Water Resources</u>: seek specific contributions with formal input of the technical expertise and role of the Water Resources Department (PDWRM) as part of the project implementation.

<u>CoWES Project Board should</u>, as part of the government in-kind co-financing contribution (\$240,000), invite the Provincial Department of Water Resources and Meteorology to serve as technical advisors and a Board member. This arrangement should include their assistance to provide technical guidance and quality assurance as needed on the specific water storage structures being constructed and external checks on conformance to accepted engineering design and construction standards. A collaborative inter-ministry process under CoWES project can build experience for future NAP implementation activities.

(e) <u>Monitoring capacity of community organisations (Output 3.2)</u>: develop the basic criteria and monitor the managerial and financial sustainability potential of the CF and CPA committees that have been strengthened by the project and the Water Resource Management Committees (water user groups) associated with the three community water systems that have been constructed by the project.

<u>CoWES project team should</u> monitor the status and self-sustaining potential of the community forest/CPA committee and the water management (user group) committees. The development of local capacities will be important for project sustainability. The workplan directive could be as follows:

Identify and apply basic criteria for assessing and monitoring the organisational, leadership, administrative and financial capacity of community committees/user groups to manage community forests and water systems, and address gaps in capacity wherever possible.

This advice is presented for discussion purposes, based on preliminary observations during the MTR field mission. There are implications for review of the partner agreements and the budget lines for 2019-2020.

Annex 1: GEF Midterm Results Tracker, Progress towards Results Matrix

Project Strategy	Results Indicator	Baseline Level	Level in 1 st PIR	End-of-project	Midterm Level &	Reasons for the
	-M&E Plan	-M&E Plan	(self- reported)	Target	Assessment/Rating ⁴⁴	Rating
OBJECTIVE To restore and maintain forest cover and watershed stability functions while providing for sustainable livelihoods and ecosystem services in the Upper Prek Thnot Watershed	 Capacity to implement the strategic objectives of NAP as measured by the <i>Capacity</i> <i>Development Scorecard</i> (MAFF/Local Authority – LA) Areas brought under productive land management in the project target areas Percentage of targeted households (gender disaggregated data) in the project target areas benefiting from diversified livelihoods Percentage of improvement of net primary production for project target 	MAFF - 14 LA - 13 0 0	No tangible progress during this reporting period	MAFF – 41 LA – 28 150 Ha 50% 500 HHs	NU – Moderately Unsatisfactory Unsustainable forest harvesting is the principal source of emploment and the water shortages and declining water quality are directly related to the increase in upstream development and water use. Local interventions are unlikely to have a marked effect on the larger scale processes. Capacity development for watershed	The project objective implies a significant increase in forest protection,restored watershed functions and increased management capacity to provide the basis for a major shift in livelihood diversification and improved hydrological balance in the watershed. The scale of expectations are too large for this small project
Outcome 1	1. Percentage increase in average	0	No tangible	20%	management is limited. MS – Moderately	Mixed results so far
On-farm soil conservation and agro- forestry practices improved	 gross and net income per household in forest areas in project target areas of Aural and Phnom Sruoch districts 2.Land productivity for rice production (tonnes per hectare) 3.Labour productivity: rice output USD per person/yr 	2 tonnes/ha	progress during this reporting period.	2.2t/ha	Satisfactory Model farmers have been sucessfully demonstrationg irrigated farming and attracting some interest from other farmers – extent of dissemination to be determined. Agro-	for Outcome 1 outputs. A basleine HH survey has been completed and changes attributabe to the project will be survyed again. Some positive progress towawrd sustaibale

⁴⁴ Colour code this column only

Project Strategy	Results Indicator	Baseline Level	Level in 1 st PIR	End-of-project	Midterm Level &	Reasons for the
	-M&E Plan	-M&E Plan	(self- reported)	Target	Assessment/Rating ⁴⁴	Rating
	4.No. of PPP case study developed as model for applying good practices in watershed management	250 USD 0		300\$ 1	forestry only recently proposed. New water sources under construction. However, no substantive progress on engaging ELC agri- businesses	livelihoods but other expected outputs not yet commenced.
Outcome 2 Community forest areas restored and sustainably managed	 Percentage increase in forest and vegetation cover of commune forest in locally prioritized micro community watersheds based on land use management plan, strengthened law enforcement, conservation and sustainable use Percentage increase in average gross and net income per participating household 	0	No tangible progress during this reporting period.	10% 20%	S – Satisfactory Re-activation of forest committees has occurred and they are striving to develop sustainable forest livelihoods. Ongoing protection of forests still needs assurances.	Outcome 2 has made good progress, perhaps because it involved re-building some earlier community organisations and a strong awareness about the value of forests for local people.
Outcome 3 Watershed management and monitoring capacity improved	 1.A collaborative program of action to enforce regulations and establish provincial level administrative mechanisms for Prek Thnot watershed 2.Number of measurement parameters for management of soil, water, land and forest defined and included in a functional monitoring and evaluation system that supports agreed upon watershed management strategies 	None 0	No tangible progress during this reporting period	One 10	U – Unsatisfactory There is some uncertainty about what can be acheived from this component until NAP implementation is underway, along with the necessary institutional change needed to establish landscape level watershed management	Awareness-raising, background studies, initial training on some elements of watershed analysis and preparation of a draft roadmap for watershed management are key outputs but the fundamental development of a watershed program has not commenced.

Strategy/component	Indicators	Baseline condition	Mid term target	End of project target	Progress as of January 2019 summarized by project staff
Objective To restore and maintain forest cover and watershed stability functions while providing for sustainable	 1.Capacity to implement the strategic objectives of NAP as measured by the <i>Capacity Development</i> <i>Scorecard</i> (MAFF/Local Authority – LA) 2. Areas brought under 	MAFF – 14 LA - 13	MAFF – 30 LA - 20 50 Ha	MAFF – 41 LA - 28 150 Ha	Ob. 1: MAFF: NAP was approved by Prime Minister on April 2, 2018. Under NAP, many working groups will be established. Sub-national committee for watershed management is one of other working groups (under formulation) and capacity scorecard
livelihoods and ecosystem services in the Upper Prek Thnot Watershed	productive land management in the project target areas 3. Percentage of targeted households (gender disaggregated data) in the project target areas benefiting from diversified livelihoods	0	20% 200 HHs	50% 500 HHs	 will assess right after sub-national committee for watershed management (MAFF) officially formulated. Local authorityLAs (3 target communes): the capacity scorecard was marked by start-up advisor and it will do again in 2020. The progress is on track for LA. Ob 2: Areas for SWC and SLM identified
	4. Percentage of improvement of net primary production for project target areas (UNCCD long term monitoring)	10%	10%	15%	(DORK POR, Longim and Tang Bampong). Activity started at Krang Devay Commune in Dec 2018. Ob 3: 44 (27F) Selected/voluntary households trained on agricultural technologies and small scale of water supplied is under constructing. A few

Annex 2 - CoWES Project Results Framework - Progress to January 2019

					households have applied what they have learned. Ob 4: Too early to conclude. Based on an international advisor (start-up advisor), this result will appear with minimum 5 years. However, it will look for the changed landscape, especially protected areas at 3 target communes, 1CF and 2CPAs identified. The 3 protected areas are on track, well progress.
Outcome 1 On-farm soil conservation and agro-forestry practices improved	1.Percentage increase in average gross and net income per household in forest areas in project target areas of Aural and Phnom Sruoch districts	0 2 toppos/ba	10%	20%	OC 1.1: Too early to make assessment due to related activities are starting Nov 2018, however some trained households have been generating incomes from mushroom and crop cultivation.
	production (tonnes per hectare)	2 tonnesy na	no target snown	2.2011a	OC 1.2: Intangible progress
	3. Labour productivity: rice output USD per person/yr	250 USD	no target shown	300\$	OC 1.3: Intangible progress
	4.No. of PPP case study developed as model for applying good practices in watershed management	0	N/A	1	unformal agreements made between LA (communes) and ELC and mining company to reduce negative impact
Output 1.1 SLM priorities mainstream into local authority area plans in	No. of communes with plans, budgets and working groups reflecting landscape based SLM strategies	district: 0 commune: 0	district: 1 commune: 2	district: 2 commune: 3	caused by ELC or mining company (to plant trees at riverbank and to reduce polluted water.

collaboration with MAFF and partners Output 1.2 Suitable SLM practices for small landholders demonstrated	agreed with district, MAFF and key partners Percentage of men and women adopting SLM practices in the pilot communes	0	10	15	O 1.1.1 Well progresses: SLM, SWC and agricultural intervention were mainstreamed into annual plan (commune investment plan) as well as CDP. District was committed to include these concepts into district plan in 2019 (after new council election).
	No. of SLM oriented extension support system for men and women in place	0	2	3	O 1.2.1. 44 households (27F) have voluntary participated in SLM and SWC, O 1.2.2. 732 participants (F: 25.92%) attended in 23 training courses and
Output 1.3 Suitable land use practices demonstrated among medium to large scale agribusiness entities	No. of agreements with key Agribusiness on relevant practices executed and under implementation	0	1	3	workshops conducted by MAFF, DALRM, PDAF and MB). O 1.3.1. Please see OC4 (above)
Outcome 2 Community forest areas restored and sustainably managed	1.Percentage increase in forest and vegetation cover of commune forest in locally prioritized micro community watersheds based on land use management plan, strengthened law enforcement, conservation and sustainable use 2.Percentage increase in average gross and net income per participating	0	5%	10%	OC 2.1. The increased forest and vegetation within 2-3 years may not visible (assumption made by start-up advisor). The changed landscape is a good option for this measurement: (forest areas at CF and CPA) OC 2.2. Intangible progress due to agroforestry is just staring. O 2.1.1. Progress made, activities related to CF/CPA and livelihood were integrated into the plans of target

Output 2.1 Prioritized	No. of collaborative local	district: 0	district: 1	district: 2	communes. Districts have committed to
actions to accelerate	authority-based plans to				include into their plan after election.
CF implementation	address CF implementation	commune: 0	commune: 2	commune: 2	
reflected in local	issues and livelihood				O 2.1.2. Progress made, CF
authority and MAFF	opportunities				management plan was updated and
program of action					endorsed by PDAFF and CPA
	% of CFs with enhanced	-	-	-	management plan is under
	plans under				development.
	implementation in pilot				0.2.2.1 Intangible progress but
	communes				strengthened community for forest
Output 2 2 Suitable	No. and type of forest	0	0		protection is considering as notential
output 2.2 Suitable	No. and type of forest	U	0	ТВО	stratogy in kooping original species
restoration strategies	restoration strategies in				regenerating at protected areas (CE and
and livelinood	place				regenerating at protected areas (CF and
enterprises	No. of men and women	TBD	TBD	TBD	CPAJ.
demonstrated	benefiting from forest-				O 2.2.2. Intangible progress (related
	based livelihoods				activities of agroforestry is just starting
					at CF).
Outrows 2					
Outcome 3	1.A collaborative program	none	underway	one	OC 3.1. NAP was approved by
Watershed	of action to enforce				government to guide for national
management and	provincial level				programs relating land improvement
monitoring capacity	administrative				productivity and watershed
improved	mechanisms for Prek				management. Roadmap for watershed
• • • •	Thnot watershed				management developed by
	2.Number of measurement	0	5	10	international consultant based on
	parameters for				tinding of Preak Thnoat Watershed
	management of soil,				Economic Valuation Study. This
	water, land and forest				roadmap is an important to use by sub-
	defined and included in a				national committee for watershed
	functional monitoring and				

Output 3.1 Capacity of key stakeholders to	evaluation system that supports agreed upon watershed management strategies Number of stakeholder- based sectors trained in	0	5	10	management when its formally/officially established. OC 3.2. MB (NGO partner) is engaging local consultant to develop and train LA and community on monitoring the
develop and start a program of action for	collaborative watershed management				overall watershed's landscape, watershed-related activities and progresses made by project.
management in place	Collaborative watershed wide program of action and interim coordination mechanism in place	e watershed 0 1 1 0 3.1.1 m of action and dination in place determined by the second s	O 3.1.1. Stakeholders, especially communities and LA were trained on watershed, SLM and agricultural technologies including study visit		
Output 3.2 Participatory monitoring and assessment to support agreed upon program of action is in place	No. of agreements executed at different local levels with stakeholder groups who can help monitor agreed upon indicators	TBD	TBD	TBD	 outside Kampong Speu. O 3.1.2. Roadmap for watershed management developed to be used by sub-national committee for watershed management when it formally formulated. O3.2.1. While waiting for a formal formulation of sub-national committee for watershed management (currently under process), MB is facilitating ad- hoc networking between/among 4 upper-part commune for information share and related activities collaboration/coordination.

Source: Indicators and targets based on Attachment 2 of the Project Inception Report: Revisions on the Project Results Framework and project staff inputs

Annex 3: Evaluation Matrix for Mid Term Review of CoWES Project

Key Evaluation Questions	Indicators	Data Sources	Methods			
I. Project Strategy: To what extent is the project strategy relevant to country priorities, country ownership, and the best route towards						
expected results?						
The coherence and practicality of the project concept, results framework and implementation strategy, and whether based on experience to date,						
anything in the project design needs to be modified to achieve (or re-consider) the project results and implementation strategy						
1. Is the project log frame and theory	Extent to which implementation	Progress reports	Compare Project Strategy to			
of change still relevant and	conforms with the design strategy	Stakeholder views of the	actual experiences during			
appropriately designed given the	Progress occurring with sufficient	project design effectiveness	implementation and interview			
project experience to date?	confidence in reaching outcomes		participants			
2. Are the project assumptions still valid and have any been missed?	 Key assumptions are confirmed or not during implementation Changes that occurred in underlying conditions that affect design assumptions 	 Project Document and progress reports that either affirm or question the key assumptions in the project design 	Compare Project Document assumptions to actual experiences during implementation, and interview participants on issues arising			
3. Is the project in line with and	Project activities are consistent	Progress reports	Interview government staff on			
supported by government priorities	with government policies	Policy documents	NAP/SLM priorities,			
and strategies?	 Government staff support the project at policy/field levels 	Field reports on govt. technical support	commitment and participation			
4. Are the project targets appropriate	Technical design studies confirm	Progress reports	Review data on progress and			
and realistic?	feasibility	Field observation on results	interview staff, partners and			
	Extent of targeting of vulnerable	of the interventions	donors and beneficiaries'			
	beneficiaries	Interviews	perceptions of the project			
	Progress to date relative to targets					
II. Progress Towards Results: To wh	II. Progress Towards Results: To what extent have the expected outcomes and objectives of the project been achieved thus far?					
Achievement and timeliness of progress on the targeted outcomes and outputs per the Project Document/Results Framework (Annex 2) and Annual						
Workplans, including progress relative to M&E tracking tool baseline status						

	Key Evaluation Questions	Indicators		Data Sources	Methods	
1.	What quantitative and qualitative	Changes from baseline conditions	•	Project progress reports and	Compile and collate data from	
	achievements have occurred in	per project Indicators		PPR reports	M&E reports and interviews on	
	terms of output/outcome targets?	Participant satisfaction with	•	Stakeholder interviews	results to date. Review of any	
		quantity/quality of outputs			post training surveys.	
2.	How well has the project	Responses to delays in project	•	Project progress reports and	Compare program schedule	
	progressed relative to work plans	deliverables per schedule		PPR reports	with actual completion of	
	and schedules?		•	M&E data	work.	
3.	Are the mid-term outcome and	Outcome indicators	•	M&E data	Interview beneficiaries in	
	output targets being met?	Output indicators	•	Beneficiary interviews	conjunction with M&E data	
			•	Government interviews		
4.	Is the project reaching the targeted	• Characteristics of the beneficiaries	•	M&E data	Assess progress against targets	
	beneficiaries?	Gender-disaggregated results	•	Field interviews		
5.	What are the issues affecting	• Status of outputs completion, any	•	Project progress reports and	Meetings with project staff and	
	project achievements and	targets not met		PPR reports	implementing partners;	
	components that may not be on	Reasons for non-achievement of	•	Stakeholder interviews	interview stakeholders	
	target?	targets	•	Board meeting minutes		
6.	What actions are needed, if any, to	Recognized issues that need	•	Project progress reports and	Consolidate views on key	
	ensure, accelerate or expand	attention		PPR reports	issues and assess consensus on	
	project achievements?	• Proposed action by the project to	•	Stakeholder interviews	actions needed	
		address issues	•	Board meeting minutes		
III.	III. Project Implementation and Adaptive Management: Has the project been implemented efficiently, cost-effectively, and been able to adapt					
	to any changing conditions thus far? To what extent are project-level monitoring and evaluation systems, reporting, and project					
	communications supporting the project's implementation?					
	- Performance of the management	structure and coordination mechanisms,	wor	k planning and financial manage	ment, and adaptive responses	
	- The reliability and usability of the Project Indicators for monitoring and reporting against baseline conditions, the quality of the monitoring plan,					
	and the reliability of the monitoring system, data quality and progress reporting.					

- The accuracy of the identified risks, any required changes in risk rating and any new risks that have emerged since project start-up

	Key Evaluation Questions		Indicators		Data Sources	Methods
1.	Are the management structure and	•	Perceived clarity of roles and	•	Interviews with project	Interview project staff and
	the roles and responsibilities		responsibilities by stakeholders		partners	implementing partners
	operating as planned in the Project	•	Participant satisfaction	•		
	Document?					
2.	Are the coordination mechanisms	•	Extent of partner knowledge and	•	Interviews with project	Interview project staff and
	operating effectively?		engagement		partners	implementing partners
		•	Number of meetings/workshops	•	Progress reports	
3.	How effective are the working	•	Participant satisfaction	•	Interviews with project	Interview project staff and
	relationships and communications	•	Extent of collaboration on		partners	implementing partners
	between the implementing		implementation activities	•	Progress reports	
	partners?					
4.	Is the executing agency providing	•	Number and significance of	•	Interviews with project	Interview project staff and
	sufficient management direction		project delivery issues		partners	implementing partners
	and how could it be improved?	•	Participant satisfaction	•	Progress reports	
5.	Is UNDP providing effective support	•	Number and significance of	•	Interviews with project staff,	Interview project staff and
	and quality assurance and how		project management issues		partners and beneficiaries	implementing partners. Review
	could it be improved?	•	Timeliness of recruitments			implementation issues.
		•	Participant satisfaction			
6.	Is the Project Board providing	•	Number of meetings and decisions	•	Interviews with project staff	Interview project staff and
	effective oversight and guidance		taken by project committees		and partners	implementing partners
	and how could it be improved?	•	Pro-active actions of management	•	Beneficiaries' comments	
	-		bodies (adaptive management)			
7.	Does the project have the	•	Annual expenditures in relation to	•	Stakeholder interviews on	Review financial audit and
	appropriate tinancial controls,		annual budgets		implementation modalities	progress reports.
	including reporting and planning, for	•	Efficiency of disbursements and	•	Financial audits	
	funds?		financial management (delays in	•	Minutes of meetings	
	iunus:		payments, etc.)			

Key Evaluation Questions	Indicators	Data Sources	Methods
8. What is the status of expected and	Self-assessment by implementing	Tracking of co-financing	Interview project staff.
actual co-financing?	partners of their contributions	contributions (table)	
9. Are the project indicators being	Reporting as per M&E indicators	Project progress reports	Review project reporting use
used and is the M&E framework	• Extent of implementation of M&E	Stakeholder interviews	of indicators.
effective?	manual		
10. Have critical risks to achievements	Occurrence of known or	Risks identified in the	Review and assess current risk
and sustainability been sufficiently	unexpected risks affecting	ProDoc/ ATLAS Risk	profile.
addressed?	implementation progress	Management Module	
	Actions taken to reduce the	Progress reports describing risks triggered	
	effects of these risks		
 IV. Sustainability: To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results? The conditions necessary for project-related results and benefits being sustained and viable without major social/environmental risks after th 			o sustaining long-term project
project is completed.			
1. To what extent is the project	Institutional capacity indicators	Training and capacity	Review training reports and
contributing to capacity	• Extensions services promotions of	development reports	tracking tool data. Interview
development to sustain results?	adaptation measures	Capacity development	local authorities and farmers
	Project Outcome 3 indicators	scorecard	
2. What factors are likely to drive or	• Financial viability of the practices/	Interviews with staff,	Assess viability and uptake of
affect sustainability – financial,	technologies for households and	partners and beneficiaries	SLM practices with farmers.
institutional, socio-economic, and	farmers	Sustainability analysis from	Interview local authorities on
environmental?	Integration of adaptation actions into government systems	interview data	mainstreaming efforts.

Annex 4 – Draft Interview Guide

The following is a set of lead questions that may be used in a general manner to prompt and guide the evaluation discussions. It is a guide only and not a questionnaire. Questions may be added or avoided depending upon the available time and the particular involvement of the interviewees.

Government/NGO Partners

- 1. What has been your involvement in the project?
- 2. What are the Major Challenges you have faced so far in implementing the project? Can they be addressed be adjusting the project implementation strategy?
- 3. Are there constraints on the availability of government staff on the ground to assist project implementation?

- 4. What training or technical assistance have you received from the project?
- 5. How useful was it? Has it had any significant effect on how you do your job? Please explain.
- 6. Can you describe the Community Forest plans that have been completed or underway? Have any problems been encountered? How will the plans be implemented?
- 7. Do you have any data on changes in crop yields and HH incomes as a result of the improved farming practices in the project?
- 8. What proportion of HHs in the target areas have adopted (a) new farming practices promoted by the project and (b) new livelihoods that have been promoted?
- 9. Is there any distinct evidence of watershed function improving as a result of project activities?
- 10. Should anything be changed to make the project more effective and efficient? Recommendations?
- 11. Do you have any comments on specific water, forestry or agricultural activities that you have observed at the field level – sites of best practices, or sites where they have not performed well?

- 12. Have there been any administrative difficulties working with UNDP and GEF systems?
- 13. Are you satisfied with the coordination and communication aspects of the project?
- 14. Is there adequate technical support and management of the project activities?
- 15. Is the gender strategy sufficiently defined and implemented?
- 16. Have there been any planned activities that have been difficult to complete according to the schedule? Have delays affected progress toward expected results?
- 17. Are there any data gaps related to monitoring and tracking results?

Local Beneficiaries

- 1. What project activities have you been engaged in? What is your role in the project?
- 2. What Community Forest areas have been established? Who is responsible for making decisions in these areas?
- 3. What training or technical support has been provided? Was it useful? Why?
- 4. What practical results have been achieved or not achieved from these activities? Examples of benefits from soil conservation demonstrations and Community Forests rehabilitation?
- 5. How does this compare to before the project? Are there any new resources, crop yields or income that can be specifically linked to the project? Data on changes in yields and incomes?
- 6. What % of farmers in your community have adopted the new soil conservation and farming practices introduced by the project? What % are female?
- 7. Have you been provided sufficient technical and training support from extension officers? How useful has this support been for local farmers?
- 8. Do you have any suggestions on how to improve the project?
- 9. What would you say have been the main lessons from the project so far for your community?
- 10. What is the likelihood that the soil conservation and CF activities under the project will continue after the project? Can anything be done to improve sustainability?

Annex 5: MTR Terms of Reference

1. Assignment Information

Assignment Title:	International Mid-Term Review (MTR) Consultant		
Cluster/Project:	Programme and Results Unit "Collaborative Management		
	for Watershed and Ecosystem Service Protection and		
	Rehabilitation in the Cardamom Mountains, Upper Prek		
	Thnot River Basin (CoWES)"		
Post Level:	Senior Specialist		
Contract Type:	Individual Contractor (IC)		
Duty Station:	Home-based and Cambodia		
Expected Place of	Kampong Speu Province, Cambodia		
Travel:			
Contract Duration:	25 working days from 07 January 2019 to 28 February 2019		

2. Project Description

Project context:

Land degradation is a serious issue in Cambodia posing a direct threat to food and water security since it affects agriculture productivity and water retention capacity of watersheds. It is linked with deforestation and forest degradation and exacerbated by climate change perpetuating increased vulnerability to climate related risks in turn. The project title "Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin (CoWES)" is designed to reduce pressures on upland watershed areas from competing land uses by demonstrating collaborative management and rehabilitation of agriculture lands and forest areas by promoting sustainable land management and stabilizing watershed catchment functions in a priority degraded area, Upper Prek Thnot watershed in Kampong Speu Province as identified by the National Action Plan to Combat Land Degradation 2018 - 2027. The project aims to achieve three main outputs: i) On-farm soil conservation and agroforestry practices improved; ii) Community forest areas restored and sustainably managed; and iii) Watershed management and monitoring capacity improved. The project forms part of the UNDP Cambodia's Country Programme Action Plan(CPAP) 2016-2018 by contributing to strengthening environmental services and the system of forest management and protected areas, including sustainable land and watershed management.

Ministry of Agriculture Forestry and Fisheries (MAFF) is the Implementing Partner (IP) of the project, with support from a number of key relevant Ministries. To ensure effective engagement of stakeholders in order to establish institutional arrangements at provincial and district levels to lead watershed management programs and host M&E system in partnership with relevant stakeholders at various levels, various capacity development and trainings for communities as well as for national, provincial and district government officials will be provided by the project through consultation meetings and workshops to promote sustainable land and forest management practices in the targeted area.

CoWES aims to restore and maintain forest cover and watershed stability functions while providing for sustainable livelihoods and ecosystem services in the Upper Prek Thnot Watershed. In order to achieve this objective, the project will demonstrate, or pilot introduce sustainable land management (SLM) technologies with local household (small landholders), SLM and technical advices to agribusiness (large landholders and Economic Land Concession-ELCs) and experiment on

wider landscape management for protection of ecosystem functional services. The project has 3 components and 7 outputs:

Component / Outcome 1: On-farm soil conservation and agroforestry practices improved

- Output 1.1: SLM priorities mainstreamed into local authority area plans in collaboration with MAFF and partners
- Output 1.2: Suitable SLM practices for small landholders demonstrated
- Output 1.3: Suitable land use practices demonstrated among medium to large scale agribusiness entities

Component / Outcome 2: Community forest areas restored and sustainably managed

- Output 2.1: Prioritized actions to accelerate CF implementation, reflected in local authority and MAFF programs of action
- Output 2.2: Suitable restoration strategies and livelihood enterprises demonstrated

Component /Outcome 3: Watershed management and monitoring capacity improved

- Output 3.1: Capacity of key stakeholders to develop and start a program of action for watershed management in place
- Output 3.2: Participatory monitoring and assessment to support agreed upon program of action is in place.

To execute project effectively, MAFF has engaged both non-governmental organization (NGO) and governmental organizations (GO—technical departments) to work and support activities at 3 target communes such as Krang Devay, Trapeang Chor and Tasal located in the upper part of Preak Tnoat Watershed and made significant progress at these target areas.

To assess the project's effectiveness, efficiency, relevance, sustainability and ownership of project implementation, on behalf of the Government of Cambodia and the Ministry of Agriculture, Forestry and Fisheries (MAFF), UNDP is now recruiting an international consultant to conduct midterm review of CoWES Project.

3. Scope of Work

This is the Terms of Reference (ToR) for the Midterm Review (MTR) of the project titled "Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin", known as the CoWES project. In line with the UNDP-GEF Guidance on MTR, this MTR process would be initiated before the submission of the second Project Implementation Report (PIR). The review needs to be conducted before both second meeting of project steering committee (February 2019) and second PIR report (May 2019).

The purpose of the MTR is to assess the project's performance since the beginning of its implementation and provide strategic partway for project intervention. The review will include both the evaluation of the project implementation progress, measured against planned outputs indicated in the results framework, in accordance with rational budget allocation and the assessment of features related to the project. The review will also address underlying causes and issues that have contributed to targets not adequately achieved.

The MTR is intended to identify weaknesses and strengths of the project design and provide recommendations for any necessary change alignments in the overall design and orientation of the project. This is done by evaluating the adequacy, efficiency, and effectiveness of project implementation, as well as assessing actual achievements of project outputs and outcomes to date.
Consequently, the review mission is also expected to make detailed recommendations on the work plan for the remaining project period. It will also provide recommendations on setting up the key priorities and modify implementation strategy to accommodate with remaining timeframe of project's life.

The consultant will assess the following four categories of project progress. See the Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects for extended descriptions

Project design:

- Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document and Project Inception Report.
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results. Were lessons from other relevant projects properly incorporated into the project design?
- Review how the project addresses country priorities. Review country ownership. Was the project concept in line with the national sector development priorities and plans of the country (or of participating countries in the case of multi-country projects)?
- Review decision-making processes: were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, taken into account during project design processes?
- Review the extent to which relevant gender issues were raised in the project design.
- If there are major areas of concern, recommend areas for improvement

Results Framework/Log-frame:

- Undertake a critical analysis of the project's log-frame indicators and targets, assess how "SMART" the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound), and suggest specific amendments/revisions to the targets and indicators as necessary.
- Are the project's objectives and outcomes or components clear, practical, and feasible within its time frame?
- Examine if progress so far has led to or could in the future catalyze beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis.
- Ensure broader development and gender aspects of the project are being monitored effectively. Develop and recommend SMART 'development' indicators, including sexdisaggregated indicators and indicators that capture development benefits

Progress Towards Outcomes Analysis:

• Review the log-frame indicators against progress made towards the end-of-project targets using the Progress Towards Results Matrix and following the Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects; color code progress in a "traffic light system" based on the level of progress achieved; assign a rating on progress for each outcome; make recommendations from the areas marked as "Not on target to be achieved" (red).

Table. Progress Towards Results Matrix (Achievement of outcomes against End-of-project Targets)

Project Strategy	Indicator	Baseline Level	Level in 1st PIR (self- reported)	Midterm Target	End-of project Target	Midterm Level & Assessment	Achieve ment Rating5	Justific ation for Rating
Objective:								
Outcome 1:								
Outcome 2:								
Outcome 3:								
Etc.								

Indicator Assessment Key

Green=AchievedYellow= On target to be achievedRed= Not on target to be achieved

In addition to the progress towards outcomes analysis:

- Compare and analyze the GEF Tracking Tool at the Baseline with the one completed right before the Midterm Review.
- Identify remaining barriers to achieving the project objective in the remainder of the project.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

iii. Project Implementation and Adaptive Management

- Review overall effectiveness of project management as outlined in the Project Document and inception report. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement
- Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement.
- Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement

Work Planning:

- Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved.
- Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results?
- Examine the use of the project's results framework/log-frame as a management tool and review any changes made to it since project start.

Finance and co-finance:

- Consider the financial management of the project, with specific reference to the cost effectiveness of interventions.
- Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions.
- Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for

timely flow of funds?

• Informed by the co-financing monitoring table to be filled out, provide commentary on financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?

Project-level Monitoring and Evaluation Systems:

- Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive?
- Examine the financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?

Stakeholder Engagement:

- Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders?
- Participation and country-driven processes: Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation?
- Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?

Reporting:

- Assess how adaptive management changes have been reported by the project management and shared with the Project Board.
- Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?)
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners

Communications:

- Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results?
- Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?)
- For reporting purposes, write one half-page paragraph that summarizes the project's progress towards results in terms of contribution to sustainable development benefits, as well as global environmental benefits

iv. Sustainability

- Validate whether the risks identified in the Project Document, inception report, Annual Project Review/PIRs and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why.
- In addition, assess the following risks to sustainability:

Financial risks to sustainability:

• What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)?

Socio-economic risks to sustainability:

• Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long-term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?

Institutional Framework and Governance risks to sustainability:

• Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems/ mechanisms for accountability, transparency, and technical knowledge transfer are in place.

Environmental risks to sustainability:

• Are there any environmental risks that may jeopardize sustenance of project outcomes?

Conclusions & Recommendations

- The consultant will include a section of the report setting out the MTR's evidence-based conclusions, in light of the findings.
- Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. A recommendation table should be put in the report's executive summary. See the Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF Financed Projects for guidance on a recommendation table.

The MTR team should make no more than 15 recommendations total <u>Ratings</u>

The consultant will include its ratings of the project's results and brief descriptions of the associated achievements in a MTR Ratings & Achievement Summary Table in the Executive Summary of the MTR report. No rating on Project Strategy and no overall project rating is required.

Table. MTR Ratings & Achievement Summary Table for (CoWES Project)

Measure	MTR Rating	Achievement Description
Project Strategy	N/A	
Progress Towards Results	Objective Achievement Rating: (rate 6 pt. scale)	
	Outcome 1 Achievement Rating: (rate 6 pt. scale)	
	Outcome 2 Achievement Rating: (rate 6 pt. scale)	
	Outcome 3 Achievement Rating: (rate 6 pt. scale)	
	Etc.	
Project Implementation & Adaptive Management	(rate 6 pt. scale)	
Sustainability	(rate 4 pt. scale)	

4. Expected Outputs and Deliverables

The consultant will produce the following deliverables to UNDP, UNDP/GEF-CoWES and the Project Steering Committee:

- Develop inception report to include methodology and plan for midterm evaluation.
- A presentation of evaluation methodology and the findings to key stakeholders;
- Develop an executive summary to emphasizing key findings and key recommendations;
- A detailed evaluation report covering scope of the mid-term review with detailed attention to lessons learnt and recommendations; and
- List of annexes prepared by the consultants including TOR's, itinerary, list of persons interviewed, summary of field visits, list of documents reviewed, questionnaire and summary of results, co-financing and leveraged resources.

The report together with the Annexes shall be written in English and shall be presented in electronic form in MS Word format.

Deliverables/Outputs	Estimated Duration to Complete	Target Due Dates	Review and Approvals Required
Deliverable 1: MTR Inception Report:	4 days No	14 January	Reviewed by
Consultant clarifies objectives and	later than 2	2019	National Project
methods of Midterm Review	weeks before		Advisor/Programm
	the MTR		e Analyst/Policy
	mission		Analyst
Deliverable 2: Presentation: Initial Findings	8 days End of	1 February	
	MTR mission:	2019	Approved by
	(Stakeholder		Project Manager &
	meetings,		

The Deliverables and timeline are summarized in the below table:

	interviews, field visits)*		Assistant Country Director
Deliverable 3: Draft Report: Full report (To	8 days Within	15 February	
be provided).	2 weeks after	2019	
	MTR mission		
Deliverable 4: Final Report: Revised report	5 days Within	28 February	
with audit trail detailing how all received	1 week of	2019	
comments have (and have not) been	receiving		
addressed in the final MTR report	comments on		
	draft		
Total working day	25 days		

26 Institutional Arrangement

- The evaluation will be commissioned by the UNDP country office (CO) in Cambodia and managed by Head of Programme and Results Unit, UNDP. An internal Evaluation Consultant will be selected and tasked to carry out the evaluation with assistance of CoWES Project team, especially M&E Officer.
- The evaluation consultant will work under the overall direct supervision of the UNDP Head of Programme and Results Unit and guidance from National Project Director and Manager. The UNDP CO will ensure the timely provision travel arrangements within the country for the evaluator. The CoWES Project Team will be responsible for liaising with the consultant team to set up stakeholder interviews, arrange field visits, coordinate with the partners etc.
- The Basic Security in the Field II and Advanced Security in the Field courses <u>must</u> be successfully completed <u>prior</u> to commencement of travel;
- Individual Consultants are responsible for ensuring they have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director.
- Consultants are required to comply with the UN security directives set forth under: <u>https://dss.un.org/dssweb/</u>
- All related travel expenses will be covered and will be reimbursed as per UNDP rules and regulations upon submission of an F-10 claim form and supporting documents.

27 Evaluation ethics

The Evaluators must read to be familiar with the evaluation ethics and procedures^{45 46} of the UN System to safeguard the rights and confidentiality of information, for example: measures to ensure compliance with legal codes governing areas such as provisions to collect and report data, particularly permissions needed to interview or obtain information about children and young people; provisions to store and maintain security of collected information; and protocols to ensure anonymity and confidentiality.

28 Duration of the Work

The Consultant will work for 25 working days over a period from January 2019 till end February 2019 and shall not exceed 2 months from when the consultant is hired. The tentative MTR timeframe is as follows:

⁴⁵ UNEG Ethical Guideline (<u>http://www.uneval.org/document/detail/102</u>)

⁴⁶ UNEG Norms and Standards for Evaluation (<u>http://www.uneval.org/document/detail/1914</u>)

Deliverables/outputs	Estimated Duration to Complete	Target Due Dates
Document review and preparing MTR Inception Report (MTR Inception Report due no later than 2 weeks before the MTR mission)	4 days	14 January 2019
MTR mission: stakeholder meetings, interviews, field visits and presentation of initial findings- last day of the MTR mission	8 days	31 January 2019
Preparing draft report (due within 2 weeks of the MTR mission) 8	8 days	15 February 2019
Finalization of MTR report/Incorporating audit trail from feedback on draft report (due within 1 week of receiving UNDP comments on the draft) (note: accommodate time delay in dates for circulation and review of the draft report)	5 days	28 February 2019

29 Duty Station

The duty stations for this assignment are home country and Cambodia with a trip to fields in Kampong Speu Province with a minimum number of stays in Phnom Penh and fields, Kampong Speu Province for 7 days. Travelling costs in Phnom Penh will be covered by the consultant.

30 Minimum Qualifications of the Individual Contractor

Education:	• A master's degree in agriculture, forestry, environmental studies, development
	studies, and other related fields
Experience:	 Minimum 7 years of result-based project management, monitoring and evaluation of environmental related projects Experience is an advantage Proven experience of evaluating similar projects, preferably involving UNDP/GEF or others UN Development Agencies or major donors Technical knowledge in the targeted focal area(s): Climate Change Adaptation/Disaster Management, agriculture, watershed, natural resource management and/or rural development. Experience working with government, particularly with projects under National Implementation is an asset. Experience and knowledge of the Cambodian development context. Prior experience with evaluation of projects commissioned by the UNDP with GEF financed projects in which this evaluation is to be carried out, would be an asset
Competencies:	 Familiarity with government planning systems and institutional roles Ability to interact with senior government officials Team leadership experience Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability
Language Requirements:	Fluency in English

31 <u>Criteria for Evaluation of Level of Technical Compliance of Individual</u> <u>Contractor</u>

The selection of consultants will be aimed at maximizing the overall qualities in the following technical evaluation areas:

Technical Evaluation Criteria	Obtainable
	Score
A master's degree in agriculture, forestry, environmental studies, development	10
studies, and other related fields.	
Proven experience of evaluating similar projects, preferably involving UNDP/GEF	30
or others UN Development Agencies or major donors	
Minimum 7 years of result-based project management, monitoring and	30
evaluation of environmental related projects	
Technical knowledge in the targeted focal area(s): Watershed, Adaptation	30
Management, agriculture, sustainable land management, livelihoods, natural	
resource management and/or rural development. Experience in Cambodian	
development context is a plus	
Total Obtainable Score	100

Financial evaluation.

With regards to technical evaluation criteria above, the financial evaluation will be also take into consideration.

Financial proposals must be "all inclusive" and expressed in a lump-sum for the total duration of the contract. The term "all inclusive" implies all cost (professional fees, travel costs, living allowances etc.);

For duty travels, the UN's Daily Subsistence Allowance (DSA) rates are (fill for all travel destinations), which should provide indication of the cost of living in a duty station/destination. Evaluation Method and Criteria

Individual consultants will be evaluated based on the following methodology:

Cumulative analysis

The award of the contract shall be made to the individual consultant whose offer has been evaluated and determined as a) responsive/compliant/acceptable; and b) having received the highest score out of set of weighted technical criteria (70%). and financial criteria (30%). Financial score shall be computed as a ratio of the proposal being evaluated and the lowest priced proposal received by UNDP for the assignment

Annexes to the MTR ToR

Possible annexes include: (reference ToR Annexes in Annex 3 of *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*)

- Project Document and latest results and resources framework
- Project Inception Report
- List of documents to be reviewed by the MTR Team
- Guidelines on Contents for the Midterm Review Report
- UNEG Code of Conduct for Evaluators/Midterm Review Consultants
- MTR Required Ratings Table and Ratings Scales

- MTR Report Clearance Form
- Sample MTR Evaluative Matrix
- Progress Towards Results Matrix and MTR Ratings & Achievement Summary Tables (in Word)

32 Payment Milestones

This is a fixed out-put based contract price regardless of extension of the herein specific duration. The consultant will be paid on a lump sum basis under the following installments.

N	Outputs/Deliveries	Payment Schedule	Payment Amount
1	First payment will be made upon approval of the final MTR Inception Report	14 January 2019	20%
2	Second payment will be made upon satisfactory completion of the draft MTR report.	15 February 2019	30%
3	Final payment will be made upon approval of the Final MTR Report	28 February 2019	50%

Date/Time	Activities/Meetings	Venue	Who
- 28 Jan 2	019 (Monday): Briefing and Meeting in Pl	hnom Penh	1
08:30– 9:30	Briefing meeting with UNDP Country Office Topic(s): Overview of the field mission and general introduction of the MTR.	UNDP CO	 Dr. Pen Rany, ACD and Head of Program and Project Result Unit, Ms. Nimnuon IvEk, Oversight Analyst, Mr. Sovanny Chhum, PA
10:00- 12:00	Meet with CoWES Team	MAFF Office	 Mr. Sam Nissay, NPA Mr. Yao Ven, Ad&F officer Ms. Heng Chinda, Project Coordinator Ms. Kong Tosoth, M&E officer Ms. Chea Vanny, Program assistant
14:00- 16:00	Meeting with Implementing Partner Topic(s): Overall introduction of the MTR Strategic direction and achievements of the CoWES project.	MB Office	 Mr. Om Sophanna, ED MB Mr. Meily, Project Manager MB Mr.Chin Bunthan, Project Coordinator Mrs. Sitha, A&F Coordinator
- 29 Jan 2	019 (Tuesday): Briefing and Meeting in Pl	hnom Penh &	& travel
9:30-11:30	Meeting with Implementing Partner Topic(s): - Overall introduction of the MTR Strategic direction and achievements of the CoWES project.	DARLM Office	 Mr. Am Phirum Mr. Veasna Chaya Mr Keo Nimal Mr. Se Sokleap
11:30	Travel from Phnom Penh to Aoral district		
16:00- 17:00	Meet with AR district governor	AR district Hall	 AR district governor team Mr Chhin Mony Mr. Sanmath Vathnak
	Stay overnight in Oaral district		
30 Janu	uary 2019 (Wednesdav): Field work		1
8:30-10:00	Meet with Rasmey samaky Community Protected Area committee and Lgem community		(commune councils, CPA and farmer group together)
10:00	Back to Aoral and lunch		
14:00- 16:00	Meet with Tasal commune and Tang Bampong (commune and community together)		16 villagers (f=7) Mr. In Em, farmer, Tang Bampong village
16:00	Travel to Chambok)		

Annex 6: MTR Mission Schedule - CoWES Project

Date/Time	Activities/Meetings	Venue	Who
	overnight, homestay		
31 Janu	uary 2019 (Thursday): Field work		
8:00-09:00	Meeting with commune KDY		
09:15- 10:30	CF, farmer group and school		
11:00- 14:00	Sit visit (demonstrated site—Dok Por) (package lunch—brown bag)		19 villagers (f=1)
14:00	Travel to Phnom Sruoch		
16:00	Meet with Phnom Srouch governor		Ms Dokkphary, Deputy Governor, Srouch district Mr Uy Yong, Director District Council
	Travel to Kg. Speu Town and overnight in provincial town		
	01 February 2019 (Friday): Field work		
08:00- 09:00	Meet with PDAFF		Mr. Yim Nain, Deputy Director, MAFF Mr. Cleo Saron Mr. Chan Monineath Mr. Soeuny Savy
09:30- 11:30	Meet with DoE		Mr. Em Sokum, Director, DOE Mr. Sang Samnag, Deputy Com
12:00	Lunch		
14:00- 15:30	Meet with provincial administration Kampong Speu		Mr Luy Chandara—Deputy, Interrelations, PB member, Ksmpong Speu prov admin
	Provincial water resource department, Kampong Speu		Mr Chea Bora Mr Nhanh Cheabhoing
15:30	Back to Phnom Penh		
	Phnom Penh		Dr. Roy Ka, former project director
2-3 Feb	ruary 2019 (Saturday and Sunday): Conso	lidate findin	gs and prepare for debriefing
04 Febr	ruary 2018 (Monday):	1	1
iviorning	Prepare for debriefing		
3:00- 4:00p.m	Debriefing	MAFF	7 attending
05 Febru	ary 2019 (Tuesday): Back home		
2:00 pm	Meet Dr Roy Ka		Former DARLM Director

Annex 7: List of Documents

ApFNet, Mid-Term Evaluation Report of ApFNet's Landscape Approach to Sustainable Management of Forests in Prek Thnot Watersheds, May 2018

CoWES Project, Attachment 2: Revisions to ProDoc, 2018

CoWES Project, 2018-01-25, Project Board Meeting minutes

CoWES Project, Proposed CoWES Multi-year Workplan, 2018-2020

CoWES Project, CoWES 2018 Workplan, Feb 1 2018

CoWES Project, Addendum to Capacity Scorecard

CoWES Project, Stakeholder Consultations Conducted

CoWES Project, GIS Report, 11-12-18

CoWES Project, Summary Report, Inception Workshop of the Project "Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin (CoWES)"

CoWES Project Monitoring Report, Date of visit: 25-26 Oct and 01-02 Nov 2018 UNDP Cambodia, Annual Project Report 2018

GEF/UNDP, CD Tracking Tool Indicators, n.d.

Government of Kingdom of Cambodia, National Action Program to Combat Land Degradation National Action Plan, 2018-2027

PWC (Cambodia), MANAGEMENT LETTER FOR THE PERIOD FROM 28 NOVEMBER 2017 TO 31 AUGUST 2018

Sopheak Chann and Tim Frewer, Commodity Frontiers, An ethnographic study of socialenvironmental interaction of Upper Stung Prek Thnot River Catchment, Eastern Cardamom Mountains, July 2017

Tosoth Kong, Baseline Survey Report, CoWES Project, 2019

UNDP Cambodia, Project Document (Final) 26 May 2017

UNDP Cambodia, Project Inception Report, Feb 28, 2018

UNDP Cambodia, Valuation of Ecosystem Services in the Prek Tnoat Watershed, draft 18 Nov 2018 UNDP Cambodia, Summary Report, Inception Workshop of the Project "Collaborative UNDP Cambodia, Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin (CoWES)"

UNDP Cambodia, ATTACHMENT 2. REVISIONS TO PRODOC SECTION VI - PROJECT RESULTS FRAMEWORK. (3 Tables)

UNDP Cambodia, 17-12-15, Inception Workshop Minutes

UNDP/GEF, 2018 Project Implementation Report

UNDP/GEF UNDP, Guidance for Conducting Mid-term Reviews of UNDP-supported GEF-financed Projects, 2014

Annex 8: List of Persons Interviewed

Mr. Meas Pyseth	Deputy Secretary General,	MAFF	
	MAFF and National Project		
	Manager, COWES		
Mr. Nissay Sam	National Project Advisor	Cowes Project	
Mr. Tashi Dorji	GEF Regional Technical Advisor in Bangkok	UNDP/GEF	
Ms Tosoth Kong	M&E Officer	CoWES project	
Ms Nimnuon IvEk	Oversight Analyst	UNDP Cambodia	
Mr Sovanny Chhum	Programme Advisor	UNDP Cambodia	
Mr. Yao Ven	Admin & Finance officer	CoWES project	
Ms. Heng Chinda,	National Coordinator	CoWES project	
Ms. Chea Vanny	Program assistant	CoWES project	
Mr. Om Sophanna	Executive Director	Mlub Baitong, (MB)	
Mr. Mey Ly,	Project Manager	Mlub Baitong, (MB)	
Mr.Chin Bunthan,	Project Coordinator	Mlub Baitong, (MB)	
Mrs. Sitha Duong,	A&F Coordinator	Mlub Baitong, (MB)	
Mr. Am Phirum	Acting Director	DARLM	
Mr. Veasna Chaya	Official	DARLM	
Ms Keo Nimul	GIS Consultant	DARLM	
Mr. Sok Leap	Official	DARLM	
Mr Chhin Mony	District governor	Srouch district	
Mr. Sanmath Vathnak	Official	Srouch district	
Mr. In Em,	farmer, Tang Bampong village	Srouch district	
Ms Dokkphary,	Deputy Governor,	Kampong Speu Province	
Mr Uy Yong,	Director District Council	Kampong Speu Province	
Mr. Yim Nain	Deputy Director	PDAFF Kampong Speu	
Mr. Cleo Saron	consultant	PDAFF Kampong Speu	
Mr. Chan Monineath	Consultant on Forest	PDAFF Kampong Speu	
	Rehabilitation and Restoration.		
Mr. Soeuny Savy	Technical officer	PDAFF Kampong Speu	
Mr. Em Sokun,	Director	Kampong Speu, DoE	
Mr. Sang Samnag,	Chief, Community	Kampong Speu, DoE	
	Management Office		
Mr Luy Chandara	Deputy, Interrelations, PB member	Ksmpong Speu prov admin	
Mr Chea Bora	Official	Kampong Speu, Water	
Mr Nhanh Cheabhoing	Director	Kampong Speu Water	
		Resources Dept	
Mr Roy Ka	Former project focal point component 1 and 3, CoWES Project	Former Director, DARLM	

Annex 9: Summary of Training

No	Workshop or training	Objective	Date	# Participa	Remark
1	Concepts and watershed management orientation to partners	-To build capacity partners on watershed management, methodology to identify micro watershed	21 May 2018	5(OF)	Kg Speu province PoE 1, PDAFF 1,1Forest admin from Borset, 2 MB staff.
2	SLM& Watershed management UNCCD and NAP Concepts	 Build capacity CoWES project staffs and relevance stakeholders 	29 May 2018	15 (5F)	MAFF (7 CoWES team, and 8 MAFF staffs)
3	Conduct community participatory situational analysis	- To build community capacity to develop participatory plan	11-12 June 2018	33(3F)	Krang Deyway commune Dock Por village: MAFF 3(1), UNDP 4(2), PDAFF 1, PS Deputy Governor1, PS dis member 1, Forest Adm 1, Dis agri 1, VL 5, CF committee 11, MB staff 4 at KDY
4	Conduct community participatory situational analysis	- To build community capacity to develop a participatory plan	27-28 June 2018	35(5F)	Trapang Chorcommune:fromPDAFF 1, District Deputy Adm 1,District GovernormemberDistrict Agriculture 1, CC1, VL 4, CFcommittee 7, CF members 16(5),MB staff 3.
5	Conduct community participatory situational analysis	- To build community capacity to develop a participatory plan	14-15 Aug 2018	63(41F)-	TasalCommuneTangbampongvillage:1Head of community office,1deputy of head of admin, 1member of District Council, 1districtagriculture,1Kravagn park,1CC, 2VLs, 11(2)CF committee,41(39)CF members, 2MB staff.

6	CLIP development workshop	- To build community capacity to develop a participatory plan	16 Aug 2018	38 (9F)	Tasal communeTang Bompongvillage: 1Head of community office,1 deputy of the head of admin,1CC, 3 VLs,11(2)CFcommittee,19(7)CF members, 2 MB staff.
7	SLM Concepts on 20 Jun 18 (Part:	- To debriefing CoWES project to partners and build	20 Jun 2018	56 (10F)	Aoral district Kg speu province
	56(10F). Conducted in AR.	their capacity on watershed concepts.			Participants relevance stakeholders from national, subnational, NGOs, local authority and key community people.
8	Workshop on analyze sustainable livelihood and assess watershed resource at a micro level	 To build capacity in participatory plan development 	17 Aug 2018	39(9F)	At Lgem Participants: Head of community 1, deputy agri office 1, deputy distr admi 1, park officer 1, CC 1, VL 3, CF 11(2), members19(7).
9	Deepen knowledge and skills of MAFF and NGO service providers on innovative SWC and AF strategies	 Build capacity stakeholders and key community people on community management, institutional strengthening, report writing, budget management. 	23-24 Aug 18	31(8F)	Trapang Chor commune, Lgem village: Head of Community 1, Deputy of agriculture office 1, CC 1, VL2 CFPA committee 11(3), community member 15 (5) and MB staff1.)
10	The debriefing workshop on Preak Thnot Watershed Economic Valuation, at Phnom Penh Hotel	 To review preliminary findings and brainstormed for the development of watershed management roadmap Introduce concept of agreforestry and WSC 	4 September 2018 September	26 (6F)	Phnom Penh Hotel (from different technical departments under MAFF, Ministry Of Environment , Kampong Speu Provincial Agricultural Department, Royal University, NGOs partner, and UNDP
11	concept.		2018	20(10F)	at 3 target communes.
12	Workshop	 To support local plans proposed by target communes in annual integration workshop (DIW). 	September 2018	54 (12F)	It is a formal plate form of meeting between communes and district, province, sectoral departments and NGO in order to review and support projects proposed by communes.
13	Training on agriculture technique	 Provide skills on agriculture technique to the local authority and model farmers in target areas. 	21-22 Oct 2018	30 (8F)	Krang Deyway commune Doc por village

14	Study tour on agriculture technique at Takeo province	 Provide experiences in agriculture practices such as vegetable planting, compost fertilizer, organic pesticide, chicken raising 	28 Oct 2018	28 (8F)	Takeo Province KDY community
15	Training on agriculture technique	 Provide skills on agriculture technique to the local authority and model farmers in target areas. 	17-19 Nov 2018	20 (9F)	Tasal commune Tang Bampong village: Model farmers, CC, CFMC
16	Training on agriculture technique	 Provide skills on agriculture technique to the local authority and model farmers in target areas 	24-26 Nov	24 (8F)	Trapang Chor commune Lgem
			2018		village: PDAFF 1, CC 1, CFMC 5, model farmers 17.
16	Study tour on agriculture technique at Takeo province	 Provide experiences in agriculture practices such as vegetable planting, compost fertilizer, organic pesticide, chicken raising 	6 Dec 2018	30 (10F)	Takeo Province Trapang Chor and Tasal community
18	Training on agri forestry technique and updated CF plan	 Provide skills on agri forestry technique the local authority and model farmers in target areas. 	On 7-9 Aug 2018	26(10F)	Damrey chakthork CF training on Agri forestry technique and updated CF plan with participants 26 (10F) -PDAFF 1, Agri office 1(1), FAdin 2, CC1(1), VL1(1), CF member 18(9), school master1(1), MB staff 1
19	Technical meeting and annual reflection workshop.	 Progresses, challenges, technologies and lesson learned regarding CoWES project implementation in2018 shared and discussed The solutions and priorities identified for 2019. Results of Preak Tnoat Watershed Economic Valuation shared and collected feedback/comments for further improvement. Bring the results from Annual Reflection Workshop 	14-15 Nov 2018	64 (9F)	Kampong Speu Relevance stakeholders from National subnational, local authority, community from 3 target communes And Chambock commune.
20	Training on M&E	Provide skills on project management and M&E to relevance stakeholders	On 26-29 Nov 18	28 (3F)	Kg Speu province (local authority at district, commune, provincial agriculture, environment, women affair, provincial governor)
21	Training on M&E	Provide skills on project management and M&E	On 12-14 Dec 18	26 (2F)	Kg Speu province (local authority at village level, key community people)

22	The debriefing on Micro- watershed, Agro-ecosystem, and	- Building capacity building of relevance stakeholders on Micro-watershed, Agro- ecosystem, and	On December 18, 2018	30 (5F)	Kg Speu province Participants from subnational ,local
	Geographical Information System results.	Geographical Information System			target communes and Chambock.
23	Training on growing mushroom	 Provide skills on growing mushroom to community people 	On 19 Dec 2018	5 (OF)	Doc Por village Kraing Deyway commune Phnom Srouch district, Kg speu province

Source: CoWES Project Office.

Total participants: 732 (190 F)

Annex 10 - Evaluation Consultant Code of Conduct Agreement Form

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.

2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.

3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.

4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.

5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.

6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.

7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form₃₀

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Alan Ferguson Name of Consultancy Organization (where relevant): Regional Consulting Limited

I confirm that I have received and understood and will abide by the United Nations Code of

Conduct for Evaluation.

Signed at (place) Vancouver on January 10, 2019

Signature:

An Fager

Annex 11: Signed MTE final clearance form

(to be completed by CO and UNDP AF Technical Adviser based in the region and included in the final

Evaluation Report Reviewed and Cleared by				
UNDP Country Office				
Name:				
Signature:	Date:			
UNDP GEF RTA				
Name:				
Signature:	Date:			