Food and Agriculture Organization of the United Nations

Project Evaluation Series
01/2021

Evaluation of the project "Strengthening the adaptive capacity and resilience of rural communities using micro watershed approaches to climate change and variability to attain sustainable food security in Cambodia"

Project Evaluation Series
01/2021

Evaluation of the project "Strengthening the adaptive capacity and resilience of rural communities using micro watershed approaches to climate change and variability to attain sustainable food security in Cambodia"

Project code: GCP/CMB/036/LDF
GEF ID: 4434

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2021

Required citation:

FAO. 2021. *Evaluation of the project "Strengthening the adaptive capacity and resilience of rural communities using micro watershed approaches to climate change and variability to attain sustainable food security in Cambodia".* Project Evaluation Series, 01/2021. Rome.

ISBN 978-92-5-133869-8

Contents

Acknowledgements v
Acronyms and abbreviations vi
Executive summary vii
1. Introduction 1
1.1 Purpose of the evaluation 1
1.2 Intended users 1
1.3 Scope and objectives of the evaluation 1
1.4 Methodology 2
1.5 Limitations 4
2. Context and background of the project 5
2.1 Description of the context 5
2.2 Background of the project 5
2.3 Theory of change 10
3. Evaluation questions: key findings 15
3.1 Relevance 15
3.2 Effectiveness 18
3.2.1 Outcome 1. CCA approach informs national and subnational forestry, water, agricultural, livelihood and food security policies, planning and implementation procedures 18
3.2.2 Outcome 2. Participatory integrated micro watershed management approach reducing climate impacts on natural resources and agriculture. 20
3.2.3 Outcome 3. Climate resilient agricultural practices adopted by farming households 24
3.2.4 Outcome 4. Climate resilient alternative livelihood options adopted by women 26
3.2.5 Outcome 5. Monitoring and evaluation and information dissemination 28
3.3 Efficiency 30
3.4 Sustainability 34
3.5 Factors affecting performance 36
3.6 Cross-cutting issues 39
3.6.1 Environmental and social safeguards 39
3.6.2 Gender 40
3.6.3 Co-financing 41
3.6.4 Progress to impact 42
3.6.5 Knowledge management 42
4. Conclusions and recommendations 45
4.1 Conclusions 45
4.2 Recommendations 49
Bibliography 53
Appendix 1. People interviewed 55
Annexes 59

Tables

Table 1: GEF rating scheme xii
Table 2: Evaluation questions by area of analysis 2
Table 3: Range of on the ground interventions visited as part of the evaluation 3
Table 4: Basic project information 7
Table 5: LNP pilot communes and watershed areas 9
Table 6: Assumptions and drivers for the theory of change of the Life and Nature Project 12
Table 7: LNP workshops held 19
Table 8: Summary of instream structures and their main purposes 22
Table 9: LNP project cumulative GEF grant disbursement (to 2020 project implementation report) 33
Table 10: Project expenditures January 2019 – June 2020 33

Acknowledgements

The FAO Office of Evaluation (OED) would like to thank all those who contributed to this evaluation. The evaluation team was composed of two independent evaluation experts: Dr Anne C. Woodfine, international tropical natural resources, sustainable land management and evaluation expert; and Dr Sovith Sin, national rural development, climate change and evaluation expert. Ms Renate Roels, Evaluation Manager from OED managed the evaluation, while Ms Sarah Jaff, office assistant from OED provided administrative support throughout the evaluation exercise.

The evaluation was carried out with the invaluable assistance of the FAO project staff at Phnom Penh, Cambodia. Their insight, knowledge, advice and comments made this evaluation possible.

The evaluation benefited from the inputs of many other stakeholders, including government officers at national, provincial and local levels, NGOs, the project beneficiaries and the project staff at the FAO Regional Office for Asia and the Pacific (RAP). Their contributions were critical to the team's work and are deeply appreciated.

Acronyms and abbreviations

AMAT	Adaptation Monitoring and Assessment Tool (for GEF LDCF and SCCF projects)
CCA	Climate change adaptation
CCD	Climate Change Department
CSA	Climate-smart agriculture
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer field school
GEF	Global Environment Facility
LDCF	Least Developed Countries Fund
LNP	Life and Nature Project
MAFF	Ministry of Agriculture, Forestry and Fisheries
MoE	Ministry of Environment
MoWA	Ministry of Women's Affairs
MoWRAM	Ministry of Water Resources and Meteorology
NGO	Non-governmental organization
PCC	Project Coordination Committee
PDAFF	Provincial Department of Agriculture and Forestry
PDE	Provincial Department of Environment
PDoWA	Provincial Department of Women's Affairs
VIA	Vulnerability Impact Assessment
WSM	Watershed management
WSMC	Watershed management committee
WSMP	Watershed management plan

Executive summary

Introduction

1. This terminal evaluation concerns the project "Strengthening the adaptive capacity and resilience of rural communities using micro -watershed approaches to climate change and variability to attain sustainable food security in Cambodia", also known as the "Life and Nature Project" (LNP). The project is financed by the Least Developed Countries Fund (LDCF) of the Global Environment Facility (GEF) and implemented by the Food and Agriculture Organization of the United Nations (FAO). The main government counterpart for implementation is the Ministry of Environment.

2. The project objective was "to build the adaptive capacity of rural communities and reduce their vulnerability to climate change through micro-watershed management and climate resilient agriculture practices through interventions at national, sub-national and community levels". It was designed to address barriers at all levels (local to national) stemming from lack of awareness, knowledge, understanding and capacity concerning climate change adaptation and the absence of alternative livelihoods, particularly affecting rural women.

3. The project had five outcomes that focused on increasing resilience among rural communities. At design these outcomes were:

   i. Outcome 1: Climate change adaptation (CCA) is integrated into national agricultural and food security policies and planning.

   ii. Outcome 2: Participatory integrated micro watershed management approach reducing climate impacts on natural resources and agriculture.

   iii. Outcome 3: Climate resilient agricultural practices adopted by farming households.

   iv. Outcome 4: Climate resilient alternative livelihood options adopted by women.

   v. Outcome 5: Monitoring and evaluation (M&E) and information dissemination.

4. The evaluation covers all five Outcomes that were implemented in the four project pilot communes in the provinces of Siem Reap, Kampong Thom, Ratanakiri and Preah Vihear, The evaluation covers the period from June 2014 (project start) until 2 August 2020 (the end of the evaluation data collection and analysis phase). The evaluation adopted a consultative and transparent approach with project stakeholders throughout the process. The evaluation questions (EQ) were answered by triangulating the following methods: Desk review of project documents, review of the Theory of Change, Skype or in-person interviews and focus-group discussions, and a field mission to Cambodia.

Main findings

The main findings of the terminal evaluation are presented below (grouped by relevance, effectiveness, efficiency, sustainability, factors affecting performance and cross-cutting issues).

EQ 1 - Relevance: To what extent are the project outcomes still congruent with the GEF focal areas, FAO country programme and country priorities?

Finding 1. The LNP is contributing to the current LDCF goal and objectives, particularly Objective 1 (Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation).

Finding 2. The project's activities are contributing to all three outcomes of FAO Cambodia's current Country Programming Framework (CPF) 2019-2023.

Finding 3. With a focus on addressing the issues of deforestation, improving availability of water, reversing land degradation, enhancing food security, enhancing climate change resilience and particularly ensuring women's livelihoods are enhanced, the LNP was relevant to many of the key environmental concerns facing rural communities in Cambodia.

Finding 4. The majority of evaluation informants concurred that it was not appropriate for a short-term project such as the LNP to envisage catalysing change in national policies.

EQ 2 - Effectiveness: To what extent have project objectives (i.e. outcomes) been achieved?

Finding 5 related to outcome 1. Since the revision of this Outcome in 2018-2019 and the enhancement of staffing, the project has achieved the target number of three policy briefs, although still in draft version. Many Outcome 2 and 3 focused workshops were organized at provincial/district level, while only two of the annually planned national CCA-related workshops (2017 and 2020) were held. One draft policy review was prepared, which is currently still in draft and of limited scope.

Finding 6 related to outcome 2. Although not all targets are reached, significant progress has been made in the activities under Outcome 2 in restoring the degraded ecosystem services (forest and hydrological) in the pilot communes.

Finding 7 related to outcome 3. Considerable progress has been made to catalyze adoption of climate resilient agricultural practices (CSA) in the pilot communes using FFS approaches since the MTR. The FFSs had a clear focus and raised awareness on CSA approaches but also have some points for improvement.

Finding 8 related to outcome 4. The LNP has made significant progress towards this Outcome, enhancing the capacities of government authorities and non-state actors to provide gender responsive services to address climate change related vulnerabilities, promoting women's meaningful participation through capacity development, strengthened rural women's economic empowerment, increasing availability of finance and strengthened rural women's leadership in decision-making (e.g. in WSMCs). Most activities are implemented in the last 12 months, with some targets lagging somewhat behind.

Finding 9 related to outcome 5. The project team completed most of the basic M&E requirements but did not undertake the level of regular monitoring of impacts via systematic studies or participatory M&E and has not completed the final update of the LDCF Adaptation Monitoring and Assessment Tool (AMAT). Under the dissemination component, the majority of outputs have been reached.

EQ 3 - Efficiency: To what extent were the project management arrangements appropriate, efficient and clear?

Finding 10. The early decision not to house the Project Management Unit in the Ministry of Environment, high levels of staff turn-over, light oversight by the PCC, delays in implementation and communication issues have been sub-optimal for such an innovative inter-sectoral watershed management / CCA project (the first of its kind in Cambodia). However, considerable progress has been made in activities towards the outputs since late 2018, thanks to the expansion of the Project Management Unit (mainly international consultants).

EQ 4 - Sustainability: What is the likelihood that project results will continue to be useful or will remain after project completion?

Finding 11. Although the project has put much in place recently to support sustainability, various barriers remain that influence the prospects for sustainability, among which the absence of an exit plan.

Factors affecting performance

Monitoring and evaluation

Finding 12. While the baseline study is comprehensive, the M&E system does not appear to have operated as per the (updated) M&E plan and suffered from unclear responsibilities for reporting and database management.

Stakeholder engagement

Finding 13. The project faced and to some extent overcame multiple challenges, motivating officials at national and provincial level to work together, while also catalysing innovative WSM, CSA and gender responsive actions at national, provincial, commune and household levels.

Cross-cutting issues

Environmental and social safeguards

Finding 14. The project was rated low / medium risk, however during implementation the evaluation consider that it did raise some social issues which warranted attention.

Gender

Finding 15. In the past nine months, the LNP activities have made exemplary progress towards the Outputs towards Outcome 4.

Co-financing

Finding 16. Data in the latest project implementation report (2020) shows the project has materialized more than the total co-finance pledged in the ProDoc, but it is not clear to the terminal evaluation (nor the MTR) what benefits the loan and grants actually brought to the LNP.

Progress to impact

Finding 17. Although the sustainability of some project outputs are in doubt, the mainstreaming of climate change into commune development processes is expected to have a significant long-term beneficial impact on local government programmes tailored to address climate change and resilient priorities at community level at least in the pilot communes.

Knowledge management

Finding 18. The project's knowledge management activities have not clearly or widely enhanced project engagement and awareness among government staff, civil society groups, journalists, the general public, and rural communities.

Conclusions

Conclusion 1. (Relevance). LNP activities remain consistent with GEF, FAO and national strategies and priorities, as they are enhancing the resilience of the four pilot communes' agroecosystems and their communities to the pervasive increasing impacts of climate change.

Conclusion 2. (Effectiveness). Delays in effective on the ground start-up to 2015, a gap in field implementation from 2016 and resumption in late 2018/early 2019 have meant that most project activities have taken place in the past 12–18 months. While many of the outputs have been achieved, the project has failed to achieve many targets and the delays limit the effectiveness "on the ground" of this ambitious project.

Conclusion 3. (Efficiency). Project management followed the standard pattern of FAO/GEF projects and demonstrated sound adaptive management post-MTR. However, given the innovative nature of the project, it would have been advantageous if the roles and responsibilities had been clearer, there was a more engaged PCC and a distributed Project Management Unit team, and a greater focus on enhancing local capacity and inter-sectoral committees at provincial levels.

Conclusion 4. (Sustainability). The prospects that some of the project outputs will continue to be useful post-project are high, however others have not had time to become embedded/accepted and being innovative their sustainability is judged to be unlikely without continued support.

Conclusion 5. (Monitoring and evaluation). While the M&E design met most of the basic requirements, its implementation did not meet all expected standards.

Conclusion 6. (Stakeholder engagement). The project collaborated with a large number of actors/institutions to catalyse innovative WSM, CSA and gender responsive actions at national, provincial, commune and household levels. The LNP lacked a specific stakeholder engagement plan, which would have enhanced participation in and the benefits of this innovative multi-sectoral project.

Conclusion 7. (Environmental and social safeguards). Overall, the project does not appear to have had any harmful impacts on the environment and in areas has brought significant benefits. Some aspects were underestimated.

Conclusion 8. (Gender). LNP has helped development through social inclusion and gender equity by equal treatment of women and men and equal access to resources and services through its implementations.

Conclusion 9. (Co-financing). The terminal evaluation was unable to evaluate the project's co-financing.

Conclusion 10. (Progress to impact). Although the sustainability of some project outputs is in doubt due to delays in implementation of on the ground activities and the project's lack of an exit strategy, the project is expected to have a lasting effect in contributing towards the subnational climate change mainstreaming.

Conclusion 11. (Knowledge management). The project's knowledge management activities have not maximized opportunities to utilize existing knowledge, enhance awareness and understanding of climate change, the win-win benefits of WSM/CSA to enhance adaptive capacity and the importance of ensuring women are equally involved to enhance their ability to adapt to climate change, nor share project derived lessons.

Recommendations

Recommendation 1. (To FAO and national implementing partners). Projects should start as soon as possible after approval and effort/activities should be spread as evenly as possibly throughout the implementation period, avoiding periods of inactivity when momentum is lost and rushing to reach outputs towards project completion. (Conclusion 2, 10)

Recommendation 2. (To GEF project formulators and FAO). Projects need to be thoroughly reviewed in terms of their ambitions *vis-à-vis* the country context and capacity before finalization and approval. Before including a policy-related Outcome (such as the original Outcome 1 in this project design), national partners should be fully aware of the implications and the enormity of the task involved, also that ultimately a Project Management Unit cannot achieve this without full Government support. (Conclusion 2)

Recommendation 3. (To GEF project formulators and FAO). Projects should include the development of an exit strategy around the time of the MTR, to ensure support is clear beyond project closure for sustainability and to catalyse scaling-up. (Conclusion 4)

Recommendation 4. (To the Government and FAO). Continued support post-project should be sought for the WSM, FFS and savings and loans groups established by the project. Good practices should be showcased (e.g. through study tours) and WSM plans should be scaled-up to other communes/micro-watersheds. (Conclusion 4)

Recommendation 5. (To the Government and FAO). Projects like LNP should have M&E systems that are anchored in a project theory of change, operate in (near) real time to increase management flexibility and indicate, as and when required, where the project and its partners are at, so that resources and support can be redirected according to needs in a timelier manner. Furthermore, relevant focal points (e.g. climate change, land degradation and GEF) should be given more prominent roles and training in M&E. (Conclusion 5, 11)

Recommendation 6. (To the Government and FAO). National Project Coordination Committees should hold more regular meetings and members should be more engaged in project activities (including visiting project sites), with comparable committees set-up at decentralized levels as appropriate. (Conclusion 3)

Recommendation 7. (To FAO). For more effective cross-sectoral cooperation and partnerships on key issues of mutual concern towards climate change adaptation, future projects should develop a detailed strategy for stakeholder engagement and clarify roles and responsibilities of implementing partners via letters of agreement. (Conclusion 3, 4, 6)

Recommendation 8. (To GEF and FAO). Projects, including FFSs and CSA should use the many resources/training materials etc. that FAO has developed to speed up implementation of innovative activities and also share its lessons on widely available platforms. (Conclusion 11)

Recommendation 9. (To FAO). Projects should place greater emphasis on facilitating experience sharing, particularly in the later years of implementation. (Conclusion 6, 11)

Recommendation 10. (To FAO). FAO should systematically carry out assessments of gender, youth and other vulnerable group needs. Furthermore, it should integrate gender, youth and vulnerability specific indicators and targets relevant to project objectives and consistent with the FAO Policy on Gender Equality and Environmental and Social safeguard. (Conclusion 5, 7, 8)

Recommendation 11. (To FAO, in collaboration with recipient countries and executing partners). Given the importance the GEF places on co-finance, FAO-GEF project teams should keep track not only of the amounts of co-finance materialized by GEF projects but also track what these funds were used for. (Conclusion 9)

Table 1: GEF rating scheme

FAO - GEF rating scheme	Rating	Summary comments
1) RELEVANCE		
Overall relevance of the project	S	LNP is contributing to the current LDCF Goal and Objectives, all three of the outcomes of FAO Cambodia's current Country Programming Framework (CPF) 2019-2023 and many of the key environmental concerns facing rural communities in Cambodia. Most evaluation informants concurred that it was not appropriate for a short-term project such as the LNP to envisage catalysing change in national policies.
2) EFFECTIVENESS		
Overall assessment of project results	MS	The Tevaluation finds the project has made significant achievements in the final 1.5 year of the project, achieving many of the outputs, However, the shortcomings (notably missing out on many targets) and delays until late 2018 undermined the effectiveness "on the ground" and the ability to meet a number of targets.
Outcome 1	MU	Although Outcome 1 was significantly revised after the MTR, it suffered from a lack of progress up until the Mid-term review (MTR). Furthermore, the small number of outputs remain as drafts, only two annual workshop were held (2017 and 2020) and the stocktaking exercise was of very limited scope.
Outcome 2	MS	LNP has made some important steps towards introducing the watershed management approach in the pilot communes in Cambodia and catalysed improved management of CPAs and community forests. At the same time, there has been a low-level achievement of the reforestation targets (53 percent and 39 percent) and mixed rates of seedling survival found in early 2020 following the 2017 and 2018 tree planting. The eleven pilot community VIAs prepared in 2015 in the 4 provinces have not been "updated annually" as planned.
Outcome 3	MS	Since the MTR, the project managed to make considerable progress using FFS activities that focussed more on climate-smart agriculture (CSA) approaches and adapted to the differences in commune agro-ecosystems / economies. Yet, the single commodity focus and the partly classroom-partly practise on demonstration/learning plots have resulted in a low level of adoption of CSA approaches.
Outcome 4	S	Notwithstanding the lateness of the activities, the number of women reached in CCA integrated FFSs went beyond the set target, while the targets in other activities lag somewhat behind. The inclusion of women in WSMCs, FFSs, establishment of valuable savings and loan groups and development of WPGs are considered positive achievements.
Outcome 5	MU	Most basic M&E requirements were met, such as the production of a baseline and M&E reports, however the baseline was prepared late, there was an absence of regular monitoring of the Objective indicators as well as absence of an updated AMAT for the TE. The dissemination component distributed some lessons learned, but not all targets were reached.
3) EFFICIENCY, PROJECT IMPLEMENTATION & EXECUTION		
Overall quality of project implementation	MS	The project has shown some exemplary adaptive management such as the re-writing of Outcome 1, the adaptation of the CSA approach and the recruitment of additional staff to get the LNP back on track after the very slow start and critical

& adaptive management (implementing agency)		MTR. Nevertheless, the project was affected by the delay in project start-up, a reported gap in many of the field operations between 2016 and late 2018 followed by a massive push to complete the activities, which has affected commitment among partners and beneficiaries.
Quality of execution (executing agencies)	MU	There was a lack of clarity of roles and responsibilities for individual agencies, particularly at the provincial level, also a limited number of PCC meetings held. In the last 18 months, the strengthened project leadership and team has catalysed major progress towards the Outcomes.
Efficiency (incl. cost effectiveness and timeliness)	MU	The project has been affected by numerous avoidable and unavoidable issues affecting its efficiency and timeliness.
4) SUSTAINABILITY		
Risks to sustainability	ML	Although the project has put much in place recently to support sustainability, various barriers remain that influence the prospects for sustainability, including the absence of an exit plan hence lack of clarity where project communities can access technical support post project.
5) FACTORS AFFECTING PERFORMANCE (M&E and Stakeholder engagement)		
Overall quality of stakeholder engagement	MS	The project faced and to some extent overcame multiple challenges, motivating officials at national and provincial level to work together, while also catalysing innovative WSM, CSA and gender responsive actions at national, provincial, commune and household levels. However, the gap in many field activities from 2016 to late 2018 seriously undermined community engagement and participation. Adoption of for example CSA approaches was very low – although participation of women in Outcome 4 activities is commendable. Due to the belated push in activities, communities have not yet seen on the ground benefits (increased crop yields etc) and do not feel well supported from a technical and financial perspective) to continue with project catalysed activities.
Overall quality of M&E	MU	While the baseline study was comprehensive, the M&E system does not appear to have operated as per the (updated) M&E plan and suffered from unclear responsibilities for reporting and database management. The PMU did not complete the AMAT or collect data for the key project indicators prior to the TE.
M&E design at project start up	S	The baseline study was comprehensive.
M&E plan implementation	MU	The M&E system does not appear to have operated as per the (updated) M&E plan and suffered from unclear responsibilities for reporting and database management. Furthermore data for the project indicators and AMAT were not collected prior to the TE.

1. Introduction

1.1 Purpose of the evaluation

1. This document presents the findings, conclusions and recommendation of the terminal evaluation of the project by the Global Environment Facility (GEF) and Food and Agriculture Organization of the United Nations (FAO) "Strengthening the adaptive capacity and resilience of rural communities using micro -watershed approaches to climate change and variability to attain sustainable food security", in the Kingdom of Cambodia also known as the "Life and Nature Project" (LNP).

2. The main purpose of this evaluation is to provide accountability to the donor (GEF) and project partners regarding performance and achievement of the expected results of the project. It is also to identify good practices and lessons learned for guidance in the formulation and execution of a potential follow-up project or other similar projects that follow a (micro) watershed management (WSM) approach for natural resources management (NRM) and uses climate-smart agriculture (CSA) for sustainable livelihood enhancements.

3. This report follows the FAO Office of Evaluation (OED) recommended structure for the report of a GEF project terminal evaluation, starting with the description of the evaluation approach in Section 1; and the description of the country context, the background of the project and the issues it sought to address (Section 2). This is followed by the key findings organised by evaluation question (Section 3) then Section 4 presents the evaluation conclusions and recommendations.

1.2 Intended users

4. **Main audience and intended users of the evaluation.** The primary audience of the evaluation are the GEF, Cambodia and the FAO Task Force Members located in FAO Cambodia, FAO Regional Office for Asia and the Pacific (RAP) and headquarters, who will use the evaluation findings for internal learning, as a tool to promote further dialogue and to improve the formulation and implementation of a possible follow-up project or similar projects.

5. **Secondary users** are i) all external partners involved in project implementation; and ii) other donors, organizations and institutions interested in supporting and/or implementing projects that follow a (micro) watershed approach for natural resource management and sustainable livelihood enhancements.

1.3 Scope and objectives of the evaluation

6. **Scope.** The evaluation covers the period from the official project start in June 2014 until the end of the evaluation field mission on 2 August 2020. However, particular attention has been given to the analysis of the efforts that have been made since the project's mid-term evaluation, which catalysed to considerable restructuring of the project and changes in the logical framework. The evaluation covers all five outcomes and the four pilot communes (one in each of the four project provinces, although the field mission was not able to visit Preah Vihear -see Section 1.5 on limitations).

7. **Objective.** The evaluation's specific objectives are to assess and rate the achievements and shortcomings of the project, including all the expected and unintended effects. The evaluation will also determine the extent to which the project has achieved its objectives

and will identify design and implementation issues that need to be improved to guide future actions in this area.

1.4 Methodology

8. This evaluation adheres to the United Nations Evaluation Group's (UNEG) most recent Norms and Standards for Evaluation (2016) and was in line with the Office of Evaluation (OED) Evaluation Manual (2019) and methodological guidelines and practices. The evaluation adopted the set of internationally recognized evaluation criteria (relevance, effectiveness, efficiency and sustainability) to which it adds two additional criteria, namely i) factors affecting performance; and ii) cross-cutting issues. The evaluation also used the GEF rating system to rate the success of the project on a six-point scale: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); and Highly Unsatisfactory (HU). The GEF evaluation rating criteria and the GEF rating scheme are presented in Annex 1 and 2 respectively.

9. This evaluation used guiding evaluation questions (EQs) (see Table 2) to assess the extent of LNP's progress against set target indicators and to discern the achievements made. The evaluation matrix, which shows the sources of information for these questions and sub-questions, is provided in Annex 4.

Table 2: Evaluation questions by area of analysis

Area of analysis	Main questions
Relevance	1. To what extent are the project outcomes still congruent with the GEF focal areas, the FAO country programme and the country priorities?
Effectiveness	2. To what extent have project objectives (i.e. outcomes) been achieved?
Efficiency	3. To what extent were the project management arrangements appropriate, efficient and clear?
Sustainability	4. What is the likelihood that project results will continue to be useful or will remain after project completion?
Factors affecting performance	5. Monitoring and Evaluation 6. Stakeholder engagement
Cross-cutting issues	7. Environmental and social safeguards 8. Gender 9. Co-financing 10. Progress to impact 11. Knowledge management

Source: Evaluation terms of reference.

10. The evaluation applied a mixed methodological approach where primary information collected through pre-mission interviews and the terminal evaluation mission was triangulated against information from project reports and secondary sources to enhance the reliability and validity of findings. This triangulation of evidence and information gathered underpins validation and analysis, supporting the conclusions and recommendations. Participatory methods were used as extensively as possible. The EQs were answered by triangulating information through the following methods:

    i. **Desk research** and review of documents produced by or related to the project and secondary sources.

    ii. **Theory of change (TOC).** Review of the TOC that was created during the mid-term review (MTR), with particular focus on the assumptions and drivers, as these were not made evident during the MTR.

iii. **Field visits** were conducted to view and assess the implementation of project catalysed activities "on the ground".

iv. **Skype or in-person semi-structured interviews and focus group discussions (FGDs)** with key stakeholders, beneficiaries and other informants who were involved in, or affected by, the project design and/or implementation, to answer more in-depth questions, to confirm (triangulate) desk review findings. The interviews and discussions were designed to particularly verify information in project six-monthly and annual reports, including interviewing attendees of the workshops and farmer field schools (FFSs).

v. Skype interviews were carried out with the local project team, the FAO Representative in Cambodia and the regional team in Bangkok to i) better understand the project; ii) ask the evaluation questions; and iii) pose follow-up questions.

vi. In-person interviews were led by the national consultant with project partners and beneficiaries in Phnom Penh and the project provinces, selected on the basis of the stakeholder mapping exercise during the inception phase and suggestions from the project team. These were supported by checklists developed by the terminal evaluation at the beginning of the evaluation.

11. The field mission, led by the national consultant, visited three of the four project provinces in Cambodia (Siem Reap, SR; Kampong Thom, KT; and Ratanakiri, R) between 20 July and 2 August 2020. The consultant attended parts of the LNP's stakeholder workshop. In each province, the consultant interviewed staff of Cambodia and partners at provincial, district and commune levels, held interviews or focus group discussions with beneficiaries and viewed on the ground implementation sites. The field itinerary can be viewed in Annex 6.

12. At the request of the terminal evaluation team, the project management unit in Cambodia included visits to a representative range of sites to demonstrate the different project interventions on the ground (see Table 3) in the different farming systems and landscapes in the project microcatchments.

Table 3: Range of on the ground interventions visited as part of the evaluation

Site type	Detail
Micro watershed management sites	In-stream structures, check dams, cascade dams, ponds (Outcome 2)
Demonstration farms/farmer field school sites	With focus on chickens, irrigated rice or vegetables (Outcome 3)
Farms where farmer field school participants have implemented climate-smart agriculture /conservation agriculture (post MTR)	Conservation agriculture, other climate-smart agriculture technologies, agroforestry, etc. (Outcome 3)
Community forests	Patrol stations, fire breaks, tree planting activities, tree nurseries (Outcome 2)
Women's businesses	Women savings and loan groups/women producer groups (Outcome 4)

Source: Evaluation team.

13. The visits were organized following three evaluation sample criteria: i) scope of project activities and the different contexts of the project areas; ii) performance of the project activities, i.e. a balanced mix of successful and less successful sites and activities that can produce lessons, good practices and insights in impediments; and iii) accessibility of project sites and stakeholders. The interviews and focus group discussions were held with

project implementers and participants at different levels and locations, with both men and women, and indigenous groups. The complete list of people interviewed can be found in Annex 1.

1.5 Limitations

14. All evaluations have limitations, including time available, reliability of data, accessibility of reports and availability of key informants. The mission included visits to as many sites as was feasible within the maximum mission duration of two weeks set by the project team, weather conditions during the rainy season, travel and COVID-19 restrictions. The field mission for this evaluation coincided with an international pandemic, a major tree planting exercise executed by the project (Outcome 2) and the final stakeholder workshop. The evaluation team is therefore very grateful to the project team, for their invaluable support in making the evaluation mission possible during these challenging events. The evaluation mission could not include Preah Vihear Province, as the provincial Project Coordinator for Preah Vihear had left the project by July 2020, and could therefore not convene meetings and coordinate the visit.

15. The evaluation team was provided with a copy of the 2020 project implementation report (PIR) on 4 August after the data collection already finished and the zero draft evaluation report was almost final. During September, after the last debriefing, the team leader reworked the draft report as much as possible, to reconcile it with the 2020 PIR, which was very useful, and providing additional quantitative information to the evaluation findings. However, the evaluation team found some discrepancies between information provided earlier to the team (in June and July) and the 2020 PIR. The project team was unable to clarify the discrepancies this close to the project closure as most staff had already left the project by then. Additional data discrepancies appeared in the comment rounds to the draft report, where the project team provided some new or updated data, different from the 2020 PIR. It appeared that some of the data in the 2020 PIR were not up to date as the staff responsible for recording project achievements resigned at a critical time. These new data could not be included in the evaluation report as it was submitted after the evaluation timeline and at this stage can no longer be verified or triangulated by the evaluation team. Furthermore, a number of documents could not be located by either the evaluation team or the project team, possibly due to staff turnover early in the project, and the fact that some of the project documents were still under preparation during the terminal evaluation data collection. Where applicable, this has been highlighted in the main text.

16. The evaluation team was unable to assess, beyond what was assessed in the mid-term evaluation, the effectiveness of the materialized co-financing. When enquired, the project team was unable to provide information or contact details of the co-financiers.

17. **Implications of the COVID-19 pandemic.** The travel restrictions due to COVID-19 meant that it was impossible for either the team leader or evaluation manager to travel to Cambodia to participate in the mission. Therefore, following the "risk analysis and guidance for the management and conduct of evaluations during international and national level COVID-19 crisis and restrictions" (OED, 2020), the evaluation was conducted in a mixed modality. This meant that the national consultant led the field mission, while the team leader held remote interviews with selected stakeholders. During the field visits, particular attention was to be paid to women and indigenous/marginalized groups. However, the COVID-19 restrictions constrained the number of people allowed to meet in groups and also travelling together.

2. Context and background of the project

2.1 Description of the context[1]

18. **Country context.** The Kingdom of Cambodia (hereafter Cambodia) is one of the least developed countries (LDC) that are most vulnerable to the impacts of climate change, with effects ranging from rising temperatures, erratic rainfall and prolonged droughts to an increasing number of storms and other extreme weather events that have their strongest impacts on the agricultural sector. The large majority of Cambodians (around 80 percent) live in rural areas, where rice production dominates the agricultural sector. Under traditional production methods, rice fields are located near ephemeral natural streams to make use of seasonal water events.

19. **Forestry and ecosystem services.** Cambodia continues to struggle with many serious environmental issues, the top three being climate change, water resources and land degradation. According to a recent report (Sciencing, 2019), the country "*has the third highest rate of deforestation in the world, motivated by timber harvest as well as clear-cutting for agriculture*". Deforestation destroys habitats and disrupts the balance of delicate tropical soils. Without trees holding the soil in place and replenishing organic matter with leaf litter, the soil erodes quickly and loses much of its fertility in the first few years of cultivation. The LNP's own climate-smart agriculture country profile notes "*Cambodia lost approximately 25 percent of all its tree cover, with 88 percent of losses due to commodity-driven deforestation. Despite annual reductions in both 2017 and 2018, nearly 70 percent of total tree cover loss since 2000 has occurred since 2010.*"(WEF, 2018). Deforestation is thus a major factor in the loss of both provisioning and regulating ecosystem services. Additional climate change challenges and implications are included in Annex 10.

20. **Gender equality.** Inequality persists in Cambodia, ranking 146 out of the 189 countries in the Gender Inequality Index (GII = 0. 0.474) (UNDP, 2020). The United Nations Office of the High Commissioner of Human Rights in Cambodia (UNDP, 2015) reported that 70 percent of women in employment were engaged at lower levels and on less pay than men, with estimates that on average women are paid 30 percent less for commensurate work. Women are also underrepresented in the public sector where 77 percent of employees and 85 percent of decision-making positions are occupied by men. Nationally, 25 percent of women are illiterate compared to 13.5 percent of men (IFC, 2019). Women farmers are particularly constrained because of their limited access to and ownership of land. Households headed by women comprised 27 percent of agricultural households in 2014 (IndexMundi, 2020). These households had access to 1.1 ha of land on average, compared to 1.5 ha for households headed by men, the difference being more pronounced in the plateau and mountain areas. Households headed by women also had less access to extension and financial services, markets and technology (ADB, n.d.).

2.2 Background of the project

21. **Implementation arrangements.** The LNP is the first GEF-funded project implemented by FAO, the main executing agency, in Cambodia. The main government counterpart for implementation is the Ministry of Environment (MoE) the Project Director is from MoE. Other key partners are the Ministry of Agriculture, Forestry and Fisheries (MAFF), also responsible for project implementation with MoE at the national and provincial level, and

[1] Based on the project document (2013) and the mid-term evaluation (2018).

several other government ministries such as the Ministry of Water Resources and Meteorology (MoWRAM) and the Ministry of Women's Affairs (MoWA). MAFF and the Provincial Department of Agriculture, Forestry and Fisheries (PDAFF) were responsible for technical training and guidance for Outcomes 3 and 4, MoWA and the Provincial Department of Women's Affairs (PDoWA) for Outcome 4 and the Provincial Department of Environment (PDE) for supporting Outcome 2.

22. As for FAO, oversight and guidance was provided by: i) a Lead Technical Officer (LTO) and Funding Liaison Officer (FLO) based in the FAO Regional Office in Bangkok; and ii) an in-country project team, the standard FAO mechanism to facilitate FAO's technical support to the project from the breadth of FAO's expertise. Project implementation was initially led by a Chief Technical Adviser (CTA), who left in 2016 and was never replaced. At first the CTA, together with MoE and MAFF, were responsible for the implementation of Outcome 1. After the CTA left in 2016 and the MTR in late 2018-early 2019, the project recruited three FAO Technical Advisers, one each for Outcomes 2, 3 and 4, and were given additional responsibilities for Outcome 1 (also see Section 3.2).

23. The project involved a considerable number of dedicated staff over the period of implementation, with only the current National Project Coordinator (NPC), and two Provincial Coordinators (PCs) (for Kampong Thom and Ratanakiri) involved throughout the project lifespan. Other project staff either changed or joined the project at a later stage (see Section 3.3 on Efficiency). Although detailed in the project document, the evaluation found that no international law and policy expert was recruited.

24. **The Project Coordination Committee (PCC)** consists of MoE, the National Climate Change Committee, MAFF, MoWA, MoWRAM, the Ministry of Interior, the Cambodian Agricultural Research and Development Institute (CARDI) and the Royal University of Agriculture. MoE plays a key role in the project's forest-related work in each micro watershed, through PDEs and in in collaboration with Forestry Administration Cantonments, which depends on PDAFF. Forestry Administration is under MAFF and assisted PDEs in forest restoration in Community Forests, under the jurisdiction of MAFF. MoWA plays a key role in supporting the activities that focus on women farmers and strengthening their capacity and resilience. MoWRAM plays an assisting role in the project's work in watershed management.

25. **Other partners.** The project also interacted with other partners, mainly for capacity building trainings and workshops, such as the Natural Farm Kirirom Co. Ltd, Action For Development (AFD), Centre Etude et Development Agricole Cambodgien (CEDAC) and Human Resource and Rural Economic Development Organization (HURREDO). Moreover, the project was designed to work in collaboration with projects supported by development partners (European Union, Asian Development Bank (ADB) and FAO, etc.) as co-financiers, to scale-up the pilots in the LNP (see also paragraph 36).

26. As can be seen in the basic project information overview in Table 4, the project was approved on 6 March 2014 and officially started on 9 June 2014. However, due to delays in the recruitment of the Chief Technical Adviser the project did not really start until March 2015, which is considered here to be the effective project start date.

27. The project MTR was finalized in March 2018 and the management response to that MTR is dated June 2018. After the Chief Technical Adviser resigned in 2016, no one was recruited to the role, however a LNP Project Manager began work in October 2018 and was recruited to lead the revision of the project after the MTR. He has led the considerable restructuring of the project, including recruitment of three new international staff to lead Outcomes 1,

2, 3 and 4 (see paragraph 29 below) and catalyse progress towards project objectives, outcomes and outputs, which had been found lacking in the MTR. The project is due to close in September 2020, having benefited from a one year no-cost extension granted following the MTR, then a further three-month extension to allow the evaluation and closing activities to be concluded, after work was on hold for a few months due to the COVID-19 pandemic.

Table 4: Basic project information

GEF Project ID Number: 4434
FAO project ID Number: GCP/CMB/036/LDF
Recipient country: Kingdom of Cambodia
Executing Agency: FAO in collaboration with the Ministry of Environment (MoE)
Main implementing partners: Provincial departments of MoE, also Ministry of Agriculture, Forestry and Fisheries (MAFF), the Ministry of Women's Affairs (MoWA) and the Ministry of Water Resources and Meteorology (MoWRAM) at national levels and in each project province
GEF Focal Area: Climate change adaptation
GEF LDCF Strategic Objectives: (1) Reducing vulnerability; (2) Increasing adaptive capacity; (3) Adaptation technology transfer
Date of CEO endorsement: 6 March 2014
Date of PPRC endorsement: 9 June 2014
Date of project start: 9 June 2014
Initial date of project completion (original NTE): 30 June 2019
Revised project completion: 30 June 2020 (first amendment) 30 September 2020 (second amendment)
Date of mid-term review: March 2018

Source: Evaluation terms of reference

28. **Project objective and outcomes.** The project objective was "*to build the adaptive capacity of rural communities and reduce their vulnerability to climate change through micro watershed management and climate resilient agriculture practices through interventions at national, subnational and community levels*". It was designed to address barriers at all levels (local to national) stemming from lack of awareness, knowledge, understanding and capacity concerning climate change adaptation and the absence of alternative livelihoods, particularly affecting rural women. The project had five outcomes that focussed on increasing resilience among rural communities by: i) incorporating climate change adaptation (CCA) into national agricultural and food security decision-making frameworks; ii) adopting integrated watershed management planning; iii) implementing CCA farming practices; and iv) supporting women to adopt climate-resilient livelihoods, including catalysing savings and loan groups and supporting women's participation in other project activities.

29. The five project Outcomes and their Outputs are as follows:

i. **Outcome 1: Climate change adaptation is integrated into national agricultural and food security policies and planning.**

- Output 1.1: CCA stocktaking study of national and subnational policy, planning and implementation processes.
- Output 1.2: CCA lessons learned, sharing, and validation workshops implemented with national and subnational stakeholders.
- Output 1.3: CCA capacity development and consolidation of experiences to inform CCA action planning development steps with subnational stakeholders.

ii. **Outcome 2: Participatory integrated micro watershed management approach reducing climate impacts on natural resources and agriculture.**

- Output 2.1: Local level CCA assessment and monitoring implemented in four target watersheds.
- Output 2.2: Integrated ecosystem-based adaptation watershed management plans operational within four target sites.
- Output 2.3: Suite of physical measures to improve ecosystem resilience established in four watersheds.

iii. **Outcome 3: Climate resilient agricultural practices adopted by farming households**.

- Output 3.1: CCA integrated into FFS curriculum.
- Output 3.2: FFS CCA curriculum tested and validated.
- Output 3.3: Model FFS curriculum, lessons learned captured and best practises replicated broadly.

iv. **Outcome 4: Climate resilient alternative livelihood options adopted by women**.

- Output 4.1: CCA capacity for women built through improved knowledge and participation in decision-making processes.
- Output 4.2: Women livelihood options implemented that increase food security and climate change resilience.

v. **Outcome 5: Monitoring and evaluation and information dissemination**.

- Output 5.1: Development of a monitoring and evaluation (M&E) system.
- Output 5.2: Mid-term and terminal evaluations carried out.
- Output 5.3: Information dissemination.

30. **Landscapes of the project pilot areas.** The project has been implemented in four pilot communes for demonstration of micro watershed approaches, one each in four provinces (see Table 5). The location of these communes in the four provinces can be viewed on the map in Annex 3 (Prior to the project, the watershed approach had not been used on the country). The micro watersheds in these project communes cover an area of 59 455 ha (almost 600 km^2) with a population of about 10 000 people. These pilot sites have been the focus of project activities related to Outcomes 2, 3 and 4. The pilot areas were selected and agreed during the project design phase, based upon climate change vulnerability criteria developed in consultation with government officials at provincial, district and commune level, as well as with local communities; particularly *vulnerability to localized floods, extreme weather events and crop failures* (ProDoc, 2013. Appendix 4). The pilot sites present a variety of landscapes and land uses, including dry and wet farming systems, grazing, forested areas, economic concessions and protected areas. This variety was

designed to provide an opportunity for the project to demonstrate adaptation improvements.

Table 5: LNP pilot communes and watershed areas

Commune	District	Province	Watershed area (ha)	% of project area
Lvea Krang	Varin	Siem Reap (SR)	8 557	14.4
PoPok	Stoung	Kampong Thom (KT)	10 270	17.3
Ta Veaeng Leu	Ta Veaeng	Ratanakiri (RK)	24 033	40.4
Kulen Chheung	Kulen	Preah Vihear (PV)	16 595	27.9
Total			**59 455**	**100**

Source: Evaluation team. Calculated from data in Appendix 4 of the LNP ProDoc.

31. **Target groups.** The target group of Outcome 1 are the national level policy makers and officials in climate-related sectors of government. The target group of the remaining outcomes are smallholder farming households, with a special focus on women in Outcome 4. The project is working with "Brao" indigenous people in one of the four target sites in Ta Vaeng Leu commune in the Ratanakiri province. The Brao are generally subsistence farmers, making their livelihoods through more traditional shifting cultivation, also hunting and collecting non-timber forest products (NTFPs) from the forests.

32. **Project financing.** The GEF grant for the project from the Least Developed Countries Fund (LDCF) was USD 5 174 364. The project also included co-financing from the Asian Development Bank Tonle Sap Poverty Reduction and Smallholder Development Project and by the European Union through the Improving Food Security and Market Linkages for Smallholders project in Oddar Meanchey and Preah Vihear Provinces. Moreover, it includes contributions from several FAO Cambodia projects and in-kind financing from the local departments of the Ministry of Environment and Ministry of Agriculture, Forestry and FIsheries. The total co-financing amount that was materialized by the time of the terminal evaluation (2020) was USD 25 767 782. Overall the project budget was USD 30 942 146 including the GEF grant and co-financing. An overview of all co-financiers and their respective contributions can be found in Annex 5.

33. **Project fit into national priorities.** The project was designed to and continues to fit into national priorities. Issues of deforestation, availability of water, land degradation, the need to enhance climate change resilience and gender remain priorities from local to national levels (see more in Section 3.1).

34. **Alignment with the FAO National Medium-Term Priority Framework (2011-2015).** The project was designed to align to the then current Cambodia National Medium-Term Priority Framework (NMTPF) 2011–2015. The NMTPF outlined the following "priority areas" for FAO - the project has contributed to the first, third, fourth and fifth priority areas:

    i. **Sustainable improved agricultural productivity for smallholder farmers.**
    ii. Improved consumer protection and market access to agricultural and related products.
    iii. **Improved food security.**
    iv. **Improved natural resource management.**
    v. **Climate change mitigation and adaptation, and disaster risk management.**

35. **Alignment with FAO regional priorities.** The 34th FAO Regional Conference for Asia and the Pacific held in 2018 included the following regional priorities: i) reduction of animal and plant pests and diseases; **ii) sustainable production and resilience in the context of climate change**; iii) improving nutrition and food safety; iv) minimizing food waste and

loss; v) inclusive value chain development; and vi) better data and analysis for decision-making and M&E. The LNP contributes particularly to the second priority.

36. **Alignment with the Sustainable Development Goals (SDGs) and FAO Strategic Objectives (SOs).** The LNP contributes to some extent to: **SDG 1** – No poverty; **SDG 2** – Zero hunger; **SDG 5** – Gender equality; **SDG 13** – Climate action; and **SDG 15** – Life on land. Of these, it mainly contributes to SDG 13. Furthermore, the LNP aimed to increase crop yields and reduce food insecurity thus contributing to **SO1** "*eliminate hunger, food insecurity and malnutrition*". Outcomes 2 and 3 contribute at a small scale to **SO2** "*make agriculture, forestry and fisheries more productive and sustainable*" - particularly ensuring that the natural resource base does not suffer in the process. In the longer term the project Outcomes should contribute to **SO3** "*reducing rural poverty*" and **SO 5** "*increase the resilience of livelihoods to disasters*".

37. **Alignment with GEF focal area and/or LDCF/ Special Climate Change Fund (SCCF) strategies.** The project was designed to and continued to contribute to the achievement of the three adaptation objectives, namely: CCA-1 "Reducing vulnerability"; CCA-2 "Increasing adaptive capacity"; and CCA-3 "Adaptation technology transfer".

2.3 Theory of change

38. No explicit theory of change was elaborated during project design, although the design is clearly based on the logical linkage between the activities, outputs, outcomes and objective. Therefore the design team did have an implicit clear idea of a TOC. The TOC was developed during the mid-term review and can be found in Annex 7. However, the MTR TOC did not explicitly include the external factors that influence change along the major impact pathways. These external factors are assumptions over which the project either has no control, or drivers of impact when the project has a certain level of control. The evaluation was particularly asked to revisit the project's TOC and identify important drivers.

39. The assumptions from the ProDoc and MTR can be found below in Table 6, together with additional assumptions found by the terminal evaluation. First of all, the terminal evaluation found an issue in the project's implicit TOC concerning the original Outcome 1 "Climate change adaptation integrated into national agricultural and food security policies and planning". The design hinged on the notion that at the start-up, national policies/planning did not take climate change into account and that during project implementation, information and data would become available from the project pilot sites following activities towards Outcomes 2, 3 and 4 would be used to guide policy changes at national level. There are two flaws in this argument: i) it was reported to the terminal evaluation team that by the actual project start date in 2015, many national policies had already been developed to include climate change; and ii) the terminal evaluation found a consensus among senior government officials that a relatively small, short-term project would be unable to provide sufficient data and information upon which to alter national policies. The inception workshop should have revisited the project outcomes and outputs to ensure they remained valid/appropriate, but since the project was designed several years earlier than the actual start date this was not done.

40. The other outcomes have proven logical and synergistic towards the overall project objective and are indeed leading to integrated micro watershed management, adoption of climate resilient farming practices and development of alternative livelihoods (particularly supported by effective savings and loans groups). However, another important assumption, particularly applicable to Outcomes 2, 3 and 4 is that these activities should have started

early in the project time frame and should have been consistently supported throughout the project lifespan up to 2020. The departure of the Chief Technical Adviser (who had reportedly mainly been focusing on Outcome 1) in 2016 had a negative impact on the project, as she was never replaced. While the involvement of communities started early on as a pilot to be progressively scaled-up, many interviewees informed the terminal evaluation that most of the work with the communities has only taken place over the past 18 months, thanks to the dedicated support of the current Project Manager (from October 2018), his team of technical advisers (international staff recruited after October 2018), as well as the provincial coordinators. This is particularly an issue for Outcome 3, where a change of mindset, which takes time, is required among farmers to adopt climate-smart agriculture technologies. Moreover, the FFS approach was not always able to follow the FAO standard "learning-by-doing" methodology directly in the field due to pressure to get work started, and catch up on the delays. Even though it was the dry season some had to be partly classroom (i.e. theory) based.

41. For Outcome 5, the evaluation added the assumption that during project implementation, the M&E system should systematically gather field data and information on project impacts from project start throughout implementation, which would be effectively shared with key partners (local, national and international) through the project's knowledge management system. For a variety of reasons further discussed in Sections 3.2.5 and 3.5.1 on M&E, including the late completion of the baseline (2016) and a lack of regular collection of data on crop yields and food security, this was not effective.

Table 6: Assumptions and drivers for the theory of change of the Life and Nature Project

Outcomes		**Outcome 1: Policy**	**Outcome 2: WSM**	**Outcome 3: FFS**	**Outcome 4: Gender**	**Outcome 5: M&E and KM**
Assumptions	**ProDoc**	Government agencies, on all levels (national to local), fail to act on required policy improvements.	Lack of understanding of the win-win benefits of landscape approach.	Vulnerable farmers may not be willing to change their known subsistence farming methods.	Women have marginalized access to common property resources.	Few local examples demonstrating how CSA can increase resilience to Climate change (CC).
		Climate change increasingly affecting local to national food security.	Increasing pressure on forest resources and degradation of watersheds CC induced changes in weather patterns exacerbating catchment degradation.	Lack of understanding of CC impacts and knowledge of CSA options.	Few opportunities for women to generate and apply adaptive capacity. Increasing numbers of women headed households (HHs).	Lack of awareness and knowledge on CC and CSA.
Assumptions	**MTR**	Government participation sustained to adopt and implement policy improvements. Absorptive capacity of national stakeholders is equal to tasks. Several major policies/plans will be completed, and project support enables CCA improvements.	Stakeholders support for project designed resilience measures will be sustained. Continued investments by donors in agricultural sectors continued to be supportive of integrating CCA within ongoing and new sector activity.	Stakeholders support for project designed resilience measures will be sustained. Continued investments by donors in agricultural sectors continued to be supportive of integrating CCA within ongoing and new sector activity.	Rural communities will provide the support required to allow women to more actively engage in decision-making and business expansion opportunities. Economic conditions provide opportunities for women to shift from climate change vulnerable to climate change resilient business activities.	PSC established and project started implementation.
Assumptions	**TE**	At start-up national policies/planning did not take CC into account – and	Activities should have started earlier in the project time frame and	Activities should have started earlier in the project time frame and	Activities should have started early in the project time frame, perhaps in 2015, and	Data collection system to gather field data and information on project

Outcomes		Outcome 1: Policy	Outcome 2: WSM	Outcome 3: FFS	Outcome 4: Gender	Outcome 5: M&E and KM
		during project implementation, information and data would become available from the project pilot sites following activities towards Outcomes 2, 3 and 4 could be used to guide policy changes at national level. Project time frame considered sufficient to provide data and information to back policy changes although project results have contributed to the objectives of the national climate strategy.	should have been consistently supported throughout the project lifespan up to 2020 to ensure acceptance by land users locally and increase the prospects for sustainability and impact.	should have been consistently supported throughout the project lifespan up to 2020 to ensure acceptance by land users locally and increase the prospects for sustainability and impact.	should have been consistently supported throughout the time to 2020 to ensure they were locally accepted by land users.	impacts should have been in place at project start and systematically maintained throughout implementation. Knowledge management system effectively shares lessons with key local, national and international partners.

3. Evaluation questions: key findings

3.1 Relevance

EQ 1. To what extent are the project outcomes still congruent with the GEF focal areas, FAO country programme and country priorities?

Finding 1. The LNP is contributing to the current LDCF goal and objectives, particularly Objective 1 (Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation).

42. Activities under Outcomes 2, 3 and 4 (including introduction of watershed management approaches, climate-smart agriculture, all with a particular focus on including women) are all beginning to directly contribute to reducing vulnerability and increasing resilience for climate change adaptation in the pilot communes, while providing models for future scaling-up.

43. Outcome 2 is restoring degraded forest ecosystems and supporting construction of instream structures thus enhancing the availability of water and reducing land degradation (soil erosion) in the project's microcatchments following development of watershed management plans and supporting establishment of watershed management committees.

44. Since the MTR, the FFSs under Outcome 3 are more clearly aiming to catalyse climate-smart agriculture, including advocating the use of cover crops (green manures), incorporation of composted crop residues (dry and wet), conservation agriculture/zero tillage, improved rice cultivation systems (System of Rice Intensification, SRI), including land levelling, seed selection and novel transplanting systems), use of drip irrigation, also agroforestry (mainly focusing on lemons and cashews).

45. Activities under Outcome 4 included gender analyses of the pilot microcatchments' farming systems, market assessments and establishment of women's producer groups – all empowering women and training them in savings and loan groups, producer and business groups.

46. The capacity building activities of Outcome 1 have raised awareness and understanding of the impacts of climate change on agriculture and the wider environment, but for others (e.g. draft policy briefs) it can only be anticipated that these will indirectly contribute in the longer term.

47. Desk review of project reports, training materials, lessons learned, case studies and pilot sites providing venues for exchange visits found that they are providing relevant models demonstrating that in combination, the landscape approach[2] can contribute to increasing crop yields and enhance food security of rural farmers, particularly women-headed households, thus improving the household socio-economics and livelihood (see Section 3.2 and 3.4).

[2] Ecosystem-based adaptation (as described in the ProDoc), introducing WSM and CSA using FFS approaches, and ensuring inclusive access to finance for households/agricultural tools, etc.

Finding 2. The project's activities are contributing to all three outcomes of FAO Cambodia's current Country Programming Framework (CPF) 2019-2023.[3]

48. One of the project's objectives has been to increase crop yields. For the various reasons mentioned in Sections 2.2 and 2.3, real progress towards this objective has only come in the past one year and a half but the initial signals are positive that the combination of outcomes is working synergistically towards this. Some of the project beneficiary farmers are noticing an increase in their yields, although this will take a series of seasons to verify. Some project trained farmers are also diversifying their cropping (e.g. from cassava monocrops to include rice, beans, sesame, which contributes to enhanced resilience (FAO, 2020a) (CPF Outcomes 1 and 3). The improved land management approaches being advocated (use of cover crops, application of compost, conservation agriculture and tree planting) are expected in time to contribute to the protection of soil fertility/reduced land degradation, to protect crop yields (reduce yield variability) in droughts/floods. Activities towards Outcome 2 have piloted watershed management (with micro watershed management plans and committees) by which communities better understand and feel more empowered to improve the management of their lands and forests, including community protected areas, community forests, riparian areas, also protecting forests from fire with fire breaks and by enhancing tree cover within agricultural areas (agroforestry) – contributing to CPF Outcome 2 (adaptation and mitigation).

Finding 3. With a focus on addressing the issues of deforestation, improving availability of water, reversing land degradation, enhancing food security, enhancing climate change resilience and particularly ensuring women's livelihoods are enhanced, the LNP was relevant to many of the key environmental concerns facing rural communities in Cambodia.

49. The involvement of government line ministries (e.g. MoE, MAFF, and MoWA) has helped ensure that project activities remained well aligned with government sectoral policies and strategies, current Government priorities and address needs from the household to national levels. The LNP is implemented through the national mechanisms of three line ministry partners, which helped foster closer coordination of public investment and social provisioning among national and subnational authorities, including the watershed management, climate-smart agriculture, and woman business groups. LNP has been generally in line with this strategy and FAO's commitment to policy-based dialogue with the partner ministries and local target communes on the emerging priorities for their communities.

50. At the subnational level, provincial departments (PDAFF, PDE, PDoWA), commune authorities and local people were involved in selecting the priorities for small-scale climate resilience activities towards Outcomes 2, 3, and 4. The project conducted needs assessments before formulating the intervention activities. These needs are still relevant such as watershed management, forest restoration and protection, soil fertility management, climate-smart agriculture on rice, cassava, cashew, lemon, and other related cash crops. The women's business groups have been linked to the market chain development with support from local authorities. The LNP activities have not reached into

[3] 1. Enhanced agricultural productivity, diversification and commercialization, and safe and nutrition-sensitive food systems for poverty reduction and food and nutrition security. 2. Equitable and sustainable management of natural resources, and climate change adaptation and mitigation. 3. Reduction of vulnerability and improved resilience to shocks at national, community and household level.

value chain activities, as this was not included in the project design, but need to be addressed post-project to ensure additional produce is not wasted and can bring in income. The project's catalysed watershed management planning has been integrated into the annual commune investment plans and the three-year rolling plans for the four pilot communes (see Sections 3.2 and 3.4).

Finding 4. The majority of evaluation informants concur that it was not appropriate for a short-term project4 such as the LNP to envisage catalysing change in national policies.

51. In the ProDoc, Outcome 1 was entitled "Climate change adaptation (CCA) integrated into national agricultural and food security policies and planning". To achieve this, the project was to develop the capacities required to fill existing institutional and policy gaps related to improving nexus between CCA, agriculture and food security. Prior to the MTR, although the Chief Technical Adviser was reportedly focusing on Outcome 1, the rationale for that outcome and its outputs were in doubt and the international law and policy expert detailed in the ProDoc was never recruited. By the time of the MTR it was openly felt that the project was of too short a duration to provide evidence for such policy change, which Government informants to the terminal evaluation also verified. Consequently and catalysed by the MTR, the Outcome was significantly revised, but it has reportedly remained problematic throughout (one informant to the terminal evaluation termed it the "orphan Outcome" – also refer to next finding and Section 3.2.1).

52. In fact, by the time project implementation started in 2015, the Government had policies and strategies in place to work towards socio-economic, sustainable development in the climate change context. The cross-sectoral policies relevant to climate change in place at the project start-up - as detailed in the recent draft LNP policy review stocktaking (Hour, T., 2019) included:

    i. National Strategic Development Plan (NSDP) (2014-2018).
    ii. Cambodia Climate Change Strategic Plan (2014–2023).
    iii. Green Growth Policy (2013-2030).
    iv. National Adaptation Plan of Action on Climate Change (2006).
    v. National Green Growth Roadmap (2009).
    vi. Strategic National Action Plan for Disaster Risk Reduction (2008-2013).
    vii. National Social Protection Strategy for the Poor and Vulnerable (2011).

53. Although the project has not contributed to the design of policies and strategies, it has contributed to the implementation of the sectoral policies and strategies related to food security and climate change, including the Agricultural Strategic Development Plan (2013-2018) and (2019-2023), the Cambodia Climate Change Development plan (2014-2023), as well as the National Strategy for Food Security and Nutrition (2014-2018) and (2019-2023). After the MTR, Outcome 1 was revised to "CCA approach informs national and sub-national forestry, water, agricultural, livelihood and food security policies, planning and implementation procedures" to enshrine a more bottom-up, as recommended by the MTR (see more detailed changes on the outcome and outputs made in Annex 8 and Section 3.2.1). This acknowledged the belief among informants at various levels that the project was too short to contribute to the redesign of national agricultural and food security

[4] The project was designed to last five years; it actually lasted over six years, because of two extensions.

policies but rather project findings in CCA should "inform" the sectors. Also, the project did not recruit the international law and policy expert detailed in the ProDoc. After the MTR, the project did adopt a more bottom-up approach learning from what was happening on the ground.

54. **Rating.** Overall, the project has remained relevant and contributed to the LDCF goal and objective of GEF and the outcomes of FAO Cambodia's current CPF. With the increasing impacts of climate change, the project is also relevant to the key environmental concerns facing rural communities in Cambodia, providing models for replication and scaling-up. Outcome 1 as designed in the ProDoc did not align well to national needs and was therefore revised following the MTR to make it more relevant. On the basis of the above findings, the overall rating for project relevance is **Satisfactory (S).**

3.2 Effectiveness

EQ 2. To what extent have project objectives (i.e. outcomes) been achieved?

3.2.1 Outcome 1. CCA approach informs national and subnational forestry, water, agricultural, livelihood and food security policies, planning and implementation procedures.

Output 1.1: CCA stocktaking study of national and subnational policy, planning and implementation processes.

Output 1.2: CCA lessons learned, sharing and validation workshops implemented with national and subnational stakeholders.

Output 1.3: CCA capacity development and consolidation of experiences to inform CCA action planning development steps with subnational stakeholders.

Finding 5. Since the revision of this Outcome in 2018-2019 and the enhancement of staffing, the project has achieved the target number of three policy briefs, although still in draft version. Many Outcome 2 and 3 focused workshops were organized at provincial/district level, while only two of the annually planned national CCA-related workshops (2017 and 2020) were held.5 One draft policy review was prepared, which is currently still in draft and of limited scope.

55. As mentioned in the previous section on relevance, Outcome 1 and its related outputs were significantly revised after the MTR. Under the revised Output 1.1, the project has supported the drafting of three policy briefs on climate change adaptation-related topics (at the time of the terminal evaluation these were out for stakeholder consultation), namely:

    i. micro watershed management;

    ii. social protection and payment for ecosystem services (climate finance);

    iii. gender equality to tackle climate change.

56. These policy briefs (currently in draft) are interesting and helpful documents, written in English. It is not clear whether they will be finalized by the close of the project, and whether they will be translated into Khmer and how they will be disseminated.

57. The project also recently supported a draft stocktaking of policies, regulations, strategies as well as literature such as manuals and project documents to "identify what has been developed and applied so far to adaptation planning" (Hour, 2019 draft). It was carried out

[5] 14 other workshops have been held at province /district levels, on specific project outcomes.

to identify the major discourses and trends in thinking about climate adaptation planning, focusing on actions, projects and initiatives. The draft report outlines the complexity of the policy landscape relating to climate change adaptation in Cambodia. Providing that the LNP will manage to support finalizing this before project closure, it can be considered an important product. However, it is very limited in its scope and sources, and it does not provide an analysis or conclusions. The project explained that the team tasked with the CCA policy stocktaking did not have the necessary understanding due to unclear objectives in the terms of reference and the absence of a Policy Officer to guide and supervise the exercise.

58. Moreover, the project has supported the production of a Climate-Smart Agriculture in Cambodia - Country Profile, which at the time of the terminal evaluation was a draft (FAO, 2020b). The process of developing the CSA country profile actively involved Ministry of Agriculture, Forestry and Fisheries/General Directorate of Agriculture (GDA) counterparts with full support from Government. The evaluation concludes that this is a well-researched and detailed report. At the same time, it is currently quite theoretical, lacking practical details such as available in the FAO CSA website (FAO, 2020c)/sourcebook (FAO, 2017). When inquired, the project team did not clarify to the terminal evaluation who the target audience is for this 47pp document, whether it will be translated into Khmer and how it will be disseminated.

59. For Output 1.2, the evaluation was informed that the project organized two of the six scheduled annual national level CCA-related workshops and a total of 14 workshops at province/district level, focussing on two out of the five project specific LNP outcomes (see Table 7). The evaluation did not find any gender-disaggregated or total number of attendees of these workshops and has seen only some of the workshop reports. The evaluation took note that the numbers provided to the terminal evaluation differ from the numbers in the 2020 project implementation report (10 achieved – ProDoc target was 15).

Table 7: LNP workshops held

Year held	National/Provincial/District + Theme	Host	Outcome	# held
2017	National - planning/lessons learned	GDA	All	1
2018	District - discussion on the results of the watershed management implementation	LNP	2	4
2018	Provincial - lesson learned workshops	PDE	2	4
2019 / 2020	Provincial - lesson learned workshop	MoWA + PdoWA	2	2
2020	Provincial - lesson learned workshops	PDAFF	3	4
2020	National - final lessons learned	LNP	All	1

Source: LNP terminal evaluation focal point and NPC.

60. Towards Output 1.3, according to the minutes of the second Project Coordination Committee (9 March 2016), the project had supported the completion of a climate change policy review and also developed a youth strategy. However, when inquired, project team could not locate either of these documents.

61. The 2020 project implementation report indicates two additional indicators. First, that a report consolidating project knowledge and workshop-derived evidence to produce lessons learned and recommendations for institutional capacity improvements on CCA planning and implementation at national and subnational levels has been published. The evaluation team was not provided with this report during data collection and can therefore not assess this output. Second, that four case studies (one per pilot commune/province) were published on the FAO Cambodia website in August 2020. These studies provide

interesting and useful information about the project activities in each commune, yet not the quantitative information as would be expected for such studies.

62. While some of the work is still in draft, FAO Cambodia reportedly provides technical support to the drafting of most policies and laws related to agriculture, food security and nutrition, and natural resource management and therefore has the opportunity to include lessons from the LNP project in the future.

63. **Rating.** Although Outcome 1 was significantly revised after the MTR, it suffered from a lack of progress up until the MTR. Given the draft nature of the small number of outputs, the limited number of annual workshops (2017 and 2020) and the limited scope of the stocktaking exercise, Outcome 1 is rated as **Moderately Unsatisfactory**.

3.2.2 Outcome 2. Participatory integrated micro watershed management approach reducing climate impacts on natural resources and agriculture.

Output 2.1: Local level CCA assessment and monitoring implemented in four target watersheds.

Output 2.2: Integrated ecosystem-based adaptation watershed management plans operational within four target sites.

Output 2.3: Suite of physical measures to improve ecosystem resilience established in four watersheds.

Finding 6. Although not all targets are reached, significant progress has been made in the activities under Outcome 2 in restoring the degraded ecosystem services (forest and hydrological) in the pilot communes.

64. Under Outcome 2, the project supported the preparation of eleven Vulnerability and Impact Assessments (VIAs) in the second half of 2015 (three villages in KT; two in PV; three in RTK and three in SR), with co-facilitation by relevant government counterparts of Provincial Department of Women's Affairs, Provincial Department of Environment, and Provincial Department of Agriculture, Forestry and Fisheries from August to October 2015. The VIAs were designed to assist target communities to identify vulnerabilities and resilience building responses emphasizing improved forest, land and water resources management. VIAs were designed to be tools to build CCA awareness and supply baseline information to inform watershed management planning.

65. The evaluation considers that the 2015 village level VIAs are useful baseline documents, providing an informative timeline of changes in the environment since the 1980s. The VIAs do not include any quantitative data (e.g. soil properties, rainfall, stream flows, crop yields). Instead, the VIAs were conducted using qualitative methods (semi-structured interviews) with small groups of local people (e.g. 10 people in Popok and 13 people in Kuleaen – with a good age/gender balance) using participatory rural appraisal tools (*inter alia* historical timelines, hazard mapping, gender-disaggregated diaries of daily life activities and seasonal calendars), which were used to develop useful strength, weaknesses, opportunities and threats (SWOT) analyses. The VIA findings covered issues and proposed solutions raised by key informants in relation to watershed management, agriculture and gender, as well as alternative livelihood options in the studied areas. All this information was then integrated into a village adaptation planning table. These tables were designed to be updated annually, as "living documents".

66. Four additional VIAs (developed in late 2019/early 2020) were found among the documents provided to the evaluation team in August 2020 – but not mentioned in the 2020 project

implementation report. These are not updated of the 2015 documents but more akin to another set of baselines, this time one per LNP pilot province covering groups of villages in the pilot communes. The gender aspects in the VIA Guidelines were further strengthened in 2020 by Output 4. The evaluation team concludes that the community VIAs have not been updated annually as planned.

67. The evaluation concurs with an assessment of the 2015 VIAs by the PCC that the VIAs could be strengthened with the inclusion of more quantitative data relating to meteorology, hydrology and land degradation. Furthermore, given the low levels of literacy and that the documents are in English, their suitability to build CCA awareness at the local level is judged to be limited.

68. Early in the project (2016), each pilot commune has also benefited considerably from support from the LNP Provincial Coordinators in developing watershed management committees (WSMCs) and providing capacity building for members in the principles of watershed management and landscape approaches. At the time of the terminal evaluation, the WSMCs included both men and women,[6] although women remain in a minority on these committees. In 2017, Participatory Micro Watershed Management Guidelines were drafted to guide the team in the planning and implementation of in-stream and on-slope interventions. The guidelines have been revisited in 2020 by Component 4 to strengthen the gender inclusion aspects.

69. The four watershed management committees (which according to the 2020 project implementation report have met 80 times in total – the terminal evaluation was unable to confirm this) have been supported by the LNP local partners to develop watershed management plans (WSMPs – covering 2017-2021)[7] and linked action plans (separate documents for each commune). The plans were designed to be updated annually and have been integrated into commune development and investment plans (reportedly to be supported by USD 5 000 funding per year/commune – although this probably varies depending on the population in each commune). Commune and district authorities stated these as "very useful". WSMC members have particularly benefited from project supported study tours to a neighbouring province.

70. Following the guidance of the WSMPs, the project has supported the construction of 28 instream structures and one pond rehabilitation across six microcatchments (involving seven villages) of the four pilot communes (see Table 8). The instream structures have been designed to enhance water availability in the pilot microcatchments and follow "successful national and international principles and practices of practical methods for maintaining and restoring ecosystem functionality in agricultural areas" (quote from ProDoc – paragraph 101).

[6] Taveng Commune in Ratanakiri – 24 members ,7 women; Popok Commune in Kampong Thom - 24 members, 4 women; Lvea Kraing Commune in Siem Reap - 23 members, 8 women; Kulean Cheung Commune in Preah Vihear – 20 members, number of women not recorded.

[7] 2021-2025 WSMP documents in Khmer provided to the terminal evaluation after the evaluation data collection period, dated September 2020.

Table 8: Summary of instream structures and their main purposes

Instream structures	# of structures in each province				Total # of structures	Main purposes
	KTP	SR	PVH	RTK		
Check dam	4	4	1	-	9	Water retention, irrigation, slowing down water flow, increasing soil water percolation and increasing aquatic life
Cascade dam	8	4	2	2	16	Slowing down water flow and ground water recharge
Gully control	1	1		-	2	Erosion control
Pond	-		1	-	1	Rain water storage
Total	**13**	**9**	**4**	**2**	**28**[8]	

Source: PMU

71. The terminal evaluation was informed that the Provincial Coordinators, who were responsible for most of the administration and coordination for the field work during the project, felt they had minimal technical support from the Project Management Unit. This lack of direction and reportedly heavy workload meant that some mistakes were made (e.g. re-building existing structures in streams that could not withstand the wet season floods).

72. In late 2019, the project undertook an analysis of farmers' perceptions of the benefits of the instream structures on their daily water consumption, livelihood and catchments ecosystem functions in rainy season.[9] The findings highlighted that paddy fields benefitted most, as well as provision of watering for livestock, which benefits women and children who are responsible for animal husbandry. Farmers do not use the water to grow a second crop as they have very limited labour. During the evaluation field mission, the interviewees concurred with these findings.

73. Following training in reforestation methods, in 2017, 2018 and 2020 the project has supported tree planting activities under Output 2.3 (indicators 2.1 and 2.7), to reforest degraded areas using bamboo and fruit trees, particularly focusing on 50m wide riparian strips and degraded forest patches. The use of native species followed the plan in the ProDoc, to use "natural means to maintain, rather than alter, natural ecosystem function". From 2017 to 2020, the project team organized and completed the reforestation of 245.45 ha of degraded forest, involving approximately 900 labourers and planting 158 236 seedlings in the four project provinces. However, the project has not adhered to the plan to also use *"assisted natural regeneration"*, which is usually more cost effective and less disruptive of soil's vegetation cover. The project also supported tree nurseries to provide saplings for reforestation activities.

74. The ProDoc target for reforestation was that at least 32 000 ha of existing good forests should be protected and 2 000 ha of forest land under community managed assisted natural regeneration. The 32 000 ha target was revised down to 20 000 ha after the MTR and the 2 000 ha target reduced to 400 ha – to be more achievable within the remaining project period. According to the information in the 2020 project implementation report, 10 519 ha of the revised target of 20 000 ha of forest reserves have been restored (53 percent), while only 147.44 ha of degraded forest patches of the 400 ha target (39 percent) achieved.

[8] Of these, 17 structures were built in private land and 11 structures in public land.

[9] Based on face-to-face interviews using structured and semi-structured questionnaires with 53 respondents across three target provinces.

75. The project collected (in 2019) and reported (in January 2020) on the survival rates of the tree seedlings which studied the 2017 and 2018 LNP planting campaigns in three of the four pilot provinces (not RTK). The survey suffered from the following constraints:

    i. the lack of "baseline data on specific number, species and dimension of the seedlings delivered to and planted in particular sites recorded in the beginning of the tree planting";

    ii. "the perfect time for survival and growth rate assessment should be conducted in year 2 at the beginning and at the end of every rainy season. The survival rate monitoring should be done every year for the research purpose but should be once every two years for community forest improvement purpose.";

    iii. "due to the time constraint, the assessment was conducted in early January 2020 that is not the proper time for the assessment as the weather was too hot and the soil was too dry, driving some of seedlings dropped their leaves while some were burnt but their stumps still alive".

76. Survival rates varied in the different sites in each province [SR 50 percent, 82 percent and 20 percent; KT 50 percent and 73 percent; PV 30 percent and 35 percent%].[10] With only a single site excellent, the results raise questions about the level of training the project provided to communities in aftercare following the project's mass tree planting campaigns, although the report does include a useful summary of constraints and challenges for future tree planting. At the same time, responding to local needs, the project has supported the construction of fire breaks and awareness raising for forest fire management. This has been appreciated by the communities and government departments interviewed as vulnerability to fire is increasing as dry seasons become longer due to climate change.

77. Community protected areas (CPAs) in the microcatchments have been strengthened as required in each situation. Interviewees reported to the terminal evaluation that this support has included:

    i. election of new CPA committees with new mandates to improve operation;

    ii. training and study tours;

    iii. building new patrol/guard stations (in cooperation with the local authorities and rangers to reduce/prevent illegal activities in the protected areas);

    iv. erection of border demarcation posts to improve demarcation of CPAs;

    v. providing patrol material and equipment.

78. Community forests (CFs) in the pilot communes were supported through the establishment of new community management committees, capacity building activities to enhance the protection and sustainable management of the forests, provision of new community forest maps and better demarcation of the boundaries between CFs and neighbouring farmland to help protect CFs from encroachment. Some degraded forest patches benefited from restoration and landscape planning according to the WSMPs (also referred to in the total above), for example the planting of seedlings, saplings and bamboo trees.

79. The final Indicator (2.8) for this Outcome was sustained non-timber forest products-related benefits to farmers from target protected forests, with the end of project target being 75 percent of households already benefiting from NTFPs reporting sustained NTFP

[10] The reforestation guideline developed by the LNP indicated that if the survival rate of planted tree seedlings more than 75 percent is excellent, between 50 and 75 percent is good and below 50 percent is poor.

availability. According to the 2020 project implementation report, this is to be measured in a survey in September 2020. However, interviewees in Ratanakiri Province (where NTFPs are especially important) already confirmed to the terminal evaluation that many people are beginning to see benefits from measures (notably better protection of boundaries with demarcation and patrols to reduce encroachment, also control of harvesting to sustainable levels through management committees) the project has put in place in CPAs and community forests (*inter alia* edible wild mushroom, bamboo shoots, wild fruits).

80. **Rating.** Outcome 2 has made some important steps towards introducing the watershed management approach in the pilot communes in Cambodia, catalysing communities to set-up WSMCs, demonstrating how in-stream structures can control stream flows and encouraging tree planting to improve rainwater infiltration/reduce riparian erosion. It has also contributed to improving management of community protected areas and community forests. At the same time, there has been a low level achievement of the reforestation targets (53 and 39 percent) and mixed rates of seedling survival found in early 2020 following the 2017 and 2018 tree planting. Furthermore, the 11 pilot community VIAs in the four provinces have not been updated annually as planned. On the basis of the above findings, the rating for Outcome 2 is **Moderately Satisfactory (MS).**

3.2.3 Outcome 3. Climate resilient agricultural practices adopted by farming households

Output 3.1: CCA integrated into FFS curriculum.

Output 3.2: FFS CCA curriculum tested and validated.

Output 3.3: Model FFS curriculum, lessons learned captured, and best practices replicated broadly.

Finding 7. Considerable progress has been made to catalyse adoption of climate resilient agricultural practices (CSA) in the pilot communes using FFS approaches since the MTR. The FFSs had a clear focus and raised awareness on CSA approaches but also have some points for improvement.

81. For Outcome 3, the MTR noted that at that time, "there was minimal adoption of CCA farming practices from FFS with no follow-up support to farmers", citing reasons including:

    i. capacity constraints among implementing partners;
    ii. a lack of technical support and disruption to in-field activities during early stages of the project;
    iii. PDAFF struggle to understand the concept of CSA and integrating CCA practices into FFS training;
    iv. LNP not adequately checking MAFF training curriculums before they commenced training, which led to inefficient use of resources considering the less than satisfactory results delivered by FFS.

82. The MTR therefore included a recommendation that project teams need to develop a roadmap of CCA practices for trialling and validating via FFS demonstration plots, with the most promising CCA practices being recommended for widespread uptake. Since the MTR and the recruitment of a technical adviser for Outcome 3, the project has catalysed a detailed analysis of the farming systems in the project pilot communes (draft dated May 2020). Also many more FFS activities towards Outcome 3 have taken place, with the June 2020 project implementation report reporting 44 FFSs out of the project target of 45. The

terminal evaluation found that since the MTR, the project FFS activities are more clearly focussed on climate-smart agriculture approaches, such as the use of nitrogen fixing cover crops (green manures), the System of Rice Intensification, incorporation of composted crop residues, conservation agriculture and reportedly agroforestry (at least the inclusion of lemons and cashew, which does not meet the generally accepted definition of agroforestry).

83. The FFS attendees reported to the evaluation team that the FFSs have helped them understand how to reduce the impacts of climate change, and found lemon tree management (branch grafting techniques, cleaning and pruning) particularly useful as these are considered a very important source of income. Other climate-smart agriculture approaches which interviewees appreciated included: growing rattle weed (*Crotalaria pallida Aiton*) as a cover crop, which also provides a source of income for farmers (approximate average yield 625kg/ha) while also improving soil fertility; techniques for selecting pest/disease resistant varieties of rice, vegetables and chickens; and technologies to reduce yield losses (insect pests and diseases) by using organic pesticides.

84. Farmers also reported to the evaluation team that many of the FFSs were partly held in classrooms, followed by practice on demonstration/learning plots, which did not allow for a full "leaning by doing" approach. Farmers specifically explained to the terminal evaluation that due to their low levels of literacy they would have preferred direct practical work, without sitting in the classroom first, because they found it "difficult to understand just by imagination".

85. While the 442 hectares covered for the CCA resilient farming practice commendably exceeded the target 225 ha (source: 2020 PIR), analysis shows that only 160 farmers (ibid.) are adopting at least one CCA resilient farming practice (target 352 – 45 percent achievement, showing that, as yet, fewer than four farmers/FFS adopted a single CSA approach). Moreover, the terminal evaluation found that FFSs continued to focus principally on single commodities (LNP prepared separate manuals on chicken FFSs, rice FFSs and vegetable FFSs), which is not in line with principles of climate-smart agriculture as diversification is considered a key element of resilience (FAO, 2017; and FAO, 2020c). The evaluation found that farmers generally also grow other crops in the same fields, or in sequence (the traditional approach) but would have preferred to see the project produce and encourage crop diversification in a single more comprehensive manual. Post-MTR reports and terminal evaluation informants continue to indicate that the FFSs were still being organized and based on single but an increased number of commodities (vegetable production, rice, chicken, cassava, lemon, cashew or fodder grass production) and remain focused on demonstration plots and short-term courses – instead of ongoing learning groups which will continue to work together post-project.

86. The project did adapt recommendations to particular commune agro-ecosystems/economies, notably in the case of Ratanakiri, where project beneficiaries are the Brao indigenous peoples, whose livelihoods are generally subsistence level, not interested in vegetable growing but in gathering non-timber forest products, some shifting cultivation and hunting.

87. The 2020 project implementation report shows that during 2019, over ten training of trainers (TOT) activities have been delivered to PDAFF staff in all project provinces (e.g. by CEDAC in Ratanakiri) which exceeds the target of six. However, it does not specify the number or roles of those trained, the length of courses nor any of the training materials used. The evaluation confirms that the project has supported the development of various

training materials, which are currently still in draft, including a Facilitator Training Manual for Climate-Smart Farmer School (2020 draft), a Conservation Agriculture – Climate-Smart Agriculture Training of Trainers Curriculum Guidebook (undated draft); and Climate-Smart Agriculture (CSA) for Chicken Raising in Cambodia (undated draft). Ideally, this outcome should have started with a master trainer earlier in the project term, leading locally based training of trainers, trainees being drawn from the ranks of the PDAFF, non-governmental organizations (NGOs) (as service providers) and lead farmers to provide support for the adoption of CSA via FFSs throughout implementation. This should have been supported with the development of a facilitator training manual on CSA, ideally in Khmer.

88. The following materials, for which the project has provided financial and/or technical support remain as drafts:

- Guideline for conducting Farming System Analysis (May 2020)
- Overview of LNP Farming Systems Analyses (undated)

89. These materials were to be used during the project but most have been prepared too late to be of use during, yet they should be useful for the Government and other organizations to continue to support the FFSs and to scale-up, post project.

90. **Rating.** Since the MTR, the project managed to make considerable progress using FFS activities that clearly focussed on climate-smart agriculture approaches and adapted to the differences in commune agro-ecosystems/economies. Yet, the persistent single commodity focus and the partly classroom/partly practice on demonstration/learning plots resulted in a low level of adoption of CSA approaches. On the basis of these findings, rating for Outcome 3 is **Moderately Satisfactory (MS).**

3.2.4 Outcome 4. Climate resilient alternative livelihood options adopted by women.

Output 4.1: CCA capacity for women built through improved knowledge and participation in decision-making processes

Output 4.2: Women livelihood options implemented that increase food security and climate change resilience

Finding 8. The LNP has made significant progress towards this Outcome, enhancing the capacities of government authorities and non-state actors to provide gender responsive services to address climate change-related vulnerabilities, promoting women's meaningful participation through capacity development, strengthened rural women´s economic empowerment, increasing availability of finance and strengthened rural women´s leadership in decision-making (e.g. in WSMCs). Most activities are implemented in the last 12 months, with some targets lagging somewhat behind.

91. The project design specifically noted the multiple responsibilities which women in rural Cambodia hold in households, on farms and in the wider agroecosystems, and therefore targeted them as main agents of change by including this gender-specific Outcome. While the project did not complete a gender analysis during the inception phase of the project, recent activities under Outcome 4 on gender responsive climate resilience livelihood options have included a gender analyses in farming systems, supporting establishment of savings and loan groups, catalysing women producer/business groups, market assessments and preparation of a gender handbook for CSA FFSs.

92. Notably, to improve gender efforts across the project, the Outcome 4 team in collaboration with the Ministry of Women's Affair and Ministry of Environment organized a two-day workshop on "Gender Analysis Capacity Building" in Siem Reap Province on 3-4 July 2019. The workshop aimed to strengthen the capacity of the responsible LNP-staff, government counterparts and related stakeholders from the four provinces to understand general gender concepts of LNP and the interlinkage of gender and livelihood options (Activities/Outputs towards the Outcome 4) with all other project outcomes. In particular, the workshop aimed to improve participants' awareness and knowledge in gender analysis and introduce the tools needed for gender mainstreaming to support a gender-responsive plan of action for the project. Participants included LNP staff, national and provincial counterparts and service providers. The workshop also included a field visit to exchange good practices of women farmers' group management – which the terminal evaluation considers an example of good practice.

93. The activities towards this outcome found that although the pilot sites show similarities, there were also important differences between the situations of women in each pilot area in terms of resource availability, challenges and constraints, socio-economic trends and opportunities. Therefore, the project conducted tailored capacity building for female farmers in the four pilot areas to develop alternative livelihood options for women, scaling-up CSA activities and watershed management.

94. To improve women's decision-making, leadership and economic empowerment the project has supported the establishment/strengthening of savings and loan groups to improve financial management and cash flow for investment in livelihood improvement with small allocations of funds for improving agricultural activities, also increasing women's business knowledge. A total of 17 women producer groups (out of the target of 35), including indigenous and disabled women have been supported to developed alternative livelihood business plans. The purposes of project funded loans included: purchase of agrochemicals and farm tools; small livestock materials including chick and piglet, animal feed, animal vaccination; small pumping machines and household needs. Of particular note is the interest the project has generated among some women to grow lemons as a cash crop, for example in Kampong Thom. Lemons are an easy crop to grow, which require little or no investment, are resilient to climate change, contribute to improving the livelihoods of women/families and boost entrepreneurship as interested farmers have succeeded in propagating seedlings for sale to group members, generating incomes.

95. The number of women reached in CCA integrated FFSs went beyond the set target (474 versus the target of 438) while the targets for the participation of women in the other activities lag somewhat behind or still unknown: 17 business plans (versus the target of 35); 30 percent of female watershed management committee members (versus 40 percent target). The target achievement of women adopting climate change resilient farming practices could not be assessed as the endline survey is planned for September 2020.

96. Gender mainstreaming for actions towards Outcomes 2 and 3 were catalysed by the Outcome 4 team in the last year, including the participation of women in FFS (see previous paragraph) and the update of Outcome 2 WSMPs and PoA to incorporate the gender analysis and women's particular needs in the face of climate change. The outcome also supported the revision of the VIA guideline (not seen by the terminal evaluation), incorporating lessons learned on the process of assessment and gender mainstreaming. The outcome also supported the development of a draft policy brief (also mentioned under Outcome 1) entitled "Gender Equality to tackle Climate Change in Rural Cambodia: the case of gender mainstreaming in climate change adaptation". Derived from the project's lessons

learned, it recommends that implementing actors' gender capacities and mainstream gender on a national and provincial coordination level in all CCA services to guarantee sustainability needs to be enhanced. Furthermore, gender budgeting and affirmative action addressing gender inequalities should be integrated in all CCA planning. The policy brief also recommends that at the implementation level emphasis should be given to women's leadership and capacity building in farm and business management, which was found to be a proven strategy to strengthen rural community's resilience and diversify livelihood options.

97. The activities towards Outcome 4 of the project, although very delayed have established good working relations with the Ministry of Women's Affairs at national and provincial levels, including catalysing visits of Ministry officials to field areas to see the project work and meet beneficiaries, to hear first-hand how women feel the project activities have improved their self-reliance and helped them diversity their livelihoods (a priority with MoAFF, MoE and MoWA).

98. **Rating.** Notwithstanding the lateness of the activities, the number of women reached in CCA integrated FFSs went beyond the set target, while the targets in other activities lag somewhat behind; particularly the inclusion of women in WSMCs, FFSs, establishment of valuable savings and loan groups and development of WPGs are considered positive achievements. Therefore, Outcome 4 is rated as **Satisfactory (S).**

3.2.5 Outcome 5. Monitoring and evaluation and information dissemination

Output 5.1: Development of an M&E system

Output 5.2: Mid-term and final evaluations carried out

Output 5.3: Information dissemination

Finding 9. The project team completed most of the basic M&E requirements but did not undertake the level of regular monitoring of impacts via systematic studies or participatory M&E, and has not completed the final update of the LDCF Adaptation Monitoring and Assessment Tool (AMAT). Under the dissemination component, the majority of outputs have been reached.

99. Under Outcome 5, a comprehensive but late baseline report was prepared on 9 August 2016, two years after the official project start on 9 June 2014. Throughout the project, the Project Management Unit has recorded basic information, numbers of workshops and other activities held, and in some cases numbers of participants but not all gender-disaggregated. The project has produced the regular M&E reports in a timely manner, including:

    i. project implementation reports (2015–2020);
    ii. six month progress reports (July-December 2014 to end 2019, missing January–June 2019);
    iii. progress monitoring indicator with milestone, dated 28 June 2017;
    iv. MTR report (dated March 2018);
    v. MTR updated version of the LDCF Adaptation Monitoring and Assessment Tool.

100. The MTR was completed and published by the FAO Office of Evaluation (OED) in March 2018 and at that time the LDCF AMAT tool was updated from the 2014 version. The terminal evaluation was delayed due to the COVID-19 pandemic and began in June 2020. The

evaluation draft report was prepared by the close of the project in the absence of an updated AMAT.

101. The first indicator of the overall project objective (revised from the ProDoc version following the MTR) was "productivity of selected commodities (yield) increased in intervention areas (revised indicator)" with the target "Productivity increased by 10 percent: average for adopters of CSA technologies". According to the 2020 project implementation report "The productivity increase is measured to be at 52 percent for two target sites. The final end-line survey planned during the NCE will confirm the results." The terminal evaluation was unable to confirm this high result, as this data was provided after the report was drafted and the target sites are not specified. During the evaluation data collection mission, the evaluation consultant found farmers reporting some increases in crop yields, however, as only 160 farmers are reported by the 2020 project implementation report to be adopting at least one CCA resilient farming practice, the 52 percent figure in two target sites must be viewed cautiously.

102. According to the results framework in the MTR, the project was to design and implement an annual survey to monitor food security[11] adapt FAO assessment tools. The terminal evaluation has not found any evidence that this was completed annually. The 2020 project implementation report states that "the increase of food secure households' proportion is up from 9 percent to 16 percent. This data represents a survey that covers only two pilot sites[12]. The final end-line survey planned during the NCE will confirm the results". The terminal evaluation have not found evidence that a systematic survey of food security has been completed across the four pilot communes for the end of the project, and therefore unable to triangulate this.

103. The project did not initiate any participatory monitoring and evaluation, which could have served to retain enthusiasm in the project over the implementation period, as farmers could have been made more aware of the benefits of the CSA technologies, etc. The project did not initiate any assessment of changes linked to project interventions, for example in stream hydrology as the WSMPs were put into action (including the various dams), the impacts of application of compost on soil organic matter and crop yields, which would have been valuable evidence to support scaling-up.

104. Under the information dissemination component, the project published four success stories on the FAO Cambodia website in August 2020, which clearly summarize project achievements. The three draft policy briefs (also mentioned under Outcome 1) are categorized as "lessons learned". The project was also supposed to publish biannual newsletters, which has not taken place. Three of the four factsheets have been prepared.

105. **Rating.** While most basic M&E requirements were met, such as the production of a baseline and M&E reports, the baseline was prepared late, there was a lack of regular monitoring of the objective indicators as well as absence of an updated AMAT for the terminal evaluation. The dissemination component distributed some lessons learned, but not all targets were reached. Based on these findings, Outcome 5 is rated as **Moderately Unsatisfactory (MU).**

[11] The second project Objective Indicator target was "At least 20 percent of households in each watershed reporting increased food security related to improved watershed, water, CSA and women's livelihood management".

[12] Sites not specified thus could not be verified by the terminal evaluation.

106. **Overall effectiveness rating.** The evaluation finds the project has made significant achievements in the final year and a half of the project, achieving many of the outputs. However, the shortcomings and delays until late 2018 undermined the effectiveness "on the ground" and the ability to meet a number of targets. Overall LNP effectiveness rating is **Moderately Satisfactory (MS).**

3.3 Efficiency

EQ 3. To what extent were the project management arrangements appropriate, efficient and clear?

Finding 10. The early decision not to house the Project Management Unit in Ministry of Environment, high levels of staff turnover, light oversight by the PCC, delays in implementation and communication issues have been suboptimal for such an innovative intersectoral watershed management/CCA project (the first of its kind in Cambodia). However, considerable progress has been made in activities towards the outputs since late 2018, thanks to the expansion of the Project Management Unit (mainly international consultants).

107. As described in Section 1, the project was approved on 5 March 2014 and started in June 2014. However, due to delays in the recruitment of the Chief Technical Adviser, it did not really start until March 2015. The project set-up a Project Management Unit in the FAO Office in Phnom Penh, headed initially by the Adviser. The Project Management Unit was not housed in Ministry of Environment, which would have been preferable to enhance ownership and MoE involvement, as the then Adviser did not agree with the office offered. Terminal evaluation informants found that this early decision has had deleterious repercussions for the entire project period.

108. The Chief Technical Adviser resigned from her post sometime in 2016 and was never replaced. The current National Project Coordinator oversaw all project activities until the recruitment of the current Project Manager in late 2018, who is also the Head of Operations in the FAO Country Office. One of the new Project Manager's immediate tasks was to oversee project restructuring following the MTR recommendations and to provide strengthened, experienced leadership during the remaining implementation period (including the 12 month no-cost extension granted after the MTR).

109. The lead implementing partner of the LNP was MoE. The National Project Director (NPD) was from the Climate Change Department (CCD) of MoE, but otherwise the CCD was not closely involved. While the ProDoc details a wide range of other key partners at national and provincial levels (see Section 2.2), during implementation the key partners were MoE, MAFFF and MoWA, including their respective provincial departments (PDE, PDoWA and PDAFF). The terminal evaluation considers this was appropriate, as they are the core ministries and departments which cover the topics of the project.

110. According to the ProDoc (paragraph 23) The National Committee for Sub-National Democratic Development (NCDD) would be responsible for "planning, investment, and monitoring for all commune level activity". Page 18 of the ProDoc further states that "NCDD will play an important role in mainstreaming the findings of the project's climate change vulnerability assessments and Ecosystem Based Adaptation watershed management plans". While the NCDD is said to normally coordinate works of commune development and to have substantial experience in similar projects, they were not part of this project.

This work was done by the respective provincial departments (PDE, PDoWA and PDAFF) of the national implementing partners.

111. According to many evaluation interviewees, the current relationships with the many implementing partners (MoE, MAFF, MoWA, provincial departments and local authorities) are an ongoing challenge. It was apparent in the evaluation interviews with government officials that they considered that the project/FAO should have had a well-defined service function, including clear roles and responsibilities for individual agencies, and for project coordination and implementation by the line agencies. Some progress has been made towards this end, but there are still some institutional constraints to cross-sectoral coordination, most notably amongst the three key line ministries that could perhaps have been resolved in more frequent PCC meetings. This being said, the terminal evaluation was informed that working together on the project has enhanced relations between FAO and Ministry of Environment.

112. The Project Coordination Committee was chaired by the MoE and comprised of representatives from NCCC, MoE, MAFF (General Directorate of Agriculture and Forest Administration), MoWA, NCDD and Ministry of Water Resources and Meteorology. Project co-financiers and FAO were standing invitees to PCC meetings. As with all such projects, the PCC was to provide policy guidance, review results-based annual work plans and budgets and provide recommendations for resolving any constraints faced by the project. The evaluation finds that there was only light oversight of the project by the PCC, which held only four meetings over the six years and a quarter implementation period.[13] This *inter alia* limited information sharing and did not enhance understanding of the principles of this innovative (intersectoral/watershed management/climate change adaptation) project. Lack of equivalent inter-sectoral committees was seen in each of the four provinces where project pilots were being conducted, which could have enhanced awareness and information sharing concerning "on the ground" plans and activities.

113. The project has included some exemplary adaptive management such as the re-writing of Outcome 1, the adjustment of indicators and targets, the adaptation of the CSA approach and the recruitment of additional staff. To get the LNP back on track after the very slow start and critical MTR, the current Project Manager recruited a team of three international Technical Advisers; one each for Outcomes 2, 3 and 4. An additional international expert was recruited specifically to oversee the work in Ratanakiri, as the project there works with the Brao indigenous people and the province is circa 500 km from the Project Management Unit office in Phnom Penh, so considered by the project team to be harder to reach.[14] The National Project Coordinator continued to lead Outcome 5 while all four Technical Advisers were to coordinating activities towards Outcome 1. This level of inputs from international staff helped the project regain momentum and get activities back on track, but was only possible as the project had under-spent funds due to not having a Chief Technical Adviser or Project Manager for two years. It was an effective strategy given the circumstances and commendable progress has been made from 2018, also considering the recent COVID-19 restrictions. However, the terminal evaluation feels that such a late surge in effort has not necessarily enhanced longer term impact/sustainability (see Section 3.4). Informants to the evaluation also specifically raised concerns that the project recruited international staff in late 2018 rather than nationals, which was not welcomed with some Government officials.

[13] 17 August 2015; 9 March 2016; 3 May 2017; 12 February 2019.

[14] The other project areas are closer to each other in the northern part of the country.

114. Four national Provincial Coordinators were recruited to coordinate on the ground activities in the pilot communes. The Ratanakiri and Kampong Thom provinces have benefited from continuity of the respective Coordinators since September 2015, while there was a delay in recruitment to the role in Siem Reap and three different Coordinators have held the role. Preah Vihear has had two different Project Coordinators, the last one left on 30 June 2020 (hence the terminal evaluation field mission could not visit that province). The Project Coordinators were responsible for most of the field work during the project (often up to the recruitment of the international Technical Advisers in late 2018-early 2019) with reportedly minimal technical support from the FAO Project Management Unit. This lack of direction and reportedly heavy workload meant that some mistakes were made (e.g. rebuilding existing structures in streams that could not withstand the wet season floods). However, overall, Project Coordinators must be credited for initiating the project in each province, throughout the project commencement period.

115. Nevertheless, the terminal evaluation found that this ambitious project lacked good communication, coordination and management between FAO's Technical Advisers at national, provincial, and community levels. Interviewees mentioned poor management and coordination of tasks, inadequate capabilities of contractors, and overall unclear roles. This affected the results, as did the generally dispersed array of small activities and outputs that required disproportionate administration overheads to manage many partners (provincial, NGOs and private). Appropriate packaging with clear roles and responsibility stated in the letters of agreement (LOAs) would have helped to better engage external partners.

116. The project was designed to achieve many of its outputs by means of letters of agreement with key partners, as vehicles for collaboration, which were signed between FAO and the respective collaborating partner. This included *inter alia* the Ministries, provincial departments and civil society organizations. Funds received under a LOA were to be used to execute the project activities in conformity with FAO's rules and procedures. The small-scale funding (through LOAs) has helped PDE, PDAFF, and Provincial Department of Women's Affairs become more engaged in CCA. NGOs also provided support and coordination roles, as well as one private company providing a technical role on agro-ecological farming practices, given the constraints on government functions at the field level. NGO, community and government mobilization services have demonstrated success in LNP (e.g. CEDAC in Ratanakiri and AFD in Kampong Thom Province). However, as mentioned in the previous paragraph, there appears to be a lack of understanding in the roles and responsibilities; for example of HURRIDO in Siem Reap for supporting activities implementation.

117. **GEF grant disbursement.** The GEF grant was USD 5 174 364. Reviewing the available information on the disbursement of the GEF grant in Table 9, reflects the changing level of project activities and staffing during the project, with a high initial spending (22.1 percent of the GEF grant) from start-up in 2014-2015 to June 2016 (when the Chief Technical Adviser resigned), followed by lower spending in the subsequent two years (12.6 and 12.8 percent respectively, reaching a total cumulative disbursement of 48 percent in 2018) in the absence of a Chief Technical Adviser. Higher spending is reported in the project implementation reports following the post MTR changes in 2018 and 2019, which included recruitment of the new Project Manager and subsequently three international Technical Advisers to lead four of the project outcomes. The project team has informed the evaluation team that they expect to disburse the remainder of the GEF grant by project closure in September 2020, therefore the terminal evaluation is unable to report on the final grant disbursement.

Table 9: LNP project cumulative GEF grant disbursement (to 2020 project implementation report)

Reporting date	GEF grant disbursement (USD)	% of budget spent
30 June 2016	1 143 262	22
30 June 2017	1 797 516	35
30 June 2018	2 461 315	48
30 June 2019	3 776 890	73
30 June 2020	n/a	
Total	n/a	

Source: 2020 project implementation review (PIR)

118. The terminal evaluation was provided with a table summarizing actual expenditures from January 2019 to June 2020, covering 18 months (see Table 10). Regrettably, no comparable data was available for the period prior to January 2019 and the project team has not been able to provide consistent data on spending per year by outcome for the evaluation. Review of the information in Table 10 shows that the majority of project funds have been spent on consultants (53.7 percent) This very high spending on consultants is exceptional and it is almost three times the amount budgeted for international and national consultants for Year 5 in the ProDoc (USD 199 400 and USD 137 556, totalling USD 336 956.).

Table 10: Project expenditures January 2019 – June 2020

	Forecast	Actuals		
	January 19 - September 20	**2019**	**January-June 20**	**Total (USD)**
5011 Professional salaries	190 327	142 793	47 534	**190 327**
5012 GS salaries	-	-	-	**-**
5013 Consultants	1 228 260	653 775	294 560	**948 336**
5014 Contracts	389 386	478 717	(122 661)	**356 057**
5020 Locally recruited labor	4 946	4 946	-	**4 946**
5021 Travel	260 272	148 791	18 115	**166 906**
5023 Training	29 042	3 283	1 451	**4 735**
5024 Expendable procurement	187 614	81 684	(57 924)	**23 760**
5025 Non-expendable procurement	2 330	2 330	-	**2 330**
5028 GOE	92 177	59 426	10 614	**70 040**
5027 Technical support services	-	-	-	**-**
5029 Support costs	-	-	-	**-**
TOTAL	**2 384 353.44**	**1 575 746.77**	**191 689.88**	**1 767 436.65**

Source: Project team

119. **Rating.** The project was affected by the delay in project start-up, reported gap in many of the field operations between 2016 and late 2018 followed by a massive push to complete the activities, which has affected commitment among partners and beneficiaries (and

reflected in project spending). The terminal evaluation found there was a lack of clarity of roles and responsibilities for individual agencies, particularly at the provincial level. In the last 18 months, the strengthened project leadership and team has catalysed major progress towards the outcomes, yet the project has been affected by numerous avoidable and unavoidable issues affecting its efficiency. The rating for project efficiency is **Moderately Unsatisfactory (MU)**.

3.4 Sustainability

EQ 4. What is the likelihood that project results will continue to be useful or will remain after project completion?

Finding 11. Although the project has put much in place recently to support sustainability, various barriers remain that influence the prospects for sustainability, among which the absence of an exit plan.

120. As described in Section 3.2, the project has catalysed important CCA activities which have been specifically designed to help beneficiaries continue the activities post-project, notably:

a. prepared three important policy briefs and a national CSA country profile (all still in draft at the time of the evaluation);

b. raised awareness of climate change and CSA among a wide range of stakeholders/partners at national, provincial and district levels;

c. developed VIAs, WSMPs and PoAs, which are now accepted in commune development and investment plans in the pilot communes, thus "mainstreamed" watershed management at local level;

d. built a range of dams following guidance from the WSMPs which farmers already preview to be beneficial in terms of water supplies and reducing flood risk;

e. planted many thousands of trees to stabilize soils (including in riparian margins to improve water quality), enhance rainfall infiltration and provide non-timber forest products for the future;

f. organized CSA FFSs to raise awareness of climate change and help farmers (men and women) adapt their agricultural practices to the impacts of climate change and increase yields, which should in future reduce yield variability;

g. raised awareness and provided training more widely on climate change and gender inclusion, including for government officials at national and local levels;

h. documented activities and developed training materials;

i. supported establishment of saving and loan, also business development groups (WPGs) targeted at women to support climate resilient alternative livelihoods.

121. However, apart from the preparation of 11 village level "baseline" VIAs (2015) and four WSMPs (2017), the majority of the effective on the ground activities (under the WSMPs, CSA FFSs, and WPGs) have only been effective in the past year and a half, with no yet confirmed plans for scaling-up, which could undermine their sustainability. Furthermore, the VIAs have not been annually updated – the 2019/2020 documents seem to be another

set of baselines, as they cover whole micro-watersheds, not the areas used in 2015. Particular points for attention are highlighted in the following paragraphs.

122. The terminal evaluation reviewed the draft policy briefs, but were not given any indication on when these would be finalised and how they would be published and disseminated.

123. In the pilot watersheds the project small-scale check and cascade dams, which were constructed as part of the micro-watershed management plans, have not been supported by the formation of any groups to look after them should they be damaged or for water allocation. They also lack maintenance plans. In general, there are established rules for water user groups, community forest, and community protected areas for collecting membership fees in Cambodia, but the evaluation team could not find them being implemented at the sites visited as well as during interviews with communities. Works maintaining check dams, operating community forests, community protected areas, maintenance of tree saplings, etc. will have difficulties after project completion, unless external financial support can be found.

124. The project has supported the planting of many native tree seedlings and saplings for forest restoration in the past two years. A project report on seedling survival rates for the 2017 and 2018 plantings showed rather low rates of survival, as described in Section 3.2.2, which may in part be attributed to the lack of plans for the aftercare of seedlings. The evaluation also questions why replanting was followed rather than assisted natural regeneration, described in the ProDoc (paragraph 101) which is usually less costly and has a higher success rate.

125. As discussed under effectiveness, the FFSs were reportedly often short commodity-based courses (partly classroom-based before going to the field, held in the dry season) rather than the longer-term "learning by doing" approach recommended in FAO's training materials (e.g. FAO, 2016s) and other agencies. Furthermore, the project FFS training materials have either only just been published or are still in draft, with no written plan for their dissemination. While the evaluation team only saw versions in English, they hope that these will be reproduced in Khmer and also as pictorial versions as language skills and literacy rates are quite low in rural Cambodia, especially among women.

126. Farmers reported to the terminal evaluation that adoption of the CSA techniques demonstrated by the FFSs is only sustainable based on three main factors: i) business plan and capital for the group; ii) increased income from new cropping system; and iii) reduce labour requirements. The low rate of uptake from the FFSs indicates the project has not been able to convince many farmers, likely due to their belatedness.

127. The project advocated the System of Rice Intensification technology as a CSA technology. Although this has many proven benefits, it is time and labour intensive requiring land levelling, use of short duration of seedlings and manually transplanting single seedlings in rows. A current issue in rural Cambodia is a shortage of agricultural labour, so rice farmers face great difficulties adopting SRI rice and prefer the current system prevalent in 85 percent of the country, where rice is broadcast, requiring less labour and less care. The project also advocated that farmers grow nitrogen fixing cover crops after the main harvest of annual crops to improve soil fertility, but farmers reported that this was not considered acceptable by most of them as these crops interfered with their normal cropping calendar and they could not see any benefits.

128. The project supported in growing lemon trees (particularly by women) and cashew as agroforestry, but the terminal evaluation considers this a very limited form of agroforestry

system by international standards and more simply the introduction of fruit growing. World Agroforestry's definitions of agroforestry describe the interaction of agriculture and trees, including the agricultural use of trees (trees on farms and in agricultural landscapes, farming in forests and along forest margins and tree-crop production).

129. The evaluation noted that the LNP lacks a detailed exit plan (*inter alia* who will take of responsibility, financial support, technical mentoring/coaching, and institutionalizing the approach). LNP beneficiaries and partners have been left unclear how support to the pilots (e.g. through the Government at national, provincial and commune level; local, national, or international NGOs; other development partners or beneficiaries) will continue or catalyse scaling-up. It is considered too early to accurately gauge the level of farmers' commitment to CSA, as they have not had time to see the benefits of many of the project interventions – particularly whether the technologies contribute to the objectives of increased food security and crop yields.

130. The savings and loan groups are welcomed and provide a very important service for the women in the pilot communes (to buy agricultural supplies – also pay for school fees and buy a boat to get children to school), yet they face struggles, for example in calculating interest etc., due to the low levels of literacy/numeracy in the pilot communities. This could hamper the prospects for the continuation of these groups.

131. There are also risks regarding the prospects for ownership. For example, within the line ministries, there are still occasional limitations among key decision makers for climate resilient mainstreaming, evidencing the need for further awareness raising activities, as the project activities have been too short-term to lead to building trust and changing mindsets. Partnerships with potential post-project support groups were not explored during the closing months of the project.

132. Essentially, the LNP was designed to be a pilot project, but the evaluation team has not heard of any plans put in place by the Government counterparts (MoE, MAFFF, MoWA) for scaling-up, although it is clear the FAO Cambodia Office is committed to ensuring lessons are shared.

133. **Rating.** The rating for Sustainability is **Moderately Likely (ML)** as the evaluation found moderate risks to sustainability.

3.5 Factors affecting performance

3.5.1 Monitoring and evaluation

Finding 12. While the baseline study is comprehensive, the M&E system does not appear to have operated as per the (updated) M&E plan and suffered from unclear responsibilities for reporting and database management.

134. The project undertook a comprehensive baseline sample survey of the target villages under the project intervention to serve as benchmarks for measuring the project achievement and impact. The baseline report is dated 9 August 2016, which is two years after the intended project start (9 June 2014). It was designed to provide measurable indicators for all the indicators listed in the project's result framework (see Annex 10). Probability sampling method was applied in order to define the representative condition among the population in the target areas. Data collection, cleaning and entry was done by the project's staff and enumerators were government official partners from the target provinces – which

was a positive arrangement as it would support future cooperative work. Bearing in mind the delay in preparation, the baseline is an interesting and detailed study, presenting: demographic information; information on migration; access to land and productivity (including rice and cassava, cashew productivity); access to irrigation and water sources; food security improvement; rice sufficiency (including the timing of insufficiency and coping mechanism during rice shortage) and impact of climate-related hazards.

135. As mentioned in Section 3.2.5 on Outcome 5, throughout the project, the Project Management Unit has recorded basic information, numbers of workshops, FFSs, etc., held, and in some cases numbers of participants.[15] However, although recommended in the MTR, no indicators were monitored on: i) the number of farmers expressing satisfaction with the CCA practice(s) adopted from FFS and expressing desire to continue longer-term with the practice(s) in their farming systems (gender-disaggregated); or ii) number of field days, cross visits and study tours; as well as satisfaction expressed by participants, which would have been extremely valuable.

136. The evaluation considers that the M&E plan, including the changes made after the MTR, was practical, but lacking in quantitative assessment, for example of the changes in stream hydrology, water availability and soil erosion after the dams were constructed and trees planted under Outcome 2. A survey was undertaken of the impacts of the dams under Outcome 2 – but only of farmers' perceptions, nothing quantitative.

137. The M&E system does not appear to have operated as per the (updated) M&E plan following the MTR, notably for the Objective indicators "LNP will design and implement an annual survey to monitor food security adapting FAO assessment tools" and "Survey to measure yield per ha.", for which the terminal evaluation found no evidence of having been achieved. Ideally Outcome 3, which was the key Outcome to achieve the overall project Objective, should have included systematic monitoring of crop yields/food security in all four pilot communes, which could have bene done using participatory approaches with the beneficiary FFS members. Concerning changes in crop yields, as previously mentioned in Section 3.2.5, the reported increase in productivity in the 2020 project implementation report needs to be interpreted cautiously and needs to be viewed in the knowledge that only 160 farmers have adopted a CSA technology. Also, the final endline survey planned during the NCE[16] is to still confirm the reported results. This endline survey is also to confirm the food security indicator, and the statement of the 2020 project implementation report that "the increase of food secure households' proportion is up from 9 to 16 percent". The suitability of the above two indicators for a short (five year) project was questioned by various interviewees to the terminal evaluation.

138. Furthermore, informants to the terminal evaluation reported that there were persistent uncertainties during the project on the respective responsibilities for reporting and database management of the various implemented activities. The LDCF AMAT tracking tool was prepared at the time of project approval in 2014, then updated for the MTR. The AMAT was not updated for the terminal evaluation. Had the project activities begun in 2014/15, and the M&E activities been implemented consistently throughout the project term, the projects' contribution to impact would have been clearer by project closure. At the same time, the terminal evaluation appreciates that lack of M&E data in the closing months of

[15] Although there remains a discrepancy between the numbers given to the terminal evaluation and those in the 2020 PIR.

[16] The terminal evaluation has no evidence of this, as 2020 PIR is the latest document received.

the project may be attributed to the constraints on project activities and travel during the COVID-19 pandemic.

139. **Rating.** Based on the above findings, the rating for monitoring and evaluation design is **Satisfactory (S),** while for implementation it is **Moderately Unsatisfactory (MU).**

3.5.2 Stakeholder engagement

Finding 13. The project faced and to some extent overcame multiple challenges, motivating officials at national and provincial level to work together, while also catalysing innovative WSM, CSA and gender responsive actions at national, provincial, commune and household levels.

140. By definition, inter-sectoral projects need to catalyse different sectoral actors/institutions at national, provincial and local levels to work together towards the agreed objective, which is a challenge as, traditionally, Government Ministries and their provincial authorities work independently (in "silos"). This project was designed to link environment with agriculture and forestry, while also involving women's affairs principally through the national level Project Coordination Committee. The PCC provided some guidance in the form of technical knowledge for backstopping to provincial departments and support in producing outputs, although the intermittent PCC meetings (only 4 in 6.25 years) limited awareness raising and information sharing. Similar multi-sectoral coordination mechanisms at the provincial level could have contributed to greater understanding of activities towards each Outcome (i.e. between sectors) and more measurable climate resilience on the ground.

141. Climate change resilience and adaptation is generally viewed as a government programme. A more defined strategy for stakeholder engagement would help to expand the involvement of NGOs and the private sector, which is important for continued support and sustainability post-project. As LNP evolved towards contributing to the implementation of local commune investment plans, sector strategies and action plans, the evaluation team finds that the project should have started to explore additional (co-)financing partners[17] (*inter alia* Asian Development Bank, Wold Bank, European Union, NGOs, private sector) and programme delivery partners (e.g. at national level: MoE, MAFF, MoWA, local authorities, etc.) while the project is still ongoing, to continue activities after project closure.

142. NGOs provided an important technical role in delivering support given the constraints on government functions at the field level (e.g. CEDAC in Ratanakiri and AFD in Kampong Thom Province). However, as discussed in Section 3.3 on efficiency, there appears to be a lack of understanding of the roles and responsibilities via letters of agreement, for example with HURRIDO in Siem Reap, for supporting implementation of activities.

143. The terminal evaluation did not find evidence that the project is interacting with other donors or projects. Assuredly, FAO Cambodia is in the position to ensure lessons from the LNP are scaled-up; however, collaboration with, for example, International Fund for Agricultural Development (IFAD) (ASPIRE), Asian Development Bank (TSSD-II), United Nations Development Programme (UNDP) (CCCA-III), and additional NGO networks during implementation would have broaden national climate change engagement to keep the momentum of the good practices resulting from the project.

144. Local stakeholders, such as farmers and particularly women in the pilot communities who have directly benefitted from project activities (*inter alia* members of the WSMCs, FFSs, savings and loans groups and WPGs, beneficiaries of the dams, improved protection of

[17] The original Asian Development Bank and European Union co-finance projects closed in 2018.

community protected areas and community forests, increased availability of non-timber forest products and improved food security) reported an overall satisfaction on their engagement in the project with the results of the project. The evaluation considers this highly important.

145. **Rating.** Based on the above findings, the rating for stakeholder engagement is **Moderately Satisfactory (MS).**

3.6 Cross-cutting issues

3.6.1 Environmental and social safeguards

Finding 14. The project was rated low/medium risk, however during implementation the evaluation consider that it did raise some social issues which warranted attention.

146. The nature of the project meant that it was not judged likely to raise any environmental or social risks, as it aimed to restore ecosystem services, improve crop yields hence food security, and included a gender Outcome to prioritize work with women.

147. The ProDoc includes a table outlining risks and mitigation measures (p. 40-41), but with no overall risk rating. In the 2016-2018 annual project implementation reports, the project overall risk rating was adjudged to be low, repeating many of the text in the ProDoc. The overall risk rating was raised to moderate in the 2019 PIR, yet the document went on to state that "the project has minimal or no adverse environmental or social impacts; there is no need to change classification". The 2020 PIR does not provide an overall risk rating and the text in the Risk Table is almost identical to the 2019 PIR.

148. However, during implementation, aspects such as the development of check and cascade dams have raised some environmental risks and some of the CSA technologies advocated raised social risks, notably advocating SRI rice (labour and time intensive) and N-fixing cover crops (interference with the crop calendar), which the team should have been more aware of. The fact that the FFSs are promoting SRI to supersede broadcasting of seed notably seems to have overlooked the ongoing social issue of labour shortages in rural Cambodia.

149. Furthermore, the project decided not to use assisted natural regeneration but planted seedlings and saplings in Outcome 2. This may be considered something potentially controversial, as it was labour intensive, involved disturbance of the soil possibly exacerbating soil erosion and lacked any plan for aftercare, most carried out very late in the project.

150. Although LNP project activities did not affect land tenure or community assets, land use activities by necessity includes active engagement with affected communities in the context of natural resources actions. The Government Community Rights and Resources Policy includes specific provisions on consultation with project affected people on any natural resources-related impacts, including i) preparing and implementing project components; ii) establishing eligibility for mitigation measures; iii) agreeing on mitigation measures that help improve or restore livelihoods in a manner that maintains the sustainability of the park or protected area; iv) resolving conflicts; v) monitoring implementation.

151. The ProDoc refers to the inclusion of indigenous people in the project implementation processes; however, it does not mention the Brao indigenous people or the particular issues which would arise working with indigenous people in the LNP project's pilot

microcatchment in Ratanakiri Province. Although the project design predates FAO's free, prior, and informed consent (FPIC) good practise manual (FAO, 2016b), it could have been conducted after the MTR period. The current project team did appreciate the additional challenges faced of the project working in Ratanikiri and recruited a dedicated member of Project Management Unit staff to be based in Ratanakiri in 2019, which was, although relatively late, a good decision. Regrettably, this staff member had to be withdrawn in early 2020 due to COVID-19.

152. In the 2020 project implementation report, completed after the terminal evaluation interviews and mission, reference is finally made in project materials of the involvement of the indigenous Brao peoples in Tavaeng Leu Commune, Ratanakiri Province. The PIR stated that the project applied a thorough participatory process. That PIR stated that the community consultative meetings were conducted in an environment where indigenous people could express their self-determination, however due to lack of time and the language barrier this could not been independently verified in the terminal evaluation. The evaluation confirmed that the indigenous social and livelihood system and traditional land use practices were considered in the implementation of project activities, as these forest dependent people rely on sustainable management of the forests for non-timber forest products, shifting cultivation and hunting rather than settled agriculture for their livelihoods.

3.6.2 Gender

Finding 15. In the past nine months, the LNP activities have made exemplary progress towards the Outputs towards Outcome 4.

153. The project has shown a good level of women involvement in culturally appropriate and equitable roles. This is particularly apparent in the increased access of women to benefits and training, as well as their increased engagement in decision-making. Women and men have all been engaged in a variety of ways within the project (e.g. watershed activities, FFS, saving groups, etc.). Furthermore, there is evidence not only of the engagement of women in activities aimed at income generation, improving awareness of climate change, leadership, agricultural technologies, and saving, and some nice examples of a joint family approach to budgeting and planning for their own business and farming activities, but of their increasing confidence in taking part in these participatory activities.

154. Following the recently undertaking of a belated gender analysis, activities towards Outcome 4 during the final nine months of the project have made major progress towards capacity building among women to enable them to participate in CCA decision-making at local, provincial and national levels. Project teams have both integrated women wherever possible within the community activities (although not all targets were reached, see Section 3.2.4), and gender focal points have been established. Interviewed women shared that gender training has improved the confidence of women in general, including their business and decision-making. The reported experience was that women generally demonstrated better organizational and accounting skills, and this gained them rapid acceptance and credibility in social credit. Also, it was observed that women-only enterprise groups often performed better than those that were exclusively male.

155. Through awareness raising and establishing savings and loans groups, women in the pilot communes have a wider range of livelihood options, which is expected to contribute to increasing food security at household/village/commune levels, as well as increased climate change resilience. Notably the savings and loans groups are empowering women to access

short-term loans to fund investments in their small-scale agriculture/horticulture. Business groups have also been set-up to link groups of women to markets, as buyers prefer to buy at scale from groups, rather than from individuals, following market assessments carried out to advise women what products are likely to be in demand. A gender handbook (June 2020 draft seen by terminal evaluation) for trainers on CSA FFSs has been developed to provide the guidance needed to organize and conduct activities to develop alternative livelihood options for women with the aim of developing and implementing CSA business plans, thus linking Outcomes 3 and 4. This compliments CSA and FFS guidance materials and has been designed to be used by implementing service providers (supporting PDAFF, PDE, PDoWA and/or NGOs) to assist them in extension service related to FFS and/or gender equality; it will contribute to making FFSs under Outcome 3 inclusive.

156. The ongoing mainstreaming of gender is essential in the face of the current cultural mind-set. Comments to the review, especially from the male dominated Commune and District leadership, often indicated narrow and even antagonistic perceptions of women's roles. The evaluation team noted that most communities experienced considerable difficulties in understanding that gender mainstreaming involves all members of a society and their needs, not just the women. Furthermore, this prevailing idea (beyond the project) that gender is solely concerned with the promotion of women's equality has polarized people and hindered progress. The main exception is the LNP which has successfully raised the importance of gender in implementing partner ministries and departments. In particular, it has influenced central policy to incorporate a more equitable approach to gender issues.

157. Although mentioned in the ProDoc, youths and children have no features in this project.

3.6.3 Co-financing

Finding 16. Data in the latest project implementation report (2020) shows the project has materialized more than the total co-finance pledged in the ProDoc, but it is not clear to the terminal evaluation (nor the MTR) what benefits the loan and grants actually brought to the LNP.

158. An overview of the project co-financing (in-kind, grant and loan amounts) can be found in Annex 5. PDEs and PDAFFF have provided co-finance in-kind for the LNP while the European Union and FAO provided a grant. A loan amount of USD 17 million from an Asian Development Bank's project is recorded, but no information has been forthcoming as to the details of the project, which ended in 2018 (noted in June 2018 PIR). The MTR states that while the co-financing was confirmed before endorsement of the project, there was no impact of project co-financing on the project interventions.

159. According to the latest GEF Guidelines on Co-Financing (GEF, 2018) "Co-Financing means financing that is additional to GEF Project Financing, and that supports the implementation of a GEF-financed project or program and the achievement of its objective(s)". The project implementation reports provide tables of cumulative co-finance which the project catalysed, but no further details could be identified on how it supported LNP, perhaps due to staff turnover, as the current project team were not involved in the period when the main co-finance is reported (up to June 2018).

160. The evaluation team is unable to assess, beyond this MTR statement, how beneficial the materialized co-financing was to the LNP as the evaluation has not been given details of anyone to contact from the European Union or Asian Development Bank, which the evaluation conclude is indicative of a lack of working together.

3.6.4 Progress to impact

Finding 17. Although the sustainability of some project outputs are in doubt, the mainstreaming of climate change into commune development processes is expected to have a significant long-term beneficial impact on local government programmes tailored to address climate change and resilient priorities at community level at least in the pilot communes.

161. The project provides a framework that addresses donor concerns about national and community ownership and the international financing requirements for specifying additionality of the incremental costs to continue support to climate change and climate resilient activities. The project is expected to have a lasting effect in contributing towards the subnational climate change mainstreaming, although the sustainability of some project Outputs are in doubt due to the delays in implementation of on the ground activities and the project's lack of an exit strategy (see also Section 3.4 on sustainability).

162. LNP's short-term impact has been mainly on strengthening the government commitment and local community planning systems towards greater climate change resilience (e.g. the mainstreaming of watershed management, community protected areas, and community forest plans into the community investment plan (CIP) of the communes) which, if sustained, is expected to contribute to long-term adaptive capacity to climate change and food security. For example, within the mainstreaming efforts towards the end of the LNP project, there is a general shift towards direct integration of watershed management by communities into the CIP, generally superseding or bypassing the ministries. This is a good sign of progress towards impact, but the impact at the local level remains to be seen in the next few years as the process of integration only started in 2018.

163. Some of the CSA practices will undoubtedly contribute to beneficial food security and income effects, as they are catalysing a shift from risky monocrop rain-fed agriculture towards more diversified, resilient and productive livelihood activities - but as yet these have not been quantified (see also section on M&E). Furthermore, according to interview respondents, LNP support has given watershed management, CSA and women's business groups a much more prominent role in communities and key ministries – particularly Ministry of Environment, Ministry of Agriculture, Forestry and Fisheries, and Ministry of Women's Affairs.

164. Lastly, there has been better recognition of the challenges and complexities in joint implementation amongst ministries, as the project has shown that there was an underestimation of the difficulties in joint operationalizing an integration approach, particularly at the national level. This experience has also raised the profile of integrating climate resilience at the community level, and the importance of cooperation and integration on the ground (over integration at the national level).

3.6.5 Knowledge management

Finding 18. The project's knowledge management activities have not clearly or widely enhanced project engagement and awareness among government staff, civil society groups, journalists, the general public and rural communities.

165. Most of the LNP knowledge management activities have focused on promotion of general knowledge of climate change and adaptation/resilience-related activities, but were not supported by a clear knowledge management strategy at start-up. The project did not produce regular newsletters nor developed a website as detailed in the ProDoc. The

evaluation team understands that FAO no longer allows projects to develop their own dedicated website. Instead, project-related information is added for the FAO Cambodia website.

166. Progress on knowledge management has been particularly made after the MTR, including the drafting of three policy briefs based on lessons learned, a Climate-Smart Agriculture in Cambodia – Country Profile (draft 2020) and various guidelines (CSA, FFS, and gender issues) for Cambodia (refer to Section 3.2). However, many documents remain as drafts and in English. It is not clear yet whether these will be finalized by project closure, whether pictorial/Khmer versions will be prepared and how they will be disseminated. Four reports about project activities in each pilot province have been added to the FAO Cambodia website in August 2020, prepared by the project Communications Specialist (recruited in late 2019). In order to improve their impact, their presence needs to be publicized.

167. However, due to the lack of a knowledge management plan and staff turnover, project outputs have not been systematically recorded and physical outputs such as reports not always archived, resulting in missing documents.

168. Knowledge development opportunities that resulted from watershed and natural resources management, FFSs and women saving groups, etc. as a platform for widely disseminating and sharing formation were not found during the evaluation. However, the project has conducted two national experiences-sharing workshop (2017 and recently on 31 July 2020) and 14 provincial/district lesson learning workshops which is a commendable achievement.

169. The terminal evaluation could not find evidence that regular communication meetings with a broad range of governmental and non-governmental organizations involved in climate change had been initiated for sharing of information and lessons learned, avoiding duplication, coordinating messages and improving joint work on key initiatives on climate change. Regular communications would have helped to set-up real time feedback loops and the support of evidence building and sharing, as well as earlier pick up of best practices and corrective measures needed. The evaluation team feels that the project could have made more extensive use of the many existing CSA and FFS materials, given that the vast range of resources are available on the FAO website (and elsewhere). It seems that the project has regrettably "reinvented the wheel", preparing many guidance documents in English based for example on the FAO CSA Sourcebook (FAO, 2017), rather than directly tailoring them in Khmer/pictorial versions for the local context.

170. The local knowledge and experiences of both women, men and indigenous people have been respected and engaged in the project activities (WSM, FFS and farming system analysis). One observation is found that WPGs in Ratanakiri province are better functioning compared to other target provinces, attributed to the locally-based international field officer who possesses rich experiences in indigenous culture and knowledge was employed based in Ratanakiri province. The new CSA-FFS in Ratanakiri focused on: indigenous people knowledge sharing and make use of local available resources to be locally adapted and preserve their culture.

171. Other works on knowledge management such as any knowledge partnerships, decision support needs and results of M&E tracking and sharing of LNP implementation were not seen during the evaluation. Also, the 2020 project implementation report mentions "the project designed a community and visibility plan during 2018 work planning and revision, outlining the purpose and scope of communication required for the project" – which was regrettably not provided to the terminal evaluation, nor mentioned by any informant to the evaluation.

172. The profile of the LNP, FAO Cambodia and GEF projects could have been enhanced had the team prepared reports on the project (activities) to share more widely nationally and/or internationally (*inter alia* presentations at national/ regional environment/ agriculture/ climate change conferences, reports on the GEF website). As FAO plays critical roles in the national Technical Working Groups (TWG), on Agriculture and Water (the FAO Representative is the lead development partner facilitator), the TWG on Social Protection, Food security and Nutrition (FAO Rep cofacilitates with the German Embassy), and the TWG on Forestry reform (LNP Project Manager is the co-chair), it is in a good position to ensure that the best practices and tools from LNP will be considered in future projects.

4. Conclusions and recommendations

4.1 Conclusions

173. Based on the evidence collected throughout the review process, the terminal evaluation has drawn several conclusions which have been organized around relevance, effectiveness, efficiency, sustainability, factors affecting performance and cross-cutting issues. These conclusions are found below and are not listed in order of importance.

Conclusion 1. (Relevance). LNP activities remain consistent with GEF, FAO and national strategies and priorities, as they are enhancing the resilience of the four pilot communes' agroecosystems and their communities to the pervasive increasing impacts of climate change.

174. The project remains extremely relevant to local, national and global priorities.

175. The LNP has provided models of how improved protection of the rural communes (*inter alia* forest restoration, watershed management, community forests, community protected areas, climate-smart agriculture, sustainable land management, etc.) can be combined with technologies to enhance crop yields and food security (*inter alia* CSA FFSs) through series of synergistic activities with a particular focus on supporting women across the pilot sites and how these can contribute to achieving national strategies and priorities in these sectors. Beneficiary communes should continue to be supported in these innovative synergistic actions and lessons shared across rural Cambodia.

176. At the national level, the project has contributed to the implementation of sectoral policies and strategies related to food security and climate change CCA.

Conclusion 2. (Effectiveness). Delays in effective on the ground start-up to 2015, a gap in field implementation from 2016 and resumption in late 2018/early 2019 have meant that most project activities have taken place in the past 12–18 months. While many of the outputs have been achieved, the project has failed to achieve many targets and the delays limit the effectiveness "on the ground" of this ambitious project.

177. The original project design was for a watershed management/climate-smart agriculture project, which by definition had to be innovative and inter-sectoral. Delays and gaps in implementation limited achievements prior to the MTR, which catalysed the revision of Outcome 1 (considered overambitious in the five year project term and by then not appropriate) to a less ambitious, more attainable Outcome. Output targets under the five Outcomes were at the same time reduced to be more attainable. Post-MTR, an enhanced Project Management Unit team, together with the provincial and district staff and partners have made major progress, achieving many of the Outputs close to project completion, especially under Outcomes 2 and 4. However, this rush to achieve Outputs was very far from optimal. Achievements have been limited in climate-smart agriculture approaches to enhance crop yields and food security as this requires a fundamental change of mindset, which is challenging to achieve in such a short time period.

Conclusion 3. (Efficiency). Project management followed the standard pattern of FAO/GEF projects and demonstrated sound adaptive management post-MTR. However, given the innovative nature of the project, it would have been advantageous if the roles and responsibilities had been clearer, there was a more engaged PCC and a distributed Project Management Unit team, and a greater focus on enhancing local capacity and inter-sectoral committees at provincial levels.

178. The management arrangements for this innovative and complex inter-sectoral project followed the standard for FAO/GEF projects, with a Project Management Unit based in the capital and overseen by a PCC with members representing the involved sectors. Informants to the evaluation expressed concerns that there was a lack of coordination, information sharing (both within the project and other partners, including co-financiers) and planning, particularly (but not only) up to the MTR, with implementing partners not always aware of annual work plans, not helped by infrequent PCC meetings (only 4 meetings in 6.25 years)[18] and a lack of equivalent meetings at province/district level. The lack of a 2020 meeting can be attributed to concerns over COVID-19, but lack of a PCC at start-up in 2014 and to prepare for/review the 2018 MTR are important missed opportunities.

179. Activity implementation in the project areas relied heavily on capacity at local (subnational) level, but despite the project plan to enhance local capacity, limited capacity improvement of these technical staff took place. The Provincial Coordinators felt overstretched and unsupported by the Project Management Unit (particularly during the hectic period from the end of 2018).

180. The strategy of funding a team of International consultants, using funds remaining as no Chief Technical Adviser was in post from 2016, helped the project regain momentum and get activities back on track, which is exemplary adaptive management. However, it is not considered ideal for projects which should be enhancing national capacity. While Government officials appreciated the works of the project, this particular aspect was not welcomed with some Government officials. Furthermore, this catch-up jump in the final project years was not enough to ensure a sufficient acceptance rate among farmers to change their traditional agricultural practices to CSA approaches.

Conclusion 4. (Sustainability). The prospects that some of the project Outputs will continue to be useful post-project are high, however others have not had time to become embedded/accepted and being innovative their sustainability is judged to be unlikely without continued support.

181. The evaluation team finds that notably: the three policy briefs and CSA Country Profile from Outcome 1; many of the Outputs of Outcome 2 (WSM plans, WSM committees, improved protection for community protected areas and community forests); materials for CSA FFSs under Outcome 3; and many Outputs of Outcome 4 have good prospects for sustainability providing these tangible Outputs (reports, policy briefs, raining of trainers manuals) are finalized, translated as appropriate, reproduced and disseminated beyond the pilot communes.

182. The evaluation furthermore concludes that the medium to long-term sustainability of the check/cascade dams, massive tree planting efforts, ongoing FFSs, adoption of CSA technologies, and savings and loan groups are less likely to be sustainable without further support – mainly due to the fact that the project only catalysed these interventions very late in the project term.

183. Sustainability is further challenged because the project has not yet formalized an exit plan to identify which provincial agencies or partnerships with local, national, or international NGOs or development partners could provide continuing support post-project to the pilot communities.

[18] Meeting dates: 17 August 2015; 9 March 2016; 3 May 2017; 12 February 2019.

Conclusion 5. (**Monitoring and evaluation).** While the M&E design met most of the basic requirements, its implementation did not meet all expected standards.

184. The project produced a comprehensive baseline, the required six-monthly and annual project implementation reports, and tracked project results including details on numbers of workshops and FFSs (although often not gender-disaggregated). The revised M&E plan was considered practical, yet in its execution has not performed in terms of expected standards. The baseline which has not been repeated before project completion (for end of project comparison), lacked quantitative assessment/monitoring (e.g. on meteorology, hydrology, soil properties) as well as participatory M&E which is a fundamental aspect for FFSs. Furthermore, the AMAT has not been updated for the terminal evaluation and data for the two key indicators for the project Objective have not been collected from the beneficiaries across all four pilot communes.

Conclusion 6. (Stakeholder engagement). The project collaborated with a large number of actors/institutions to catalyse innovative WSM, CSA and gender responsive actions at national, provincial, commune and household levels. The LNP lacked a specific stakeholder engagement plan, which would have enhanced participation in and the benefits of this innovative multi-sectoral project.

185. This inter-sectoral project catalysed different sectoral authorities at national, provincial and local levels to work together, addressing common issues and working towards the agreed objective, which has been quite a challenging task. Through the PCC, the project catalysed links between environment, agriculture and forestry, and women's affairs. However, this was of limited success due to the infrequent meetings, limiting awareness raising and information sharing. At the level of each of the four pilot provinces, no mechanism had been put in place for the sectors to work together (apart from if they coincided in the field) and thus sharing of information and the synergies between the sectors has been limited.

186. Local stakeholder engagement has been particularly appreciated, particularly by farmers and women in the pilot communities.

Conclusion 7. (Environmental and social safeguards). Overall, the project does not appear to have had any harmful impacts on the environment and in areas has brought significant benefits. Some aspects were underestimated.[19]

187. The nature of the project meant that it was not judged likely to raise any environmental or social risks, as it aimed to restore ecosystem services and included a gender Outcome to prioritize work with women. However, during implementation some of the range of WSM and CSA technologies raised environmental and social issues which the team seem to have underestimated (e.g. advocating: use of cover crops which did not fit into local crop calendar; labour intensive SRI rice where key issue is labour availability).

188. While little reference is made to working with the Brao indigenous peoples in Ratanakiri Province in the early years of the project, the current project team did appreciate the additional challenges this brings about and recruited a dedicated member of Project Management Unit staff to ensure tailored participatory approaches. Ideally the project

[19] *Inter alia* advocating use of cover crops which did not fit into local crop calendar; labour intensive SRI rice where key issue is labour availability. Little reference is made to working with the Brao indigenous peoples in Ratanakiri Province in the early years of the project, the current project team did appreciate the additional challenges this brings about and recruited a dedicated member of Project Management Unit staff to ensure tailored participatory approaches.

should have had this approach from start-up to ensure the Brao had given FPIC and benefited from additional support throughout the project.

Conclusion 8. (Gender). LNP has helped development through social inclusion and gender equity by equal treatment of women and men and equal access to resources and services through its implementations.

189. The activities towards Outcome 4 over the past 12 months have been exemplary in terms of advocating gender equity, including supporting savings and loan groups to particularly benefit women and WPGs, while also raising awareness of women's issues at all levels, directly involving MoWA officials to visit pilot communities.

Conclusion 9. (Co-financing). The terminal evaluation was unable to evaluate the project's co-financing.

190. The project implementation reports provide tables of cumulative co-finance which the project catalysed; however, the evaluation team is unable to assess how beneficial the materialized co-financing was to the project as no further details are documented. The evaluation has not been given information to contact anyone from the European Union or Asian Development Bank, which the evaluation conclude is indicative of a lack of working together, as stated in the MTR.

Conclusion 10. (Progress to impact). Although the sustainability of some project Outputs is in doubt due to delays in implementation of on the ground activities and the project's lack of an exit strategy, the project is expected to have a lasting effect in contributing towards the subnational climate change mainstreaming.

191. The project team, counterparts and beneficiaries are to be credited for major recent achievements. However, the gap in field implementation mid-project and short period for the achievements to become embedded, challenges prospects for longer-term impact.

192. While there are good signs of progress towards impact (among which strengthened government commitment and the integration of watershed management in the commune investment plans) the impact at the local level remains to be seen in the next few years as the process of integration only started in 2018. This particularly counts for the required change of mindsets for such an innovative project.

Conclusion 11. (Knowledge management). The project's knowledge management activities have not maximized opportunities to utilize existing knowledge, enhance awareness and understanding of climate change, the win-win benefits of WSM/CSA to enhance adaptive capacity and the importance of ensuring women are equally involved to enhance their ability to adapt to climate change, nor share project derived lessons.

193. The terminal evaluation did not find evidence that the project made effective use of the very many existing learning materials and resources (online and elsewhere).

194. Throughout implementation, the project has been generating knowledge and information, some in the form of regular reports, also field experiences, during discussions at workshop, etc. Progress on knowledge management has been particularly made after the MTR. Due to the lack of development of a knowledge management and communications plan, these have not been systematically recorded or adequately shared. This could have been achieved by using an archive for project reports (which would guard against missing items when there is staff turnover), the finalizing and publishing of the many draft documents

and importantly dissemination of project-derived knowledge in appropriate formats (*inter alia* pictorial, in Khmer, in English, radio, TV, newspaper articles) across pilot communities, to other rural areas in Cambodia and beyond - for example on WOCAT (2020)/HIMCAT (2020).

195. As FAO is involved in a number of national technical working groups, it is therefore in a good position to ensure that the best practices and tools from LNP will be considered in future projects.

4.2 Recommendations

Recommendation 1. (To FAO and national implementing partners). Projects should start as soon as possible after approval and effort/activities should be spread as evenly as possibly throughout the implementation period, avoiding periods of inactivity when momentum is lost and rushing to reach outputs towards project completion. (Conclusion 2, 10)

196. Project periods and funds are by definition limited, while the expectations of beneficiaries and stakeholders are by definition high, based on agreed ProDocs. FAO and implementing partners are recommended to ensure that in future projects, all possible measures are taken to ensure that staff and appropriate offices are in place and field activities make a swift start after project approval. An early start and even spread of project activities contribute to enhanced prospects for effectiveness, impact and better project management.

Recommendation 2. (To GEF project formulators and FAO) Projects need to be thoroughly reviewed in terms of their ambitions *vis-à-vis* the country context and capacity before finalization and approval. Before including a policy-related Outcome (such as the original Outcome 1 in this project design), national partners should be fully aware of the implications and the enormity of the task involved, also that ultimately a Project Management Unit cannot achieve this without full Government support. (Conclusion 2)

197. None of the evaluation informants felt that the original Outcome 1 of this project was appropriate. This may be due to changes in staff between the project preparation grant and project start-up, as following standard procedures during the project preparation grant they should have been closely involved, contributing to and approving the design.

198. Based on the lessons learned, future projects need to be thoroughly reviewed in terms of their ambitions *vis-à-vis* the country context and capacity before finalization and approval. GEF project formulators must ensure that project preparation grant activities are participatory at all levels and FAO should ensure that the Objectives/Outcomes/Outputs of new projects are correctly understood by key stakeholders.

199. Furthermore, during the inception phase all those involved and particularly the Project Coordination Committee should be aware that even after approval the Inception Workshop can and should be used to catalyse necessary changes/fine-tuning of the project design to reflect changes in circumstances, etc. (using adaptive management, a project can be revised at later stages).

200. Should a project plan to include such a policy Outcome, it should provide adequate human resources that can fully support its implementation (LNP budgeted for two law and policy experts, but only for 14 weeks for the international and 96 weeks for the national consultant – the former was never recruited).

Recommendation 3. (To GEF project formulators and FAO). Projects should include the development of an exit strategy around the time of the MTR, to ensure support is clear beyond project closure for sustainability and to catalyse scaling-up. (Conclusion 4)

201. Developing an exit strategy early on would ensure the sustainability of achievements and impact post-project, and a clear plan on how the communities involved in the on the ground interventions will continue to receive support (e.g. from extension services).

202. The exit strategy should specifically address the application and utilization of relevant technical products and any related capacity development needs. Moreover, the exit strategy should explore the potential for greater integration with the local private sector inputs and market providers (particularly for woman saving and business groups) and more widely across the country for larger-scale replication.

Recommendation 4. (To the Government and FAO). Continued support post-project should be sought for the WSM, FFS and savings and loans groups established by the project. Good practices should be showcased (e.g. through study tours) and WSM plans should be scaled-up to other communes/micro-watersheds. (Conclusion 4)

203. Provincial and district Government agencies, including extension staff who benefited from the training of trainers for CSA/FFSs, should continue to provide the project pilot communities with support, as many novel activities were catalysed late during project implementation.

204. Capacity building support should continue to be provided to the savings and loans groups established by the project to strengthen their potential for sustainability. A cross-sectoral team and a microfinance adviser should be appointed to rapidly assess the current organizational status of these groups and the short-term capacity strengthening needs, and to draw out specific lessons learned regarding saving groups and relevant policy recommendations across the project.

205. FAO Cambodia should ensure the lessons and learning materials are included in future projects.

Recommendation 5. (To the Government and FAO). Projects like LNP should have M&E systems that are anchored in a project theory of change, operate in (near) real time to increase management flexibility and indicate, as and when required, where the project and its partners are at, so that resources and support can be redirected according to needs in a timelier manner. Furthermore, relevant focal points (e.g. climate change, land degradation and GEF) should be given more prominent roles and training in M&E. (Conclusion 5, 11)

206. M&E is fundamental to project implementation, not only to confirm to donors that the funds are being effectively utilized, but also for beneficiaries to help them appreciate the impacts of their project-catalysed activities, and if positive, will enhance adoption of actions being promoted by the project (e.g. CSA technologies). This is best achieved through participatory M&E.

207. National environment, climate change or other relevant focal points (e.g. land degradation and GEF) should be given more prominent roles and training in monitoring, oversight, tracking, and reporting on progress in project action plans implementation and impacts on climate resilience/land degradation. They should be provided with project action plans, monitoring data collection and reporting forms, as well as tools or guidelines with a reporting structure, to ensure that these focal points are able to collect appropriate data (both quantitative and qualitative).

208. The results of monitoring should be shared widely amongst stakeholders and other relevant partners, to document lessons learned, support a multi-stakeholder governance process that needs real time feedback loops and evidence building and sharing.

209. Projects should also develop knowledge management and communications plans and endeavour to ensure that outputs (such as for the LNP the policy briefs, various guidelines etc.) are completed, translated, published and disseminated before project closure as these are important documents for post-project replication/scaling-up. Moreover, project information, project and financial data should be carefully stored for the purpose of accountability, monitoring and evaluation, learning and sharing.

Recommendation 6. (To the Government and FAO). National Project Coordination Committees should hold more regular meetings and members should be more engaged in project activities (including visiting project sites), with comparable committees set-up at decentralized levels as appropriate. (Conclusion 3)

210. ProDocs should specify how frequently PCC meetings are held (ideally at least every six months). These should include the development and agreement of formal joint annual work plans including milestones in implementation and financing road map processes to deliver better coordination and decision-making functions. This will enhance communications and understanding of inter-sectoral projects between partners and staff.

211. For innovative projects such as the LNP with many activities on the ground, the PCC should hold meetings close to pilot sites and include field visits. Apart from national PCCs, projects such as LNP would also benefit from equivalent provincial level PCCs.

212. Ideally, someone in the PCC (or another appropriate individual, e.g. a national environmental activist, academic or teachers) should become a project "champion", akin to Wangarĩ Muta Maathai of the Kenyan Greenbelt Movement (GBM, 2020).

Recommendation 7. (To FAO). For more effective cross-sectoral cooperation and partnerships on key issues of mutual concern towards climate change adaptation, future projects should develop a detailed strategy for stakeholder engagement and clarify roles and responsibilities of implementing partners via letters of agreement. (Conclusion 3, 4, 6)

213. Similar future projects should develop a detailed strategy for stakeholder engagement to guide and enhance the multi-sectoral coordination at all levels, expand the involvement of additional (co-)financing partners and the private sector, as well as with additional NGOs, donors (projects) to ensure sustainability, scaling-up and long-term impact.

214. Letters of agreement with the implementing partners should specify the areas of collaboration, responsibilities, budgets and the working relationships. Work plans and activities of each of the implementing partners should be shared in the planning process so that all partners will understand each other works.

Recommendation 8. (To GEF and FAO). Projects, including FFSs and CSA should use the many resources/training materials etc. that FAO has developed to speed up implementation of innovative activities and also share its lessons on widely available platforms. (Conclusion 11)

215. Where a project includes approaches such as FFSs and CSA, the project implementing team should work using the strong, proven foundations of approaches, resources and materials available on the FAO website (and elsewhere), rather than reinventing the wheel.

216. For example in this project, a master trainer should have been contracted very early on to train groups of FFS facilitators in each province, then the FFSs methodology could have been scaled-up prior to the MTR, thus demonstrating clear results by project closure.

217. It is recommended that the guidance documents the project prepared in English are tailored in Khmer and/or pictorial versions, for local contexts where the local language is spoken and literacy rates are low.

Recommendation 9. (To FAO). Projects should place greater emphasis on facilitating experience sharing, particularly in the later years of implementation. (Conclusion 6, 11)

218. Projects such as LNP are repeatedly referred to as pilots. As a prerequisite, this entails that they include exchange of experiences/lessons and cooperation with other government/donor projects for mutual learning and support on WSM, FFSs, CSA, community protected areas, community forests, Savings and Loans Groups – to avoid reinventing the wheel in each project. This should also include enhancing coordination, communications and learning opportunities with other civil society organizations and the private sector.

219. The inception phase of future projects should include the development of communications and knowledge management plans to enhance understanding of the project. Clear and systematic communication and knowledge management activities are vital for the effective functioning of projects during implementation (e.g. having an archive of project reports to help new staff) and contribute to the sustainability of activities, sharing of lessons learned and scaling-up which ought to continue after project closure.

220. Project lessons should be widely shared – for example through the development of materials tailored for school children/teachers/youth groups using the wide range of media – and adding to web databases (e.g. WOCAT and HIMCAT, 2020).

221. These plans should also be updated throughout a project, as aspects can change (e.g. the LNP ProDoc included development of a website, but this is no longer allowed by FAO).

Recommendation 10. (To FAO). FAO should systematically carry out assessments of gender, youth and other vulnerable group needs. Furthermore, it should integrate gender, youth and vulnerability specific indicators and targets relevant to project objectives and consistent with the FAO Policy on Gender Equality and Environmental and Social safeguard. (Conclusion 5, 7, 8)

222. Within the results framework of any similar future project, FAO should systematically carry out assessments of gender, youth and other vulnerable group needs, and integrate gender and vulnerability specific indicators and targets relevant to project objectives and consistent with the FAO Policy on Gender Equality and Environmental and Social safeguard.

223. Involvement of youth (for example via school teachers) as project beneficiaries has been proven effective in other projects, particularly as training a small number of teachers can have a huge multiplier effect over a few years and contribute to sustainability.

Recommendation 11. (To FAO, in collaboration with recipient countries and executing partners). Given the importance the GEF places on co-finance, FAO-GEF project teams should keep track not only of the amounts of co-finance materialized by GEF projects but also track what these funds were used for. (Conclusion 9)

224. As highlighted in the latest GEF Guidelines on Co-Financing (GEF, 2018), it is advised that projects with co-financing *identify, document, monitor and report on sources and types of co-financing* as well as how the co-financing contributed to the achievement of the project objective and outcomes.

Bibliography

ADB. n.d. *Country Partnership Strategy: Cambodia, 2014–2018 – Gender Analysis (Summary).* (also available at: https://www.adb.org/sites/default/files/linked-documents/cps-cam-2014-2018-ga.pdf).

Do, H., Luedeling, E. & Whitney, C. 2020. *Decision analysis of agroforestry options reveals adoption risks for resource-poor farmers*. Agron. Sustain. Dev. 40, 20. (also available at: https://doi.org/10.1007/s13593-020-00624-5).

FAO. 2016a. *Farmer Field School Guidance Document.* Rome. (also available at: http://www.fao.org/documents/card/en/c/d7d4db1f-826f-4d81-b097-44292ff7eeca/).

FAO. 2016b. *Free Prior and Informed Consent An indigenous peoples' right and a good practice for local communities – Manual for Practitioners*. Rome. (also available at: http://www.fao.org/documents/card/en/c/5202ca4e-e27e-4afa-84e2-b08f8181e8c9/).

FAO. 2017. *Climate Smart Agriculture Sourcebook (2nd edition).* Rome, Italy. (also available at: http://www.fao.org/climate-smart-agriculture-sourcebook/about/en/).

FAO. 2019. *OED project evaluation manual for decentralized offices – Planning and conducting project evaluations under Budget Holder's responsibility.* Rome.

FAO. 2020a. *Sustaining the future of agriculture and securing food production of upland communities in Siem Reap Province, Cambodia. LNP case study dated*. [online]. [Cited 12/08/20]. http://www.fao.org/cambodia/programmes-and-projects/success-stories/sustaining-the-future-of-agriculture-and-securing-food-production/en/

FAO. 2020b. *Climate-Smart Agriculture in Cambodia Country Profile.* FAO LNP Project Draft Report.

FAO. 2020c. Climate-Smart Agriculture [online]. http://www.fao.org/climate-smart-agriculture/en/

GEF. 2018. Guidelines on Co-Financing. [online]. https://www.thegef.org/sites/default/files/documents/Cofinancing_Guidelines.pdf

GBM. *The Green Belt Movement* [online]. https://www.greenbeltmovement.org/wangari-maathai

HIMCAT. 2020. *The Himalayan Conservation, Approaches and Technologies (HIMCAT)*. [online]. https://www.icimod.org/get-informed/himcat/

Hour, T. 2019. Policy review stocktaking. LNP Project Draft Report.

IFC. 2019. *Exploring the Opportunities for Women-owned SMEs in Cambodia.* International Finance Corporation, World Bank. New York, USA. (also available at: https://www.ifc.org/wps/wcm/connect/9e469291-d3f5-43a5-bea2-2558313995ab/Market+Research+Report+on+Women_owned+SMEs+in+Cambodia.pdf?MOD=AJPERES&CVID=mOU6fpx).

Index mundi. 2020. *Cambodia - Female headed households (% of households with a female head)* [online]. https://www.indexmundi.com/facts/cambodia/indicator/SP.HOU.FEMA.ZS

OED. 2020. *Risk analysis and guidance for the management and conduct of evaluations during international and national level COVID-19 crisis and restrictions.* (also available at: http://www.fao.org/3/ca8796en/ca8796en.pdf

RGC. 2013. *Cambodia Climate Change Strategic Plan 2014 – 2023.* National Climate Change Committee, RGC, Phnom Penh, Cambodia. (also available at:

https://www.cambodiaip.gov.kh/DocResources/ab9455cf-9eea-4adc-ae93-95d149c6d78c_007729c5-60a9-47f0-83ac-7f70420b9a34-en.pdf).

Sciencing. 2019. *Cambodia's Environmental Problems.* [online]. (also available at: https://sciencing.com/cambodias-environmental-problems-7327797.html).

Silva, D. 2020. *Dispelling the top seven tree planting misconceptions.* (also available at: http://www.worldagroforestry.org/blog/2020/09/17/dispelling-top-seven-tree-planting-misconceptions).

Thoeun, Heng Chan. 2016. *Current Status of National Adaptation Plan Process in Cambodia.* (also available at: https://www.slideshare.net/NAP_Global_Network/current-status-of-national-adaptation-plan-process-in-cambodia).

UNDP. 2015. *Human Development Report 2015 - Work for Human Development. United Nations Development Programme.* New York, USA. (also available at: http://hdr.undp.org/sites/default/files/2015_human_development_report.pdf).

UNDP. 2020. *Human Development Report* [online]. (also available at: http://hdr.undp.org/en/composite/GII).

UNEG. 2016. *Norms and Standards for Evaluation.* United Nations Evaluation Group, United Nations, New York, USA. (also available at: http://www.unevaluation.org/document/detail/1914).

WEF. 2018. *The Inclusive Development Index 2018: Summary and Data Highlights, World Economic Forum.* [online]. (also available at: http://www3.weforum.org/docs/WEF_Forum_IncGrwth_2018.pdf).

Wageningen University and Research. 2020. *WOCAT - World Overview of Conservation Approaches and Technologies.* [online]. https://www.wur.nl/en/product/WOCAT-World-Overview-of-Conservation-Approaches-and-Technologies.htm

Appendix 1. People interviewed

Last name	First name	Position	Organization/location
Am	Phyrum	Deputy Director of Rice Department	GDA/MAFF, Phnom Penh
Beck	Lilian	International Field Officer	Ratanakiri and Phnom Penh
Becker	Aaron	Funding Liaison Officer	FAO Bangkok
Ceci	Paolo	Terminal Evaluation Focal Point & Lead International Consultant Outcomes 2 and Co-Lead Outcome 1	FAO Phnom Penh
Chan	Thel	Chief of Anlong Kranh Village	Popok Commune, Kampong Thom Province
Chan	Kimhong	Innovative Farmer of O Tey Village	Lvea Kraing, Siem Reap
Chea	Chanthan	National Project Coordinator	FAO Phnom Penh
Cheu	Paka	Vice-Chief of CPA, O Kampha 1	O Kampha CPA, Ratanakiri
Chhay	Kry	Chief of Office of Post-Harvest, Rice Department	GDA/MAFF, Phnom Penh
Chhoeun	Sody	WSMC and CF member of Changkran Roy Village	Lvea Kraing, Siem Reap
Chou	Cheytharith	Deputy Director of Rice Dept.	GDA/MAFF, Phnom Penh
Chul	Seth	Farmer, Bangkat Village,	Taveng Leu Commune, Ratanakiri
Chuoy	Mom	Member of FFS, Bangkat Village,	Taveng Leu Commune, Ratanakiri
Diep	Piseth	PDAFF Officer, Project Implantation Officer	PDAFF, Kampong Thom
Din	Khorm	Farmer, Bangkat Village	Taveng Leu Commune, Ratanakiri
Din	Nev	Chief of Bangkat Village, Member of FFS	Taveng Leu Commune, Ratanakiri
Dung	Kunthea	WSMC member of Kok Chan Village	Lvea Kraing, Siem Reap
Duong	Saroeun	Community Forest Officer	PDAFF, Siem Reap
Em	Somonn	Vice-Chief of agriculture, natural resource management and environment	Staung, Kampong Thom
Gatt	Bettina	Lead International Consultant Outcome 4 and Co-Lead Outcome 1	FAO Phnom Penh
Hab	Seat	Member of Saving Group, Koh Samrong Village	Popok Commune, Kampong Thom Province
Hang	Konnga	Member of Saving Group, Kok Chan Village	Lvea Kraing, Siem Reap
Hara	Lang	Vice-Chief of District Agriculture	Taveng Agricultural District, Ratanakiri
Heang	Samreth	Marketing Officer of Saving Group of Kok Chan Village	Lvea Kraing, Siem Reap
Hit	Savin	Member of Saving Group, Kok Chan Village	Lvea Kraing, Siem Reap
Hofer	Thomas	Lead Technical Officer	FAO Bangkok
Huhynh	Alex	FAO Representative	Phnom Penh
Im	Vy	Chief of Koh Samrong Village	Popok Commune, Kampong Thom Province
In	Vien	Member of Saving Group, Kok Chan Village	Lvea Kraing, Siem Reap
Kaing	Sophanna	Chief of District Office of Agriculture, Natural Resource Management and Environment	Staung, Kampong Thom
Kam	Boeunh	Innovative Farmer and member of Woman Producer Group of O Tey Village	Lvea Kraing, Siem Reap
Kang	Sophal	Chief of Phteah Deum Village	Popok Commune, Kampong Thom Province

Last name	First name	Position	Organization/location
Kaping	Pich	Chief of Office of Woman Affair and Social Welfare Office	Taveng District, Ratanakiri
Keo	Sopheak	Provincial Project Coordinator	Siem Reap
Keo	Ban	Chief of Community Protected Areas (CPA), O Kampha 1	O Kampha CPA, Ratanakiri
Kham	Lel	Vice-Head of Saving Group and record keeper	Bangkat Village, Ratanakiri
Kham	Nanil	Member and record keeper	Bangkat Village, Ratanakiri
Kham	Mi	Member	Bangkat Village, Ratanakiri
Kheng	Mao	Accountant of Saving Group, Kok Chan Villag	Lvea Kraing, Siem Reap
Kheun	Sokun Viseth	Deputy Director of PDE	PDE, Siem Reap
Khloam	Vun	Innovative Farmer and member of Woman Producer Group of O Tey Village	Lvea Kraing, Siem Reap
Khlot	Sarin	Office of Knowledge and Environment	PDE, Ratanakiri
Khoeut	Srarb	Chief of Kok Kandal Village	Lvea Kraing, Siem Reap
Khon	Hing	Innovative Farmer and member of Woman Producer Group of O Tey Village	Lvea Kraing, Siem Reap
Khorn	Dimravy	Adviser	MoWA, Phnom Penh
Khut	Sokny	Agricultural Officer	HURREDO, Siem Reap
Khut	Chara	Commune Chief and Head of Lvea Kraing WSMC	Lvea Kraing, Siem Reap
Kim	Sok Kanery	Chief of Women and Education; in LNP as Technical Staff	MoWA, Phnom Penh
Kim	Nong	Undersecretary of State	MoE, Phnom Penh
Kong	Kea	Director of Rice Department	GDA/MAFF, Phnom Penh
Kvy	Ny	Popok Commune, Kampong Thom Province	Popok Commune, Kampong Thom Province
Lan	Klean	Member of Saving Group, Koh Samrong Village	Popok Commune, Kampong Thom Province
Lay	Hang	Vice-Chief of Krasaing Village	Popok Commune, Kampong Thom Province
Leam	Savin	Member of Saving Group, Koh Samrong Village	Popok Commune, Kampong Thom Province
Leang	Sambath	Provincial Coordinator	Ratanakiri Province
Leng	Sokhy	Community member of Sre Krasaing Village	Popok Commune, Kampong Thom Province
Long	Sophary	National Consultant Outcome 3	FAO Phnom Penh
Loy	Sambath	Popok Commune, Kampong Thom Province	Popok Commune, Kampong Thom Province
Lun	Prok	Innovative Farmer of O Tey Village	Lvea Kraing, Siem Reap
Luon	Thim	Popok Village member	Popok Commune, Kampong Thom Province
Man	Van	Member of Saving Group, Koh Samrong Village	Popok Commune, Kampong Thom Province
Mao	Put Ratana	Vice-Chief of Agricultural Office of Varin District	Varin, Siem Reap
Me	Savy	Committee member of O Tabok CPA	O Tabok CPA, Ratanakiri
Meas	Chanthavy	National Gender and Livelihood Expert, Outcome 4	FAO Phnom Penh
Molyneaux	Nicholas	Lead International Consultant Outcome 3 and Co-Lead Outcome 1	Italy
Mom	Thany	Undersecretary of State	MoE, Phnom Penh
Mom	Champa	Farmer, Bangkat Village,	Taveng Leu Commune, Ratanakiri

Last name	First name	Position	Organization/location
Nan	Mao	Chief of Woman Health and Education Office	PDoWA, Siem Reap
Nem	Noeum	WSMC member of Kok Kandal Village	Lvea Kraing, Siem Reap
Ngeu	Theara	Office of Protected Environment	PDE, Ratanakiri
Nuk	Phon	Chief of Sambour Village	Popok Commune, Kampong Thom Province
Oum	Ney	Chief of O Tabok CPA	O Tabok CPA, Ratanakiri
Pa	Bopha	Vice-Chief of Social Welfare and Chief of District Woman Office	Staung, Kampong Thom
Pey	Kean	Community member of Anlong Kranh Village	Popok Commune, Kampong Thom Province
Phang	Salath	Chief of District Agriculture	Taveng Agricultural District, Ratanakiri
Prek	Yat	Popok Commune, Kampong Thom Province	Popok Commune, Kampong Thom Province
Preung	Kham	Head of Saving Group	Bangkat Village, Ratanakiri
Prum	Phun	Innovative Farmer of O Tey Village	Lvea Kraing, Siem Reap
Prum	A	Member of Saving Group, Kok Chan Village	Lvea Kraing, Siem Reap
Puth	Loeum	Vice-Chief of Agronomy	PDAFF, Siem Reap
Rach	Seng	Chief of Commune Council	Taveng Leu Commune, Ratanakiri
Ro	Borin	Provincial Manager looking after overall LNP	CEDAC, Ratanakiri
Sam	Sun	2nd Vice-Chief of Lvea Kraing Commune Council	Lvea Kraing, Siem Reap
Sameth	Sarin	Innovative Farmer and member of Woman Producer Group of O Tey Village	Lvea Kraing, Siem Reap
Samrith	Sokran	Vice-Chief of Cantonment	Staung, Kampong Thom
San	Tho	Chief of Popok Village	Popok Commune, Kampong Thom Province
Sang	Loam	Chief of Office of Women and Education, Project Focal Point in PDoWA	PDoWA, Kampong Thom
Sath	Sim	Popok Commune, Kampong Thom Province	Popok Commune, Kampong Thom Province
Schiavone	Antonio	Project Manager and Alternate Budget Holder	FAO Phnom Penh
Seng	Koch Chayakon	Committee member of Popok Commune	Popok Commune, Kampong Thom Province
Sieb	Hun	Member of Saving Group, Koh Samrong Village	Popok Commune, Kampong Thom Province
Siveun	Nhak	Project Coordinator	Kampong Thom
Soeum	Sen	1st Vice-Chief of Lvea Kraing Commune Council	Lvea Kraing, Siem Reap
Soeur	Chandararith	PDE officer, Project implementation officer	PDE, Kampong Thom
Sorn	Sokhan	Project Officer, looking after Outcome 3	CEDAC, Ratanakiri
Sovann	Kim	National Watershed expert	Kampong Thom
Sut	Chantha	WSMC member	Lvea Kraing, Siem Reap
Suy	Sovanarith	Deputy Director of PDoWRAM	PDoWRAM, Ratanakiri
Taing	Vanchan	Executive Director	HURREDO, Siem Reap
Tauk	Tam	Chief of Kok Chan Village	Lvea Kraing, Siem Reap
Tem	Heat	Member of Saving Group, Kok Chan Village	Lvea Kraing, Siem Reap

Last name	First name	Position	Organization/location
Thach	Mao	Member of Saving Group, Koh Samrong Village	Popok Commune, Kampong Thom Province
Thai	Chan Makary	Officer of Women and Education; in LNP as Finance Officer	MoWA, Phnom Penh
Thai	He	Popok Commune, Kampong Thom Province	Popok Commune, Kampong Thom Province
Thlan	Borin	Vice-Chief of Community Development	PDE, Siem Reap
Thol	Daneth	Administrative Officer	FAO Phnom Penh
Tram	Yang	Admin and Finance, and looking after Outcome 4	CEDAC, Ratanakiri
Vath	Veasna	WSMC member of Kok Chan Village	Lvea Kraing, Siem Reap
Ven	Kham Cheurn	Vice-Chief of O Kampha Village, member of water management committee	O Kampha CPA, Ratanakiri
Vorn	Hong	1st Vice-Chief of Popok Commune	Popok Commune, Kampong Thom Province
Wat	Veasna	Head of Saving Group of Kok Chan Village	Lvea Kraing, Siem Reap
Ya	Mom	Farmer, Bangkat Village	Taveng Leu Commune, Ratanakiri
Yang	Yim	WSMC and CF member of Kon Phnom Sangke	Lvea Kraing, Siem Reap
Yem	Youn	Chief of O Tey Village	Lvea Kraing, Siem Reap
Yi	Hoy	Anlong Kranh Village Committee member	Popok Commune, Kampong Thom Province
York	Chhem	WSMC and CF member of Phnom Tbeng	Lvea Kraing, Siem Reap
Yos	Thun	Chief of Trapeang Reusey Village	Popok Commune, Kampong Thom Province

Annexes

Annex 1. Evaluation ratings
http://www.fao.org/3/cb2629en/cb2629en.pdf

Annex 2. GEF evaluation criteria and rating scheme
http://www.fao.org/3/cb2630en/cb2630en.pdf

Annex 3. Map of project pilot sites
http://www.fao.org/3/cb2631en/cb2631en.pdf

Annex 4. Evaluation matrix
http://www.fao.org/3/cb2632en/cb2632en.pdf

Annex 5. GEF co-financing table
http://www.fao.org/3/cb2633en/cb2633en.pdf

Annex 6. Field itinerary
http://www.fao.org/3/cb2634en/cb2634en.pdf

Annex 7. Mid-term review theory of change for Life and Nature Project (LNP)
http://www.fao.org/3/cb2635en/cb2635en.pdf

Annex 8. Changes made in Outcome 1 post mid-term review
http://www.fao.org/3/cb2636en/cb2636en.pdf

Annex 9. Analysis of project achievements
http://www.fao.org/3/cb2637en/cb2637en.pdf

Annex 10. Additional climate change challenges and their implications in Cambodia
http://www.fao.org/3/cb2638en/cb2638en.pdf

Office of Evaluation
E-mail: evaluation@fao.org
Web address: www.fao.org/evaluation

Food and Agriculture Organization of the United Nations
Rome, Italy

CB2937EN/1/01.21