Final Evaluation of
Cambodia Climate Change Alliance
- Phase II Programme

May 13, 2019

CAMBODIA CLIMATE CHANGE ALLIANCE

Implemented by: Ministry of Environment

Supported by: European Union

UNDP

SWEDEN

EXECUTIVE SUMMARY (DRAFT)
Final Evaluation of Cambodia Climate Change Alliance - Phase II Programme

CCCA plays a unique role in strengthening the institutional framework for response to Climate Change in Cambodia. It is a well-respected, multi-donor financing facility with a programme designed to be fully aligned with Cambodia's climate change policy and to strengthen the national institutional framework for implementing the policy. This evaluation is based on a field mission undertaken March 25–April 12, 2019 including site visits to nine CCCA Grant projects. The evaluation was guided by Terms of References (Annex 1) issued by UNDP Cambodia and an evaluation matrix (Annex 2) presented in an approved inception report that was submitted before the mission.

The Final Evaluation of CCCA Phase II was commissioned by UNDP Cambodia to (a) review and assess the overall achievements at 3 levels of development results (outputs, outcomes and impacts) of CCCA Programme (including grant projects), as well as to identify opportunities and challenges related to design, implementation and management of CCCA and provide recommendations on any changes in approach that may be considered in the third phase of the CCCA Programme; assess how the CCCA programme is related to or complements other climate change activities; identify lessons learnt and impacts from the CCCA programme (including pilot projects), with potential for replication or inclusion in national or sectoral climate change policies; and, determine the contribution to the UNDP Country Programme.

Under Result 1, the evaluation found that CCCA-II has generated significant progress in national systems and capacities particularly the policy framework and processes for integrating climate change into development planning and budgeting. The National Sustainable Development Plan and Cambodia's Sustainable Development Goals have been well established. Subnational implementation, technical guidance to support innovation and on-the-job performance monitoring of the system may need further support. Fundamental organizational and resource constraints are still impeding climate change integration into the programmes, budgets and operations of line ministries. As part of the closure of CCCA-II and planning for CCCA-III, it would be useful and timely to develop consensus on where critical capacity gaps remain and what specifically can be done to overcome them.

The evaluation noted that some of the Grant projects undertook very small-scale interventions that supplemented government budgets often to fix or replace infrastructure but did not have the scale to significantly reduce local climate change risks and vulnerabilities, or to change adaptation practices. Where innovation were introduced, information on the specific barriers to adoption of certain project technologies and the potential strategies to overcome such constraints remain to be documented. In many cases, the organisational development and fee collection processes of community-based water and electricity user groups remain in doubt.

Under Result 2, the expected results for coordination mechanisms, the upgrading of NCDD procedures to meet international financing standards, and identification of climate change-related activities in the national ODA database have been achieved. The effectiveness of the Climate Change Technical Working Group in assisting progress may take some time to determine but it is important progress along with the accreditation of Cambodia to apply for funds directly from Green Climate Fund and Adaptation Fund which is expected in the next few months. Overall, the outcomes under Result 2 in regard to identifying climate expenditures and budgets and determining financing gaps have been substantially achieved, although the evidence of increased climate resilience funding on the ground is not yet apparent. The available line agency funding for sector climate change programmes and subnational budgets remains to be determined. In regard to private sector engagement, there appear to be significant opportunities for industry adoption of clean production and energy efficient technologies with lower GHG emissions but it may require a partnership with UNIDO or other similar organisations to generate such collaboration in the future.

Under Result 3, the Knowledge Management System will need to clearly define measurable objectives and results. CCCA-II has certainly raised awareness of climate change issues and operational mainstreaming tasks with the national development planning and budgeting systems. Contributions to school curriculum development and academic research on climate change have also improved knowledge development and dissemination. Universities have been assisted in an organised manner to pursue climate change research issues. CCCA-II has also engaged a wide range of project participants and provided direct support for climate change activities with 33 communes and with the stakeholders in 22 Grant projects.

The Results Framework left a lot of discretionary flexibility about expected outcomes and the relationships between these planned results and the funding windows and grant activities. Many of the Grant projects are essentially standalone projects. This means that synergies and

complementarities between different ministry and partner activities in contributing to programme results are not explicit or apparent. More programme coherence is needed if a results-based approach is to be pursued. The wide and diverse programming strategy, aimed at maximizing engagement and reach, reduced the focus on overall results.

CCCA is widely viewed as a trusted partner of the RGC, and MoE in particular. It has served an essential function as the primary technical and financial support facility for GSSD and CCD in their extensive duties to coordinate Cambodia's climate change response. There is scope to leverage this position, together with UN system partners, on strengthened advocacy for inclusive and sustainable development, in line with the SDGs/CSDGs. Limited monitoring and reporting on outcome results has been a constraint under the current programme design, but the impressive scale of outputs also indicates productive operations.

No significant management issues were reported through the auditor report or in the interviews. The programme tracks leveraging of project partner co-finances but not from the Government of Cambodia. There is a question of how much financial rigor should be applied between 'nice to do in the name of climate change' and 'need to do in order to achieve certain results' – a function of the flexible Results Framework, and some uncertainty about how much contribution to climate change action is actually generated from the government's increasing revenues and budgets associated with a growing economy. Some significant additional funds were added to a few of the Grant projects which may need better reporting on the added results.[1] Overall, however, the programme management has been effective, consistent with UNDP requirements, and responsive to issues that emerged in the course of implementation.

Oversight of the Grant projects has been a key function of CCCA Secretariat staff and CCD. The cursory field review of nine Grant projects and discussions with staff from five other projects suggested that further capacity development support is needed in some cases, especially in regard to documentation of results, field inspections and sustainability arrangements. Assessment of sustainability in all the CCCA-II community field projects is warranted in the completion and evaluation reports. Governance constraints are key factors affecting the sustainability of climate resilience investments in Cambodia. While local committees and user groups in community-managed facilities had in most cases been reported as established, evidence of actual management functions and user fee collection in place were sparse. Some of these facilities, e.g., school budgets for maintaining solar system batteries, will have difficulties unless external financial support can be found. Further

[1] "The full impact of these top-ups will be assessed in 2019, and lessons will be fed into the design of the CCCA 3 grant mechanism." CCCA Annual Report, 2018, p. 64.

assistance in the final stages of closing Phase II is also needed to assess the uptake of the technologies and practices that have been promoted and the potential for sustainability and replication.

The following Recommendations are presented:

1. CCCA and CCD should implement targeted measures to finalize line ministries' commitments to climate change mainstreaming in government programmes.

2. CCCA and CCD should fully monitor and report on, in the programme completion report, the results of the project activities at integrating climate change into the pilot communes and assess the effectiveness and lessons for subnational climate change action building upon other previous work on local government climate change mainstreaming in Cambodia.

3. CCCA should develop and apply a method to assess the leadership, capability and sustainability of water and energy user groups that have been established in the CCCA Grant projects, drawing upon available standards and guidelines for sustainable community-based facilities management.

4. CCCA Grant project agencies that have promoted selected technologies should be required to determine the level of adoption of the technologies, the necessary conditions for adoption, or reasons for rejection by the targeted user group/beneficiaries and the specific factors that influence the technology uptake and potential replication.

5. CCCA should collaborate with UNIDO or other mitigation expert organisations on a review of government and private sector programmes involved with energy management in selected industrial sectors, drawing on the experiences and recommendations from the CCCA-II projects and the recent GEF industrial energy efficiency project in Cambodia.

6. The Cambodia National Biogas Programme (NBP) should develop a business partnership with appropriate livestock supply companies to expand pig farm biogas technology with modern livestock management systems, particularly in areas where water quality improvements are needed near farm operations.

7. CCCA should adopt quality standards for project reporting and case studies and enhance capacity of grantees and CCD staff for concise, objective description of key results and useful evidence emerging from CCCA projects.

8. CCCA, NCDD and CRDB should develop a practical decision support tool and related dashboard to assist local government staff in analyzing climate-resilient infrastructure options, drawing upon the extensive climate change project databases in Cambodia.

9. CCCA and DCC should strengthen MOE's strategic focus on ecosystem-based adaptation in their primary role to maintain the protected area system at the local level.

10. CCCA should develop a programme-wide Gender Action Plan that addresses measurable cross-cutting objectives and results from the multiple projects that are funded.

11. CCCA and UNDP should develop a CCCA-III M&E Plan that includes external evaluation of projects by sector on an annual basis, appointing a designated M&E Officer, and ensuring that the CCCA-III Results Framework has well-defined, measurable outcomes and reliable, pre-tested indicators.

12. CCCA should increase the monitoring and reporting on government, private sector and beneficiary contributions to the programme results.

The Final Evaluation was completed by Mr. Alan Ferguson with assistance from Dr Sovith Sin and logistical support from Mr. Tuch. Thank you to the many CCCA staff and stakeholders that took the time to assist the mission.

TABLE OF CONTENTS

Annexes:

Figures:

Tables:

LIST OF ABBREVIATIONS

ADB	Asian Development Bank
BTIC	Biogas Technology and Information Center (RUA)
BTOR	Back to office report
CCAP	Climate Change Action Plan
CCBAP	Cambodia Community Based Adaptation Programme
CCCA	Cambodia Climate Change Alliance
CCCSP	Cambodia Climate Change Strategic Plan
CCSAP	Climate Change Strategy and Action Plan
CC-TWG	Climate Change Technical Working Group
CDC/CRDB	Council for the Cambodia Development/Cambodia Rehabilitation and Development Board
CDP	Commune Development Plan
CIP	Commune Investment Plan
CPER	Climate Change Public Expenditure Review
CPA	Community Protected Area
CSDG	Cambodia's Sustainable Development Goals
CSDG13	Cambodia's Sustainable Development Goal on Climate Change
DCC	Department of Climate Change
EU	European Union
GCF	Green Climate Fund
GEFSGP	Global Environment Facility Small Grants Programme
GERES	Group for Environment, Renewable Energies and Solidarity
GGGI	Global Green Growth Institute
GSSD	General Secretariat of NCSD
KM	Knowledge Management
LGCC	Local Government and Climate Change
LoA	Letter of Agreement
MAFF	Ministry of Forestry and Fisheries
M&E	Monitoring and Evaluation
MEF	Ministry of Economy and Finance
MIME	Ministry of Industry, Mine and Energy
MTR	Mid Term Review
MoE	Ministry of Environment

MoEYS	Ministry of Education, Youth and Sport
MOI	Ministry of Interior
MOP	Ministry of Planning
MoPWT	Ministry of Public Works and Transport
MRD	Ministry of Rural Development
MOWA	Ministry of Women Affair
MOWRAM	Ministry of Water Resource and Meteorology
MLMUPC	Ministry of Land Management, Urban Planning and Construction
NAPA	National Action Plan for Adaptation to Climate Change
NBP	National Biogas Programme
NCCC	National Climate Change Committee
NCDD	The National Committee for Sub-National Democratic Development
NCSD	National Council for Sustainable Development
NCDM	National Committee for Disaster Management
NGO	Non-governmental organisation
NSDP	National Strategic Development Plan
ODA	Official Development Assistance
PA	Protected Areas
PCEIR	Private Sector Climate Expenditure and Institutional Review
PPCR	Pilot Project for Climate Resilience
PSB	Programme Support Board
RGC	Royal Government of Cambodia
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organisation
WASH	Water, sanitation and hygiene

1. INTRODUCTION

1.1 Background

The Final Evaluation of the Cambodia Climate Change Alliance (CCCA) - Phase 2 was commissioned by UNDP Cambodia in accordance with Terms of Reference developed by UNDP and the Climate Change Department (CCD) of the Ministry of Environment (MoE) of the Royal Government of Cambodia. The CCCA programme is an initiative led by the Ministry of Environment and supported by the European Union, Sweden and UNDP. It provides a combination of technical assistance and capacity building activities and financial support for pilot projects from a 2014-2019 grant facility with an overall budget of USD 11.7 million.

The overall objective of CCCA Phase 2 is to strengthen national systems and capacities to support the coordination and implementation of Cambodia's climate change response, contributing to a greener, low carbon, climate-resilient, equitable, sustainable and knowledge-based society. The specific objective is to contribute to the implementation of the Cambodia Climate Change Strategic Plan.

The CCCA Phase 2 programme focuses on three main drivers of change (Results), for the period from July 2014 to June 2019:

Result 1: Strengthening the governance of climate change

Result 2: Harnessing public and private, domestic and external resources in support of the CCCSP vision

Result 3: Developing human and technological capital for the climate change response

The Results Framework is presented in **Annex 1**. It includes a specific objective for assistance in the implementation of the Cambodia Climate Change Strategic Plan. CCCA plays a unique role in strengthening the national institutional framework for the coordination of the Climate Change response. CCCA is a multi-donor financing facility with a programme designed to be fully aligned with and to strengthen the national institutional framework for climate change. It is implemented by Ministry of Environment, in its capacity as chair and secretariat of the National Climate Change Committee (NCCC). Key NCCC members sit on the CCCA Programme Support Board, and the members of the inter-ministerial Climate Change Technical Team are involved in the implementation of CCCA activities. CCCA is therefore directed by the government's National Climate Change Committee (NCCC), which is the mandated government coordinating and policy support entity for all aspects of the climate change response. The CCCA focus on direct government support and mainstreaming climate into government operations is intended to maximize institutionalization and capacity building for

long term, sustainable, climate-resilient development in conjunction with Cambodia's approved Sustainable Development Goals Framework (2016-2030).

Phase II of the Cambodia Climate Change Alliance programme (2014-2019) builds on the achievements of Phase I with the aim to *strengthen national systems and capacities to support the implementation and coordination of Cambodia's climate change response, contributing to a greener, low carbon, climate resilient equitable, sustainable and knowledge-based society* (the CCCSP vision). The CCCA will contribute to the implementation of the CCCSP by focusing on three main drivers of change, which have a catalytic effect for the whole climate change response:

i. Strengthening the governance of climate change
ii. Orienting public and private, domestic and external resources in support of the CCCSP vision
iii. Developing human and technological capital for the climate change response

CCCA-II was implemented principally through a series of grants delivered through three CCCA funding windows:

Window 1 grants that support proposals involved with the implementation of the Cambodia Climate Change Strategic Plan (CCCSP) 2014-23 and specific ministries' Climate Change Action Plans (CCAPs).

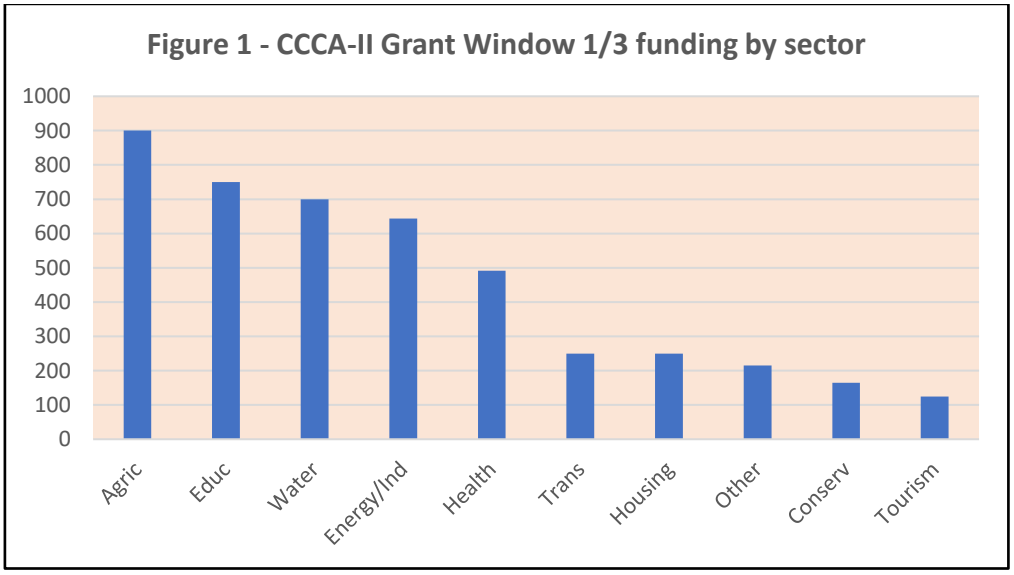
Window 2 grants that provide support for various direct government activities associated with the mobilization and management of climate finance under MEF, CDC-CRDB and MOP. e.g. implementing the Climate Public Expenditure Reviews, CC mainstreaming in CCSP and NSDP, climate-responsive budgeting, etc.

Window 3 grants that support proposals involving innovation and catalytic initiatives and have mandatory criteria.[2]

[2] Window 3 Grant projects must be: (1) in line with the Cambodia Climate Change Strategic Plan (CCCSP) 2014-23, and/or the Climate Change Strategic Plan and Action Plan of the concerned ministry or agency, (2) fall within one of the focal areas of this call for proposals, (3) have research and innovation at the core of the proposal (no "business-as-usual"), with a clear explanation of how it will add value to the climate change response in Cambodia, and its concrete implications for climate change policies and/or programming, and (4) demonstrate potential to act as catalysts for the mobilization of other sources of climate finance. Proposals may come from: Government ministries or agencies with an approved Climate Change Action Plan (CCAP), or their departments/institutes; Non-governmental organizations (local and international based in Cambodia); or Universities and research centers (based in Cambodia).

Table 1 summarizes the 22 Grant projects that were funded under Windows 1 and 3. Additional funding was provided for the engagement of universities on academic research and policy briefs.

Many of the Window 1/3 Grant project activities fall within Outputs 1.1 and 1.3 of the programme design, but some may fall under other Outputs. The General Secretariat for Sustainable Development (GSSD), and more specifically the Climate Change Department, manages the CCCA grant facilities with support from the Cambodia Climate Change Alliance (CCCA), the funding facility that provides resources for climate change capacity development and implementation at national and local level. Figure 1 displays the funding allocations by sector for the Grant projects. Approximately $4.5M was allocated to the grants.



1.2 Scope of the Evaluation

The evaluation was guided by the Terms of Reference (Annex 2) issued by CCCA and UNDP, consistent with UNDP Evaluation Policy. The overall objectives of the evaluation are:

- To review and assess the overall achievements at 3 levels of development results (outputs, outcomes and impacts) of CCCA Programme (including grant projects) to date, as well as to identify opportunities and challenges related to design, implementation and management of CCCA and provide recommendations on any changes in approach that may be considered in the third phase of the CCCA Programme;

- To assess how the CCCA programme is related to or complements other climate change activities;

- To identify lessons learnt and impacts from the CCCA programme (including pilot projects), with potential for replication or inclusion in national or sectoral climate change policies; and

- To determine what extent the programme contributed to the UNDP Country Programme 2016-2018.

The final evaluation is required to evaluate the status of progress, implementation and management process employed under each of the three results contained in CCCA Phase 2 Programme. It addresses the specific review questions developed for each Result:

Result 1: Governance and accountability framework for CC

To what extent has the CCCA intervention helped operationalize the governance and accountability framework for the climate change response at national and sub-national levels, including legal aspects, M&E framework and implementation of the CCCSP by ministries?

Result 2: Climate finance

To what extent has the CCCA intervention contributed to orienting domestic and external finance in support of climate resilient, low carbon development? This should include a review of the work on national and sub-national budgets, external assistance, and initial engagement of the private sector.

Result 3: Human and technological capacities in support of the CC response

To what extent has the CCCA strengthened national systems and capacities for knowledge management on climate change?

To what extent has the CCCA strengthened national systems and capacities for education, research and innovation on climate change?

The specific objectives of the evaluation are presented in the Terms of Reference (**Annex 2**) and include the following:

- To assess the overall development progress (outputs, outcomes, & impacts against the targets);

- Relevance and suitability of the indicators in the result framework;

- Extent to which the planned activities allow for attainment of programme objectives;

- Strategies developed and implemented in addressing the key challenges faced in programme implementation;

- Value for money against outputs produced;

- To identify lessons learnt in relation to the design, implementation, monitoring and management of the CCCA grant facility. This includes providing recommendations to improve capacity development support to the grantees and partners to promote knowledge-sharing;

- To identify lessons learned (including unsuccessful practices), and any best practices which should be fed into national or sectoral policies or have shown significant potential for replication.

1.3 Methodology and Process

The evaluation was designed as a balanced, evidence-based review of the project activities, outputs and performance to date, drawing upon review of available reports and compiling information through interviews, group discussions and site visits. The evaluation questions and criteria are provided in an Evaluation Matrix in **Annex 3**. The itinerary involved meetings with government officials and donors and field travel to project sites near Pursat – Battambang - Kampong Thom – Kratie – Kampong Speu – Kampong Chhang – Phnom Penh (**Annex 4**).

An Inception Report for the evaluation was finalized on March 22, 2019, outlining the evaluation criteria, methodology, work tasks and schedule. The evaluation commenced with a review of the annual workplans and progress reports based on:

(a) explicit evaluation criteria and questions, with a particular focus on the adequacy, efficiency, and effectiveness of project implementation, as well as assessing actual achievements of project outputs and outcomes to date;
(b) key evaluation and measurement issues identified at inception and initial preparation;
(c) review of documents, reports and surveys that describe progress on project outputs, outcomes and outcomes as per indicators in the project designs;
(d) compilation of available data and draft tables profiling the type of interventions across project sites and confirmation of indicators of climate resilience effects;
(e) self-assessment of project achievements by project staff;
(f) interviews with project participants and stakeholders to verify achievements and to identify issues related to project design and implementation;
(h) group discussions to review project experiences and lessons learned;
(i) triangulation and corroboration of comments by project participants regarding project results, implementation and lessons; and

(j) presentation and discussion of preliminary findings.

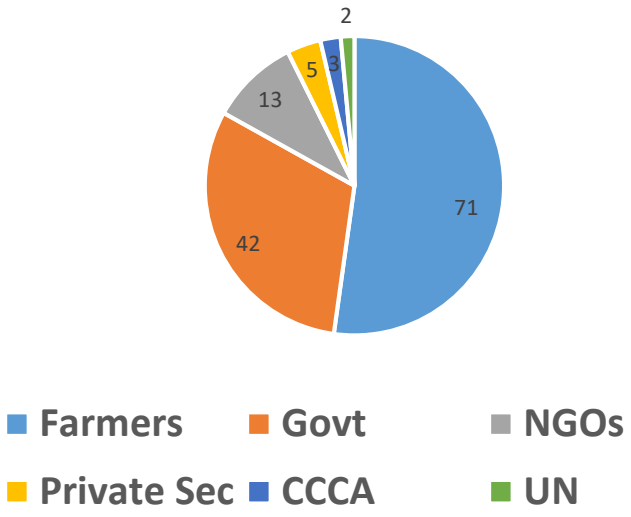
Table 1: CCCA-II Grant Projects

No.	Grantee	Window 1 Projects	Budget $
1	MOH	Strengthening country capacity to deal effectively with climate-sensitive vector-borne and water-related diseases and reducing the health impacts of disasters	400,000
2	MPWT	Green House Gas Emissions Inventory and Mitigation Plan for the Road Transport Sector in Cambodia	250,000
3	MOWRAM	Increase the Knowledge of the water cycle in order to reduce vulnerability to Climate Change hazards through an integrated approach(IKWCRCC) in 3 districts of Oddar Meanchey province	350,000
4	MRD	Climate-Proof Integrated Rural Community Development in Kampong Thom Province	250,000
5	NCDM	Living with Disaster Risk Reduction and Climate Change Impact in Coastal Areas	100,000
6	MOWA	Mainstreaming of gender impacts of climate change and disasters in education sector	100,000
7	MOEYS	Mainstreaming Climate Change in Education(MCCE)	350,000
8	MAFF	Increasing Resilience to Climate Change for farmers in rural Cambodia: through Climate Smart Agriculture practices	450,000
9	MME	Promote Low-Carbon Technologies in Energy Sector	250,000
10	MOINFO	Strengthening and Capacity Building on Climate Change through Television, Radio, and Digital Media	125,000
11	MOT	Public Awareness of Climate Change in Tourism Sector	125,000
12	MLMUPC	development adapted to natural disasters	250,000
13	MIH	Demonstration of best practices on available technology for contribution to climate change adaptation and mitigation in industrial and handicraft sectors	250,000
14	MOE	Develop and test low carbon resilient approaches and options in urban areas	300,000
	Total		3,550,000
	Grantee	**Window 3 Innovation/research Projects**	**Budget $**
15	GERES Partner: ITC	Testing supply chain and technologies for use of biomass (palm fruit residue) for energy in garment and brick industries, and developing tools for investors	143,790
16	National Bio-digester Program (NBP) Partner: Prek Leap National College of Agriculture	Testing technologies for medium-sized bio-digester (20 KW), and use of bio- digester slurry for adaptation in agriculture	149,990
17	Cambodian Rural Development Team (CRDT)	Integrated approach for farmer adaptation to CC: solar-powered water pumps, resilient crops and livestock, farmer organizations/SMEs	149,960

18	General Department of Agriculture (MAFF) Partners: RUA, ITC, CIRAD	Research on ecosystem benefits of conservation agriculture (on soil etc.)	143,790
19	Ministry of Health Partners: WHO, James Cook University	Research to establish a climate vulnerability index in health sector Development of CC vulnerability assessment tool for health	91,000
20	Wildlife Conservation Society Partners: ITC, MOE GIS	Testing remote sensing monitoring of deciduous forest and grassland (focus on Kulen Phnomtep Wildlife Sanctuary)	90,000
21	NEXUS Partners: ITC, MOE/NCSD and PP municipality	Research on solid waste management (existing practices, international best practices etc.) and development of a strategy for Phnom Penh	89,558
22	Provincial Department of Environment in Stung Treng; Partner: BDLink	Vulnerability assessment and adaptation strategy for communities leaving in an ecologically sensitive area (Ramsar)	75,000
Subtl			939,297
	TOTAL USD		**4,489,297**

The evaluation process focused on the criteria, indicators and data sources in **Annex 2**. Representative stakeholder interviews were undertaken, assisted by an Interview Guide reflecting the range of project interventions that have been undertaken. Particular attention was given to the factors affecting implementation and results. Key CCCA and CCD staff were interviewed, along with the programme donors. Nine of the 22 CCCA-II Grant projects were visited by the evaluation team, and interviews were held with project staff from an additional five Grant projects. Figure 2 displays the categories of the 136 people who were consulted (**Annex 5**), 52% who were local participants (mostly farmers) and 40 % were female.

Figure 2: CCCA-II Final Evaluation respondents n=136



2. CCCA PHASE II RESULTS

2.1 Programme Objectives

The Overall Objective of CCCA-II was to strengthen national systems and capacities to support the implementation and coordination of Cambodia's climate change response, contributing to a greener, low carbon, climate-resilient, equitable, sustainable and knowledge-based society. A main focus was on implementation of the *Cambodia Climate Change Strategic Plan,* as measured by the percentage of CCAPs funded and implemented (the target was 50%) with the support of the NCCC Secretariat or climate change working groups of line ministries, and the CCSP implementation being on track.[3]

The outputs generated by CCCA-II, primarily through the 22 Grant projects (see Table 1 and **Annexes 7-9**) show significant progress in national systems and capacities, including 15 government policies or regulations developed or influenced by CCCA projects, 2253 government staff and 56,664 community members trained in various aspects of climate change adaptation and mitigation, 64 types of adaptation and mitigation activities implemented and 58 knowledge products produced by March 2019. These represent a significant scale and scope of outputs under CCCA-II. However, it has not been possible for CCD or CCCA staff to fully determine the extent of CCAP implementation within the 14 ministries that have developed some form of CCAP. Ministry of Rural Development (MRD) and Ministry of Public Works and Transport (MPWT) have integrated climate change into their sectoral development plans. For others, progress either through CCAP implementation or

[3] CCCA Project Document, Results Framework.

sectoral plan mainstreaming has been variable, uncertain, or difficult to measure. Difficulties remain in coordinating government action on climate change.

Regarding the targets related to the Climate Change Strategic Plan implementation, this is currently being assessed by the CCCSP review team. CCCA-II provided support for completion of the Cambodian Sustainable Development Goals (CSDGS)[4], and sector inputs into the National Sustainable Development Plan (2019-2023) and the indicator framework. The programme achievements are described in more detail below in term of governance, finance and capacity development, the three key results expected from CCCA-II.

2.2 Result 1 – A clear governance and accountability framework is functional for the climate change response at national and sub-national levels

- Consolidation of the legal and institutional framework for the Climate Change response;
- A national framework to track and monitor the performance of climate change investments, both in adaptation and mitigation;
- Support to line ministries and sector stakeholders in finalising or complementing their respective Climate Change Action Plans, and for the preparation and implementation of priority and strategic activities identified in the Line Ministries' Action Plans.

Evaluation Question: *To what extent has the CCCA intervention helped operationalize the governance and accountability framework for the climate change response at national and sub-national levels, including legal aspects, M&E framework and implementation of the CCCSP by ministries?*

CCCA has effectively established the governance and accountability framework through:

- the CCSP implementation,
- 14 ministry CCAPs (of varying levels of quality) and initial integration of climate change into Sectoral Development Plans,
- climate change inputs into the National Sustainable Development Plan,
- inclusion of climate change Goal 13 targets in Cambodia Sustainable Development Goals (CSDGs) and related monitoring plans,
- a processes for mainstreaming at the subnational level with a focus on Commune Investment Plans (CIPS),

[4] Goal 13: "Take urgent action to combat climate change and its impacts"; 3 targets: strengthen resilience and adaptive capacity, integrate climate change measures into national policies and planning, and improve education, awareness-raising and human and institutional capacity, along with 5 indicators. Kingdom of Cambodia, Cambodian Sustainable Development Goals (CSDGs) Framework (2016-2030), 2018.

- development of a Climate Change Financing Plan and the tracking of climate-related public expenditures in national budgets, and
- development of coordination mechanisms such as the Climate Change Technical Working Group (CC-TWG).

The strategy in Cambodia is to include all relevant ministries in a broad-based, government-led climate change response system that is fully mainstreamed into government operations from the policy level to the village level. CCCA has comes a long way over ten years to firmly establish the climate change framework, the awareness of climate change effects and the practices to promote climate change resilience and to access climate financing.

An analysis conducted by the GIZ Climate Finance Readiness Programme attempted to calculate the financing gap for CCAP implementation. It concluded that roughly half of the USD 865 million needed to implement the climate change priority actions determined by line ministries for the period until 2018–2019 remained unfunded. The demand for finance is determined by several factors, notably the absorption capacity of implementing agencies, the adaptation goal/target, the degree of trade-offs between impacts of climate change, the costs of adaptation and the residual costs after adaptation.[5]

There are still operational issues that need further attention in the next phase of CCCA. Evaluation Interviewees requested further capacity development, although CCCA-II has "trained" close to 59,000 people (**Annex 9**) to date on top of the many thousands that were trained in CCCA-I (2010-2014).[6] Targeted institutional strengthening especially for the subnational level, technical guidance and on-the-job performance monitoring of the system that has been effectively established may be gaps that need further attention.

2.2.1 Output 1.1: Legislation on climate change institutions, including roles of sub-national administrations have been strengthened

Achievements:

CCCA-II has focussed on developing the national and, to a less extent, sub-national requirements and processes for integration of climate change into development planning and budgeting. Support was provided for institutional reforms in Ministry of Environment, and the drafting of a Royal Decree and Sub-Decree for the new National Council on Sustainable Development and its General Secretariat (GSSD), which consolidated the responsibilities of previously existing inter-ministerial bodies and plays a key role in climate change policy and

[5] GSSD, National Adaptation Plan Process in Cambodia, May 2017, p.13

[6] The Final Evaluation of CCCA-I reported that CCCA had directly sponsored 43 workshops and 6 training sessions, and combined with Grant project trainings, over 20,000 participants were involved in 140 workshop/training events. Alan Ferguson, Sovith Sin, Final Review Report of Cambodia Climate Change Alliance, June 2014, p.20.

coordination of climate finance. The programme assisted development of a national M&E framework for climate change, including a methodology for a national climate vulnerability index. MOE and MOI issued sub-decree on the delegation of the function on climate change adaptation to the district level.

CCCA-II funded GSSD/DCC work on inclusion of climate change in the new Environmental Code, both under the Climate Change title and as a cross-cutting issue in other relevant books / titles of the Code. Inputs included clarification of the mandates of the various institutions in relation to climate change, as well as commitments to establish key mechanisms for the implementation and monitoring of Cambodia's climate change response. CCCA-II also supported the law on ratification of the Paris Agreement which was approved on 19 December 2016, following unanimous endorsement by the National Assembly and the Senate. Various climate-related inputs were provided to other legislation such as the Draft Environment and Natural Resources Code of Cambodia (with provisions covering Climate Change, Sustainable Production and Consumption, Fisheries, Water, Forests, Extractive Industries, Energy, Coastal Zone Protection, Environmental Education, and Sustainable Cities). The Agriculture Land Law and the draft Fisheries Law. In 2017, a legal Prakas was approved to establish the Climate Change Technical Working group (CC-TWG) with a mandate for mainstreaming climate change into national, sub-national or sectoral legislation and regulations; reviewing and strengthening of climate change monitoring and evaluation frameworks; and contributing inputs to national and international reporting on climate change (See Output 2.1).

The development and finalization of the guidelines for mainstreaming climate change in national and in sectoral planning and budgeting were key outputs. CCCA-II, in collaboration with GGGI, improved the NSDP guideline for line ministries, establishing climate change as a cross-cutting issue (risks and opportunities, climate resilience required in the sector, indicators, and information and capacity development needs). These were published in 2018.[7]

At the sub-national level, the focus has been on enhancing climate resilience of Commune Investment Plans. Technical guidelines on the preparation and development of the commune, district and provincial development plans and investment programmes included the climate change as a key sector and introduced vulnerability reduction assessment tool for the planning process. Support was also provided to NCDD to apply for accreditation under the Green Climate Fund, principally aimed at scaling up the sub-national climate change

[7] Guideline for Formulating National Strategic Development Plan (NSDP) 2019-2023 (May 2018) and Guideline for Sectoral Strategic Development Plan Preparation (Sept. 2018)

mainstreaming activities. MoE received considerable training on mainstreaming climate change, and provincial departments of environment were assisted to support selected commune councils to integrate climate change into 33 commune investment plans (CIPs).

Table 2 identifies the communes in six provinces that received small scale support for Vulnerability Risk Assessment and implementation of a variety of CIP activities ranging from water management, solar pumping and lighting, rainwater harvesting, canal rehabilitation, road improvements, landfill construction, agricultural diversification, livestock development, public awareness and eco-schools.

Table 2: Communes supported through PDOEs for mainstreaming of climate change into Commune Investment Plans

Province	District	Communes (33)
Kampot	Tuek Chhu	Boeng Tuk, Preak Tnaot, Trapeang Sangkae
Pursat	Krakor	Ansa Chambak, Kampong Pou
Kampong Cham	Kampong Siem	Kaoh Roka, Kokor, Ro'ang
Oddar Meanchay	Banteay Ampil	Kouk Khoos, Beng, Ampil
Takeo	Prey Kabbas	Pou Rumchak, Ban Kam, Kampeaeng
Tboung Khum	Ou Reang Ov	Damrel, Ampil Ta Pok, Mien, Kong Chey
Siem Reap	Kralanh	Sambuor, Snuol
	Srei Snam	Prei, Slaeng Spean
	Svay Leu	Kantout
Svay Rieng	Svay Chrum	Basak, Kampong Chamlang
	Svay Rieng	Svay Toea, Sangkhoar
Koh Kong	Koh Kong	Trapang Rung, Tatai Kraom
	Srey Ambel	Dorng Peng, Chroy Svay
Kampong Speu	Oral District	Hou Samnang
	Phnom Srouch	Tang Samroung

Source: CCCA; Note: The communes in Kampong Speu were chosen for piloting the Commune investment programme in 2019 based on the consultation with the PDOE, but didn't engage the PDOE in full process as other PDOEs.

Comments:

While the funding of a wide array of activities for 33 Commune Development Committees (CDCs) has benefitted the selected communities, and provided capacity development for six provincial DoEs in VRA and project implementation, the larger implications from the experiences for future NCDD and MoE programmes in subnational climate change planning

still need to be identified.[8] There were also other efforts at integration of climate change resilience measures in CIPs in conjunction with the Grant projects (see Output 1.3; e.g, NCDM Kampot project).

Subnational mainstreaming of environment/climate change has had two decades of history in Cambodia.[9] For example, in the *Local Government and Climate Change Project* (LGCC), 49 communes of 5 districts in Battambang, Takeo and Preah Vihear provinces integrated climate change adaptation into district and commune investment programmes out of which 32 (17 infrastructure and 15 non-infrastructure) received funding transferred directly into commune account through the national treasury.[10] In the 2010-2015 *Cambodia Community Based Adaptation Programme* (CCBAP, $4.5 M funding by Sweden, Australia, GEFSGP, UNDP), at least 60% of the 107 communes in 56 districts of 21 provinces involved in climate resilient-building initiatives incorporated climate change issues in their development plans.[11] How the CCCA-II experience with these additional 33 communes has added to and strengthened the subnational capacity to address climate change is not yet fully clear but this could be usefully considered in the final stages of the programme. The evaluation interviews with government officials suggested that there is still a long way to go to systematically institutionalize VRA and to establish the necessary capacity to integrate climate change within local government and provincial line agencies. PDoEs have lead responsibilities for Protected Areas which can play a role in ecosystem-based adaptation but their expertise in the other adaptation/mitigation sectors is limited. These PAs are facing increasing threats from development and illegal clearing.

2.2.2 Output 1.2: National framework to track and monitor the performance of climate change investments in both adaptation and mitigation

Achievements:

The development of Indicators for Goal 13 (Climate Change) of Cambodia's Sustainable Development Goals (CSDGs) were aligned to match with the M&E framework of CCCSP, and Cambodia's NCD and NSDP 2019-23. The indicator that tracks national efforts on GHG emission reduction was handled slightly differently due to the longer timeframe of SDGs. It measures aggregate GHG emission reductions achieved through a broad range of mitigation

[8] The MTR stated that while support from PDoE is viewed as highly relevant to communities, the actual approach is less clear about contributing lessons learned for subnational support under NCDD despite the PDoE "Delegation of functions on mainstreaming climate resilience to city/district administration).

[9] See for example, https://www.youtube.com/watch?v=KDpfMXBysao

[10] http://www.kh.undp.org/content/cambodia/en/home/operations/projects/environment_and_energy/scaling-up-climate-change-into-sub-national-planning-and-budgeti.html

[11] CCBAP involved implementation of 46 small-scale commune/village level adaptation projects funded by AusAid and Sweden. John Carter and Vong Sok, *Cambodia Community Based Adaptation Programme (CCBAP) Programme Review Final Report*, UNDP, February 13, 2013.

activities, including relevant policy decisions. Indicators on Climate Change for NSDP 2019-23 were submitted to the MOP. CCCA-II also established a close partnership with Ministry of Economy and Finance to track climate finance, integrate climate considerations in the national budget process, and train key ministry staff on climate-responsive planning and budgeting.

The National Climate Change M&E Framework was launched in April 2016. National and sectoral M&E frameworks for three ministries (MAFF, MPWT, and MoH) have been completed and baselines produced. Support was also provided to the mid-term review of NSDP, with updated information on its four climate change indicators, ensuring greater alignment with the national CC M&E framework. Under the coordination of the Ministry of Planning, CCCA2 has been instrumental in providing support to DCC/GSSD on the ongoing exercise for the localization of Sustainable Development Goals.

NCSD/CC-TWG conducted an update of five institutional readiness indicators of the National CC M&E Framework in June 2017, with discussions of the score cards facilitated by CCCA. The results showed an overall increase in institutional readiness from 2014, with the coordination mechanisms, and development of climate policy, strategies and action plans for climate change response attaining high scores, while the status of production, access and use of climate change information scored the lowest. Also noted is the uneven rate of improvement of institutional capacity, and the indicator on CC financing increasing at a significantly higher pace than other indicators. It was stated that "some of the milestones defined in the institutional readiness scorecards for these indicators constitute the focus of much of the work that national institutions are currently carrying out, e.g. 1) CCCSP progress monitoring reports, 2) regular meetings to review the progress of the CCCSP and the CCA.[12]

Three trainings on M&E were provided to the DCC staff as part of the CCCA's in-house capacity development and mentoring support. The first training covered the introduction on the M&E, indicator framework and results chain. The second and third training introduced the national climate change M&E framework and a hands-on exercise on the calculation of Cambodia's CC institutional readiness indicators. It was also reported that Preparatory work has been initiated on the automatization of the update and dissemination of the results of the M&E impact indicators of the national framework, in particular Vulnerability and Loss and Damage indicators.

Comments:

[12] CCCA 2017 Annual Progress Report, p.17.

The national *Climate Change Financing Framework*, developed with assistance from international consultants, was endorsed by NCCC in November 2014.[13] It contained climate finance scenarios, climate action costing, cost-benefit analysis and recommendations on financing modalities and institutional arrangements and CCAPs for eight line ministries.[14] A national index of vulnerability is to be a cornerstone for assessing impacts of CC financing in adaptation. For example, 23 indicators for monitoring climate change financing have been proposed. Progress over the past five years has been steady but modest in terms of implementing the elaborate framework that was promised.

The basis for tracking and monitoring climate change investments has been established and a few ministries have developed the plans to undertake the monitoring and reporting. The collaboration between NCSD, MOP and MEF, with CCCA-II support, has been instrumental in developing the monitoring processes. The claims of institutional readiness for climate change response based on rough scoring methods may not match the operational evidence from an M&E system which remains to be fully tested. The evaluation interviews and site visits suggested that the system is very dependent on donor funding and on the commitments of individuals in some ministries who are particularly interested in advancing the climate change agenda. The framework for monitoring climate change investment is important and worthwhile, but it still needs to demonstrate reliable performance.

2.2.3 Output 1.3: Support to line ministries in finalizing or complementing their action plan, and for the preparation and implementation of priority activities identified in the action plans

Achievements:

Climate Change Technical Working Groups were formed in each ministry and technical support has been provided by CCCA. **Annex 7** lists the core outputs from CCCA-II support to implementation of CCAPs and other activities funded under Window 1 and 3. **Annex 8** provides comments from the nine Grant project sites visited, and the five projects discussed with the implementing organisations. **Annex 9** lists the CCCA training events.

A wide range of project activities within 14 sectors were funded. Some of the projects provided basic water supply and rainwater harvesting solutions. The Vulnerability Assessment of communities near the Ramsar site, for example, led to installation of four hand

[13] CCCA Annual Report 2014, p.4
[14] Analysis and Recommendations of the Cambodia Climate Change Financing Framework, November 2014, p. 83 and Table 25.

pumps. The evaluation recommended building hand-pump wells during dry season when water supply is at its lowest point, expanding irrigation water supply not only for rice but for other climate-smart agriculture, and including WASH elements in the water supply program.[15] Some of the projects involved standard rural infrastructure, but others offered modestly innovative solutions. For example, Table 3 summarizes the main technologies that were promoted in Grant projects, comparing conventional and climate-resilient practices.

Table 3: Technologies being piloted or demonstrated by CCCA-II Grant Projects

Grant Projects:	Conventional practices pre-project	Climate-resilient practises promoted
MPWT Green House Gas Emissions Inventory and Mitigation Plan for Road Transport	No information on GHG emissions from vehicles and no significant mitigation action to reduce emissions in Siem Reap	Training of staff in GHG monitoring and public awareness and traffic management measures to reduce emissions and enhance traffic flow.
NCDM Living with Disaster Risk Reduction and Climate Change Impact in Coastal Areas	Unsuitable and non-sustainable drinking water sources, and lack of water in the dry season	Two water stations constructed; 20 people trained on how to produce, market and maintain a community-based water system
MAFF Increasing Resilience to Climate Change for farmers in rural Cambodia	Raising chickens in open area and use of flood irrigation methods for leafy vegetable gardens	Raising chickens in pens and shelters, and use of micro (but not drip) irrigation to increase farm production
MME Promote Low-Carbon Technologies in Energy Sector	Off-grid energy technologies for individual households	Solar-powered community micro grid for household electricity
MLMUPC Development adapted to natural disasters	Traditional elevated bamboo houses that are damaged by flooding	New elevated concrete and steel houses that are more storm and flood resilient
MIH Demonstration of best practices in industrial and handicraft sectors	Traditional, energy-inefficient and carbon-intensive manufacturing processes	Various energy efficiency and non-conventional energy sources introduced in five industrial sectors
MOE Develop and test low carbon resilient approaches and options in urban areas	Schools with limited instruction on climate change, poor water supply and electricity	'Eco-schools' with teachers trained on climate change, rainwater harvesting, solar lighting and small gardens
CRDT Promoting Resilience in Agricultural Production and Enterprises	Water supply from the Mekong requiring hauling and treating	Solar pumping to 31 households and vegetable production and marketing

[15] Evaluation Report, Vulnerability Assessment of Local People Living in and near Ramsar Site to Climate Variability and Change, 2018.

GDA Ecological Intensification and Soil Ecosystem Functioning	Traditional cropping and fallowing practices that lead to soil infertility and high levels of soil erosion	Use of low/no-tillage farming and selected climate resilient cover crops to enhance soil fertility, maintain ground cover and diversify crops
GERES Fuelling the low carbon development of Cambodian manufacturing	Fuelwood, often from illegal harvesting, used for energy in the garment industry	Development and use of rice husk briquettes as fuel in the garment sector
NBP Medium scale Bio-digestor Innovation for Smart Environment	Waste from commercial pig farms discharged to the local environment. Electricity needs obtained from the local grid.	Waste treated in biogas systems, gas used to drive generators for electricity and cooling fans, and slurry used as fertilizer in home gardens

A standard CCAP assessment template was used by the projects to report on the implementation of the respective action plans. The 2018 Annual Report describes comprehensive assessment of CCAPs implementation and capacity gaps in implementing the CCAP in each ministry. In 2017, climate change-related capacity assessment of NCSD, GSSD, and CCTWG/sector CC teams was initiated in conjunction with the broader capacity assessment of NCSD under the Environmental Governance Project, although results were not available for this evaluation.[16]

Comments:

Three general observations stand out from the evaluation interviews and site visits. Firstly, some of the Grant projects undertook very small-scale interventions that supplemented government budgets but did not have the scale to significantly reduce local climate change risks and vulnerabilities or to change adaptation practices. They did however, raise awareness of climate change and engage a many participants who received direct benefits from a variety of development adaptation activities. Output 1.3 and the Grant projects that were funded sought to advance CCAPs implementation, yet the status of CCAPs still seems to be uncertain to many of those key stakeholders who were interviewed.

Secondly, information on the specific barriers to adoption of certain project technologies and the potential strategies to overcome such constraints remain to be documented. For example, the conditions that affect the viability of solar pumping and community solar electrical micro grids are complex and important lessons have been learned. (See discussion in Section 3.4 – Impacts). Follow-up concepts have also emerged, such as proposed use of mobile solar pumping from the Mekong River through a private sector service provider – to be tested.

[16] CCCA, 2017 Annual Report

Thirdly, in many cases, the post-project sustainability of community-based water and electricity user groups – their organisational development and fee collection processes, remain in doubt. Project investments to rehabilitate community infrastructure that had previously failed to be maintained provided little convincing evidence of sustainability (legal and organisational structure, leadership capacity, operating practices, revenue collection and booking, compliance measures, etc) after receiving CCCA-II grant.

2.3 Result 2 – Domestic and external finance effectively oriented in support of climate resilient, and low carbon development

Implement the Climate Change Financing Framework:

- Establish partnership and donor coordination mechanisms on Climate Change
- Embed climate change financial expertise at national level, through designation of a focal point for institutions, civil society and the private sector on access to various climate funds, and new funding modalities;
- Support to the accreditation process of a National Implementing Entity for the Adaptation Fund and the Green Climate Fund;
- Build an economic case for the Climate Change response and create momentum for increased domestic funding;
- Establish and maintain a dialogue on potential measures and incentives to create a favorable environment for private sector investment in the climate change response;
- Support the capacity of key government ministries and agencies to undertake international and regional negotiations on climate change;
- Support improved tagging of climate change expenditure in the ODA database and sub-national budgets, and regular monitoring reports on climate expenditure.

Evaluation Question: *To what extent has the CCCA intervention contributed to orienting domestic and external finance in support of climate resilient, low carbon development, including work on national and sub-national budgets, external assistance, and initial engagement of the private sector?*

The expected results for coordination mechanisms (Output 2.1), upgrading of NCSD procedures to meet international financing standards and identification of climate change-related activities in the national ODA database (Output 2.2) have been or are likely to be achieved by the end of the programme. The effectiveness of the CC-TWG in assisting progress may take some time to determine, and the accreditation of Cambodia to apply for funds directly from Green Climate Fund and Adaptation Fund is expected in the next few months. Overall, the outcomes under Result 2 (Output 2.3) in regard to identifying and orienting national activities, plans and budgets and determining financing gaps have been substantially

achieved and made a substantial contribution to Cambodia's long-term framework for addressing climate change.

The evaluation question also asks about private sector engagement. Discussions on private sector engagement were initiated and some piloting of the *private sector service provider model* in support of public services and low-carbon technologies has been undertaken in the Grant projects. A study on scoping the private sector's contribution to the CC response was also conducted early 2016. At least 65 local and international private companies and other stakeholders were interviewed for this exercise. In addition, senior government officials from seven sectoral ministries and institutions were consulted including MAFF, MPWT, CIB/CDC, MoT, MME, MIH and MLUPC, in addition to MOE/NCSD. The final report was published and reportedly helped inform MOE/NCSD priorities in their work to promote climate-smart investments by the private sector.

In the NBP biogas project, CCCA extended the grant to allow engagement with local banks in discussion about financing arrangements for other pig farmers to adopt the technology. Results unknown, so far. However, private sector engagement has been limited by the government orientation of CCCA (see management response to MTR) and the apparent lack of tools to address private sector financing. There are significant opportunities for industry adoption of clean production and energy efficient approaches technologies with lower GHG emissions but it may require a partnership with UNIDO or other similar organisations to generate such collaboration in the future. (See the discussion under Section 4.4 - Impacts).

2.3.1 Output 2.1: Coordination mechanism is established and functional for climate change domestic and external finance and investments

Achievements:

The establishment of a high level Climate Change Technical Working Group (CC-TWG) and internal working groups on climate change in the government ministries is seen as a significant development. It was officially established by the Prakas of the Minister of Environment and Chair of the National Council for Sustainable Development (NCSD) on May 05, 2017. It is chaired by the Deputy Secretary General, GSSD/NCSD and is composed of 25 members from 19 ministries and government institutions, with the Director of Department of Climate Change (DCC), GSSD/NCSD and the Director of Department of Marine and Coastal Zone Conservation, Ministry of Environment serving respectively as CCTWG's first and second vice-chairs.

In March 2019, the Department for Climate Change, convened and coordinated the 4th Climate Change Technical Working Group to discuss three key priorities - the update and review of national institution indicators which is part of the National M&E Framework; the Mid-Term Review of the Implementation of Cambodia's Climate Change Strategic Plan 2014-2023 (CCCSP) and the road map for Cambodia's Nationally Determined Contributions (NDC) implementation. The Climate Change Technical Working Group (CC-TWG) meetings were held in June and November in 2018 and focused on addressing climate change in the new National Strategic Development Plan (NSDP) 2019-2023, discussing the scaling up of mainstreaming efforts, initiated discussion on monitoring, reporting and verification (MRV) system for NDC implementation, and on validating the proposed localized CSDG13 indicators. In 2017, the TWG also met two times.

Coordination meetings are also held with Development Partners, generally every six months. The focus in 2018 was on how partners can support climate change mainstreaming in the new NSDP and at sector level, and on GCF pipeline.

Comments:

The consultative program of CCCA-II was extensive and inclusive, as evidenced by the number of meetings and the attendees from a cross-section of government, donor and civil society interests. The CC-TWG is highly regarded as an essential coordination body. There is some view that it could serve to accelerate reporting on climate change integration into sectors, but others seem to be sceptical given the high level of representation and cautious relations between ministries. Actual functions of the TWG as a means of tracking progress and addressing issues may depend upon a pro-active approach to setting TWG agendas.

2.3.2 Output 2.2: NCSD Secretariat procedures updated and applied in line with the requirement for National Implementation Entities of multilateral funds.

Achievements:

Activities were initiated under CCCA-II to address the capacity gaps in NCSD application for accreditation as a National Implementing Entity by the Green Climate Fund, particularly the revision of the operations manual, and the strengthening of internal audit and financial statements of NCSD. These activities were conducted in cooperation and with parallel financing from UNEP. The operations manual for General Secretariat of National Council for Sustainable Development (GSSD/NCSD) was revised and finalized following consultations at technical level and with NCSD senior management. It is in line with national systems and introduces stronger standards where required to meet international requirements.

Accreditation as a National Implementing Entity (NIE) for the Green Climate Fund (GCF) and Adaptation Fund (AF) allows Cambodia to apply directly for these international climate change funds. In 2016, CCCA and NCSD also facilitated the accreditation process for NCDD-S. NCDD-S has applied to the GCF to become an NIE for grants to sub-national administrations. A capacity assessment of NCDD-S has been conducted by PriceWaterhouse Coopers on behalf of the GCF, at the request of NCSD. NCDD-S is currently working on the identified gaps and is hoping to finalize its application by mid-2018.

CCCA Mid-term Review noted that the operations manual for General Secretariat of National Council for Sustainable Development (GSSD/NCSD) had been revised. Following consultations at a technical level, a final draft of the revised operations manual was ready for review by NCSD senior management. The environmental and social safeguards have already been strengthened in partnership with GIZ. Administrative improvements were made to financial management within GSSD.

Comments:
Good progress has been made toward accreditation for access to international funding as part of the initial pathway to future financial support. CCCA has had ten years' experience with development of the policy and institutional architecture for climate change governance in Cambodia. A long term financing plan is needed that anticipates the shift to gradual increases in government funding and reduced dependence on international support.

2.3.3 Output 2.3: Climate change related expenditures are integrated into the government plans and budgets including the ODA database.

Achievements:
As part of the agreement between Ministry of Economy and Finance (MEF) and GSSD/NCSD, the Climate Public Expenditure Review (CPER) for fiscal year 2013 & 2014 was completed and published by MEF (April 2016). The study showed a continued increase in public climate finance. It was conducted with active engagement of MEF staff in the processing of data. One key finding is that while Cambodia has been relatively successful in mobilizing climate finance, alignment with the Climate Change Action Plans of the concerned ministries will require further work.

The CPER for fiscal year 2017, completed in cooperation with MEF and CDC/CRDB showed that one third of public expenditure, or 30.2%, was either fully or partially delivering climate change benefits. This share of public expenditures with some degree of climate change benefits has remained relatively stable since 2009, around 30.6% in average. Once climate

change relevance weights are applied to this expenditure, climate change expenditure constituted 3.2% of total public expenditure (the same level as 2016, but dropping from 4.3% in 2015).

Following GSSD/NCSD recommendations, climate change has been integrated into the Budget Strategic Plan circular (2019-2021) and annual budget law circular 2019 of Ministry of Economy and Finance (MEF). Three infrastructure ministries (MAFF, MoWRAM, and MPWT) have integrated climate change into their sector planning and budgeting requests to Ministry of Economy and Finance (MEF). With support from CCCA, MRD has integrated climate change, and gender into their new five year policy, strategy and action plan (2019-2023). Climate resilience was integrated in MRD programmes on infrastructure (rural road), water and sanitation and health care. CCCA also supported integration of climate change language in the MPWT submission for the NSDP. MPWT also received support for a technical training course to MPWT's senior engineers on climate change and cost-benefit analysis for climate responsive budgets and plans.

In cooperation with Ministry of Planning (MoP), climate change, green growth, gender, and sustainable development have been integrated into guidelines for the new National Strategic Development Plan (NSDP) and Sector Strategic Development Plans 2019-2023. GSSD/NCSD and MoP co-organized an official dissemination workshop for line ministries and agencies on new guidelines on 26 December 2018. Line ministries and agencies are being encouraged to take into account the climate change, gender and sustainable development in their sector strategic plan particularly infrastructure ministries (MRD, MAFF, MPWT, MoWRAM, and MLUPC). Two training courses on cost benefit analysis methodology for finance and planning staff were also delivered (16 staff from MPWT and 09 staff from MoWRAM).

Under the cooperation agreement between DCC/GSSD and CRDB/CDC, two training workshops on ODA database and international climate change financing for development partners and CRDB staff have been conducted. Climate change thematic markers and sectors were defined in the ODA database. Climate change financing was also reported and reflected in the cross-cutting issues section of the 2016 development cooperation and partnership report published by CRDB.[17] CCCA also developed a brief guidance note for climate change sector and sub sector in order to support Development Partner focal points and CRDB technical staff to track climate financing flow and classification in the database. CCCA and NCSD/GSSD planned to do quality assurance of the climate change data in the ODA database.

[17]http://odacambodia.com/DCR_Report/disbursement%20by%20year%20thematic%20and%20sector%20frame.asp

At the request of the Supreme National Economic Council (SNEC), a study on impacts of climate change on priority climate-sensitive sectors was also produced. Seven sector ministries (MAFF, MoH, MPWT, MoWRAM, MoE, MRD, MoEYS) and priority actions and key recommendations for addressing climate change impacts on each sector were developed and approved by the Minister of Environment and submitted to the Prime Minister. The report recommends that i) that NCSD submit to MEF an updated analysis of climate change priorities every year, for inclusion in the budget process, and ii) that MEF designate staff to oversee mainstreaming of CC (and other cross-cutting issues) in the budget process.

The Climate Public Expenditure Analyses (2015, 2017) indicated a significant increase in funding for climate-related public expenditures.[18] These analyses, along with the climate economic impact model have increased public awareness of the implications of climate change in Cambodia. Budgets available from Cambodia's own resources were estimated to increase by an average 9.45% per year in 2012-2016.[19] This needs ground truthing field verification. Although more budget is apparently available for climate-related activities, respondents in the evaluation interviews commented about the lack of luck in securing funding for local priorities that had been identified in their CIP. CCCA-II worked closely with 33 communes to assist local mainstreaming with some level of expectation that funds might be available from government resources. Further tracking of actual funding and implementation of climate resilience priorities would provide useful local corroboration of national statistics on climate expenditures having an effect on-the-ground.

Comments:

Three Climate Public Expenditure Reviews (CPER) have been conducted by MEF to date with support from an international consultant and funding from CCCA. These, along with the economic modelling and other MEF/MPO actions have greatly helped climate change mainstreaming and climate finance planning in Cambodia. The effort to include the donor-funded projects and programmes in these analyses through the national ODA database has made the work even more comprehensive. About 50% of the estimated economic impacts from climate change are linked to labour productivity reductions and the MEF would like to further assess the options for addressing such impacts.

[18] Significantly different estimates of climate expenditures can be produced depending upon on the approaches and methods. “Results from an objectives-based or binomial weighted approach is typically 3 to 6 times larger respectively than an approach that directly tries to quantify co-benefits.” The assumptions regarding weighting of relative climate importance of expenditures is critical. Kit Nicholson, Thomas Beloe (UNDP), Glenn Hodges (UNDP), *Hard Choices, Integrated Approaches, A Guidance Note on Climate Change Financing Frameworks*, UNDP, n.d., p.21.

[19] Annual Report Figure 3, 2017 showing an increase in domestic resources from 176M in 2012 to 283M in 2016.

A high level of dependence on international consultants and availability of external financial support could be limiting factors for sustainability. MEF plan to continue the annual analysis if funding is available. Two issues were identified during the evaluation. Firstly, according to government staff, there appears to be little feedback on the extent to which ministries take account of the budget circular on climate change and gender. (No one was aware of the circular during limited number of interviews with other ministries) Despite government commitments to mainstreaming, there are no apparent inter-ministerial monitoring and reporting function.

Secondly, the cost-effectiveness of alternative adaptation and mitigation options is not part of the tracking database. The long list of donor-funded projects (40 identified in CPER 2015[20] and 55 (43 adaptation, 4 mitigation, 8 other) identified in the CRDB/CDC ODA database[21]) contain climate-related activities from which cost norms and cost-benefits or cost-effectiveness data can be derived in order to enhance understanding of the business cases for investment by government, donors and private sector. The General Dept. of Subnational Budgets in MEF is responsible for considering climate resilience choices in public infrastructure. They need more empirical evidence that is drawn from actual experience; e.g., hard vs bioengineering methods for flood-proofing roads. In addition, private sector investments are not included in the analyses, although UNDP has been testing a methodology - private climate finance public expenditure review (PCEIR) for this in other countries.

2.4 Result 3: Strengthened human and technological capacities to support climate change response

- Establishment of standards, for climate change education and awareness, and establishment of a quality assurance mechanism for climate change related information products.
- Provision of grants to test innovative technologies and approaches in the Cambodian context and evaluate their potential, including public-private and South-South/triangular partnerships
- Strategic support to the Ministry of Education, Youth and Sport and selected universities to help put in place sustainable structures to develop human capital in key areas of the climate change response**.**
- Finalisation and implementation of a Knowledge Management Information System, including procedures for climate data management (gender disaggregated), development of knowledge products and learning events.

[20] Annex 2: Largest Items of Climate Change Expenditure, Report on Climate Public Expenditure Review 2015, MEF, March 2017.
[21] http://odacambodia.com/Reports/reports_by_sector.asp

Evaluation Question*: To what extent has the CCCA strengthened national systems and capacities for knowledge management on climate change, including those for education, research and innovation on climate change?*

This Programme Result focuses on awareness and education. The capacity development achievements on climate change knowledge management are most likely to become apparent in the final months of the programme when the full Knowledge Management System is operational. The strategy for knowledge development against measurable objectives, beyond individual education sector Window 3 Grant projects, case studies and policy briefs, will need to be clearly defined to generate measurable results. CCCA-II has certainly raised awareness of climate change issues and operational mainstreaming tasks with the national development planning and budgeting systems. Contributions to school curriculum development and academic research on climate change have also improved knowledge development and dissemination. The numbers and range of participants (**Annex 7** on outputs) have been substantial and CCCA activities with 33 communes and 22 Grant projects have provided significant reach across the country. The efforts however, have been dispersed and specific to selected partners, and downstream effects on practices and behaviour to be determined.

2.4.1 Output 3.1: Standards and procedures for quality assurance of climate change awareness raising materials and knowledge management are developed

Achievements:

A Knowledge Management (KM) Framework for climate change response and the KM Action Plan were finalized in early 2016. Delays occurred in the procurement process to establish the website that will also maintain a data portal but significant progress is now reported on the new knowledge platform for climate change, which is in the final development and testing phase and will be launched in the next few months. The climate change website and data portal have been developed as part of a broader NCSD website. The institutional arrangements for the tasks to be routinely performed, and guidelines for the review of materials have been established, and the capacity of DCC has been strengthened on database management and information management systems. CCCA states they have produced 58 knowledge products to date.

A training program and mentoring on capturing knowledge and lessons learnt from ongoing climate change related interventions was started in 2016. A team of three DCC staff were designated and received training and simultaneously developed case studies based on

projects being implemented with the support of the CCCA Grant Facility. CCCA has also provided support for development of a Climate Change Glossary in Kymer.

Comments:
Considerable effort, time and preparation have gone into the Knowledge Management System and CCCA and CCD. The system is expected to provide significant improvements in access to relevant information, data and tools for awareness, learning and research on climate change. From a climate change programmatic perspective, there is little evidence to date of coordination and collaboration between CCCA programme and the other multilateral and bilateral climate change projects in Cambodia (55 in the CRDB ODA database)

2.4.2 Output 3.2: Partnership with education institutions is established to integrate climate change into curriculum development and research

Achievements:
CCCA provided support to the Ministry of Education, Youth and Sport and selected universities to encourage development of human capital in key areas of the climate change response. Various outreach and youth engagement activities were supported by CCCA. In 2018, the development of new teaching materials on climate change for high school (grade 10 to 12) was finalised as part of the cooperation between MoEYS and GSSD, and launched in July 2018. Core components of these teaching materials were included in the outline of the national curriculum, under the earth and environmental science subject. A training of teachers for climate change from 10 target schools was completed along with the national curriculum revisions.

CCCA provided technical support for research development with six universities through Result 3 funding. Training workshops on climate change, targeting lecturers, students and young leaders, were conducted including on causes and impacts of climate change, national and international responses and specific guidance on mitigation and adaptation measures. A long list of research topics was produced through various consultations and supplemented by priorities identified at the 2nd Knowledge-sharing Event. Coaching was provided to the universities to develop research proposals and to enhance grant-writing applications. Four formal research proposals are expected from these deliberations and capacity building support. CCCA has also funded the development of policy briefs, as outlined on Table 4. These are expected to facilitate policy discussions in some manner yet to be determined.

Comments:

CCCA has been pro-active in organising and assisting the universities in developing research ideas and proposals. There are also applied research opportunities that may emerge from the CCCA Grant projects (e.g., GDA). The relationships between research issues from Grant projects, national climate research themes and university priorities and policy briefs did not seem very clear to the evaluators. The big theme policy issues for Cambodia that require targeted research such as, for example, the effects of climate change and hydroelectric development on the Mekong River-dependent agricultural and fisheries production, the climate-related salt water intrusion on groundwater resources in the delta region, the decreasing availability of water for irrigation systems, the combined climate change and deforestation effects on watershed integrity, water storage and ecosystem services are key national policy level topics missing from the research themes.

Table 4: List of Policy Briefs, April 2019

Tittle	**Authors**	**Institution**	**Date approval/ revision**	**Status**
The Danger of POPs in Pesticide in Cambodia: Promoting Integrated Pest Management to Reduce POPs	Mr. Thav Sopheak Lecturer/Researc her	Royal University of Agriculture	December 2018	Approved
Institutional Capacity-Building for Climate-Informed Planning in Cambodia's Water Resources and Agriculture Sectors	Dr. Va Dany Head of Department of Environmental Science	Royal University of Phnom Penh	December 2018	Approved
Why Payment for Ecosystem Services is a Cost-Effective Strategy for Climate Change Adaptation and Mitigation?	CHOU Phanith, Lecturer, Faculty of Development Studies and SOVANN Chansopheaktra, Lecturer, Department of Environment	Royal University of Phnom Penh	Mar 2019	Approved
Building Adaptive Capacity to Warmer Temperatures and Fluctuations in Rainfall Patterns in Northwest Cambodia	Try Yorn Vice Rector	Meanchey University	Mar 2019	Under review

Better Understanding of the flood regime and habitat change under Climate Change in Tonle Sap Lake	Dr. Seingheng, Director of Research and Innovation Center	Institute of Technology of Cambodia	Mar 2018	Under revision
Climate Change and Education	Mr. Thav Sopheak Lecturer/Researc her	Royal University of Agriculture	February 2019	Under revision

Source: CCCA Secretariat

2.4.3 Output 3.3: Lessons generated from innovative practices pilots are documented and shared with relevant stakeholders

Achievements:

The 'innovation' projects funded by CCCA-II are listed on Table 1. Many of the important lessons learned will be identified in the final few months of CCCA-II.

The case studies reviewed included:

- *Low Carbon Technologies for Electricity Generator Case Studies,* Ministry of Mines and Energy. The article concludes that the solar systems are technically feasible, dependent on community-based management and there is a need to document the co-benefits from GHG mitigation measures.

- *Strengthening climate responsive budget and planning in Ministry of Public Works and Transport; a case study on climate proofing road in three provinces*, Ministry of Public Works and Transport. The difference in costs of road construction and maintenance with and without 'climate-proofing' is mostly related to assumptions about higher operational costs to maintain conventional road construction. The net cost reduction with the 'proofing scheme' for three roads (2018-2050) was $2.6 m or 23% lower than the 'regular scheme'. The engineering methods for bank stabilisation and erosion control seem to lack reference to significant bio-engineering potential.

- *Better Fuel, Better Future, How Private Sector Partnership Helps Cambodia Mitigate Climate Change and Burn Less Wood*, NCSD and MoE describes the effort to develop rice husk briquette technology with two partner rice mills and to interest garment manufacturers in the use waste products from rice milling to provide energy to factories in Cambodia, and reduce their greenhouse gas emissions. The article does not explain that the briquettes were not actually introduced into garment plants, nor does it describe the barriers to adoption by the industry.

Comments:

The lessons from most of the Window 3 innovation and research projects are still being documented by the projects. The experiences from GDA no tillage/cover crop farming, GERES rice husk fuel substitute, and NBP Bio-digesters may offer new insights into further development of the technologies. In two of the projects, the lessons in the context of related GEF/UNIDO projects (energy efficiency industrial sector and commercial biogas) were not considered. For example, can the NBP medium-scale biogas model overcome many of the barriers that were identified in the GEF commercial biogas study in Cambodia?[22] There are locally significant benefits that have been generated by many of the projects and scale-out opportunities identified for further consideration. But some of the projects, such as the NEXUS solid waste project, have clearly failed to deliver the expected results.[23] The strengths, weaknesses and learning associated with the projects are often not yet apparent from the available documentation – completion reports and independent evaluation reports. Policy makers need to have a clear set of conclusions about the opportunities and trade-offs and policy implications to becoming climate-resilient.

The case studies follow different formats and levels of detail. Two general observations were noted. Firstly, many of critical issues and factors that affected results that were identified during the evaluation mission site visits (see **Annex 8**) were not mentioned in the case study articles. Secondly, it was not clear whether the methods that had been demonstrated have sufficient merit that they are now or will be advocated to become part of the ministries' regular operations –i.e., how the projects have influenced the ministries implementing them and their programme strategies is not yet apparent in many cases (e.g., MIH).

2.5 Gender Aspects in CCCA-II

Women have been substantially involved in programme activities and gender equity and gender breakdown of participation data has occurred during implementation. **Annex 7** shows participant rates in the range of 20-40% female at training events especially at the community level. CCCA worked with UN-WOMEN to increase awareness and improve reporting of gender and climate change issues in the assessment of CCAP implementation. An expanded template

[22] Limited captive energy demand, licensing to feed power to the grid, and the pig farms that apply an all-in, all-out pig movement causing substantial fluctuations in the availability of dung and hence biogas production and financial viability are factors. https://www.biogas.org/edcom/webfvb.nsf/id/en-unido-cambodia

[23] *Final Evaluation of the "Phnom Penh Capital Solid Waste Management Strategy" Project*, June 2018; "The project is considered to have not (i) delivered on its climate change aims or have achieved all the objective(s) of the project. While a draft integrated waste management strategy has been developed and is under consideration by PPCA it has not qualified or quantified the "mitigation solutions for serious environmental (climate) change risks posed by unsustainable waste management practices"."

was prepared to assess additional gender/climate change issues such as differentiated vulnerabilities of climate change for women and men, and was tested in three target sectors (MRD, MOWA, and NCDM). Ministry of Women's Affairs (MoWA) implemented a grant project with the Ministry of Education, Youth and Sports (MoEYS). The general strategy has been to consider gender in the design of the CCCA Grant projects and to improve the capacity of MoWA to integrated gender into sectoral climate change programmes.

3. Assessment of Performance

3.1 Relevance

The direct involvement of CCCA with government policies and line ministry programmes ensures that the activities are aligned with government priorities. CCCA Window 1 Grant projects are specifically designed to implement Ministry's CCAPs under the umbrella of the national CCCSP. This makes the programme highly relevant to national objectives. At the subnational level, commune authorities and local people are involved in selecting the priorities for small-scale climate resilience activities.

The UNDP Country Programme Document (2016-2018) emphasized assistance to national mechanisms will focus on fostering closer coordination of public investment and social provisioning among national and subnational authorities, which including disaster risk reduction and early warning systems and strengthening vulnerability risk assessment methodology.[24] CCCA-II has been generally in line with this strategy and the UNDP commitment to policy-based research and dialogue with the Government on the country's emerging priorities.

3.2 Efficiency

The annual budgets and expenditures are presented in Table 5 based on the overall CCCA budget of $11.7 M USD. Almost $10M has been expended to the end of 2018, or 85% of the total budget. Result-1 accounted for 48.4% of total expenditures and Result-3 30.6%. The annual expenditures relative to budgets started slow in year 1 at 75% but increased rapidly to over 90%. Result-2 involves more flexibility and responsiveness in activities funded and therefore the delivery rate varies from year to year.

Delays in executing work tasks or inadequate capabilities of contractors (e.g., knowledge management development) and government staff were probably the main sources of inefficiencies. Overly ambitious expectations about implementation of CCAPs and the Climate

[24] United Nations, 2015, Country programme document for Cambodia (2016-2018), p. 6.

Change Financing Framework also affected the results, as did the generally dispersed array of small activities and outputs that required disproportionate administration overheads to manage with many partners. There were no major issues on financial management that were reported to the evaluation mission. It has not been possible with the information in hand to determine the proportion of expenses that went toward programme management and overhead.

Table 5: CCCA Annual Budgets and Expenditures to December 31, 2018

	2014	2015	2016	2017	2018	Total
Result 1						
Budget	270,438	1,094,648	1,262,951	1,399,967	1,308,830	5,570,731
Expenditure	196,056	1,021,368	1,194,673	1,447,096	1,188,425	4,840,202
%Delivery	72%	93%	95%	103%	91%	90.8%
Result 2						
Budget	104,872	328,359	391,315	455,004	587,764	1,785,734
Expenditure	89,366	237,146	410,676	354,622	486,975	1,500,561
%Delivery	85%	72%	105%	78%	83%	84.6%
Result 3						
Budget	68,697	464,560	840,659	1,041,997	983,104	3,638,372
Expenditure	47,452	481,434	771,038	980,874	923,608	3,062,670
%Delivery	85%	104%	92%	94%	94%	93.8%
Indirect Eligible Costs	-	-	-	-		
Budget					210,110	705,907
Expenditure					188,313	588,027
%Delivery					90%	83%
TOTAL Budget	444,007	1,887,567	2,494,925	2,896,969	3,089,808	11,700,745
Total Expenditure	332,874	1,739,949	2,376,387	2,782,592	2,787,321	9,991,487
% Annual Delivery	75%	92%	95%	96%	90%	85%

Source: CCCA Annual Reports, 2014-2018

The cost-effectiveness and value for money questions are harder to answer since it is too early to determine the extent to which climate change investments from CCCA have led to reduced vulnerability or increased resilience. CCCA staff point to the baseline conditions that had limited policy and government framework and action and the progress that has now been

made today after ten years of CCCA support. There has been significant development of the climate change policy and planning systems, and subjective assessments of readiness that suggest great improvements, but there is no reliable empirical basis at this stage for knowing whether the benefits of CCCA will outweigh the costs.

3.3 Effectiveness

The effectiveness of CCCA-II is reflected in the policy developments that have been accomplished and the large number of activities and outputs that have been completed (**Annex 7**). A summary of Logframe progress in **Annex 10**, from the 2018 CCCA Annual Report, show the substantive level of outputs results. The downstream effects on government programmes and budgets and on actual climate change adaptation and GHG emissions reduction is less certain.

The effectiveness of the programme strategy to allocate grant and other funding based primarily on sector and ministry representation as a means of mobilizing broad government support and policy mainstreaming, noted earlier in this report, is a feature of CCCA-II that needs to be re-considered in the next phase. The Results Framework that guides the strategy has been moderately effective within the context of this concern. The main theme of CCCA-II: make more funding available for ministries' CCAP implementation from national and donor sources, track the implementation and results of the CCCPs, and facilitate a decline in climate change vulnerability and an increase in adaptation and mitigation practices, is the concept that was expected to be delivered through the Results Framework. CCCA has diligently reported per the indicators set out in the Framework. It has met the required standards for reporting. Not all the indicators are meaningful; for example, Indicator 2 for the Objective is a measure of programme expenditures and activities rather than results.

3.4 Impacts

Long-term viability of the technologies piloted

The evidence of CCCA-II impact on adoption of new adaptation and mitigation technologies (Table 3) remains to be considered in many of the Grant project final completion reports. While uncertainties about acceptance by prospective users are often apparent (see **Annex 8** field notes), some important experiences have helped to identify the key factors influencing the shift toward climate resilient technologies and practices in the CCCA projects. A few examples of these factors are presented below from the interviews and site visits.

Project technologies:	Key factors affecting technology adoption:
MME – Community-managed solar micro-grid system	Challenges managing HH use of electricity without metering. System competes with low cost, individual HH solar systems. Length of grid in relation to HH density also appears to be a key factor in technology cost-effectiveness.[25]
MME – 6 kW Solar battery charging station Prahal Village, Talou Commune, Bakan District, Pursat Province	No apparent constraints. The system is saving 2,386.8 USD/year with simple payback period of around 6 years. This is economically feasible. The system is very simple to operate and maintain; substitutes diesel base battery charging system. Information on replication is not known.
MME – 2.5 kW with 10 kWh battery Standalone solar system Reangtil Health Center, Pursat	The system can save 638.75 USD /year with simple payback period of more than 10 years. Although the benefits may be significant, the system cannot be scaled up without financial support. The system is costly and can generate a limited amount of electricity.[26]
MIH - Ice plant energy improvement in Battambang city	CCCA provided a 20% subsidy for a $50k upgrade in equipment. Ice production increased by 50%/hr and electricity costs dropped by 20-30% according to the owner. Financial analysis not completed.
CRDT – Solar water pump on Mekong near Kratie	Capital costs of $15,000 provided by CCCA for installation of floating pumps in the Mekong River and distribution pipes to households and community gardens in three villages, providing domestic and irrigation water that supports community gardens. At a cost averaging $500/household, the costs inhibit expansion, but sunlight availability and managing over-use of water are also factors.
GERES – Rice husk briquettes as fuelwood substitute in the garment industry	The technology was proven to be feasible and productive revenue for rice mills, with multiple economic and social benefits over fuelwood sources but cost barriers and the lack of industry regulations or incentives to either push or pull industry firms to alternative fuel sources are seen as constraints to expansion.
NBP – Biogas from pig wastes provides on-site electricity and fertilizer slurry for home gardens	Bio-digesters installed with technical and financing support from CP Company that supplies commercial pig farming inputs. Used generators purchased and modified to burn biogas. Total capital cost was $60,000 but electricity savings were estimated at $100,000/5-6 mth cycle at one of the farms and in the range of $3500-10,000/cycle at two other demonstration farms. Voluntary replication at other similar farms is not known except anecdotally.[27]

[25] System challenges: a. The investment is very costly which cannot be done without financial support. b. The power production is limited meaning when there is storm or a lot of cloud, the charge might not be enough for the need. c. Replication of the system is not possible without financial support. d. The battery life is short and the investment on battery replacement is expensive. Advantages: a. Larger scale, b. More efficient use of generation and storage. c. Can ensure higher reliability and power quality. d. Can provide for larger loads. e. and product use. f. Can provide more data and control. MME, Quarterly Progress Report, Oct-Dec -2018, Feb 1, 2019.

[26] MME, Quarterly Progress Report, 01-10-2018 – 31-12-2018, Feb 1, 2019.

[27] Feasibility studies of 12 pig farms in Cambodia in the companion GEF project illustrated barriers that affect potential to produce biogas at a commercial scale but medium scale plants may have better ability to maintain a regular supply of animals/waste for steady biogas production if the pig-raising cycle can be modified.

The incremental contribution of CCCA to advancing clean technologies in industry is minor in the national context. Partnerships with larger initiatives were not explored. For example, industrial energy efficiency was addressed in a 2011-2015 GEF/UNIDO project, "*Reduce Greenhouse Gas Emission through Energy Efficiency in Industrial Sector in Cambodia*". The main activities were aimed at developing site specific pilots that demonstrated the cost and energy savings from clean technologies. The project trained many enterprises, energy experts that work with those enterprises, and on the regulatory end, developed policies that would support enterprises in search of clean technologies. Some exceptional results were reported. The original target was '40 IEE project quick scans' and 'cumulative savings of 45,000 TOEs[28] of energy savings over the technology lifetime'. The project reached this output target but also demonstrated a lifetime GHG reduction of 436,870 tonnes CO2 - over ten times the original project estimate. On the institutional strengthening side, many of the outputs focused on training government officials on energy software, energy audits and on IEE which were for the most part achieved. However, the project failed to work with financial institutions on IEE investments which was one of the biggest shortcomings.[29] The evaluator noted nevertheless that most of the cost-benefit for the companies in the project was high and most investments paid back in less than 2 years.[30] Lessons from such sector experiences can usefully inform CCCA programming and government extension services to provide technical support for industry modernization. The value-added contribution of CCCA project to sector mitigation policies and government programme development remains poorly defined.

Development effects on communities

The livelihood, income, water supply and related community capacity building impacts have been generally positive but cumulative programme effects can only be gleaned in a general way from the output list and field notes in **Annexes 7 and 8**. The community development impacts are primarily associated with local results from the Grant projects that had livelihood development activities, and the small-scale works undertaken by PDOEs for climate change integration into Commune Investment Plans.

[28] Tonnes of oil equivalent

[29] UNIDO, Terminal Evaluation Review form, GEF Independent Evaluation Office, APR 2016

[30] Dr Hans Shnitzer, International Evaluation Consultant, Mid Term of UNIDO Project: Reduce Greenhouse Gas Emission Through Energy Efficiency in Industrial Sector in Cambodia, Sept. 2013. His report identifies issues that limited results: i) lack of institutional adoption of a reporting structure for monitoring industrial energy consumption and GHG emission reductions; ii) no engagement of financial institutions and iii) no industrial energy efficiency standards set by the Energy Efficiency Department under the Ministry of Mines and Energy.

There were 33 communes selected to demonstrate this process (Table 4). Comparative analysis of the results of these activities could promote further insights into issues associated with subnational mainstreaming processes. The PDOE is not normally a major player in commune development activities, so this has been an experimental effort to some extent. That NCDD and MRD, who have substantial experience in similar projects, were not a direct part of this CCCA activity reflects the compartmentalized approach under the Grants Facility.

It should be noted that CCCA, despite its breadth, has been a very small government programme compared to much larger climate change programmes (e.g., ASPIRE climate change component aimed at institutionalising climate smart agriculture.) There appears to be no systematic means of assessing the impacts of many small contributions of CCCA to climate-resilient community development activities currently underway (see CRDB ODA database project funded by CCCA). The fit for CCCA in the development landscape may be more in advancing the effectiveness of national and subnational development and budgeting processes toward great climate change response based on vulnerability, rather than in directly piloting or demonstrating adaptation methods that are more substantially addressed elsewhere.

Impact on climate change responses

CCCA-II primary impact has been on strengthening the government commitment and policy and planning systems toward greater climate change orientation. Integrating climate change at a high level in NSDP and economic growth considerations is a significant accomplishment over the situation at the close of CCCA-I. According to interview respondents, CCCA support has given climate change a much more prominent role in key ministries – particularly MEF, MOP, MRD and MPWT. There has also been growing recognition of the challenges and complexities in CCAP implementation in ministries and perhaps under-estimation of the difficulties in operationalizing the 2014 Climate Financing Framework. CCCA-II also increased awareness about the need to present a sound economic or business case for climate resilient infrastructure, low carbon development options and energy management investment. The experience has also raised the profile on integrating climate change risk reduction at the village level, and the importance of linking increased national budgets for climate change response to identified risks and vulnerabilities on the ground.

Within the mainstreaming efforts in the past five years, there is a general shift toward direct integration of climate change by ministries into sectoral development plans, generally superseding or bypassing the CCAPs in the case of some ministries, and toward the

international practice of embedding climate change priorities in budget circulars and directives from central budget planning offices of the finance ministry. These are substantive results at a high level in government. Their impact at the local level however remains to be seen in the next few years.

3.5 Sustainability

The CCCA Grant projects are required to have exit/sustainability strategies. Following comments from the MTR, each grant was asked to update its exit and sustainability strategy and indicate any needs for CCCA support. This was recorded and the CCCA team was to monitor implementation.[31] Further documentation of this monitoring is warranted. The interviews at sampled project sites (**Annex 8**) asked questions about the user group management of the community infrastructure that had been established – solar pumping, tube wells, solar electricity system, rehabilitated irrigation canals, school solar electricity, etc. While local committees and user groups had in most cases been reported as established, evidence of actual management functions and user fee collection in place were sparse. (There are established rules for water user groups in Cambodia but we could not find them being implemented at the few sites visited). Some of these facilities, e.g., school budgets for maintaining solar system batteries, will have difficulties unless external financial support can be found.

The Final Evaluation generally concurs with conclusions of the mid-term review: "The sustainability has to be assessed against the level of empowerment within line ministries and/or the ownership of results for involved communities**.** Within line ministries, CCCA2 is not fully sustainable: there is still occasional resistance from key decision makers within line ministries for climate change mainstreaming, evidencing the need for further awareness raising activities. …The institutional strengthening is well under way under CCCA2 with the enhancement of the capacity of NCSD. CCCA2 has relied heavily on the provision of consultants for the delivery of some key products. This approach has produced mixed results with a lower than expected line ministry capability to be empowered."[32]

During the evaluation sites visits, a government official was asked about the percentage of hand pumps that were functioning properly in his district. He estimated that only about 60% of hand pumps under MRD responsibility were functional due to lack of government resources or lack of water. Studies of water management in Cambodia also point to major

[31] Management Responses to Key Recommendations, Cambodia Climate Change Alliance (CCCA) Phase II, Mid Term Review, January 2017.
[32] Tech Chey and Vincent Lefebrve, Mid-term Review of CCCA Phase 2, Dec. 2017, p. 9.

issues in the operations and maintenance of irrigation schemes. For example, a survey of the 2,525 irrigation schemes in Cambodia, determined that 1574 or 62% did not function at all; 802 or 32% of schemes function partly and only 149 schemes 6% function well.[33] This is a central issue that is not yet fully recognized in CCCA strategies – providing more funding to line ministries for climate change action also needs to come with obligations for significant institutional reform, capacity building and community empowerment. Further assessment of sustainability in all the CCCA-II field projects is warranted in the completion and evaluation reports. For example, the MOWRM project in Oddar Meanchey province installed extensive equipment and protocols for monitoring meteorological, groundwater, stream discharge and water supply conditions, and the creation of a Farmer Water Users Committee/Group at Chong Kal. The arrangements for continued operations, maintenance and sustainability including usability of the water resource data should be verified in the completion report, to be submitted soon.

Governance constraints are therefore key factors affecting the sustainability of climate resilience investments in Cambodia. It is only through effective and accountable community water supply and farmer water users groups and similar local management arrangements, and through approaches such as the LGCC *Performance-Based Grant Mechanism* that these issues of sustainability can be overcome. CCCA-II co-sponsored an important workshop in 2014 on the progress in innovative approaches to subnational climate change adaptation.[34] The small-scale funding for 33 communes by CCCA-II has helped PDOEs become engaged in climate change adaptation but more monitoring data are needed to determine if the programme has advanced the participatory, community-based concepts for local climate change adaptation that support sustainability. Resources, capacity and accountability are key factors that limit the potential for sustainability at the subnational level.

3.6 Coherence/Complementarity

As noted under the Objectives achievement discussion in Section 2.1, it is difficult to identify and assess the complex relationships between the CCCA-II Results (expected outcomes) and the many project and activities funded under the Grant Facility Windows 1, 2 and 3. Many of the results from the Grant projects fall within Output 1.3 but also within other programme

[33] Mak Sithirith, Water Governance in Cambodia: From Centralized Water Governance to Farmer Water User Community *Resources* 2017, *6*, 44; doi:10.3390/resources6030044, August 2017, p.7.; data from the 2009 Center for Agriculture Development Study (CEDAC). *Inventory of Irrigation Schemes and Famer Water User Communities in Cambodia*.

[34] https://www.local-uncdf.org/news/stakeholder-presentation-on-proposed-initiatives-for-subnational-climate-change-adaptation-financing-takes-place-in-cambodia

Outputs or none at all. This means that synergies and complementarities between different ministry and partner activities in contributing to programme results are not explicit and apparent.

3.7 Partnerships and Grantee Capacity Development

Capacity assessment of all grantees was carried out at the project design stage, and relevant capacity development measures were integrated. This sometimes included training and mentoring of the grantee's administrative and management staff, more frequent spot checks, or provision of detailed operational procedures when the grantee's own procedures were not fully up to standards.[35] Oversight of the Grant projects has been a key function of CCCA Secretariat staff and CCD. The cursory field review of nine Grant projects and discussions with staff from five other projects, as summarized in **Annex 8**, suggested that further capacity development support is needed in some cases, especially in regard to documentation of results, field inspections and sustainability arrangements. There have been exceptional efforts by CCCA, especially in the case of assisting universities to develop climate change research priorities and proposals. Further assistance in the final stages of closing Phase II is needed to assess the uptake of the technologies and practices that have been promoted and the potential for sustainability and replication.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

CCCA Result 1 – Governance

CCCA-II outputs to date show significant progress in national systems and capacities, including 15 government policies or regulations developed or influenced by CCCA projects, 2253 government staff and 56,664 community members oriented or trained in various aspects of climate change adaptation and mitigation, 64 types of adaptation and mitigation activities implemented and 58 knowledge products produced by March 2019 (**Annex 7**). The policy framework and processes for integrating climate change into development planning and budgeting including the National Sustainable Development Plan (NSDP 2018-2023) and the Cambodian Sustainable Development Goals (CSDGs 2016-2030) have been well established.

There are operational issues that need further attention. It has been difficult for CCD to track the progress on mainstreaming climate into line ministry programmes let alone determine effectiveness of climate change adaptation and mitigation activities within the government

[35] CCCA Phase 2 Project Document, 2014, P.23

system. Evaluation Interviewees requested further capacity development, although CCCA-I and II have trained many thousands of stakeholders. Subnational implementation, technical guidance to support innovation and on-the-job performance monitoring of the system may need further support. Training alone is insufficient to address the gaps. Fundamental organizational and resource constraints are still impeding climate change integration into individual ministry programmes and budgets. As part of the closure of CCCA-II and planning for CCCA-III, it would be useful and timely to develop consensus on where critical capacity gaps remain and what specifically can be done to overcome them.

CCCA Result 2 – Finance

The expected results for coordination mechanisms, the upgrading of NCDD procedures to meet international financing standards, and identification of climate change-related activities in the national ODA database have been achieved. The effectiveness of the Climate Change Technical Working Group in assisting progress may take some time to determine but it is important along with the accreditation of Cambodia to apply for funds directly from Green Climate Fund and Adaptation Fund which is expected in the next few months. Overall, the outcomes under Result 2 in regard to identifying climate expenditures and budgets and determining financing gaps have been substantially achieved, although the evidence of increased climate resilience funding on the ground is not yet apparent. The impact on line agency funding for sector climate change programmes and subnational budgets remains to be determined.

In regard to private sector engagement, discussions were initiated with industry and some piloting of the private sector *service provider model* in support of public services and low-carbon technologies has been undertaken in Grant projects. However, private sector engagement has been generally limited due to the primary government orientation of CCCA and the apparent lack of tools to address financing. There appear to be significant opportunities for industry adoption of clean production and energy efficient technologies with lower GHG emissions but it may require a partnership with UNIDO or other similar organisations to generate such collaboration in the future.

CCCA Result 3 – Capacity

Result 3 focussed on awareness and education. The Knowledge Management System, about to be activated, will need to clearly define measurable objectives and results. CCCA-II has certainly raised awareness of climate change issues and operational mainstreaming tasks with the national development planning and budgeting systems. Contributions to school curriculum development and academic research on climate change have also improved knowledge development and dissemination. Universities have been assisted in an organised manner to pursue climate change research issues. CCCA-II has also engaged a wide range of

project participants and provided direct support for climate change activities with 33 communes and with the 22 Grant projects, providing significant reach across the country.

CCCA Programme Design

The Results Framework left a lot of discretionary flexibility about expected outcomes and the relationships between these planned results and the funding windows and grant activities. Many of the results from the Grant projects fall within Output 1.3 but also within other programme Outputs or none at all. They are essentially standalone projects. This means that synergies and complementarities between different ministry and partner activities in contributing to programme results are not explicit or apparent. More programme coherence is needed if a results-based approach is to be pursued. The wide and diverse programming strategy, aimed at maximizing engagement and reach, reduced the focus on overall results. As noted in the MTR report, there are benefits from a more focussed implementation strategy.

CCCA Programme Management

CCCA is widely viewed as a trusted partner of the RGC, and MoE in particular. CCCA has served an essential function as the primary technical and financial support facility for GSSD and CCD in their extensive duties to coordinate Cambodia's climate change response. There is scope to leverage this position, together with UN system partners, on strengthened advocacy for inclusive and sustainable development, in line with the SDGs/CSDGs. Limited monitoring and reporting on outcome results has been a constraint under the current programme design, but the impressive scale of outputs (**Annex 7**) also indicates productive operations.

No significant management issues were reported through the auditor report or in the interviews. The programme tracks leveraging of project partner co-finances but not from the Government of Cambodia. There is a question of how much financial rigor should be applied between 'nice to do in the name of climate change' and 'need to do in order to achieve certain results' – a function of the flexible Results Framework, and some uncertainty about how much contribution to climate change action is actually generated from the government's increasing revenues and budgets associated with a growing economy. Some significant additional funds were added to a few of the Grant projects which may need better reporting on the added results.[36] Site inspection procedures and back to office reports are also a little weak on scrutinizing performance and issues. Overall, however, the programme management has

[36] "The full impact of these top-ups will be assessed in 2019, and lessons will be fed into the design of the CCCA 3 grant mechanism." CCCA Annual Report, 2018, p. 64.

been effective, consistent with UNDP requirements, and responsive to issues that emerged in the course of implementation.

Governance constraints are key factors affecting the sustainability of climate resilience investments in Cambodia. Further assessment of sustainability in all the CCCA-II field projects is warranted in the completion and evaluation reports. While local committees and user groups had in most cases been reported as established, evidence of actual management functions and user fee collection in place were sparse. Further assistance in the final stages of closing Phase II is also needed to assess the uptake of the technologies and practices that have been promoted and the potential for sustainability.

4.2 Recommendations

1. **CCCA and CCD should implement targeted measures to finalize line ministries' commitments to climate change mainstreaming in government programmes.**

Review of implementation of the Cambodia Climate Change Strategic Plan and government mainstreaming efforts is underway. CCCA-II should ensure that this phase of the programme resolves the remaining gaps in the actions needed to fully engage line ministries in substantive actions that support climate change resilience consistent with the strategic plan.

2. **CCCA and CCD should fully monitor and report on, in the programme completion report, the results of the project activities at integrating climate change into the pilot communes and assess the effectiveness and lessons for subnational climate change action building upon other previous work on local government climate change mainstreaming in Cambodia.**

The CCCA-II programme has gained considerable experience at integrating climate change into 33 commune investment plans in six provinces. These experiences, and many other similar projects (including CCCA-I) can provide important lessons for development of future subnational climate change programmes but it requires a concentrated, comparative analysis of the activities, costs, results, factors that have affected results and sustainability arrangements at each project. The NCDD subnational programme concepts are proposed to be scaled up. Extracting lessons from CCCA-II will be timely and important. The CCD/PDOE programme is still underway and staff should be required to develop this analysis as part of their exit strategy over the next few months.

3. **CCCA should develop and apply a method to assess the leadership, capability and sustainability of water and energy user groups that have been established in the**

CCCA Grant projects, drawing upon available standards and guidelines for sustainable community-based facilities management.

Water and energy user groups, except where government provided firm assurances to maintain facilities, were established for ongoing community operations and maintenance. The evaluation found that the user groups are only in the initial set-up stages and following withdrawal of the project, this support and the planned user fees may not be sufficient to maintain the facilities and programmes. Sustainability of the community-based climate-resilient infrastructure – hand pumps, solar pumps, irrigation systems, electricity systems that were established with funding from CCCA-II are a concern that warrant further assessment and follow-up capacity building where necessary to provide sustainability assurances.

4. **CCCA Grant project agencies that have promoted selected technologies should be required to determine the level of adoption of the technologies, the necessary conditions for adoption, or reasons for rejection by the targeted user group/beneficiaries and the specific factors that influence the technology uptake and potential replication.**

The evaluation noted incomplete assessment to date of the extent of technologies adoption and the often complex answers as to the limits of or conditions needed for acceptance of the technologies. These results need to be carefully documented. Surveys of targeted users or beneficiaries in the Grant projects are needed in order to provide empirical information on the viability and replication potential for the technologies that have been piloted.

5. **CCCA should collaborate with UNIDO or other mitigation expert organisations on a review of government and private sector programmes involved with energy management in selected industrial sectors, drawing on the experiences and recommendations from the CCCA-II projects and the recent GEF industrial energy efficiency project in Cambodia.**

The government policy and programme implications from previous projects and the specific options available to stimulate and expand industry investments in energy management have yet to be identified. CCCA's mandate for mainstreaming climate change into government provides a platform to enhance the awareness, regulatory, fiscal, financial, marketing and corporate sustainability measures needed to encourage increased energy conservation and efficiency in industry. This requires a certain level of further advocacy and pro-active facilitation by MME and NGO partners to develop the business case for investment. The recommendations of recent projects provide an entry point for more targeted follow-up action within energy inefficient industrial sectors where opportunities for cost-effective energy management have been identified.

6. **The Cambodia National Biogas Programme (NBP) should develop a business partnership with appropriate livestock supply companies to expand pig farm biogas technology with modern livestock management systems, particularly in areas where water quality improvements are needed near farm operations.**

Commercial pig farming consumes a lot of electricity for ventilation and cooling of pig sties. Their wastes generate methane and contaminate ground and surface waters. The demonstrations funded at five farms under Window 3 suggest that biogas technology is financially viable and especially attractive from a public water quality perspective where pollution concerns exist. The experience to date is principally a transfer of successful technology from Thailand that needs several missing elements for scaling out: an industry code of practice, local technical support expertise to manage livestock flow-through and wastes, economies of scale, agronomic ventures and loan financing guarantees. CCCA should facilitate collaboration between NBP and BTIC at Royal University of Agriculture in professional development for biogas business, taking account of the key barriers identified in other similar biogas projects.[37] The head of livestock department for Kampong Speu says that there are some 250 similar farms in his province, the swine capital of Cambodia. The business model for medium-scale biogas utilization warrants further development.

7. **CCCA should adopt quality standards for project reporting and case studies and enhance capacity of grantees and CCD staff for concise, objective description of key results and useful evidence emerging from CCCA projects.**

Some of the case studies are promotional in style with limited information on specific results and lessons. The purpose of the case study is not always clear. It would be useful to have a consistent format that presents more technical and objective synthesis of the important facts and lessons, including peer-reviewed conclusions where possible. The grantee and CCD reports do not provide much explanation of site issues, results or sustainability and site inspections/BTORs by CCD, CCCA and UNDP seem to have an insignificant role. Perhaps they need to apply a standard *project performance and learning checklist*. Previous CCCA publications, aimed at climate change practioners provided a well-written synthesis of key advice from CCCA-I, and this approach should be considered for CCCA-II (see *Climate Change Practice Note – Factors of Change*, January 2014).

[37] https://www.unido.org/news/unido-and-key-stakeholders-provide-training-commercial-biogas-technology-cambodia

8. **CCCA, NCDD and CRDB should develop a practical decision support tool and related dashboard to assist local government staff in analyzing climate-resilient infrastructure options, drawing upon the extensive climate change project databases in Cambodia.**

The current piloting of Cost-Benefit Analysis to assist government decision making and to assess the economic and social basis for climate resilience investment is too onerous for most of the medium and small-scale infrastructure decisions. CCCA funding for one-time training on CBA for non-experts may have limited impact. Instead, simpler, lighter, rapid assessment tools can be used to assess climate-proofing options and practices, albeit in different site and ecosystem circumstances. The main focus is to ensure awareness of options, costs and maintenance requirements and to provide a structured process for vulnerability reduction. Adaptation and mitigation effectiveness data can be derived from the extensive climate change project databases and pro-forma rules adopted as general guidance on investment options and climate proofing additionality. Since 2010, well over 100 communes have been engaged in climate change mainstreaming through CCCA, LGCC and CCBAP; there is enough of a track record in this history to develop normative investment rules and informed choices for local climate change adaptation within participatory processes. Cost norms for standard infrastructure are currently used in government programmes to guide decisions and these can be modified to design customized Decision Support Tools, including simple analyses and dashboard aids for local authorities.

9. **CCCA and DCC should strengthen MOE's strategic focus on ecosystem-based adaptation in their primary role to maintain the protected area system at the local level.**

MoE and DCC should be leading by example in the implementation of ministry CCAPs and in advocating for climate change action within their service functions and making the case for budget support. The role of DCC needs to be clarified in relation to the rest of the ministry and the climate change mainstreaming strategy within the ministry. In particular, MoE/PDoE's limited resources and legal mandate should be more strategically focussed on maintaining ecosystem services in the protected area system for which they have a major responsibility. The PA system is under threat from development and climate change and with it the ecosystem services that support adaptation are declining. The primary climate change challenge for PDoEs at the field level is to support conservation of Community Forests and Community Protected Areas and related ecosystem-based adaptation. Reducing the rate of deforestation and development in and displacement of protected areas and community forests is probably their most important function rather than funding small-scale

infrastructure where they have little expertise or responsibility, or promoting environmental education in schools, arguably a duplication of other ministries.

10. **CCCA should develop a programme-wide Gender Action Plan that addresses measurable cross-cutting objectives and results from the multiple projects that are funded.**

Gender equity issues are currently addressed in limited and variable form within different projects. The gender issues are not well-defined at a programme level. A more comprehensive cross-cutting approach could be established that supports gender equity activities in an integrated manner across the programme.

11. **CCCA and UNDP should develop a CCCA-III M&E Plan that includes external evaluation of projects by sector on an annual basis, appointing a designated M&E Officer, and ensuring that the CCCA-III Results Framework has well-defined, measurable outcomes and reliable, pre-tested indicators.**

The CCCA-II programme design did not facilitate sufficient monitoring at the outcome level and tracking the relative contribution of project outputs to the three Programme Results. The Governance, Finance and Capacity results in the programme design did not have sufficient logic model clarity about the final conditions envisioned for June 2019, or the sub-outcomes and outputs that were 'necessary and sufficient' to produce such results. In addition, the few CCCA-II Grant project evaluations completed to date do not provide the detail to determine the quality of verified results on the ground. Evaluations of CCCA projects could be cost-effectively undertaken on a sector basis by national consultants contracted by UNDP. The core indicators of outcomes and outputs also need to be an integral part of the UNDP ATLAS Information Management System that tracks results and costs. All of this needs to be managed within an M&E Plan under the responsibility of a designated CCD M&E unit or officer with back-up mentoring support from CCCA and UNDP.

12. **CCCA should increase the monitoring and reporting on government, private sector and beneficiary contributions to the programme results**

The evaluation mission identified a high dependence on CCCA funding for government climate change activities and international engagements. It is not clear how much co-financing is provided by the government or the project beneficiaries, or if stakeholders have enough stake in the activities to ensure direct responsibility and duty for results. Tracking of national budget and donor climate change funding is underway at the national level. CCCA is also estimating private sector leveraging, but the specific beneficiary contributions at the government and

community levels are vague. More detailed accounting of CCCA co-financing would further assist transparency and the gradual long-term path toward less donor dependence.

4.3 Lessons Learned

Some general lessons were extracted from the review of CCCA-II programme implementation. Firstly, integrating climate change into Cambodian government operations and developing an effective knowledge management system is a long, slow process. CCCA has been working for ten years to build a strong, comprehensive policy framework. But there are still significant gaps in the process that require continued support, and uncertainties about the timetable for full implementation of Cambodia's Climate Change Strategic Plan.

Secondly, capacity development for enhanced climate resilience and reduced GHG emissions requires not only training human resources, but also fundamental changes in the institutions within which they work. Individuals can make a difference, particularly and sometimes only if they can influence how their organisation prioritizes and delivers on national commitments to addressing climate change. Implementation of climate change policy and strategy requires more than training and demonstration but also challenging modification of institutional processes. For example, ministry responses to climate change commitments need to be built into their organisational structure, priority-setting, workplans and job descriptions.

Thirdly, the introduction of appropriate technologies can be complicated. There are a host of factors, as shown by the CCCA projects, which affect the acceptance and adoption of new climate-resilient and low carbon technologies and practices. Technologies such as rice husk briquettes fuel substitutes, or no-tillage/cover crop farming, or bio-digestor electricity, or solar electrical micro-grids can prove to be viable alternatives but their wider adoption depends upon many social, financial, organisational and human factors and the readiness and incentives to shift to new methods and practices. The drivers of viable innovations and the strategies to facilitate them are poorly known in the CCCA projects.

Annex 1: CCCA-II Results Framework

Results Statement	Objectively verifiable indicators of achievement	Baselines 2014	Targets 2019	Means of verification	Assumptions
Overall Objective[38]: *Strengthen national systems and capacities to support the implementation and coordination of Cambodia's climate change response, contributing to a greener, low carbon, climate-resilient, equitable, sustainable and knowledge-based society* **Specific Objective**: Contribute to the implementation of the Cambodia Climate Change Strategic Plan.	1. % of CCAP annual requirement funded through budgetary and extra-budgetary resources 2. % of CCAP actions implemented with the support of the NCCC Secretariat or climate change working groups of line ministries 3. CCCSP implementation on track (incl. process and impact indicators)	1. No action (CCAP is being finalised) 2. No action (CCAP is being finalised) 3. The CCCSP is approved, national M&E framework is being finalized	1. 50% 2. 50% 3. 2018 CCCSP Monitoring Report is considered satisfactory by NCCC	1. CC Expenditure Review 2. CCAP monitoring report[39] 3. CCCSP progress monitoring reports as part of NSDP mid-term and final review	Climate Change remains a priority of Gvt & development partners. Climate Change Action Plans are approved High level support for the CCCSP as climate change is a cross-cutting issue in the NSDP

[38] Links to the European Development Cooperation Strategy for Cambodia 2014-2018 and UNDP's Strategic Plan (2014-2017): Outcome 1 "Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded" (Indicator: 1.4) and Output 1.4: " Scaled up action on climate change adaptation and mitigation across sectors which is funded and implemented" (Indicators 1.4.1 and 1.4.2)

[39] Including assessment of the gender component of the CCAPs

Results Statement	**Objectively verifiable indicators of achievement**	**Baselines 2014**	**Targets 2019**	**Means of verification**	**Assumptions**
Result 1: A clear governance and accountability framework is functional for the climate change response at national and sub-national levels.	1. National M&E Framework is approved and functional including gender disaggregated and poverty indicators 2. Number of ministries with institutional arrangement to manage their CCAP and contribute to CCTT activities 3. Number of ministries that demonstrate capacity to implement at least 50% of actions in their CCAPs and report on CCAP progress in line with national standards (incl. gender analysis) 4. Strengthen legal mandates for the NCCC, CCTT and NCCC Secretariat	1. A draft M&E Framework is under discussion 2. Two line ministries have CC working groups (MOWA and MRD) 3. CCAP is being finalised 4. Institutional and legal review is ongoing	1. M&E Framework approved and CCCSP progress report submitted in line with NSDP timeline 2. Ten line ministries 3. Ten line ministries 4. New legislation on NCCC, CCTT and NCCC Secretariat	1. M&E Framework, CCCSP Monitoring Report 2. ToR of the working groups, organisation charts of the ministries 3. CCAP Monitoring Report 4. Legislation (Royal Decree, and Sub-decree)	Collaboration with SPCR on the rollout of the M&E Framework, capacity development and CCAP funding and implementation in the line ministries
Output 1.1: Legislation on climate change institutions, including roles of sub-national administrations has been strengthened	1.1.1 Status of the legislation on climate change institutions	1.1.1. Institutional and legal review is ongoing	1.1.1. Recommendations to strengthen legislation on Climate Change institutions, including role of sub-national administrations are submitted to the NCCC and concerned ministries	1.1.1 Climate change institutional and legal review report, detailed recommendations to concerned ministries	

Results Statement	Objectively verifiable indicators of achievement	Baselines 2014	Targets 2019	Means of verification	Assumptions
Output 1.2: National and key sectoral M&E frameworks are developed and submitted for approval	1.2.1 Status of National M&E framework for Climate Change 1.2.2 Number of sectoral M&E plan developed and submitted for approval by concerned ministries	1.2.1 A draft M&E Framework is under discussion 1.2.2 None	1.2.1 National M&E framework finalized and submitted to NCCC 1.2.2 Five	1.2.1 National M&E framework document 1.2.2. Sectoral M&E Document	
Output 1.3: Capacity of key line ministries has been strengthened to manage their CCAP and contribute to CCTT/NCCC activities	1.3.1 Number of line ministries that receive inputs for inclusion of climate criteria in planning/screening procedures 1.3.2 Status of capacity development programme for climate change officials in NCCC, CCTT, NCCC Secretariat and line ministry working groups 1.3.3 Number of line ministries producing annual CCAP monitoring reports 1.3.4 Number of line ministries/agencies' receiving CCCA grant support for the implementation of CCAP priority actions	1.3.1 None 1.3.2 Draft capacity development plan for NCCC, CCTT and CCD is available and only some activities are being implemented 1.3.3 None 1.3.4 None	1.3.1 At least four ministries 1.3.2 Capacity development programme functional for climate change officials in NCCC, CCTT, NCCC Secretariat and line ministry working groups[40] 1.3.3 At least five ministries 1.3.4 At least seven ministries/agencies	1.3.1. CCD Annual Progress Report 1.3.2. CCCA Progress Report on capacity development 1.3.3. CCAP monitoring reports by line ministries 1.3.4. Grant Agreements between CCCA and Line Ministries	

[40] In cooperation with UNITAR (United Nations Institute for Training And Research)

Results Statement	**Objectively verifiable indicators of achievement**	**Baselines 2014**	**Targets 2019**	**Means of verification**	**Assumptions**
Result 2: Domestic and external finance effectively oriented in support of climate resilient, and low carbon development	1. Status of government – partners coordination mechanism 2. Status of Cambodia's direct access to Multilateral climate funds 3. Number of ministries benefiting from NCCC Secretariat support on financing sourcing and modalities 4. Status of public-private dialogue on climate change investments 5. Number of ministry planning and budgeting documents explicitly integrating CC	1. No formal mechanism in place 2. No direct access 3. Four (MOWRAM, NCDD, MAFF, MOE) 4. No formal mechanism in place	1. A nationally led, coordinated funding arrangement is functional 2. Cambodia gains direct access to at least 1 Multilateral Fund 3. Eight 4. A national dialogue platform formulates recommendations on facilitation of CC investments 5. At least one document in each of the ten priority ministries	1. Official recognition of the coordination mechanism; reports/minutes of the meetings available to partners 2. Accreditation certificate and fund approval letter 3. NCCC Secretariat Annual Report 4. Minutes / report of the public-private dialogue 5. Ministry PIP, Annual Work Plan, Budget Strategic Plan, programme budget	Donors are committed to coordination of their interventions Private sectors' interest in climate investments

Results Statement	Objectively verifiable indicators of achievement	Baselines 2014	Targets 2019	Means of verification	Assumptions
Output 2.1: Coordination mechanism is established and functional for climate change domestic and external finance and investments	2.1.1. Status of government-donor coordination mechanism 2.1.2. Status of mechanism for NCCC-Secretariat to respond to requests from line ministries and other stakeholders for financial and technical support on CC finance 2.1.3. Availability of dialogue platform with private sector on climate change 2.1.4. Percentage of NCCC, CCTT and NCCC Secretariat staff participating in preparations and involved in international negotiations on CC	2.1.1. there is no formal government-donor coordination mechanism 2.1.2. Not established 2.1.3. Not established 2.1.4 TBC	2.1.1. Government-donor coordination mechanism established 2.1.2. Mechanism in place for NCCC-Secretariat to respond to requests from line ministries and other stakeholders for financial and technical support on CC finance 2.1.3. A programme of dialogue sessions with the private sector is implemented 2.1.4. 70%	2.1.1. ToRs and minutes of the coordination meetings 2.1.2. Request Letters from Line Ministries to NCCC-Secretariat 2.1.3. ToRs and Minutes of the meetings 2.1.4. Attendance records	
Output 2.2: NCCC Secretariat procedures updated and applied in line with the requirements for National Implementing Entities of multilateral climate funds	2.2.1. Status of NCCC secretariat procedures	2.2.1. The first version of NCCC secretariat procedures is under pilot implementation	2.2.1. NCCC Secretariat procedures updated and applied in line with the requirements for National Implementing Entities of at least 1 of the multilateral climate funds	2.2.1. NCCC Secretariat procedures and audit report	

Results Statement	**Objectively verifiable indicators of achievement**	**Baselines 2014**	**Targets 2019**	**Means of verification**	**Assumptions**
Output 2.3: Climate change related expenditures are integrated into the government plans and budgets including the ODA database	2.3.1. Status of CC expenditure reviews against national CCAP 2.3.2. Quality and application of climate change tag in the ODA database managed by CDC/CRDB 2.3.3. Number of knowledge products on cost-benefit analysis of the climate change response in Cambodia	2.3.1. First Climate Public Expenditure and Institutional Review conducted in 2012 and updated in 2013 2.3.2. Climate change tag not consistently applied in the ODA database 2.3.3. Initial estimates and case studies integrated in the report on Climate Change Financing Framework (2014)	2.3.1. Annual CC expenditure reviews conducted and mapped against the national CCAP 2.3.2. Climate Change tag improved and consistently applied in the ODA database managed by CDC/CRDB 2.3.3. At least two knowledge products on cost-benefit analysis of the CC response in Cambodia	2.3.1. CC expenditure review 2.3.2. review of ODA database 2.3.3. knowledge products on cost-benefit analysis of CC response	

Result 3: Strengthened human and technological capacities to support climate change response	1. Status of procedures for management and exchange of climate change related information 2. Status of integration of climate change in schools and universities' curriculum 3. Mechanism is in place to identify and test relevant technologies for CCAP implementation 4. Availability and functionality of standards and quality assurance procedures for climate change publication and data	1. A climate change website exists but key data bases remain scattered 2. (TBC, basic CC element in school curriculum, 3 universities have piloted CC modules: RUA, PNCA, RUPP) 3. There is no mechanism in place 4. Not available	1. A metadata base listing climate change related information is functional and publicly available 2. 3-4 Universities + national curriculum for primary and secondary education include climate change 3. Support function established in the NCCC Secretariat for technology assessments and piloting 4. Standards and quality assurance procedures are in place and functional	1. Website 2. Review of curriculum and KAP Survey 3. NCCC Secretariat report 4. The procedures and NCCC Secretariat report;	Data owners are prepared to provide access to data and analysis; Key Community of Practice members (public and private) are willing to participate and share information; Universities are willing to include CC in their curriculum and research programmes.

Output 3.1: Standards and procedures for quality assurance of climate change awareness raising materials and knowledge management are developed	3.1.1. Status of standards for awareness-raising on climate change 3.1.2. Status of quality assurance procedures of key CC materials and technologies 3.1.3. Status of a protocol for management and exchange of climate data	3.1.1 Not established 3.1.2. Not established 3.1.3. Not established	3.1.1. Standards for awareness-raising on CC approved by NCCC 3.1.2. Procedures for quality assurance of key CC materials and technologies approved by NCCC 3.1.3. A protocol for the management and exchange of climate data is approved by NCCC	3.1.1. Standards document 3.1.2. Procedures for quality assurance 3.1.3. Protocol document	
Output 3.2: Partnership with education institutions is established to integrate climate change into curriculum development and research	3.2.1. Number of partnerships with universities on CC curriculum development and research	3.2.1. No comprehensive partnerships in place , but three academic institutions have been involved in CCCA pilots projects (RUA, RUPP and PNCA)	3.2.1. At least three partnerships in place with universities on CC curriculum development and research	3.2.1. partnership agreement between CCCA and universities	
Output 3.3: Lessons generated from innovative practices pilots are documented and shared with relevant stakeholders	3.3.1. Number of sectors/sub-sectors who have piloted innovative practices with support from CCCA grants 3.3.2. Number of knowledge products from research initiatives in key sectors 3.3.3. Number of knowledge sharing events for CC practitioners, researchers and policy-makers	3.3.1. 0 3.3.2. 0 3.3.2. 1 per year	3.3.1. At least four sectors/sub-sectors 3.3.2. Four knowledge products from research initiatives in key sectors 3.3.3. Two knowledge sharing events per year	3.3.1. Grant agreements 3.3.2. Knowledge products 3.3.3. Knowledge event reports	

ANNEX 2: Final Evaluation Terms of Reference

Project Description

The Cambodia Climate Change Alliance (CCCA) - Phase 2 is an initiative led by the Ministry of Environment and supported by the European Union, Sweden and UNDP. The overall objective is to strengthen national systems and capacities to support the coordination and implementation of Cambodia's climate change response, contributing to a greener, low carbon, climate -resilient, equitable, sustainable and knowledge-based society. The specific objective is to contribute to the implementation of the Cambodia Climate Change Strategic Plan.

The CCCA Phase 2 programme focuses on three main drivers of change (results), for the period from July 2014 to June 2019:

i. Strengthening the governance of climate change
ii. Harnessing public and private, domestic and external resources in support of the CCCSP vision
iii. Developing human and technological capital for the climate change response

The programme combines technical assistance activities and financial support for pilot projects, through a grant facility (22 funded projects). The budget of the CCCA Phase 2 is USD 10.8 million.

UNDP is now looking to hire qualified and experienced consultant(s) to conduct a final evaluation of the CCCA Phase 2 Programme.

Overall Objectives of the Assignment

The overall objectives of the evaluation are:

To review and assess the overall achievements at 3 levels of development results (outputs, outcomes and impacts) of CCCA Programme (including grant projects) to date, as well as to identify opportunities and challenges related to design, implementation and management of CCCA and provide recommendations on any changes in approach that may be considered in the third phase of the CCCA Programme;

To assess how the CCCA programme is related to or complements other climate change activities;

To identify lessons learnt and impacts from the CCCA programme (including pilot projects), with potential for replication or inclusion in national or sectoral climate change policies; and

To what extent the programme contributed to the UNDP Country Programme 2016-2018.

Specific objectives:

The final evaluation will evaluate the status of progress, implementation and management process employed under each of the three results contained in CCCA Phase 2 Programme.

The specific objectives of the assessment are as follows:
To assess the overall development progress (outputs, outcomes, & impacts against the targets);

- Capacity development of grantees and their partners' system and institutions;
- Development of the adaptive capacity of target communities to adapt to climate change impacts;
- Integration of adaptation activities into local development planning, in a way that is consistent with decentralization reform (where relevant);
- Gender sensitivities in the CCCA;
- Generation of lessons learnt and sharing of this information with the CCCA programme;
- Review of the extent to which the planned project activities can lead to programme outputs/outcomes by project completion and suggestions on adjustments if required;
- Review and assessment of the adequacy of the budget and expenditures to date, and provision of recommendation going forward;

Relevance and suitability of the indicators in the result framework;

Extent to which the planned activities allow for attainment of programme objectives;

Strategies developed and implemented in addressing the key challenges faced in programme implementation;

Value for money against outputs produced;

To identify lessons learnt in relation to the design, implementation, monitoring and management of the CCCA grant facility. This includes providing recommendations to improve capacity development support to the grantees and partners to promote knowledge-sharing;

To identify lessons learned (including unsuccessful practices), and any best practices which should be fed into national or sectoral policies or have shown significant potential for replication;

In addition, the evaluation will seek to respond specific review questions developed for each of the three results.

<u>Result 1: Governance and accountability framework for CC</u>

To what extent has the CCCA intervention helped operationalize the governance and accountability framework for the climate change response at national and sub-national

levels, including legal aspects, M&E framework and implementation of the CCCSP by ministries?

Result 2: Climate finance

To what extent has the CCCA intervention contributed to orienting domestic and external finance in support of climate resilient, low carbon development? This should include a review of the work on national and sub-national budgets, external assistance, and initial engagement of the private sector.

Result 3: Human and technological capacities in support of the CC response

To what extent has the CCCA strengthened national systems and capacities for knowledge management on climate change?

To what extent has the CCCA strengthened national systems and capacities for education, research and innovation on climate change?

In addition, the evaluation should include a brief assessment for each of the sample grant projects visited (under results 1 and 3), as well as a section highlighting any strategic findings and recommendations for the grant portfolio as a whole.

Scope of Work

The final evaluation will be conducted in such a way to ensure that the key principles of UNDP Evaluation are fully respected. The evaluation will be independent, impartial, transparent, ethical and credible.

The following focused scope of works and criteria are covered by this final evaluation:

Relevance: to assess the relevance of the CCCA strategies and implementation arrangement, and national priorities for climate change response.

- To what extent does the CCCA intervention meets the needs of Cambodia?
- To what extent are the objectives of the CCCA Programme still valid and aligned with national priorities for Climate Change response?
- Are the activities and outputs of the CCCA Programme consistent with the overall objectives and goals of the CCCA programme?
- Related to activities and capacity level, was the programme timeframe (including each result) reasonable to achieve the outputs and outcomes?

Efficiency: to the extent possible, the Evaluation Team will compare the benefits (social, economic and related to national capacities) from the CCCA Programme with the budget to

assess how efficient the programme is. The Evaluation team will provide practical recommendations regarding how to improve the efficiency, as required.

- Have the use of UNDP as the interim Trust Fund Manager and the multi-donor trust fund approach resulted in optimum transaction costs and oversight?
- Were activities cost-efficient?
- Were outputs achieved on time?

Effectiveness: to assess how effective CCCA Programme is in achieving the objectives (outputs and outcomes), using the Result Framework as a basis.

- To what extent were the CCCA governance structures, in particular the Programme Support Board, effective in facilitating smooth implementation of the CCCA Programme?
- To what extent were the objectives achieved / are likely to be achieved by the end of the CCCA Programme?
- What were the major factors influencing the achievement or non-achievement of the objectives?

Impacts: CCCA aims to strengthen national capacities (Government and NGOs) for climate change adaptation. It should be noted that it takes significant time to improve or build adaptive capacity; therefore, the team should analyse both how adaptive capacity has been developed and how project achievements contribute to future strengthening of adaptive capacities.

- What were the changes resulting from CCCA intervention in the way in which Cambodia is addressing climate change issues?
- What were the impacts of the CCCA Programme (including CCCA funded projects) on adaptive capacities of target beneficiaries?
- What were the changes in the livelihood/behaviour of the local communities contributing to better adaptive capacity at the ground level?
- How many people have benefitted from the impacts by aggregated sex and groups

Sustainability: The evaluation will assess how the programmme achievements contribute to sustainability by engaging appropriate Government, non-Government and community level stakeholders.

- To what extent has the CCCA Programme contributed to nurturing Government ownership and leadership in implementing Climate Change initiative and sustaining the results of the CCCA Programme?

- To what extent are the benefits of CCCA funded projects likely to continue after its completions?
- What were the major factors which influenced the achievement or non-achievement of sustainability?

Coherence/Complementarity

- Does the CCCA intervention complement other CC initiatives implemented in Cambodia or are there any significant overlaps?
- Are the procedures and coordination among Development Partners harmonized and aligned to the principles of pool fund mechanism and country systems?

Partnership

- To what extent the CCCA intervention forged new or strengthened partnerships among different stakeholders (Government institutions, Development Partners, civil society/academia, CC practitioners etc...)?

Annex 3: Evaluation Matrix for CCCA Phase 2 Final Evaluation

Key Evaluation Questions	Indicators	Data Sources	Methods
Relevance			
To what extent does the CCCA intervention meets the needs of Cambodia?	• Usefulness of the project to targeted beneficiaries	• Progress reports • Stakeholder views of the project	- Assess demand for the activity - Interviews
To what extent are the objectives of the CCCA Programme still valid and aligned with national priorities for Climate Change response?	• Consistency with climate change policy/strategy	• Climate change national priorities • Stakeholder views of the project	-Consistency with climate change policy/strategy - Interviews
Are the activities and outputs of the CCCA Programme consistent with the overall objectives and goals of the CCCA programme?	• Consistency with CCCA goals and objectives	• CCCA strategic plan • Stakeholder views of the project	- Consistency with CCCA plan - Interviews
Related to activities and capacity level, was the programme timeframe (including each result) reasonable to achieve the outputs and outcomes?	• Progress to date relative to targets and schedule	• Progress reports • Interview data	- Assess progress relative to work plans
Efficiency			
Have the use of UNDP as the interim Trust Fund Manager and the multi-donor trust fund approach resulted in optimum transaction costs and oversight?	• Cost proportions for management and overhead • Quality assurance processes	• Project financial reports • Project progress reports • Spot checking reports	-Compare output costs and management costs - Interviews
Were activities cost-efficient?	• Cost per unit output • Management cost	• Project financial reports • Project progress reports	-Compare costs to outputs
Were outputs achieved on time?	• Conformance with schedule	• Project progress reports	-Assess any delivery delays and reasons for delays
Effectiveness			
To what extent were the CCCA governance structures, in particular the Programme Support Board, effective in facilitating smooth implementation of the CCCA Programme?	• No. of issues that arose • Adaptive management responses	• Project progress reports • Minutes of meetings • Stakeholder interview data	-Review documents and assess level of proactive management

Key Evaluation Questions	Indicators	Data Sources	Methods
To what extent were the objectives achieved / are likely to be achieved by the end of the CCCA Programme?	• Objectives indicators • Views of participants	• Project progress reports • Interview data	-Assess progress and estimate likelihood of achievement of targets against schedule
What were the major factors influencing the achievement or non-achievement of the objectives?	• Records of achievements • Views of participants	• Project progress reports • Interview data	-Interview project staff and beneficiaries
Impacts			
What were the changes resulting from CCCA intervention in the way in which Cambodia is addressing climate change issues?	• Changes in Cambodian responses to climate change caused by project	• Project progress reports • Interview data • Site observations where relevant	-Assess changes in baseline practices that are linked to the project
What were the impacts of the CCCA Programme (including CCCA funded projects) on adaptive capacities of target beneficiaries?	• Institutional changes • Trainings completed • Changes in practices	• Project progress reports • Interview data • Site observations where relevant	-Assess changes in organisational and human capacity generated by the project
What were the changes in the livelihood/ behaviour of the local communities contributing to better adaptive capacity at the ground level?	• Livelihoods generated • Changes in practices • Changes in conditions	• Project progress reports • Interview data • Site observations where relevant	-Assess effects on livelihood development and improved climate resilience
How many people have benefitted from the impacts by aggregated sex and groups	• No. of beneficiaries • Gender disaggregated data	• Project progress reports • Interview data	-Review progress reports and assess the beneficiaries
Sustainability			
To what extent has the CCCA Programme contributed to nurturing Government ownership and leadership in implementing Climate Change initiative and sustaining the results of the CCCA Programme?	• Integration of project interventions into govt systems (mainstreaming) • Govt. actions resulting from the project	• Project progress reports on government activities stemming from the project • Interview data	-Assess the uptake of the project interventions into government organisations, processes and practices
To what extent are the benefits of CCCA funded projects likely to continue after its completions?	• Financial viability of the practices/ technologies • Beneficiary views of sustainability	• Project progress reports • Interview data	-Assess financial, institutional, cultural/social sustainability attributes in the project interventions

Key Evaluation Questions	Indicators	Data Sources	Methods
What were the major factors which influenced the achievement or non-achievement of sustainability?	• Financial viability of the practices/ technologies • Integration of adaptation actions into government systems	• Interviews with staff, partners and beneficiaries • Sustainability analysis from interview data	-Assess context and inferred causal factors related to project outcomes
Coherence/Complementarity			
Does the CCCA intervention complement other CC initiatives implemented in Cambodia or are there any significant overlaps?	• Linkages with other projects • Level of complementarity	• Project progress reports • Information on other climate change projects	-Analyze the extent of inter-project linkages
Are the procedures and coordination among Development Partners harmonized and aligned to the principles of pool fund mechanism and country systems?	• Compatibility of procedures • Administrative issues arising	• Project progress reports • Interview data	-Determine the level of administrative harmonization between development partners and CCCA operations
Partnership			
To what extent has the CCCA intervention forged new or strengthened partnerships among different stakeholders (Government institutions, Development Partners, civil society/academia, CC practitioners etc...)?	• No. and types of partnerships established • Short – long term tenure of the partnerships	• Project progress reports • Interview data	-Identify the partnerships created and assess characteristics of the partnerships

Annex 4: Draft Schedule for CCCA II Evaluation

25-29 March 2019 Meetings in Phnom Penh

Date	Time	Key person	Institutions/Ministries	Venue	Phone	Noted
Mon Mar 25	9:00am	Mr Chhum Sovanny	UNDP	UNDP office	012 919 041	confirmed
	11-12:00	- Mr Teang Chhayheang, Deputy Director of Planning Department - Mr Tuoch Siphat, Deputy Director of Community Development Department	Ministry of Rural Development (MRD)	MRD *please provide a driver who knows these locations*	012 925 888	confirmed
	2:30-3:30pm	- Mr. Julien Chevillard, Trust Fund Administrator - Dr. Tin Ponlok, Secretary General - Mr. Sum Thy, Director of DCC - CCCA Team	CCCA/DCC GSSD	CCCA Office	012 910 391	confirmed
Tues Mar 26	9:00-10:00am	Mr San Vannarith, Director of Investment Planning	Ministry of Planning	MoP	012 799 965	confirmed
	2:30-3:30pm	Mr Chhun Bunnara, Director Programme and Support Division NCDD Secretariat	NCDD Secretariat of Ministry of Interior (MoI)	NCDD Secretariat (Building T)	017 553 586 097 626 7777	confirmed
Wed Mar 27	2:00-3:00pm	Dr Hul Seingheng, Director Research and Innovation Center, ITC	ITC/RUPP	ITC/RUPP	092 750 724	confirmed
Thu Mar 28	9:30-10:30	H.E Ros Seilava and his focal points	MEF	MEF	012 909 786	tbc
	2:30-3:30pm	Mr Chreang Phollak, Deputy Director General of Policy and Planning	Ministry of Public Work and Transport (MPWT)	MPWT	012 961 199	confirmed
Fri Mar 29	9:00-10:00am	Mr Kim Lumangbopata, Deputy Director and CRDB/CDC team	CRDB/CDC	CRDB/CDC	017 517 471	confirmed

	11.00 am??	**HEALTH: / water borne diseases and dengue (project closed)**	**MOH**			
	1.30 pm??	***EU possible Friday pm?***	**or Apr 9 or 10**			
	tbc	**SIDA**	**Apr 9 or 10 anytime**			

1 - 9 April 2019 Field trips

Date	Time	Theme/project	Key Person, Organization	Venue	Phone	Noted
Mon, April 1	06:30 – 08:30	*Travel to Kampong Chhnang*		*travel*		
	08:30-10:30	**AGRIC** MAFF/ GERES climate-sensitive agriculture		Kampong Chhnang		
	10.30-11.30	**EDUC** MOEYS or MOWA/ eco-schools		Kampong Chhnang		project closed
	11.30-14.00	*Travel to Pursat*				
	14.00 -16.00	**ENERGY** MME / Off-grid solar solutions		Pursat		
	15.30-16.30	*Travel to Battambang and overnight staying in Battambang*		*travel*		
Tues April 2	8.00-10.00	**AGRIC** MAFF/GDA/ Agroecology		Battambang		
	10.00-12.00	**INDUS** MIH/ cleaner production technology		Battambang		
	13.00-16.00	*Travel to Siem Reap and stay overnight in Siem Reap*		*travel*		
Wed April 3	8.00-10.00	**TOUR** MOT/ clean city/ green hotels		Siem Reap		
	10.00-12.00	**TRANS** MPWT/ GHG inventory and pilot campaign on eco-driving				
	12.00-15.00	*Travel to Kampong Thom and stay overnight in Kampong Thom*		travel		
Thur April 4	8.00-10.00	**WATER** MRD / local water infrastructure for adaptation		Kampong Thom		

	10.00 – 14.00 4 hrs???	*Travel to Tbaung Khmum and stay overnight in Tbaung Khmum*		*travel*		
	15.00-17.00	**HOUSING** MLMUPC/ resilient housing		Tbaung Khmum		
Fri April 5	7.00-9.00	*Travel to Kratie province*		*travel*		
	10.00-12.00	**SECTOR?** CRDT/ integrated approach to adaptation / remote communities		Kratie		
	13.00-17.00	*Travel to Phnom Penh*		*travel*		
Mon April 8	7:30 – 10:00	**AGRIC** MAFF/ GERES climate-sensitive agriculture		Kandal – PP outskirts		
	10:00 – 12:00	*Travel to Kampong Speu*		*travel*		
	13:00 – 15:00	**AGRIC/ENERGY** Energy and Agriculture NBP/Medium scale bio-digesters pig farm		K. Speu		
	15:00 – 17:00	*Travel back to Phnom Penh*		*travel*		
Tues April 9	tbd or Apr 10	**EU mtg in PP**				
	tbd or Apr 10	**SIDA mtg**				
	tbd or Apr 10	**ENERGY** Energy/industry GERES / biomass fuel for industry		PP		
	tbd or Apr 10	**ENERGY** MOE/ ecoschool and e-bikes		PP		
Wed April 10		Consolidation of field notes, pre-mtg with CCCA to discuss data gaps and questions; remaining mtgs as required.				
Thur April 11		Presentation of findings				
Fri April 12		Final meetings if required				

ANNEX 5: List of Persons Interviewed

	Name	Position	Organisation
1	Mr. Chhum Sovanny	Programme Analyst	UNDP Cambodia
2	Mr Julien Chevillard	Administrator	CCCA
3	Ms Clara Landeiro	Climate Change Technical Specialist	CCCA
4	Mr. Soung Ung	Programme officer	CCCA
5	Mr. Sum Thy	Director Climate Change Dept.	MoE
6	Mr. San Vannakreth	Director, General Directorate of Planning	Ministry of Planning
7	Mr. Bul Delly	Deputy Director General of Technical Affairs	MOWRAM
8	Mr. Kong Chanveasna	Accountant	MOWRAM
9	Mr. Teang Chhayheang	Deputy Director, Dept. of Planning and Public Relations	Ministry of Rural Development
10	Mr. Chunn Bunnara	Director, Program Management and Support Division	NCDD
11	Mr. Sorn Sunsopheak	Deputy Director	NCDD
12	Mr. Armand Blondeau	Project Manager	GERES
13	Dr. Hul Seingheng	Director of Research and Innovation Center	Cambodia Institute of Technology
14	Mr. Tuoch Siphat	Deputy Director, Planning Dept.	MRD
15	Mr. Clemens Beckers	Attache, Natural Resources Management – Climate Change	EU Embassy
16	Dr. Tauch Chan Kresna	Deputy Director General, General Dept of Intl Cooperation and Debt Management	Ministry Economy & Finance
17	Mr. Poliveth Lao	Chief of Research Division, Dept of Macroeconomic and Fiscal Policy	Ministry Economy & Finance
18	Mr. Uy Sambath,	Chief of Environment and Social Office	MPWT Min Public Works & Transport
19	Mr. Bour Chhayya	Vice-Chief Environment and Social Office	MPWT Min Public Works & Transport
20	Mr. Kim Lumangbopata	Deputy director, Policy and Development Assistance Dept	CRDB/CDC Cambodia Development Council

21	Mr. Chea Sokpheng,	Aid Policy Officer, Policy and Development Assistance Dept.	Cambodia Rural Development Board
22	Dr. Kol Hero	Director, Preventive Medicine Dept.	Ministry of Health
23	Ms Lak Muy Seang	Deputy Director, Preventive Medicine Dept.	Ministry of Health
24	Dr. Vibal Chan	Project Coordinator	World Health Organisation
25	Ms Sombath Vimean	Preventive Medicine Dept.	Ministry of Health
26	Dr. Choeing Karo	Project Coordinator	Ministry of Industry and Handicrafts
27	Mr. Sophanna Nun	Director and Consultant	Green Move Consulting
28	Mr. Kop Kim	Head of Community	Samrong village
29	Ms Cheut Ker	Deputy Head of Community	Samrong village
30	Dr. Leng Vira		
31	Dr. Seng Vang	Director of DALRM	GDA, MAFF
32	Mr. Son Souanda		
33	Mr. Pheng Sarid		
34	Mr. Kan Veasna	General Manager	Misota Foods

No	**Name**	**Position**
CRDT		
35	Mr. Meas Viphou	Program Manager
36	Mr. Yon Ma	Project Coordinator
37	Mr. Doem Chunleng	Project Officer
38	Mr. Mich Kimkoemin	Project Assistant
Prahal Village, Ta Lo Commune, Bakan District Pursat province		
39	Mr. Kok Tin	Head of Electricity Grid Group
40	Mr. Chot Keul	Deputy Head of Electricity Grid Group
Reaksmey Sangha village and commune, Ratanak Mondul district, Battambang Province		
41	Mr. Chreung Ky	Conservation of Agriculture Farmer
42	Mrs. Choy Sinuon	Conservation of Agriculture Farmer
43	Mrs. Run Te	Conservation of Agriculture Farmer
44	Mr. Sogn Pros	Conservation of Agriculture Farmer
45	Mrs. Y Kong	Conservation of Agriculture Farmer
46	Mrs. Sok Ren	Conservation of Agriculture Farmer
47	Mrs. Suon Thavy	Conservation of Agriculture Farmer
48	Mrs. Touch Sokhoeun	Conservation of Agriculture Farmer
49	Mrs. Phlean Rany	Conservation of Agriculture Farmer
50	Mr. Sim Bunthoeun	Conservation of Agriculture Farmer
Battambang province		
51	Mr. Kan Veasn	General Manager of Misota food factory
52	Mr. Chip Vuthy	Staff of Misota
53	Mr. Keung Sokheng	Chief of Office of Industry and Handicraft
54	Mr. Thab Savuth	Deputy Chief of Office of Industry and Handicraft
55	Mrs. Ho Dany	Deputy Provincial Director of PDIH
56	Mr. Sok Kun	Deputy Chief of Office of Standard of PDIH
57	Mr. Cheung Von	Deputy Chief of Office of Standard of PDIH

58	Mr. Tim Bamrong	Deputy Chief of Office of Industry and Handicraft
Ratanak Village, Sangkat Ratanak, Battambang city		
59	Mr. Lim Chan	Ice Factory Manager
Damrey Slap village, Damrey Slap Commune, Kampong Svay District, Kampong Thom		
60	Mrs. Kien Ban	Farmer
61	Mr. Seng Saron	Commune Council member
62	Mrs. Bo Hiek	Farmer
63	Mrs. Muth Nam	Farmer
64	Mrs. Keo Luoy	Farmer
65	Mr. Neng Ven	Vice Chief of Village
66	Mr. Nol Kong	Farmer
67	Mrs. Chhieng San	Farmer
68	Mrs. Bi Hien	Farmer
69	Mrs. Kieng Koeun	Farmer
70	Mrs. Chhit Kong	Farmer
71	Mrs. Tab Ley	Farmer
72	Mrs. Pang Lay Hoeun	Farmer
73	Mr. Kho Pros	Farmer
74	Mrs. Seoun Channy	Farmer
75	Mrs. Sman Kva	Village Committee Member
Sleng Village, Kdey Daung, Kampong Svay District, Kampong Thom Province		
76	Mr. Lo Lin	Village Chief
77	Mrs. Tes Yeng	Farmer/water tube well
78	Mrs. Po Sam Ol	Farmer
79	Mrs. Sok Phea	Farmer
Dam Re Village, Beung Char Commune, Sambo District, Kratie province		
80	Mrs. Um Dy	Member of Commune Council
81	Mrs. Sem Von	Assistant to Village Chief
82	Mr. Dong Channa	Member of Commune Council
83	Mr. Tha Nan	Member of Commune Council
84	Mr. Hul Siet	Chief of Dam Re Village
85	Mrs. Sem Sarem	Vegetable Farmers
86	Mrs. Ang Rina	Vegetable Farmers
87	Mrs. Men Sokha	Vegetable Farmers
88	Mrs. Lay Ok	Vegetable Farmers
89	Mrs. Men Sitha	Vegetable Farmers
90	Mrs. Hun Chenda	Vegetable Farmers
91	Mrs. Prang Sakhan	Committee member for water management
92	Mrs. Chan Sothy	Vegetable Farmers
93	Mrs. Khan Socheat	Water user
94	Mr. Han Sor	Village Vice Chief of Koh Dambang Village
95	Mr. Sem Sron	Village Chief of Koh Dambang Village
96	Mrs. Thanh Nary	Head of farmer association buying vegetable
97	Mr. Yan Yuth	Model farmer
98	Mr. Er Samaun	Farmer
99	Mr. Rath Sem	Farmer
100	Mrs. Men Sotea	Farmer
101	Mrs. Kong Seng	Farmer

Spean Chheu village, Beung Pruol Commune, Tbaung Kmum District, Tbaung Kmum Province		
102	Mr Tem Pu	Village member (house recipient)
103	Mr. Then Phoeul	House Owner
104	Mrs. Try Teang	Commune Chief
105	Mr. Meng An	Village Chief
106	Mrs. Srey Mao	Member of Commune Council
MLMUPC		
107	Mr. Chien Sokha	Project Officer
NBT in Kampong Speu Province		
108	Mr. Him Sambath	Technical Officer
109	Mr. Phuong Tara	Biogas Officer
110	Mr. Neak Lay	Biogas Officer
111	Mr. Tep Vichetmuny	Chief of Livestock and animal Health Office
O Neang Hing Village		
112	Mr. Cheang Touch	Pig farmer
113	Mr. Sok Chan	Farmer
Thmey Village, Peary Mean Chey Commune, Boseth DFistrict, Kampong Speu Province		
114	Mrs. Tang Kak	Biogas slurry project beneficiaries
115	Mrs. Top Son	
116	Mrs. Ouch Moch	
117	Mr. Kong Moeun	
118	Mrs. Touch Sak	
119	Mrs. Sieng Hip	
120	Mr. Sok Chan	
Prey Veng Primary School Phnom Penh		
121	Mrs. Chuon Sokunthy	Teacher for 7 grade
122	Mr. Phon Salin	Vice Director of Primary School
123	Mr. Song Tonh	Director of Secondary School
124	Mr. Buth Heng	Vice Director of Primary School
125	Mr. Krang Sophat	8th Grade Teacher
126	Mr. Chab Puthearith	9th Grade Teacher
127	Mr. Om Ton	8th Grade Teacher
128	Mrs. Tep Srey neang	9th Grade Teacher
129	Mr. Oeum Vanthan	7th Grade Teacher
Char Thmey Village, Anlong Snay Commune, Roleapha-ear District, Kampong Chnang Province		
130	Mrs. Pov Mom	Chicken raising farmer
131	Mr. Huot Vannara	PDAFF Staff
132	Mrs. Long Bunna	PDAFF Staff
133	Mr. Seak Soly	GERES
134	Miss. Math Maisam	GERES
Other		
135	Ms Johanna Palmberg	Counsellor, Embassy of Sweden
	Mr. Dara Doeun	Vice chief, policy and coordination, CCD
	Ms Seth Sopunnaleap	Vice chief, office of vulnerability and adaptation, CCD
	TOTAL (m/f)	**137 (55F)**

ANNEX 6: List of Key Documents Reviewed

CCCA Phase 2 Project Document, 2014

CCCA, Annual Project Reports, 2014, 2015, 2016, 2017, 2018

CCCA, Grant Facility for Implementation of the Climate Change Strategic Plan, window for Research and Innovation Projects, August 1, 2015

CCCA, Analysis and Recommendations of the Cambodia Climate Change Financing Framework, November 2014

CCCA, Letters of Agreement with Grantees.

CCCA, Management Responses to Key Recommendations, Cambodia Climate Change Alliance (CCCA) Phase II, Mid Term Review, January 2017

Cambodia Ministry of Health, "Strengthening country capacity to deal effectively with climate-sensitive vector-borne and water-related diseases and reducing the health impacts of disasters", Training Workshop for improving epidemiological and serological surveillance for dengue fever, Pursat Province, 1st – 2nd October, 2018

CCCA, Minutes of CCCA Programme Support Board Meetings, 2017, 2018.

Cambodia Ministry of Planning, Guideline for Sectoral Strategic Development Plan Preparation (Sept. 2018)

Cambodia Ministry of Planning, Guideline for Formulating National Strategic Development Plan (NSDP) 2019-2023 (May 2018)

Tech Chey and Vincent Lefebrve, Mid-term Review of CCCA Phase 2, Dec. 2017

Dr Katrina Lyne, Support for CCCA-2 Window 3 Climate Change and Health Research Project October 29 to November 2, 2018 Phnom Penh, December 2018

Mak Sithirith, Water Governance in Cambodia: From Centralized Water Governance to Farmer Water User Community Resources 2017

Ministry of Economy and Finance, Royal Government of Cambodia, Report on Climate Public Expenditure Review 2015, March 2017.

Ministry of Economy and Finance, Royal Government of Cambodia, Climate Public Expenditure Review, Jan. 2019.

NCSD, Dept of Climate Change, Summary Report, Knowledge-sharing Event, Cambodia's Response to Climate Change, 29-30 November 2016

NCSD, Dept of Climate Change, Climate Change Research and Practice in Cambodia, 05-06 Dec 2017

NCSD/MoE, Better Fuel, Better Future: How Private Sector Partnership Helps Cambodia Mitigate Climate Change and Burn Less Wood, GERES, 2018

Royal Government of Cambodia, Sustainable Development Goals (CSDG) Framework (2016-20130) 19 Nov. 2018

Hans Shnitzer, Mid Term of UNIDO Project: Reduce Greenhouse Gas Emission Through Energy Efficiency in Industrial Sector in Cambodia, Sept. 2013

STDoE, Vulnerability Assessment of Local People Living in and near Ramsar Site to Climate Variability and Change, 2018

Thusitha Suguthapala, Low Carbon Assessment for Electricity Generation in Cambodia, January 2019

United Nations, 2015, Country programme document for Cambodia (2016-2018)

UNDP, Draft country programme document for Cambodia (2019-2023)

Annex 7: Core Output Data for CCCA Grant Projects, updated to March 2019

Targets (output indicators only)	Outputs achieved to March 2019
CCCA Grants Window 1	**Implementation projects linked to ministries' CCAPs**
- At least 18 different types of adaptation activities and 5 different types of mitigation activities will be demonstrated, with 8,000 households as direct beneficiaries (at least 10% female-headed households and 10% ID poor households); - At least 1,000,000 USD in public and private resources will be leveraged by CCCA grant projects for adaptation and mitigation activities; - 400 provincial, national and local government staff will be trained on CC adaptation and/or mitigation (at least 20% female); - 9,000 community members will be trained on CC adaptation and/or mitigation (at least 40% female); - 30 knowledge products will be published (including e.g. flood vulnerability maps, guidelines for	• 46 adaptation and mitigation activities are operational (Entomological surveillance; Health Professional Training on Climate Sensitive Diseases; ELISA reader and washer machine and real time PCR machine for dengue; Awareness Raising Campaign on eco-driving; Traffic signs equipped with solar panel; ground water monitoring wells; drilling wells (observation wells); rain gauges stations; river gauges stations, meteorology station, canal rehabilitation; latrines, rain water collector, pump-wells, combined wells, home gardens; water stations; hygiene change agent (HCA); Women Climatic Platform, climate-resilient ponds; first aids kids, provision of school kits to the vulnerable school girls, lightning protector, thermometers, water filters, fans, solar pump connected with water container, water containers, Information boards, water distribution systems in schools, garbage bins, garbage cages, school ponds, latrines constructed and renovated linked with hand washing sinks, trees plantation, school gardens, ceiling fans, construction of a water release system, and demonstration sites of compost making; crops plantation, garlic leaves plantations with drip system and agro-clinics; resilient housing; 8 kW on-grid system for a Community School; solar battery charging station; micro grid system; and battery standalone solar system; e-bikes; billboards, and 50 educational banners, strengthening resilient houses with 27,338 households as direct beneficiaries (including 2.2% female-headed and 5.3% ID poor households); • 1,641,468 USD have been leveraged to date; • 2,021 government staff trained (22.3% female); • 55,992 community members trained (33.1% female); • 37 knowledge products including e.g. three clinical guidelines on leptospirosis, melioidosis and schistosomiasis, 1 Guidance document for National and sub-national GHG Emission Inventory for Road Transport in Cambodia; 1 National GHG Inventory Report for Road Transport in Cambodia and 1 technical report on rapid GHG EI for road transport in Siem Reap, 1 database including 2 additional years of chronic water cycle data in addition of historical data, thesis of 4 students on water management, 1 vulnerability map and 1 standard technical guidelines for climate-proof rural infrastructures, Training Curriculum on Climate Change (Grade 10-12), Guidelines of

CC resilient infrastructures, CC curriculum for schools, etc.); - At least 12 Government policies or regulations will take into account evidence produced by CCCA projects (for example guidance on control and treatment of climate-sensitive diseases)	diagnosis of the climate vulnerabilities and assessment of adaptation strategies to climate change using Participatory Approach, Manual on climate-smart agriculture practices, diagnostic and Implementation, training manual on national GHG inventory in industry sector and training manual on cleaner production and environmental management system, 1 technical guidelines for resilient housing, 1 architectural design plan for resilient housing, 4 Radio/TV talk shows, 3 video features, leaflet on Green Hotel Standard; Facebook on Youth Ambassadors for Clean City, Video clip on Cambodia Green Hotel Standard; 3 Brochures and 3 posters on environmental education for school children and public awareness raising, ToT training manual and e-bike assessment report in Phnom Penh, Report on Low Carbon Technology in Cambodia and Policy Recommendations, energy balance sheets for 2010 and 2017, and MAFF screening tool for CSA. • 12 government policies or regulations including: Action Plan (2019-2021) for Tourism National Policy (2016-2030); Cambodia Green Hotel Standards; standards for rural water infrastructures, national curriculum for higher secondary schools, Emergency Preparedness and Response Plans in Kampot and Kep provinces, 5-year policy and strategy for rural development sector; clinical guidelines on climate sensitive diseases (3); technical guidelines for resilient housing and MLMUPC 5-year plan (integration of resilient housing).
CCCA Grants Window 3	**Projects focussed on innovation and research**
- At least 5 different types of adaptation activities and 3 different types of mitigation activities will be demonstrated, with 162 households as direct beneficiaries (at least 4% female-headed households and 7% ID poor households); - At least 300,000 USD in public and private resources will be leveraged by CCCA grant projects for adaptation and mitigation activities; - 120 provincial, national and local government staff will be trained on CC adaptation and/or mitigation (at least 20% female);	• 14 types of adaptation activities, 2 types of mitigation activities and 2 types of mixed activities are operational (4 resilient drilled wells; 4 solar powered-water supply system and 3 cycle climate adapted agricultural techniques, 4 saving groups, and strengthening community-based eco-tourism, one boat for access to market, 6 lagoon medium scaled biodigesters connected with electricity generator, 3 liquid slurry huts; 5 compost stores; 3 household compost store, 3 farmer field schools, Community-based waste management initiative in Boeung Tompun, Conservation Agriculture cropping systems for the annual upland crops (maize, cassava, soybean), rice husk briquette, LOCAL tool for forest cover mapping, and development of vulnerability index in heath sector, 3 agricultural cooperatives (AC), 11 field experiments to adapt to climate change, and one rice husk briquette site, with 1,037 households as direct beneficiaries (including 21.6% female-headed and 19.2% ID poor households); • 718,190 USD have been leveraged to date; • 232 government staff trained (8.2% female); • 672 community members trained (38.1.4% female); • 21 knowledge products including e.g. Review on Existing Climate Change Adaptation Options; Literature Review on Vulnerability Assessment Method and Tools; Technical report on Climate Change Vulnerability Assessment in

- 350 community members will be trained on CC adaptation and/or mitigation (at least 30% female); - 30 knowledge products will be published (including e.g. flood vulnerability maps, guidelines for CC resilient infrastructures, CC curriculum for schools, etc.); - At least 5 Government policies or regulations will take into account evidence produced by CCCA projects (for example guidance on control and treatment of climate-sensitive diseases)	Steung Treng Ramsar Site; note books with educational messages on climate change and gender; Agricultural Training Manual; Designed architectural plan of lagoon medium scale biodigesters; 4 Posters on Best Practices on Waste Management Service; Brochure on Municipal Solid Waste in Phnom Penh; Spatial Assessment of the Potential Agricultural Residues Supply From Agro-Industries; Spatial Assessment Of The Woodfuels Consumption And Greenhouse Gases Emissions From Garment And Brick Industries; Technical Feasibility Report On Palm EFB Transformation Into Different Kind Of Fuels; A Decision Support Tool; development tool to assess the effectiveness of health adaptation to climate change; and Literature Review on Climate Change and Health in Cambodia; Development of vulnerability index in heath sector; Land Cover Monitoring Review; LOCAL tool for forest cover mapping, video Spot, video documentary, information folder, standing panel and leaflet on medium-scale biodigester technology. • 3 government policies are influenced by CCCA projects to date including Policy on Biodigester Development in Cambodia 2016-2025, Solid Waste Management Strategy for Phnom Penh, 3-year PDOE investment plan in Stung Treng,

Source: CCCA Secretariat

ANNEX 8: Notes from CCCA-II Project Site Visits and Interviews

Site Visits to 9 CCCA Grant Projects

Date	Organiz.	Budget	Title	Observations from field visits
Apr 1	MME	250,000	Promote Low-Carbon Technologies in Energy Sector	The review team visited Prahal Village, Ta Lo Commune, Bakan District Pursat Province and met with Mr. Kok Tin, Head of solar micro-grid system and Mr. Chot Keoul Deputy Head. The micro-grid station was completed in 18 August 2018 and operated in November 2018. The cost of construction was $48,000. The fee was collected so far only from the months of February and March 2019. The fee calculation was based on number of lamps and fans used. The fee for a lamp is 2,500Riel/month or $0.625/month and fan charges cost 10,000Riel/month or $2.5/mth. Community-managed solar micro-grid system designed for 74 HHs, currently serving 31 HHs on a 9km grid in Samrong village. User fees to cover the costs of operation ($2.50/month), but the batteries are depleted earlier than expected even with 31 HH connections due to overuse (current restriction on number of lights and appliances) by some HHs (using rice cookers, etc.) Need to either enforce restrictions on use or charge more than the standard flat rate of 10,000 riels/month. Some electrical leakage problems noted and renewable power is dependent on weather conditions. High management requirements with a community system, having to collect fees each month and manage users. Community leaders manage the system but a local technician is on call to fix problems, mostly related to HH connections. Micro-grid is suited to more compact settlements and communities with strong organisation and leadership. Battery charging stations at other locations are reported to be viable and sustainable.[41] The communities requested the project to support electric wire around 5,000m more so that the electricity can reach to all 74 households. There were some challenges related to thunderstorm and lightning.
Apr 2	GDA & CASC	149,960	Ecological Intensification	The community started to involve with the project from 2014. The project provided cover crop seeds at the beginning of the project. The following season, the project sold seeds to farmers with

[41] See CCCA, Low Carbon Technologies for Electricity Generation Case Studies.

	(Window 3)		and Soil Ecosystem Functioning	$1/kg and one hectare, farmer requires 20kg of cover crop seeds. The owner of the farm was responsible for growing cover crop and plowing for incorporating into the ground. Farmers also applied chemical fertilizer around 70-100kg of DAP and 15:15:15. There were some challenges to find labor for application of herbicide and water availability. The results using cover crop were improved soil structure, fertility, and improved grain weight. In addition, most participating farmers demonstrated that they have better profit up to 30% (increased yield around 2 tons of maize). If farmers produced cover crop seeds, the project will buy back. However, many farmers were skeptical about buying cover crop seeds in the future after project completed. There is a lack of support from government and only private sector has been supported in providing technology and market. Visited Sangha village and met 8 farmers. Research project and demonstration work with 110 HHs on a total 350 ha to promote no-tillage farming (through use of private sector service providers), selected cover crops and crop diversification to enhance soil fertility. Sound research evidence for the technology package; all 110 participant farmers were engaged in the technologies. Cost of hiring the custom tillage and planting service was $ per crop cycle. Three issues stated: (i) farmers not always convinced about enhanced yield and benefits of no-tillage and cover crops system, (ii) technology did not always fit well and they had to adjust the support system to suit the targeted 110 beneficiaries, (iii) some uncertainties about the ongoing availability of the preferred cover crop seeds. End of project farmer survey may be needed to determined actual uptake of the technologies.
Apr 2	MIH	250,000	Demonstration of Best Practices on Available Technology for Contribution to Climate Change Adaptation and Mitigation in Industrial and	There were 17 companies engaged and 10 were provided CCCA support for demonstration of various low carbon technologies. Visited Misota Foods (dried fruit), a new company in Battambang that has installed crop residue pellet-based boiler for back-up power operations. Production not yet operational. No CCCA funding to date ($5k planned subsidy). The project was started with ideas and support from UNIDO. The boiler of factory was run by gas and firewood as alternative. The next stage the project will use wood pellets. The company contracted UNIDO to use petroleum gas, but the cost of operation was more expensive than wood pellet. However, imported wood pellet is more expensive than the local wood pellet,

			Handicraft Sectors	which is produced from agricultural residues such as maize stem and cop, risk husks, cassava, etc. Visited Lim Chan, Small Enterprise Ice Making Factory in Ratanak Village, Ratanak Commune, Battambang Province. Ice plant to observe newly replaced ice condenser ($10k provided by CCCA). Ice production increased from 5 to 7 blocks per hr (50% increase) and 20-30% reduction in electricity costs, according to the owner.
Apr 3	MRD	250,000	Climate-Proof Integrated Rural Community Development in Kampong Thom Province	Visited Damrey Slap village, Damrey Slap Commune, Kampong Svay District, Kampon Thom Province and Sleng village, Kdey daung Commune, Kampong Svay District, Kampong Thom Province. Well construction (14) and public latrines provided in drought-prone villages, and home gardens promoted for 16 HHs. O&M of the wells is mostly through water user groups but no process yet to collect fees; few expectations of any ministry maintenance support. Some wells have weak yield and run dry by the end of the day but recharge overnight. Home gardens only taken up by 2 of 14 HH beneficiaries, one of which has sold produce to the market. No gardens operating during the hot weather. Local people appreciate the new water supply since they have to purchase or haul water during the dry season but uncertain whether some wells will last through a long dry season. No innovative aspects were apparent. Sustainability can be questioned.
Apr 4	CRDT (Window 3)	149,999 (105,00 in ProDoc)	Promoting Resilience in Agricultural Production and Enterprises for Food Security among Subsistence Farmers along the Mekong	Visited remote Damre/Kotombong villages on Mekong River and met with 23 people. Solar water pump systems were installed since 2016 at three villages, including site demonstrations by a total 14 model farmers. At Danre village, 31 HHs are connected to a 500m distribution line served by a floating pump in Mekong River. Water user group appears to have good leadership and fee collection process. The fee collection for January and February 2019 was 264,000Riels. The cost of 1m^3 for farmers growing vegetable was 1,000R. If farmer growing vegetable for business, the fee was 500Riel/m^3 the contribution is just for incentive and encouraged farmers to produce vegetable for commercial purpose. However, there were only 12 households could grow vegetable because water was not strong enough to reach all household for growing vegetable. Most leafy vegetable was produced between 20-40kg/day supplied to near by market. There are 4 model farmers at this location with good vegetable production and significant income for each farmer, helped by agricultural cooperative committees that assist in marketing. Some issues with capacity and over-use of the water supply tanks in the evenings and lower pumping volumes in

				cloudy conditions, but generally operating effectively. The capital cost, averaging $500 per HH, may limit replication. Farmers through the interview have indicated that they have improved their income around 10% from this solar pump water. They used to spend around 500,000 Riels/month and after using this water they just decrease their expenditure to 400,000Riel. Before the project, most farmers in the area were growing vegetable for home consumption. However, after having water from solar pump, the farmer can grow for commercial purpose. And normal farmer (not model farmer) can generate between 3000 to 5,000riel/day. The water user committee consists of 3 members as a head, an accountant, and a service officer. This committee was elected from 31 household member. The mandate of committee was two years and the old member can stand for next election. The committee has no salary support, but can use water for free and monthly telephone card top up. However, the fee budget was distributed after completion of the term of committee by dividing as follows: - 15% for operation - 15% for village development and conservation - 50% for repairing and maintenance - 20% for dividing to the three committee members The project activities were included in the CIP, but so far, there is no new support from the commune investment fund.
Apr 5	MLMU PC	250,000 (332,500 in ProDoc)	Promote the Development of Urban and Rural Settlements Resilient to Climate Induced Disasters	Visited Spean Cheu village, Beung Pruol Commune in Tbong Khmum district, the location of one of three new houses built for selected poor households. Most houses are built primarily of bamboo and last 3 years; these are made of concrete, steel floor support and concrete-based boarding. No innovative aspect was apparent. Cost of the new houses was $8,000-9,000 each, and repairs were also completed on four existing houses. Local people indicated that this house construction standard is not affordable for most families. Project staff also advised commune council on integration of adaption measures in the commune investment pan, although no additional funding has occurred to date. The concrete and steel houses are more flood and fire-resistant that regular bamboo houses, but the opportunities to improve flood protection using local, more affordable timber bamboo were not considered. The selection of beneficiaries was based on ID Poor I and II. The construction engineers were coming from Phnom Penh. According

				to the commune chief, the construction was at the right geographic location. However, the cost of house was too expensive for replication and required the project study to reduce cost to affordable price by the communities. The standard house size was also too small for large families with 5 members or over. The standard house should be 5m x 7m and bathroom and kitchen should not be constructed inside the house.
Apr 8	NBP (Window 3)	149,990 plus top-up	Medium scale Bio-digester Innovation for Smart Environment	Visited a large pig farm raising 3500 piglets at ONearing Hing village in Kampong Speu. Waste is discharged into a large bladder tank that generates biogas for electricity and some cooking gas. He has 2 large generators that have been modified to burn biogas. The capital cost was $60,000. The electricity is primarily used to drive large fans and ventilation system necessary for cooling the piggeries (5 bldgs). After 2.5-3 mths of waste accumulation, the farmer is able to run the operation completely on biogas. Electricity cost savings are significant – see handout provided ($100,000 per pig cycle – 5/6 mths). About 50 farmers surrounding the farms and also from other near by provinces such as Takeo and Kampot provinces were invited to visit the farm. The provincial livestock chief of office says there are 250 such pig farms in the province. The technology and financing was provided by the Thai company that supplies the inputs, piglets, vaccinations, feed, technical support, etc. and buys the pigs ('CP' Company). CP also services the tank for 5 years. $5 sq m installation cost. NBP is the facilitator but CP provides technical support. NBP was also given additional money to engage discussions with banks. Note – improvements in groundwater quality are not known. Previously, the wastes were discharged to a settling basin where the rubber bladder tank is now located. (Reduction in waste loading to water sources may be a large benefit at other sites) There were some challenges by farmers related to financial support for replicating the biogas due to the requirement of collateral by MIFs. Most farm communities have no ability to find collateral to back up the loan from MFIs. Visited local communities where biogas slurry in Phum Thmey khang Tbaung village, Peary Meanchey Commune (obtained from a farm 2 km away) is used along with compost in vegetable gardening, and where NBP has installed small biodigestors with waste from cows in 10 HHs – 6 biodigesters. HHs manage to save about 400,000 Riel ($100) per year in fuelwood costs. Replication is limited by cost of biogas system. Yield has increased almost 70% since involved the project and can grow vegetable in off-season. According to farmers interviewed, the cost of construction of one bio-digester with 4m^3 was $520 (communities contributed $320) and can

				produce one tons of organic fertilizer per years. The gas from bio-digester was used for cooking and sometime used for lighting in the house during the electric cut-off. The slurry was used for producing compost mixing with other household kitchen waste.
Apr 8	MOE	350,000	Develop and test low carbon resilient approaches and options in urban areas	Five 'eco-schools' were provided with various assistance for a green school. Visited Prey Veng school near outer Phnom Penh where a variety of infrastructure improvements were made to the school: solar power, tree planting, vegetable garden, compost preparation, waste management, TOT approach to training teachers about climate change, some rainwater harvesting from roof top, e-bikes study by Education authority. Now have lighting and ceiling fans for all 18 classrooms. 2 toilets and sinks, and major tree planting and landscaping project. Water shortage is the main problem. Many of the mature trees have died (planted in dry season) and an extensive irrigation system was installed in another part of the front garden. No student involvement in the gardens – all work done by many contractors. Media videos and films also completed by contractor. Also prepared an environmental 'training curriculum' and manual done by a consultant in collaboration with dept. of education in MOEYS. The project's consultants have trained five TOTs from 5 schools and five staff from MoE and 1,200 students. The eco-school consultants were responsible for all training and monitoring the teachers.
Apr 9	MAFF GERES	450,000	Increasing Resilience to Climate Change for farmers in rural Cambodia: through Climate Smart Agriculture practices	Visited Char Thmey Village, Anlong Snay commune, Rolea Pha-ir district, Kampong Chnang province. The benefited farmer has received 37 three week old chicks and chicken house roof (4mx8m) from the project. The participated farmer has received also hand-on training. The farmer can sell around 14-15kg/month of chicken (or around 6 chicken per month) and can get income of 50,000 – 100,000Riel/month. Shed and pen chicken raising supported by the project, and micro- irrigation. Small interventions over traditional practices. Micro-irrigation system visited at farm site with a large pond and fully irrigated vegetable farm. GERES trained 35 provincial staff on CC vulnerability and climate-smart agriculture. 100 farmer beneficiaries (30% women) were reported. Some discrepancies between project statement of assets distributed and farmers' view of benefits. Agro-clinics set up in rural stores at two locations that also sell agricultural inputs. Training provided to storekeeper to assist farmers in selecting products. Extension officer from PDAF also

				attends the store (desk and small library provided) two times per week to provide advice to farmers. GERES is providing 17mth support for the clinics; provide per diem and travel expenses to extension officer. More than 100 farmers have reportedly been consulted so far. GERES feels that this activity has the most potential for scale-up. {sustainability?] Visited Pesticide and livestock medicine store in Pahy Village, Andong snay Commune, Rolea Pha-ir district, Kampong Chnang Province. The owner of the shop has been trained by the PDAFF to handle the pesticide and livestock medicine and has received certificate for open a formal store. The vaccine was good sale during the wet season, but not well sale during the hot season. Visited vegetable farmer field in Spok Reach village, Anlong Snay Commune. The farmers were started with the project since March 2018, but did not receive any training for growing vegetable and still apply by own understanding. The project provided only drip irrigation tube. The farmers can sell around 10kg of leafy vegetable per day and got income around 20,000Riel to 30,000Riel/day. The farmer was expressed interest of learning of vegetable production, especially related to plant protection.

Note: some of the projects include research, training and mainstreaming activities not discussed above.

Interviews with staff of 6 CCCA Window 1 and 3 Grant Projects

No.	Grantee	Budget	Project	Notes from Project Interviews
Mar 29	MOH	400,000	Strengthening country capacity to deal effectively with climate-sensitive vector-borne and water-related diseases and reducing the health impacts of disasters	The project focused on 3 components – vector-borne diseases, water-borne diseases and disaster risk reduction. Capacity development in 3 provinces with outputs on national dengue training, scale-up health professionals including technical guidelines, and alignment of climate change and disaster risk reduction plans. Trained 492 health professionals (71=F) in 17 trainings, and 207 (20=F) on water borne diseases. However, no post assessment of training impact and no monitoring of guidelines' usability, applications. Capacity of lab was enhanced. The approved GEF project on CC and Health Adaptation will provide some follow-up continuity.

Mar 29	MOH (Window 3)	91,000	Vulnerability and Impact Research Targeting Usability and Effectiveness (VIRTUE)	The project was designed to improve knowledge of the likely health impacts of climate change in Cambodia, identify areas of increased risk, and improve monitoring and evaluation of projects designed to address health impacts. Three components completed: 1) Literature review on climate-sensitive health risks in Cambodia; 2) Development of a climate risk index for health to identify areas most at risk of health impacts of climate change, and factors contributing to risk; and 3) Development of a tool or framework for monitoring and evaluation of climate change adaptation in the health sector in Cambodia.
Mar 28	MPWT	250,000	Green House Gas Emissions Inventory and Mitigation Plan for the Road Transport Sector in Cambodia	The project undertook vehicle GHG inventory and mitigation in Siem Reap. The approach was new to the ministry and involved training of staff, leaflets/banners, and billboards. Lessons learned: how to collect GHG data from vehicles and how to take action to improve traffic efficiency and reduced GHG emissions and traffic congestion. A CBA study involved training of 8 trainers on simplified CBA method to assess climate change measures on public works projects. They now have an idea about the costs and benefits of climate resilience in project designs. They trained local staff in Siem Reap, who in turn trained 90 people from Prov districts (1 engineer and 1 planner each). They now want to expand this to many more provinces. Cost data on climate proofing measures needs to have more precision. (Measurable results from adaptation and training are not well documented so far.)
Mar 25	MOWRAM	350,000	Increase the Knowledge of the water cycle in order to reduce vulnerability to Climate Change hazards through an integrated approach in 3 districts of Oddar Meanchey province	Project involved strengthening provincial authorities on climate change adaptation and climate proofing water infrastructure and engineering training in cooperation with ITC and Cambodia Red Cross. River gauge stations, GW pumping tests, MET stn and wells installed and 4+km canal rehabilitation. Six villages with enhanced water supply (Chong Kal district) for 750HHs (rainy season) – 120 HH (dry season) restored irrigation. Increased agricultural output, but no clear evidence of functional water user groups. Monthly collection of hydro data to be continued by the Ministry but is this realistic? Questionable sustainability. Completion report 19 April.

Mar 27	GERES (Window 3)	143,790	Fuelling the low carbon development of Cambodian manufacturing industries by valorizing agro-industries' biomass residues into energy	They started with the idea of palm industry crop residue for brick factories; ended up on rice husk crop residue for briquettes as a fuel for garment industry. GERES and H&M Clothing company (who added $50K co-finance) collaborated to develop rice husk briquettes with two major rice millers.[42] GERES worked with rice millers, and H&M used their position and influence with garment factories to encourage and assist a switch in energy sources from wood and towards rice husk briquettes. Rice millers have found an economic use for husks. The project has advanced the knowledge on feasibility and issues in converting garment factories to use of crop residues as energy sources. According to GERES, cost barriers and few industry incentives currently limit the potential to expand the technology.
Apr 9	NCDD/ CCD	100,000	Living with Disaster Risk Reduction and Climate Change in Coastal Areas	Project not visited by evaluation mission. Report provided by CCD staff based on recent site visit to Kampot project. Information updates the current status of the water supply facilities and programme. The 2016 Evaluation Report found that the project successfully achieved all outputs and outcomes, effective use of the budget, and built a sustainable mechanism beyond project end. The verbal update from CCD indicated that there are some problems with the pond water source, and some communication issues about the need to pay for water. They are also reportedly finding that the incentive for O&M of the water system may not be sufficient. CCD and CCCA staff preparing a case study report.

[42] "As of 2018, it is estimated that 70% of the garment industry's thermal energy is unsustainably provided by natural forests, sourced either from forest conversion for agriculture or from illegal harvesting. To switch to cleaner production of garments in Cambodia, a number of barriers need to be overcome, including a lack of large scale supply of sustainable biomass fuels, and a lack of incentives for factories to switch sources, leading to low profitability of sustainable energy plantations." NCSD/MoE, **Better Fuel, Better Future: How Private Sector Partnership Helps Cambodia Mitigate Climate Change and Burn Less Wood**.

Annex 9: List of Training

CCCA Phase2 (Jul 2014-Apr 2019)

Date	English Title	Event date	EventType	Province	No.	Female	#day
Result 1							
24-Jul-15	Training Workshop on NAP Process and Climate Finance Readiness Programe	24-25 June 2015		Siem Reap	48	6	2
07-Oct-15	Sub national mainstreaming in 3 provinces	7-9 Oct 2015	Training	Pursat, Kampong Cham, Kampot	18	2	3
03-May-16	Subnational mainstreaming in Takeo province	04-May-16	Training	Takeo	10	0	1
28-Apr-16	Subnational at Oddar Meanchey	21-Jul-16	Training	Oddar Meanchey	10	0	1
10-Mar-17	Training on mainstreaming climate change into commune planning	10-Mar-17	Training	Svay Rieng	13	5	1
23-Mar-17	Training on mainstreaming climate change into commune planning	23-Mar-17	Training	Koh Kong	18	2	1
06-Apr-17	Training on mainstreaming climate change into commune planning	06-Apr-18	Training	Siem Reap	23	2	1
03-Apr-18	Training Workshop on climate change vulnerable, impact and adaptation assessment	3-5 Apr 2018	Training	Phnom Penh	52	15	3
29-Jan-19	Training on M&E to DCC (internal)	29-Jan-19	Training	Phnom Penh	10	2	0.5

19-Mar-18	Training on M&E to DCC (internal)	19-Mar-18	Training	Phnom Penh	5	1	0.5
16-Jun-18	Training on M&E to DCC (internal)	16-Jun-18	Training	Phnom Penh	3	1	0.5
25-May-18	Training on mainstreaming climate change into commune planning	25-May-18	Training	Phnom Penh	14	2	1
				Total	**76**	**8**	**6**
Result 2							
15-Dec-15	Training on international climate finance and ODA database	14-15 Dec 2015	Training	Preah Sihanouk	27	17	2
09-May-16	Training on public policy and finance	9-11 May 2016	Training	Phnom Penh	30	7	3
Jun-16	Training on Climate Responsive Budgeting to Finance and Planning Staff of Two-Sectoral Ministries and MEF	Jun-16	Training				
20-Sep-16	Training on tracking climate financing in Cambodia ODA database to the development partners	20-Sep-16	Training				
23-Jan-17	CCCA Grant Implementation Guideline Training	23-Jan-17	Training	Phnom Penh	36	14	0.5
				Total	**93**	**38**	**5.5**
Result 3							
24-Dec-15	Youth training in SHV	24-26 Dec 2015	YouthTraining	Preah Sihanouk	150	45	3
15-Sep-16	Youth training in Kampot	15-16 Sep 2016	YouthTraining	Kampot	150	45	2
12-May-17	Youth training in Svay Rieng	12-May-17	YouthTraining	Svay Rieng	130	61	1
15-Aug-17	Youth training in Koh Kong	15-Aug-17	YouthTraining	Koh Kong	152	76	2

15-Dec-17	Youth training in Kratie	15-Dec-17	YouthTraining	Kratie	120	36	1
19-Feb-18	Communication training at UNDP	19-23 Feb 2018	Training	Phnom Penh	15	7	5
24-May-18	CC training for Youth and Young Leaders in Phnom Penh	24-May-18	YouthTraining	Phnom Penh	135	30	1
28-May-18	Youth training for Siem Reap Province	28-29 May 2018	YouthTraining	Siem Reap	140	68	2
19-Sep-18	Youth training for Tbong Khmum province	19-20 Sep 2018	YouthTraining	Tbong Khmum	163	101	1.5
25-Sep-18	Youth training for Takeo province	25-26 Sep 2018	YouthTraining	Takeo	172	65	1.5
30-Oct-18	Youth training in Mondulkiri	30-31 Oct 2018	YouthTraining	Mondul Kiri	100	30	1.5
25-Feb-19	Youth training in Battambang	25-26 Feb 2019	YouthTraining	Battambang	160	92	1.5
28-Feb-19	Youth training in Oddar Meanchey	28 Feb-01 Mar 2019	YouthTraining	Oddar Meanchey	150	44	1.5
11-Mar-19	Youth training in Ratanak Kiri	11-12 Mar 2019	YouthTraining	Rattanak Kiri	154	74	1.5
14-Mar-19	Youth training in Stoeng Treng	14-15 Mar 2019	YouthTraining	Stoeng Treng	171	68	1
04-Mar-19	Training and mentoring programme on climate change research grant writing and resource mobilization	04-07 Mar 2019	Training	Phnom Penh	58	18	3.5
				Total	**2120**	**860**	**30.5**
Grantee							
18-Nov-15	Media training to media professionals and spoke persons		Training	Phnom Penh	60	n/a	1
20-Feb-18	Media training for journalist	20-Feb-18	Training	Phnom Penh	50	n/a	1
21-Mar-18	Media training for journalist	21-Mar-18	Training	Battambang	50	n/a	1
				Total	**160**	**0**	**3**

Annex 10: Current status summary based on CCCA Logframe

Indicator	Targets 2019	Status 31 Dec 2018
Objective		
1. % of CCAP annual requirement funded through budgetary and extra-budgetary resources	40%	19.37%. This is based on the latest with GIZ in early 2016. An update using data provided by CC- TWG members is expected to be available by Q1 2019 (CCAP review, in conjunction with CCCSP MTR)
2. % of CCAP actions implemented with the support of the NCCC Secretariat or climate change working groups of line ministries	40%	43% (43/101 CCAP actions) received grants (detail to be made available in Q1 2019 upon completion of CCAP review and CCCSP MTR)
3. CCCSP implementation on track (incl. process and impact indicators)	Annual Improvement in CCCSP process and impact indicators compared to previous years	National CC M&E framework has (except for GHG inventory), with indicators regularly tracked according to approved procedures. Some of the indicators tracked (e.g. CC Vulnerability and Institutional Readiness indicators) have shown improvement against the baseline. M&E indicators will be made publicly available through the new CC data portal to be launched in Q1 2019. CCCSP MTR results will provide further detail on the status of its implementation.
Result 1		
1.National M&E Framework is approved and functional including gender disaggregated and poverty indicators	M&E Data collection and analysis in line with approved procedures	National CC M&E framework has been finalized and launched. An official document of the national CC M&E framework in Khmer has been developed to ensure alignment of the different CC M&E efforts (submitted for final comment/ approval). Indicators are being produced regularly according to approved procedures detailed in individual technical notes. This information will soon be accessible through NCSD data portal.
2. Number of ministries with institutional arrangements to manage their CCAP and contribute to CCTT activities	Nine line ministries have CC working groups	All key ministries have focal points. Achieved. Nine ministries and agencies (MEF, MAFF, MoWA, MRD, MOH, MPWT, MOEYS, MOP, CDC/CRDB) have established climate change working groups or teams, with different levels of engagement.
3. Number of ministries that demonstrate capacity to implement at least 50% of actions in their CCAPs and report on	Four line ministries	n/a (to be confirmed after the CCAP review, by Q1 2019)

CCAP progress in line with national standards (incl gender analysis)		
4. Strengthen legal mandates for for the NCCC, CCTT and NCCC Secretariat	Ministerial Prakas adopted in line with Royal Decree	Royal decree on the NCSD and sub- decree on its General Secretariat were approved in 2015. Prakas on GSSD departments and on CC-TWG finalized and approved by Chair of NCSD. CC-TWG is fully operational.
Result 2		
1.Status of government – partners coordination mechanism	Coordination mechanism is functional under national management/secretariat	TORs CC-TWG and DPs approved. Meetings held regularly and coordinated by GSSD
2.Status of Cambodia's access to Multilateral climate funds	Direct access for at least one project	Two are in the pipeline (NCSD and NCDD) but some changes to procedures and time to demonstrate a track record are required before the NCSD applications can be submitted. NCDD has undergone an initial assessment from GCF and received support from CCCA to address gaps in its operations manual. It now aims to apply in the 1st quarter of 2019.
3.Number of ministries benefiting from NCCC Secretariat support on financing sourcing and modalities	8 ministries	9 ministries
4.Status of public-private dialogue on climate change investments	Recommendations in at least one thematic area	Mapping of private sector contribution to CC completed, including recommendations for a dialogue mechanism. Feasibility study on PES in Kbal Chhay finalized. Policy study on vehicles (standards, fiscal policy) is ongoing.
5. Number of ministry budgeting documents explicitly integrating CC	9 ministries	8 ministries
Result 3		
1. Status of procedures for management and exchange of climate change related information	A metadata base listing climate change related information is functional and	New firm contracted in 2018 to develop a climate change data portal. A number of data products (and respective metadata) will be publicly available on the CC data portal once the new NCSD website is launched in Q1 2019.

	publicly available	
2.Status of integration of climate change in schools and universities' curriculums	Primary and secondary curriculum completed Partnership with at least 3 universities in place	CC inputs for integration in higher secondary school curriculum have been completed, under the MoEYS grant; Climate Change Textbook for Higher Secondary School launched in Q3 2018 Currently GSSD is partnering with six universities. MOUs have been established with four universities (RUA, RUPP, PNCA, MCU) in 2017, and two universities (UHST, ITC) in Q3 2018. LoAs have been signed with all six universities; programmes of activities are now under implementation and expected to be fully executed by the Q2 2019
3. Mechanism is in place to identify and test relevant technologies for CCAP implementation	GSSD Secretariat monitors at least 6 projects with a focus on innovation	DCC/GSSD is currently monitoring the implementation of Window 3 projects (8), as well as of MoE's Window 1 projects (monitoring of e-bikes distributed to MoE staff now taking place).
4. Availability and functionality of standards and quality assurance procedures for climate change publication and data	Standards and quality assurance procedures are in place and functional	In place for the CC Newsletter since 2017 Communication guidelines approved (in Q3 2018) for all communication products, including QA processes. QA procedures for climate change data made available through the online data portal will be part of the website manual, to be completed in Q1 2019(database managers will be appointed and trained on the new procedures by then)

Source: abbreviated from CCCA Annual Progress Report 2018