Royal Government of Cambodia

National Committee for Sub-National Democratic Development

National and sub-national schemes for mainstreaming climate resilience at province, district and commune level

August 2018

Phnom Penh

National Committee for Sub-National Democratic Development (NCDD)

National and sub-national schemes for mainstreaming climate resilience at province, district and commune level

TA 8179: Mainstreaming Climate Resilience into Development Planning, Package C: Gender, Monitoring and Evaluation (M&E), and Mainstreaming at the Sub-National Levels

Theme-specific report (KP4) submitted to Asian Development Bank (ADB)

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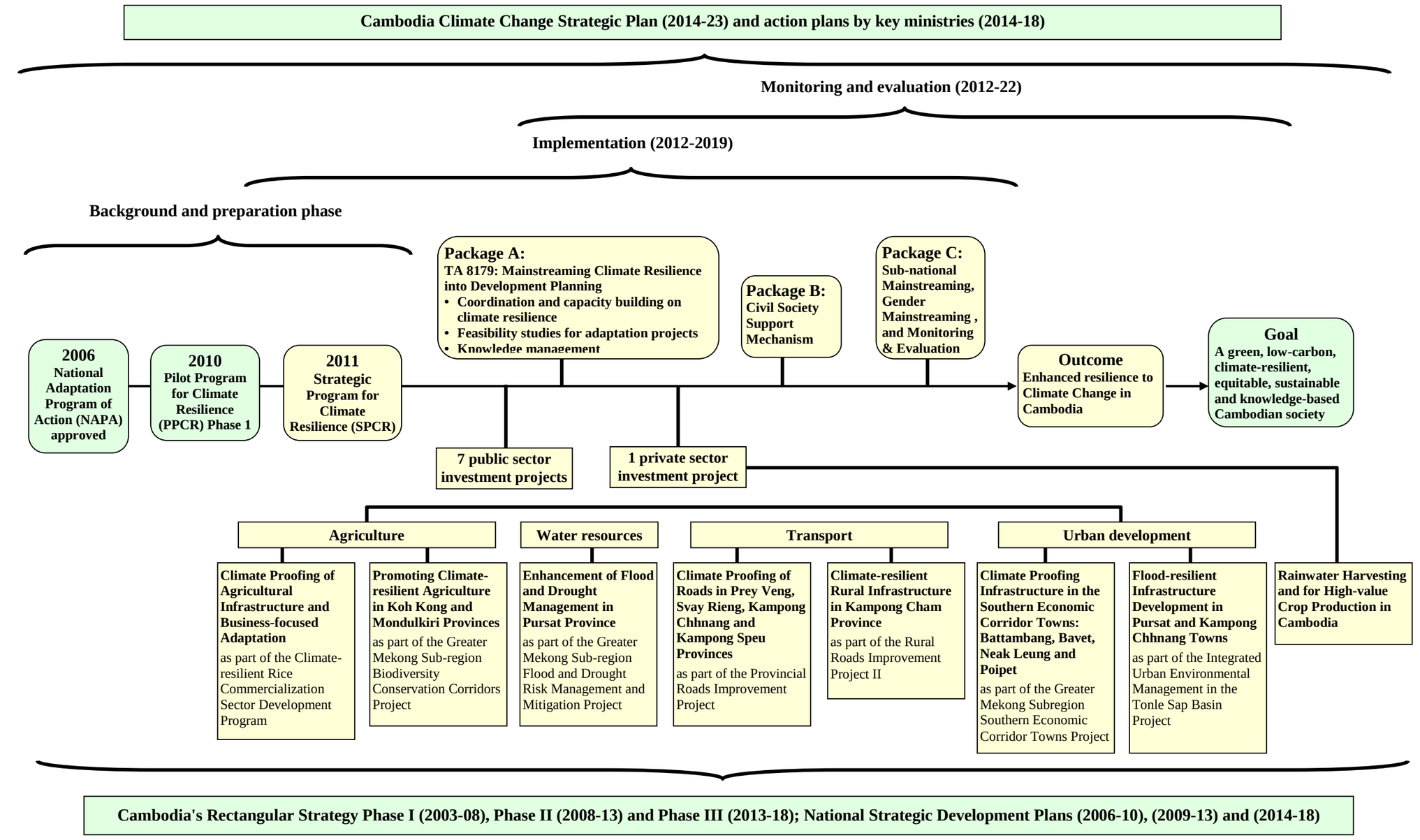
Contents

The Strategic Program for Climate Resilience (SPCR) in Cambodia



Source: Climate Change Department, Ministry of Environment (October 2016)

About this document

This report “National and Sub-national Financing Schemes for Enhancing Climate Resilience at Province, District and Commune Levels in Cambodia” (Knowledge Product 4 / KP4, TA 8179) has been prepared through 4 rounds of consultative meetings with government personnel at NCDD-S in Phnom Penh. Consultations took place in workshops with staff from sub-national administrations (SNAs), discussions with representatives from different government agencies, the private sector (rural finance) and reflection with selected international Non-Government Organizations (NGOs). An extensive examination was undertaken of resources accessible through the www.

The main purpose of this report is to investigate the existing financing schemes put in place in Cambodia enabling flow of international climate finance (e.g. CIF, GCF) to reach the provincial, district and commune levels within a short time, and on a larger scale. Naturally, such being functional within practical arrangement that maintains good practice of the project cycle (from planning to evaluation) and virtues of public financial management (e.g. transparency and accountability).

The document is part of a series of 4 reports that illustrate the present status and the degree of readiness of the Royal Government of Cambodia (RGC) in general, and the National Committee for Sub-national Democratic Development (NCDD) more specifically, being able to substantially upgrade existing capacity for sub-national mainstreaming of climate resilience as far as the institutional network for planning, the financial modalities, obstacles at district and commune levels, and best practice of field projects are concerned:

- Inclusion of Climate Resilience in Planning by Local Government in Cambodia (KP1, September 2017)
- National and Sub-national Schemes Enhancing Climate Resilience at Province, District and Commune Levels (KP4, December 2017)
- Opportunities and Barriers to Adaptation and Disaster Risk Reduction at the District and Commune levels (KP5, July 2018)
- Best Practices at Sub-national Level for Local Mainstreaming of Climate Risks (based on pilot projects, KP6, October 2018)

Preface

Cambodia is considered one of the countries in South-East Asia that are highly vulnerable to adverse climate change impacts, which will become more severe and damaging along with the ongoing increase in global warming. Cambodia's economic sectors related to water resources management, agriculture production, provision of health services and general infrastructure development have experienced damage and losses resulting from severe floods, droughts and typhoons in lowland and upland areas, coupled with saline intrusion along the coastal areas, all effecting food security and livelihoods, especially of the rural population. An analysis based on a scenario of a 2°C temperature rise by 2050 estimates that the full impact of climate change on Cambodia's GDP will be at least 1.5% by 2030, and 3.5% by 2050 (NCSD 2015).

Cambodia's main national development goals (NSDP 2014) continue to put emphasis on poverty reduction and infrastructure rehabilitation while fostering economic growth at a steady rate of 7-8% per year. Cambodia aims to progress from least-developed country (LDC) status towards a low and high middle-income developing country by 2018 and 2030 respectively.

Recognizing the potential risks of climate change on Cambodia's economic growth now and in the future, the Royal Government of Cambodia has developed - and put into practice - appropriate climate change policy responses and initiatives to enhance the climate resilience capacity of the Cambodian institutions and communities across all sectors and in the whole of the society. Climate change policies, the concept of "green growth and sustainable environment", together with measured conservation and development of natural resources, are important elements of the existing National Strategic Development Plan 2014-18 and will remain so for the next NSDP.

Mobilization of sub-national funding resources for the implementation of climate-related projects and programmes is critical to achieve the goals and objectives of the Cambodian Climate Change Strategic Plan (CCCSP).

"At sub-national level, the decentralization reform has during the last years centered on the districts/municipalities (DMs). The establishment of a new planning process for DMs constitutes a foundation for increased adaptation actions at the local level. The implementation of a policy for climate change mainstreaming at the sub-national level is also expected to have a significant positive impact. The National Committee for Sub-National Democratic Development (NCDD) is planning to scale-up climate change efforts to the entire country, working closely with the NCSD" (GSSD 2017).

The NCDD-S plays a paramount role in mainstreaming of climate resilience into local planning and investment processes, in coordination with all sector ministries, donors, NGOs, and the private sector. NCDD-S, through its Programme Management and Support Division, implements a number of externally financed projects that transfer earmarked funds for climate change adaptation to sub-national administrations.

The present report considers existing models and experience of national and sub-national administrations in partnership with different stakeholders and development partners. It reflects upon global experience with sub-national climate finance. Furthermore, it refers to opinions and suggestions from the private sector, e.g. from micro-finance operators in the country and non-government organizations (NGOs).

We trust that this report will encourage national and sub-national administrations, line ministries, the private sector and NGOs to further develop and expand models and schemes for sub-national climate finance, and the integration of successful practice into development plans and investment programmes.

Acknowledgement

The NCDDS TA Team expresses its deep gratitude to H.E. Dr. Say Samal, Minister of Environment and Chairman of the National Council for Sustainable Development (NCSD) for his valuable guidance and leadership in successful implementation of major climate change response, programmes and projects at different levels, which makes Cambodia to become one of the advanced countries addressing global warming and climate change impacts. Our deep thanks are given to H.E. Prof. Dr. Sabo Ojano, chairman of the SPCR Coordination Team for his continuous support and coordination, conducive to successful consultation with relevant specialists and experts. High appreciation goes to H.E. Dr. Tin Ponlok, Secretary General of the NCSD and Mr. Sum Thy, Director DCC for overall technical supports and guidance. Many thanks are owed to Mr. Meas Sophal, Director of MCRDP, and his management team for guidance and support. We also highly appreciate the guidance and recommendations provided by Dr. Srinivasan Anchar and his colleagues at ADB Manila.

We wish to thank H.E. Ngan Chamroeun, Deputy Head of the National Committee for Sub-National Democratic Development Secretariat (NCDD-S) for providing comprehensive advice and support, and H.E. Ny Kimsan, Deputy Head NCDD-S and Director of the Programme Management Support Division of NCDD-S for his valuable contributions and active advice for the preparation of the report.

Special thanks are also due to the NCDD-S Counterpart Team and the Technical Assistance staff for hard works in researching and investigating the subject, conducting consultative visits and documenting useful practices concerning financing schemes for climate resilience at province, district and commune level.

Thanks are also due to representatives from different government bodies on national and sub-national levels, the private sector and civil society organizations who provided advice on the complex issues of climate finance based upon their own experiences.

A number of individuals, as listed in the appendix at the end of the report, kindly shared their knowledge and provided indispensable guidance and valuable suggestions.

Acronyms and abbreviations

ADB	:	Asian Development Bank
ASAP	:	Adaptation for Smallholder Agriculture Programme
ASPIRE	:	Agriculture Services Programme for Innovation, Resilience and Extension
CCA	:	Climate change adaptation
CCCSP	:	Cambodia Climate Change Strategic Plan
CCD	:	Climate Change Department (of MoE)
CDMC	:	Commune Disaster Management Committee
CDP	:	Commune development plan
CIP	:	Commune investment programme
CPDP	:	Capital/provincial development plan
CPIP	:	Capital/province investment programme
CR	:	Climate resilience
DDMC	:	District disaster management committee
DDP	:	District development plan
DIP	:	District investment programme
DMF	:	District/municipal fund
DRR	:	Disaster risk reduction
EFAP	:	Emergency Food Assistance Project
EU	:	European Union
GCF	:	Green Climate Fund
GDP	:	Gross domestic product
GEF	:	Global Environment Facility
GHG	:	Greenhouse gas
IBRD	:	International Bank for Reconstruction and Development
IFAD	:	International Fund for Agricultural Development
LGCC	:	Local Governments and Climate Change
LoCAL	:	Local Climate Adaptive Living Facility (UNDCF)
MAFF	:	Ministry of Agriculture, Forestry, Fisheries
M&E	:	Monitoring and evaluation
MCRDP	:	Mainstreaming Climate Resilience in Development Planning
MEF	:	Ministry of Economy and Finance
MOE	:	Ministry of Environment
MOI	:	Ministry of Interior
MOP	:	Ministry of Planning
MOWA	:	Ministry of Women's Affairs
MOWRAM	:	Ministry of Water Resources and Meteorology
NAPA	:	National Adaptation Programme of Action to Climate Change
NCCC	:	National Climate Change Committee
NCDD-S	:	National Committee for Sub-National Democratic Development Secretariat

NCDM	:	National Committee for Disaster Management
NCSD	:	National Council for Sustainable Development
NGO	:	Non-governmental organization
NIE	:	National implementation entities
NIS	:	National Institute of Statistics
NLCS	:	National League of Communes/Sangkats
NSDP	:	National Strategic Development Plan
PBCRG	:	Performance-based climate resilience grant
PCDM	:	Provincial Committee for Disaster Management
PPCR	:	Pilot Programme on Climate Resilience
RGC	:	Royal Government of Cambodia
SIDA	:	Swedish International Development Agency
SNA	:	Sub-national administration
SNIF	:	Sub-National Investment Fund
SPCR	:	Strategic Programme for Climate Resilience
SRL	:	Sustainable resilient livelihoods
UNCDF	:	United Nations Capital Development Fund
UNDP	:	United Nations Development Programme
UNFCCC	:	United Nations Framework Convention on Climate Change

Terminology used in this report

Climate resilience

Climate resilience can be generally defined as the capacity for a socio-ecological system to absorb stresses and maintain function in the face of external stresses imposed upon it by climate change and adapt, reorganize, and evolve into more desirable configurations that improve the sustainability of the system, leaving it better prepared for future climate change impacts *(Folke 2006).*

Financing schemes

Financing schemes are used for long-term financing of infrastructure and other investments based upon the projected cash flows. Usually, a financing structure involves an investor or 'sponsor', a bank or other lending institution that provide loans to the operation, and several parties managing and using the loan for specific purposes *(see Wikipedia 'Project Finance').*

Adaptation finance

Adaptation finance means to reducing the vulnerability of local communities exposed to climate change by increasing the volume and effectiveness of finance directed towards adaptation *(see World Resource Institute, www WRI 2017)*

Micro-finance

Financial services especially in the form of micro-loans provided to impoverished individuals and groups in poor and developing regions; the financial activities associated with micro-credit. Hundreds of millions of dollars are flowing into microfinance from international financial institutions, foundations, governments, and, most important, private investors—who increasingly see microfinance as a potentially profitable business venture *(source: www.merriam-webster.com/dictionary/microfinance).*

Crop insurance

Crop insurance refers to an insurance which insures farmers and crop producers against their loss of crops due to natural disasters, such as hail drought, and floods. There are two types of crop insurance: (1) Crop-yield insurance; and (2) crop-revenue insurance *(source: definitions.uslegal.com/c/crop-insurance).*

Note: Use of terms for this report may differ from the Khmer Glossary produced by the Ministry of Environment (MoE 2017)

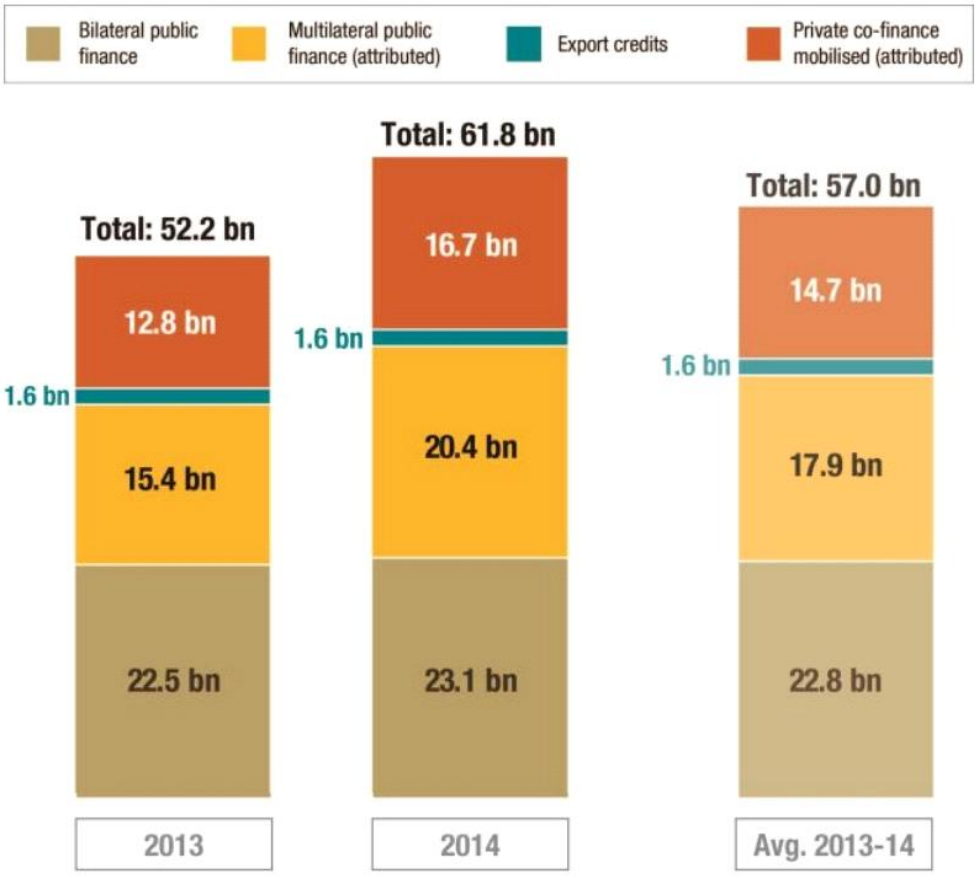
Executive summary

Global climate finance

This report explores the crucial question of how to bridge the divide between increasing sources of adaptation finance, most of which currently exist at international or national levels, and local communities at the grassroots level that are facing the impacts of climate change.

Simply depositing climate finance into the national accounts of developing nations is not enough to ensure that those funds reach the most vulnerable populations. Established mechanisms are needed to channel financial resources down to the local level. This report explores to what extent local government institutions could provide a gateway for vulnerable communities to gain increased access to climate adaptation finance.

Figure 1: Estimated mobilized global climate finance in 2013 and 2014, in US$, by funding source



Source: OECD 2015

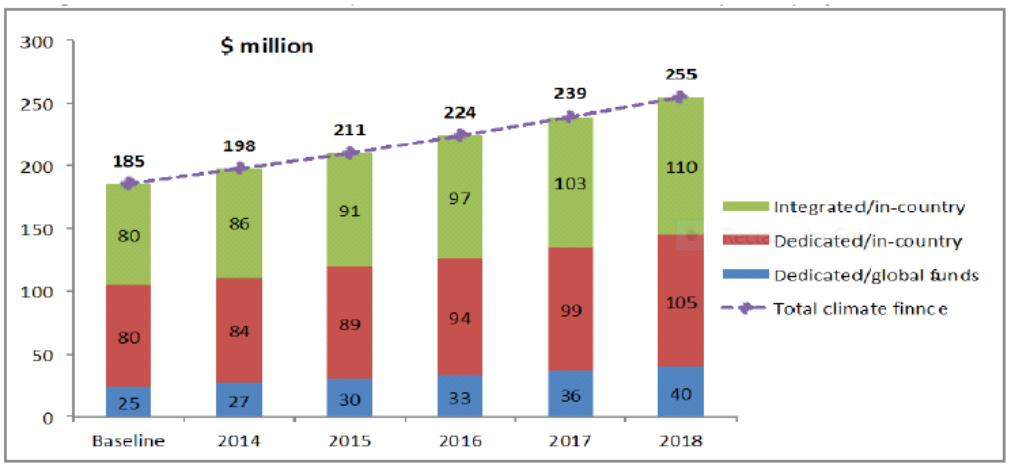
Flows of funds to local level

Climate funds are not equipped to provide a sufficient level of transparency yet. Working with the information available, IIED's very rough estimate for 2003-15 is that only 11 per cent of climate finance, or US$1.6 billion, flows to the local level.

IIED's analysis suggests it is a combination of factors, including the investment strategies of climate funds prioritizing large-scale results; traditional financing intermediaries (e.g.

development banks) shying away from small-scale projects with higher transaction costs; risk averse funding strategies; too little support for building local capacity to manage funds; co-financing requirements that hinder local ownership; and poor enforcement of policies for community engagement.

Figure 2: The Cambodian Climate Change Investment Framework (CCFF)



Indicative progression of climate finance (2014 - 18) - low increase scenario (Source NCSD 2015)

According the Cambodian Climate Change Investment Framework (NCSD 2015), initial scenarios indicate that the total amount of public climate finance could grow from about US$185 million in 2013 to US$255 million (low increase) or US$300 million (high increase) per year by 2018. The share of resources of the global climate funds is expected to grow fastest, but the bulk of resources during this period will still be provided by Government and donors in country, either through dedicated climate finance, or as an element of broader development projects.

A very recent publication by MoE (GSSD 2017) estimates the financial demand and the financing gap relating to the implementation of the climate agenda at national level in Cambodia to a total of USD 865.5 million for implementation (focusing on the needs of climate sensitive institutions). The financing gap is estimated at 92.7%.

The role of NCDD-S in the Cambodian Climate Investment Framework

The CCFF foresees these functions and responsibilities for the NCDD Secretariat and the sub-national administrations:

- “ Integrate climate in sub-national planning and budgeting guidelines for the Commune/Sangkat Fund and District-Municipality Fund, based on lessons learnt from existing pilots;
- Integrate climate change in the priorities and planning/application procedures for the Sub-National Investment Fund;
- In cooperation with NCSD, establish a climate tracker for climate - change related expenditures through the CSF, DMF and SNIF (in line with the methodology foreseen for the ODA database and national budget);

- In cooperation with NCSD, clarify the climate change related responsibilities of the various levels of sub-national administrations (province, district, commune);

- Develop climate change capacity in technical support units for sub‐national administrations mechanisms at district and provincial levels.” (NCSD 2015)

Although this report makes a distinction between public investment, direct project investment by donors and investment by the private sector, a main thread of the report relates to established systems within the structure of the Cambodian government, linking national budgets with budget allocations on district and commune levels.

Transfer schemes in existing NCDD-S climate projects

Existing experience with financial schemes under management of NCDD-S is based on the “Local Governments and Climate Change” LGCC project, the “Sustainable Resilient Livelihoods” (SRL) project, the “Community-based Disaster Risk Reduction (CDRR) project, and the “Agriculture Services Programme for Innovation, Resilience and Extension” (ASPIRE). Three of these projects make use of a mechanism known as the Performance Based Climate Resilience Grant (PBCRG) which was developed within the framework of UNCDF’s multi-country Local Climate Adaptive Living (LoCAL) facility and programme.

The financial volume of a single investment under these 4 projects varies from $15,000 to $50,000 per activity. The planning, design and budgeting period takes approximately one year through the official RGC process, involving MEF and treasury, until funds are available at local level. Pending on the nature of the investment and other factors (e.g. weather conditions, flood drought, etc.) field implementation may take 1-2 years. The planning and budgeting period for the CDRR project is shorter by 5-6 months, as the funds are directly flowing from NCDDS and NCDMS accounts to districts and communes.

The three PBCRG based projects have a high impact on capacity building of staff but the implementation speed is slow and probably not yet suitable for a fast response required by singular or unexpected climatic event. In all cases the volume of the actual investment is low, certainly in terms of overall economic development. The total volume of sub-national transactions may have to be brought increasingly at par with the international climate finance available. At present, the potential to be unlocked through the GCF accreditation does not find a fully adequate channeling mechanism to provinces, districts and communes.

In this context further analysis may have to be done and more institutional support to be provided to the National League of Communes/Sangkats (NLCS), which may become important interlocutors in the process of channeling international climate finance to sub-national authorities and communities.

The Sub-national Investment Facility (SNIF) and the Green Climate Fund (GCF)

The Royal Government of Cambodia is in the process of establishing a Sub-National Investment Facility (SNIF) which will transfer finance for investments to sub-national administrations, with the initial focus being on the District level. It is envisaged that additional “non-core” facilities within the SNIF could be created for earmarked grants and this could include grants for climate change adaptation. Detailed design of this “climate change SNIF” has not yet begun because the focus has been on operationalizing the core SNIF. Strategically, it could be an interesting docking point for the Green Climate Fund (GCF) as well.

As far as the GCF is concerned, NCDD-S is now finalizing a 'Readiness Action Plan, based on Price Waterhouse Coopers (PWC) recommendations. Successful accreditation will allow NCDD-S to access substantial finance for scaling up sub-national climate change adaptation. However, the process of achieving accreditation is not straightforward and is will still require a period of one year or more, as well as significant resources for implementation of the 'Readiness Action Plan'.

Figure 3: Financing frames

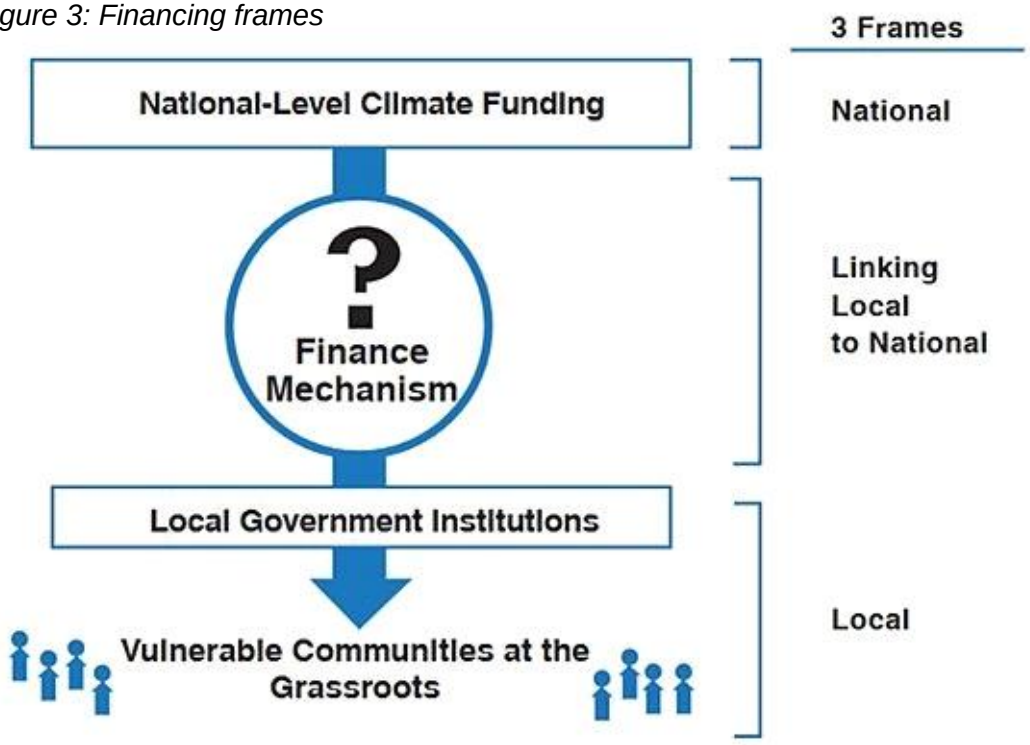


Table 1: Climate change projects of NCDD-S

Project	Financing source	Activities	Target provinces	Funding amount	Timeframe
LGCC	UNCDF/ SIDA	PBCRG in 8 districts Capacity building Programme development	8 districts in Battambang and Takeo	3 million	2012-19
ASPIRE	IFAD	PBCRG in 16 Districts (Phase 1) / 24 Districts (Phase 2(	16 districts in 5 provinces, increasing to 24 districts in 10 provinces	10 million	2017-21
SRL	UNDP/GEF	Resilient agricultural livelihoods PBCRG	10 districts in Siem Reap and Kampong Thom	5 million	2016-18

Project	Financing source	Activities	Target provinces	Funding amount	Timeframe
CB-DRR	ADB	Plan, manage and implement disaster risk reduction projects at district and commune level	6 provinces, 18 districts, 54 communes	1.4 million	2014-2017
SPCR	ADB	Mainstreaming climate in planning, investment at sub-national levels	2 provinces	0.5 million	2016-2019
Total				19.9 million	

Technical capacity and technology transfer

Besides direct financial schemes and flows related to public funding, Cambodia has substantial experience with donor funded approaches that contribute to climate finance through a larger number of programmes, projects and micro-projects. The Cambodian Climate Change Alliance Trust Fund, local projects through PPCR/SPCR/Plan International, GEF's Small Grant Programme (SGP) and many interactions within the concept of north-south, south-south climate change technology transfer are daily and gradually contributing to enhance expertise and practical knowledge in the country.

Those schemes are most helpful in building national and local technical capacities for climate resilience measures and undertakings. In general, weak technical knowledge for design and implementation of actual climate resilience investments has been identified as a main bottleneck contributing to slow project execution.

Global examples from developing countries and emerging economies

The selected global examples in the report refer to innovative options that also could be made working in Cambodia. Approaches from the Philippines, India, Bangladesh, Southern Africa, Zambia are used to demonstrate the rich variety of models, projects, policies available for Government, private sector engagement and NGOs, in most cases sharing common goals through new ways of partnership and collaboration.

Experiences with innovative concepts in Albay and Agusan del Norte provinces, the Philippines, private equity funds and contributions of large corporations in India, the 'Local Disaster Risk Reduction Fund' in Bangladesh, concepts of corporate responsibility for sustainable development in southern Africa, and direct collaboration between and INGO and the Government on climate finance and water security in Zambia, provide plenty of stimulation for similar undertakings in Cambodia.

Criteria for efficient climate change financing:

An analysis of the Cambodian experience is very much in line with international discussion and debate and existing literature on local climate finance. In the global discourse there is general agreement on four pillars that do contribute to the success to local (financial, financial/technical) schemes:

1 An enabling institutional environment for climate finance:

The autonomy and authority that sub-national governments have to respond to climate change will, to a large extent, be determined by a country's approaches to political, administrative and fiscal decentralization.

2 Improved delivery of climate finance:

While providing transfers specifically targeted for climate change projects may be a useful short-term strategy to raise the profile of climate change at a local government level, mainstreaming climate change concerns into ongoing expenditures in relevant areas (i.e. rural development programs, water and sanitation, and agriculture) may bring greater long-term benefits.

3 More effective and equitable planning and budgeting for climate initiatives:

Responses to climate change at the local level will involve different stakeholders: local government, line departments, and CSOs. Similarly, there is a role for national institutions and academia to provide policy guidance. Ensuring the participation of communities in the planning process can make them more responsive to the needs of those communities, and is a core aspect of political decentralization. Transparent financial planning and budgeting and comprehensive budgets will have a key role to play in enabling participation.

4 Monitoring and evaluating the local impact of climate finance:

The establishment of a good monitoring and evaluation framework and creating a process where the information is shared with the public can be an effective way of holding local governments to account in the use of public resources and the results that they have contributed to.

Taken together, these four pillars are serving as overarching framework that can be used to inform a suitable approach to ensure that finance is channeled and used effectively to address climate change at the local level.

Contributions by other stakeholders

Because of its highly diversified micro-finance sector, and rich society of small-and medium sized enterprises (SMEs) Cambodia is in an excellent position to set examples for private sector engagement that could be adopted in other parts of the world.

In 2015, the Cambodian Agriculture Cooperative Insurance Company (CACIC), an initiative established by the Cambodia Center for Study and Development in Agriculture (CEDAC), announced the start of an agriculture micro insurance service to help rice farmers better respond to climate change. The initiative is presently be implemented by CEDAC in five target provinces including Takeo, Kampong Chhnang, and Kampong Speu. In the last two years, about 150 farmers have signed up with CACIC/CEDAC, registering more than 140 hectares of rice plantation.

In general, similar activities are supported by the Co-operative Organization Cambodian (CAC), aiming to set-up and support financial co-operatives to help Cambodia's rural poor. In addition to helping establish new co-ops, CAC provides training to co-op leaders, monitors co-op operations and promotes networking and sharing between the co-ops so that they can learn and support each other.

Some cooperatives promote the benefits of using financial co-ops to villagers, especially children. This includes encouraging villagers to open savings accounts and teaching them basic money management skills. Provide credit union services are provided to the co-ops, including funds for loans to co-op members.

Innovative Financing Scheme for Mainstreaming Climate Resilience at Provincial, District and Commune Levels

Following a stakeholder meeting between MoE, MCRDP, and SPCR/NCDDS in early 2018, criteria for the innovative financing scheme were agreed upon. These criteria included using an existing flow and guideline with funds transferred directly from NCDD-S and the district. A priority for such a scheme is the rapidity of the transfer of funds to synergize with district planning procedures. In consideration of this, analysis of the relevant schemes indicated that the Community-Based Disaster Risk Reduction (CDRR) project is the most suitable of those existing as it fulfills the most important elements of the agreed criteria.

The total implementation including planning, budgeting, and the beginning of field implementation is approximately 26 weeks. The procedure should follow the NCDD-S' District Project Preparation Handbook 2013 and the NCDD-S' Implementation and Procurement Handbook for Construction/Rehabilitation of the District Disaster Risk Reduction and Climate Change Adaptation Small Scale Infrastructure Project 2016. These guidelines cover i) the preparation of the block grant agreement, ii) the bidding process for the works, iii) the process for bid opening, evaluation and reporting, and iv) the signing of contracts.

However, average financial transfers may need to be increased to meet subnational climate resilience demands. Nevertheless, the scheme's effective coordination, provision of support, and the clear official government structure to be adhered to are regarded as significant strengths in favor of this scheme. A range of opportunities associated with this scheme are also evident as indicated in the CDRR's SWOT Analysis, particularly in regards potential cost-sharing, partnerships and complementary projects supported by CSOs.

Main conclusions and recommendations

- Globally, there are substantial allotments and commitments for climate finance, estimated being beyond and above 60 billion US$ (61.8 billion US$ in 2014); exact figures and balances do not exist.
- It is estimated that only 11% of the global climate finance reaches the sub-national and local levels across all countries worldwide.
- Figures released by Ministry of Finance Cambodia in 2016 show that the government allocated just 2.8 % of national funds to the local levels in Cambodia. This covers conventional investments and adaptation investments.
- Accreditation under the GCF is a very tedious process that still may take one year to complete. Presently only one project (at 15 million $) is proposed by NCDD-S.
- The total investment under NCDD-S for sub-national climate resilience is around 20 million $ over a time span of 9 years (through 4-5 projects).
- A single investment under the 4 NCDD-S sub-national adaptation projects ranges from 15,000 $ to 50,000 $ per commune / district.
- The full implementation process for a single (climate adaptation) investment takes between 2 to 3 years; this time includes planning, budgeting, design, approval, procurement, actual technical implementation, evaluation etc.

RECOMMENDATION 1 ***'SCALE':*** The scale of planned sub-national interventions should be significantly uplifted, anticipating the substantial global climate finance available, and to generate a measurable impact on socio-economic development of provinces, districts, communes towards a *'green economy'* as sketched out in country strategies.

- The NCDD-S sub-national adaptation projects have a very good impact on capacity building of staff from government and sub-national administrations.
- Weak technical capacity in design, construction, and implementation of climate resilient investment activities (especially related to rural infrastructure) hampers quality of the projects.
- The rich network of (national and sub-national) micro-finance operators and institutions is one of Cambodia's potential assets for decentralized rural development and climate resilience.
- The existing (national/sub-national) technical expertise related to agriculture, livestock, fisheries, forestry, and rural income generation/ livelihoods is one of Cambodia main assets for economic diversification and household resilience.
- Local and specific technical capacity created through schemes like the CCAA Trust Fund, the SPCR/ Plan International sub-projects, GEF's Small Grants Programme are a solid stock for further expansion, replication, duplication, modification, and more massive up-scaling.
- The transfer of climate resilient technology and practical adaptation knowledge is a main purpose of sub-national financial schemes.

RECOMMENDATION 2 ***'FIN-TECH SCHEMES':*** Rather than designing a scheme mainly along criteria of finance or public finance criteria, the actual climate resilient purpose of the investment needs to come to the forefront of planning, .tactic and approach, and relevant technical, capacity should be developed simultaneously to administrative capacity.

- The Council for Development of Cambodia (CDC) is the most important platform to foster private investment in the country.
- The Sub-National Investment Facility (SNIF) will transfer finance for investments to sub-national administrations, with initial focus being on the District level.
- Probably by late 2018 NCDD-S will be the first National Designated Entity (NIE) in Cambodia for the Green Climate Fund (GCF).
- Small and medium enterprises (SMEs) in Cambodia have the potential to supply climate resilient products, materials and inputs into provinces, districts, communes (agriculture inputs, housing protection, shelter, water protection, tools, solar energy supply, etc.).
- The financial sector in Cambodia has the potential to provide low-interest credits and loans to individuals, companies, local groups, for climate resilient modernization, refurbishment, upgrading of technology.
- A wide range of national and local non-government organizations is capable to foster technical adaptation on-ground, basically across all social and economic sectors in the country (e.g. crop insurances, farming system diversification by family farmers, water harvesting and management, small-scale irrigation and energy development, technical and vocational training, water, sanitation, health, etc.).
- Many existing farmer organizations, producer groups and cooperatives are by design and nature suitable and appropriate to act across different sectors as an integrative

interlocutor (e.g. linking finance with supply with production with transportation with marketing…).

- Expanding north-south, south-south climate exchange activities with sub-national participants can substantially increase access, knowledge and availability of appropriate technologies in provinces, communes, districts.
- The National League of Communes/Sangkats (NLCS) or other entities (e.g. the Tonle Sap Authority) could be developed into sub-regional entities that bundle activities, integrate regional planning, strengthen technical focus, and act as intermediary for larger-scale financial flows.

  On local level the distinction between DRR and CAA appears to be rather artificial, and a closer integration of approaches, funding sources, implementation agencies may be encouraged

RECOMMENDATION 3 'CONCERTED LOCAL ACTION': As policy and strategy development moves on through national authorities and administrations, the transmission belt towards practical sub-national implementation needs to generate a larger scale of interventions, a wider local distribution of climate resilient action, better appreciation of climate relevance investment and improved acknowledgment of the short- and long-term opportunities opening up for local populations and for sub-national development..

1 Introduction

"One can see from space how the human race has changed the Earth. Nearly all of the available land has been cleared of forest and is now used for agriculture or urban development. The polar icecaps are shrinking and the desert areas are increasing. At night, the Earth is no longer dark, but large areas are lit up. All of this is evidence that human exploitation of the planet is reaching a critical limit. But human demands and expectations are ever-increasing. We cannot continue to pollute the atmosphere, poison the ocean and exhaust the land. There isn't any more available."

- *Stephen Hawking -*

  (Professor Stephen Hawking is regarded as one of the most brilliant theoretical physicists since Einstein.)

"The concentration of carbon dioxide (CO2) in the atmosphere has hit a new high. The numbers don't lie. We are still emitting too much and this needs to be reversed. What we need now is global political will and a new sense of urgency."

(World Meteorological Organization, Greenhouse Gas Bulletin, 30th October 2017)

1. This report "National and Sub-national Financing Schemes for Enhancing Climate Resilience at Province, District and Commune Levels in Cambodia" (Knowledge Product 4 / KP4, TA 8179) has been prepared through a series of consultative meetings with government professionals at NCDD-S and other RGC agencies in Phnom Penh.

2. The main objective of this report is to investigate the existing financing schemes put in place in Cambodia enabling flow of international climate finance (e.g. CIF, GCF) to reach the provincial, district and commune levels within a short time, and on a larger scale.

3. Under this objective it is assumed that the volume of international climate finance and adaptation investment presently directed to sub-national levels has to be substantially increased to assure a measurable impact towards compliance with the 2015 Paris Agreement ("keeping the increase in global average temperature to well below 2°C above pre-industrial levels").

4. Developed countries intend to continue their existing collective goal to mobilise USD 100 billion per year by 2020 and extend this until 2025. A new and higher goal is supposed to be set for after this period.

5. Based upon existing practice of climate finance projects at NCDDS, the report discusses suggestions how the process of financial delivery to sub-national entities can be enhanced, both in terms of reducing time for planning and implementation, and increasing the size (scale) of actual investment. Congruency with practical arrangements that do maintain a good practice of the project cycle (from planning to evaluation) and virtues of public financial management (e.g. transparency and accountability) was a complementary purpose.

6. The document is part of a series of 4 NCDDS reports (financed by ADB) that illustrate the present status and the degree of readiness of the Royal Government of Cambodia (RGC) in general, and the National Committee for Sub-national Democratic Development (NCDD) more specifically, being able to substantially upgrade existing capacity for sub-national mainstreaming of climate resilience as far as the institutional network for planning, the financial modalities, obstacles at district and commune levels, and best practice of field projects are concerned.

7. The 4-reports series consists of linked thematic subjects relevant from start to end of the project cycle, from planning to best practice:

    - Inclusion of Climate Resilience in Planning by Local Government in Cambodia (KP1, September 2017)
    - National and Sub-national Schemes Enhancing Climate Resilience at Province, District and Commune Levels (KP4, April 2018)
    - Opportunities and Barriers to Adaptation and Disaster Risk Reduction at the District and Commune levels (KP5, July 2018)
    - Best Practices at Sub-national Level for Local Mainstreaming of Climate Risks (based on demonstration projects, KP6, October 2018)

2 Methodology

"If you are thinking one year ahead, sow seed. If you are thinking ten years ahead, plant a tree. If you are thinking 100 years ahead, educate the people."

- Chinese proverb -

8. Desk research proved to be effective and was conducted in all phases of report and most of the basic information could be easily fetched and then used as benchmark in the research process. Main sources were available documents at NCDDS and through the internet.

9. Information was generated internally within NCDD-S as a course of normal working process, e.g. project related information which indicates what types of financial schemes are used, applied to which type of target groups including their geographical location. Some information for the report, especially for chapter 6, was directly extracted by communicating with existing projects and potential stakeholders (primary data).

10. Group discussions (during a training workshop in Kampot) with sub-national RGC officials and professionals from NCDDS were another way to gather feedback from people of similar technical background or experience across relevant government agencies on province and district level.

11. As part of the wider consultation process NCDDS organized two internal consultation sessions on local climate-related financing in Cambodia and a third brain-storming session with selected external stakeholders (MEF, MoP, MoWA, others).

12. To a limited degree, Government published data online was used in the research process. This mainly relates to social and economic aspects. Some of the government websites contained good information. A handicap was that many of the

RGC websites do not properly update the English sub-site of the organization. It is noted that many climate- and disaster-related investments may serve additional purposes (and provide additional substantial benefits), such as rural income generation, public health, agricultural productivity, road connectivity, water storage for households and communities, preservation of habitats and ecosystems (for example mangroves), and crop insurance.

13. Opinions from the private sector (micro-finance operator, insurance provider) and the NGO community (Plan International) were collected. Those were qualitative, in-depth interviews of individual persons selected for their first-hand knowledge on local finance. The interviews were loosely structured, relying on a list of issues to be discussed.

14. Limited field observation on successful examples was undertaken during an earlier field study mission (Pursat, Takeo, Koh Kong and Kampong Speu provinces, April 2017) by co-authors to the report. They were able to collect information through informal interviews, direct observation, and participating in the process of fund administration, collective discussions, and analyses of documents produced locally in Khmer language only.

15. Several reviews were the key to the consolidation phase as actual proof of substance.

16. The Executive Summary was produced simultaneously to the main text, and used to check and maintain consistency, logic and sequence of the main text. This approach was also helpful to avoid gaps in the argumentation established throughout the main text. The Executive Summary is not a simple summary of the main text but in itself a standalone deduction of the main critical points.

17. The report did not proceed in distinct stages; rather, the literature and document review was an ongoing process while most of the focus group discussions occurred in the earlier days of the report and many of the key informant interviews later.

3 Strategies and policies relevant for sub-national climate resilient investment

"The axe forgets what the tree remembers"

- African Proverb

18. Over time Cambodia has developed a set of strategies and policies that guide sub-national climate resilient investment, although procedures and mechanisms to translate these into effective local climate finance and climate action would need to be further unpacked, sketched out and tested.

19. The RGC's "Rectangular strategy for growth, employment, equity and efficiency" is a holistic and integrated strategic document. "Green Growth" has been considered as a key feature of the Rectangular Strategy III (2014-18).

20. The NSDP (2014-2018) recognizes climate change as one of its cross-cutting issues (together with gender and disaster risk management), and integrates specific climate change actions in relevant sectors, as well as climate change-related

indicators. The Sector Development Plan, the National Forest Program 2010-2029, and the Energy Policy of Cambodia 1994 provide the foundation for specific investment policies.

21. The Cambodia Climate Change Strategic Plan (CCCSP) 2014-2023 was approved on 31 October 2013 and officially promulgated on 5 November 2013. This is the first ever comprehensive national policy document responding to the climate change issues that Cambodia is facing. It builds synergies with existing government policies to ensure a strategic cohesion to address a wide range of climate change issues linked to adaptation, GHG mitigation, and low-carbon development. The CCCSP reflects the political will and firm commitment and readiness for reducing climate change impacts on national development, and contributing, with the international community, to global efforts for mitigating GHG emissions under the UNFCCC.

22. Most important for future investments across all sectors is a conclusive set of strategies and action plans twinning economic development, climate resilience, and disaster risk reduction under the concept of “Green Growth”. Here we have the Green Growth Road Map 2010, the National Policy on Green Growth 2013 and the National Strategic Plan on Green Growth 2013-2030.

23. In line with the priority sectors of development in the Rectangular Strategy, the Road Map focuses on all those sectors that are conducive for economic growth and environmental sustainability. The National Green Growth Roadmap addresses “the 7 A”s: Access to clean water and sanitation; Access to renewable energy; Access to information and knowledge; Access to means for better mobility; Access to finance and investment; Access to food security (agriculture) and non-chemical products; and Access to sustainable land use.

24. The National Policy on Green Growth envisages striking a balance of economic development with environment, society, culture, and sustainable use of national resources through integration, matching and adaptation, as well as harmonization between green growth principles and national policies. The National Strategic Plan on Green Growth 2013-2030 regards green growth as a win-win approach for a sustainable economy moving towards a developed country in the future. It promotes green growth, public health, the quality of the environment, peoples’ livelihoods, and upholds a national cultural identity (Chan Sethea, March 2015).

25. The National Strategic Plan on Green Growth aims to promote the sustainable long-term economic, social and environmental development of the country. Focus areas are: 1) Green Investment and Green Jobs Creation; 2) Green Economy Management in Balance with Environment; 3) Blue Economy Development with Sustainability; 4) Green Environment and Natural Resources Management; 5) Human Resources Development and Green Education; 6) Effective Green Technology Management; 7) Promotion of a Green Social Safety System; 8) Uphold and Protection of Green Cultural Heritage and National Identity; and 9) Good Governance on Green Growth.

26. The RGC has prepared the National Strategic Plan on Green Growth 2012-2030 to boost Cambodia’s economy towards a green economy focusing on efficient use of natural resources, environmental sustainability, green jobs, green technology, and economic reform. More consideration has been placed on green incentives, such as green tax, green finance, green credit, green microfinance, and green investment, based on the most successful experience on sustainable socio-economic

development in the implementation of the Rectangular Strategy. If successful in practical terms, such policy will contribute to global green economy, at the same time maintaining environmental quality, enhancing of public health, and promoting a social safety system, together moving toward a low carbon emission society (National Strategic Plan on Green Growth 2013-2030, 2013).

27. The NCDD is the inter-ministerial mechanism for promoting democratic development through decentralization and de-concentration reforms throughout Cambodia. NCDD was established by Royal Decree on 31 December 2008. NCDD is accountable to the Royal Government of Cambodia for the implementation of the Law on Administrative Management of the Capital, Provinces, Municipalities, Districts and Khans (Organic Law), the Law on Administrative Management of Communes/Sangkats and Decentralization and De-concentration policy. To effectively implement the Organic Law and the Commune/Sangkat law, in line with decentralization and de-concentration policy, NCDD has established sub-committees and a Secretariat (NCDD-S) to facilitate and manage implementation.

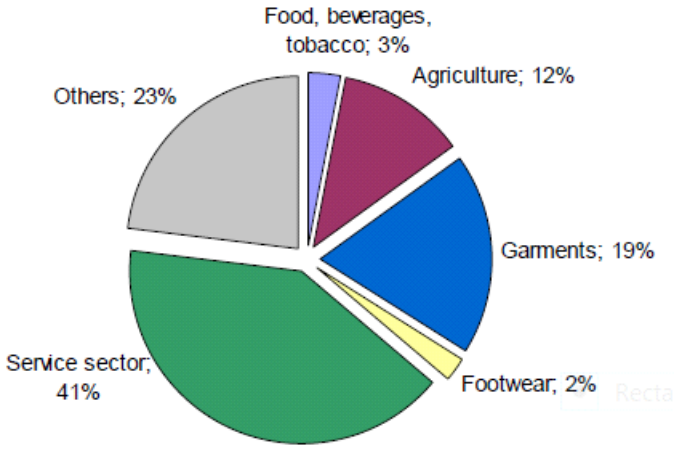
28. NCDD-S is the coordinating institution for implementation of the RGC's National Programme for Sub-National Democratic Development (NP-SNDD). The NP-SNDD is designed to develop the regulatory framework, build capacity, assign functions and provide a financing framework for decentralized governance at three levels: Province/Capital, District/Municipality/Khan and Commune/Sangkat: These sub-national administrations (SNAs) are responsible to address climate change as part of their general mandate to promote local development and, increasingly, will also need to mainstream climate change responses into their execution of specific mandates for service delivery functions transferred to them under the NP-SNDD. Under the NP-SNDD the District is seen as the key level for service delivery.

29. Standard investment options across many sectors are available through the Council for Development of Cambodia (CDC). In addition to reviewing applications for investment incentives, the mission of the Council for the Development of Cambodia (CDC) is to promote and facilitate foreign and local investments. In order to accomplish this goal, it is charged with several functions:
    - to provide information to potential investors,
    - to review investment applications and grant incentives,
    - to monitor investment projects after implementation,
    - to provide after-care service to investor in their project's implementation,
    - to provide a platform for private sector to participate in policy dialogue with
    - the government through its bi-annual government-private sector Forum.

30. In principle, the CDC is the most important platform to foster climate resilient investment in Cambodia through the private sector.

31. There is a wide range of opportunities for "green" economic value addition and job creation in the specific value chains associated to such commercial investment that could have direct benefits for districts, communes and villages.

Figure 4: Foreign direct investment in Cambodia by sector 2011 (National Bank of Cambodia in UNCTAD 2013)



32. The $1.2 billion Pilot Program for Climate Resilience (PPCR) is a funding window of the Climate Investment Fund (CIF) for climate change adaptation and resilience building. Using a two-phase, programmatic approach, the PPCR assists national governments in integrating climate resilience into development planning across sectors and stakeholder groups. It also provides additional funding to put the plan into action and pilot innovative public and private sector solutions to pressing climate-related risks. To date, $939 million (about 80% of PPCR funding) is approved for 58 projects expecting around $2 billion in co-financing from other sources (source: CIF website August 2017).

4 Climate finance and local governance in Cambodia

“If you want to go fast, go alone. If you want to go far, go together.”

- African Proverb –

4.1 Cambodia’s climate change financial landscape

33. Cambodia’s vulnerability to climate change is widely regarded to be due to its lack of adaptation capacity. 80% of the population lives in rural areas with weak adaptive capacity and infrastructure. The agricultural sector contributes around 34% of GDP and engages 80% of the population. The Second National Communication (SNC) to the UNFCCC (November 2015) reveals that nearly 50% of the total communes in Cambodia are categorized between vulnerable to extremely vulnerable to climate variations. A public perception survey on climate change conducted in 2010 found that more than 50% of respondents indicated that they lack information related to climate change and 60% of the respondents did not know how to react to climate change.

34. The need for climate change adaptation and disaster risk management mainstreaming has become recognized as increasingly important in building the country’s adaptive capacity and enhancing community resilience. Climate change mainstreaming interventions have been implemented to pilot the process of mainstreaming climate change into national, sector and sub-national levels under different initiatives. For instance, the Cambodia Community Based Adaptation

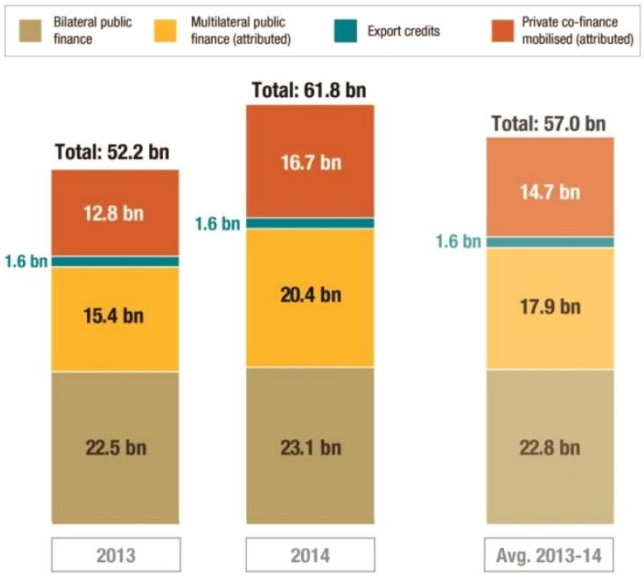
Programme (CCBAP), the Promoting Climate Resilience in Agriculture and Water Resources Management for Rural Livelihood in Cambodia Programme (a NAPA follow-up), the Cambodia Climate Change Alliance (CCCA), Local Governments and Climate Change (LGCC), the Strategic Programme for Climate Resilience (SPCR), and others.

35. Central for capacity building on province, district and commune levels is the timely availability of adequate costing, budgets and funding. Although global climate finance offers ways to provide substantial sums for investments, severe obstacles must be overcome before a Sub-National Authority (SNA) becomes a benefactor. Simply depositing climate finance into the national accounts of the country is not enough to ensure that those funds reach the most vulnerable populations. Established mechanisms are needed to channel financial resources down to the local level. Looking into schemes established in Cambodia, they do provide a gateway for vulnerable communities to gain increased access to climate adaptation finance.

36. According to IIED (November 2016) nobody knows exactly how much climate finance reaches local people. Calculating a precise figure would require donors to disclose detailed information about how their finance flows within programmes and whether communities are involved in deciding how it is spent. Climate funds are not equipped to provide this level of transparency yet. Working with the information available, IIED's very rough estimate for 2003-15 is that only 11 per cent of climate finance, or US$1.6 billion, flows to the local level.

37. IIED's analysis suggests that it is a combination of factors, including the investment strategies of climate funds prioritizing large-scale results; traditional financing intermediaries (e.g. development banks) shying away from small-scale projects with higher transaction costs; risk averse funding strategies; too little support for building local capacity to manage funds; co-financing requirements that hinder local ownership; and poor enforcement of policies for community engagement.

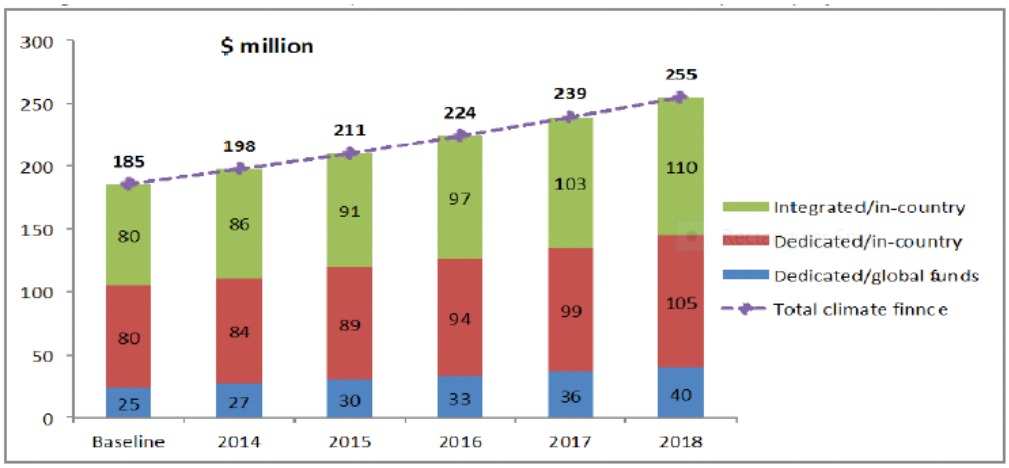
Figure 5: Estimated mobilized global climate finance in 2013 and 2014, in US$, by funding source



Source: OECD 2015

38. Compared to the global situation, the Cambodian Climate Change Investment Framework (CCFF) provides the figures shown below:

Figure 6: The Cambodian Climate Change Investment Framework (CCFF)



Indicative progression of climate finance (2014 - 18), low increase scenario (NCSD 2015)

39. Against the backdrop of large global climate finance mobilized (approximately 62 billion $ in 2014) initial scenarios for Cambodia indicate that the total amount of public climate finance could grow from about (very modest) US$185 million in 2013 to US$255 million (low increase) or US$300 million (high increase) per year by 2018. The share of resources of the global climate funds is expected to grow fastest, but the bulk of resources during this period will still be provided by Government and

donors in country, either through dedicated climate finance, or as an element of broader development projects.

40. A very recent publication by MoE (GSSD 2017) estimates the financial demand and the financing gap relating to the implementation of the climate agenda at national level in Cambodia to a total of USD 865.5 million for implementation (focusing on the needs of climate sensitive institutions). The financing gap is estimated at 92.7%.

Table 2: Cambodia's climate change financial landscape

Sources of climate finance	Intermediaries	Economic and financial instruments	Financial planning systems and institutional arrangements	Uses and users of climate finance
National public finance (national budget)	**Ministry of Environment** **Line ministries**	**National budget**	**Cambodia Budget Law** **Budget Strategy Plan BSP** **National Strategic Development Plan NSDP** **Cambodia Climate Change Financing Framework** **Green Growth National Strategy Plan**	**Line ministries according to sector mandate, strategy, action planning**
National private finance	**Commercial banks for all types of investment** **Micro-finance institutions** **Insurance companies, NGOs (mixed experiences)** **Community-based micro-savings groups and revolving funds** **Local private money lenders**	**Commercial loans** **Small loans** **Crop insurance** **Different self-help models** **Non-regulated loan practice**	**Policies from Council for Development of Cambodia CDC** **Cambodian Investment Board (CIB), Cambodian Special Economic Zone Board (CSEZB)** **Law on Banking and Financial Institutions**	**All private investors for different purposes** **Farmers, community organizations, individuals, SMEs, for small affordable investments, livelihood** **Farmers, households, groups, individuals, as part of poverty reduction / livelihood adaptation strategies** **Farmers, individuals, for emergency or non-bureaucratic processes**
Multi-donor international public finance	**ADB, EU, IFAD, Sida, UNCDF, UNDP, GEF, MoE Climate Change Trust Fund**	**Grants**	**PPCR/SPCR** **Cambodia Climate Change Alliance**	**Various project funding**
International public finance	**Climate Investment Funds** **Multilateral development Banks** **GEF**	**Grants** **Concessional loans** **Grants**	**Policies and procedures from different partners**	**Various project funding** **Various project funding**

4.2 Modalities for climate finance at sub-national level

41. This section has to be read under the awareness that - in general - donor-funded schemes are highly diversified across many of the development sectors, often with small activities and undertakings; and Cambodia is no exception from this rule. The selection presented below concentrates on themes that may have a strategic or special operational significance, focus, or potential in relation to sub-national development.

42. A review of public expenditure showed that around 86% of climate relevant expenditure is externally funded. Main multilateral sources include ADB, CIF (PPCR/SPCR), the GEF-supported Adaptation Fund, and UNDP. Main bilateral donors include USAID, Sida, Japan, and the European Union.

4.2.1 Performance-based climate resilient grants

43. PBCRG are grants to the District level and the District Council approves the work plan for use of the grant. District and Commune level administrations work together to prepare a work plan for priority uses of the grant which is then approved by the District Council. Implementation can be at either District or Commune level and NCDD-S apportions the grant to the budgets of the District and selected Commune administrations accordingly. Funds flow through the State Treasury system and are used in accordance with the budget execution procedures of the SNA.

44. Average PBCRG allocations are around $50,000 per District per year. The total amount available is divided into a 75% as base amount which is allocated in proportion to the general budget revenues of the District; and a performance amount which is allocated based on the results of an annual performance assessment.

45. An annual Performance Assessment is carried out. The Performance Assessment methodology focuses on quality of CCA projects; quality of implementation process; type of beneficiaries and beneficiary satisfaction and an index of institutional capacity. The intention is to reward improvements in performance rather than to penalize the weaker SNA which may face externally determined challenges (remoteness, lack of resources etc).

46. This is developed through discussions with MEF and seeks to overcome the difficulties in budgeting and execution of PBCRG, primarily through ensuring that PBCRG becomes a single entry on the revenue side of the District Budget, determined in a timely manner before the budget is finalized in the preceding year. Options for financing activities of the Communes through this route could be either a system of sub-grants to the Commune level, as was originally envisaged for PBCRG; or a system in which the District co-finances investments with the Commune.

4.2.2 The Local Governments and Climate Change (LGCC) project

47. NCDD-S, through its Program Management and Support Division, implements a number of externally financed projects that transfer earmarked funds for climate change adaptation to sub-national administrations. Three of these projects make use of a mechanism known as the Performance Based Climate Resilience Grant (PBCRG) which was developed within the framework of UNCDF's multi-country Local Climate Adaptive Living (LoCAL) programme.

48. In principle, Districts are selected based on climate vulnerability and ability to meet the 'Minimum Access Conditions'. However, as PBCRG are financed through

separate project facilities, the targeting strategy of the parent project (LGCC, ASPIRE, SRL) plays a major role.

49. Under LGCC, PBCRG can be applied to climate proofing costs of local infrastructure, considered to be no more than 1/3 of total cost, with base costs financed by general revenues of the SNA; and costs of local services for climate resilience, which can be 100% financed.

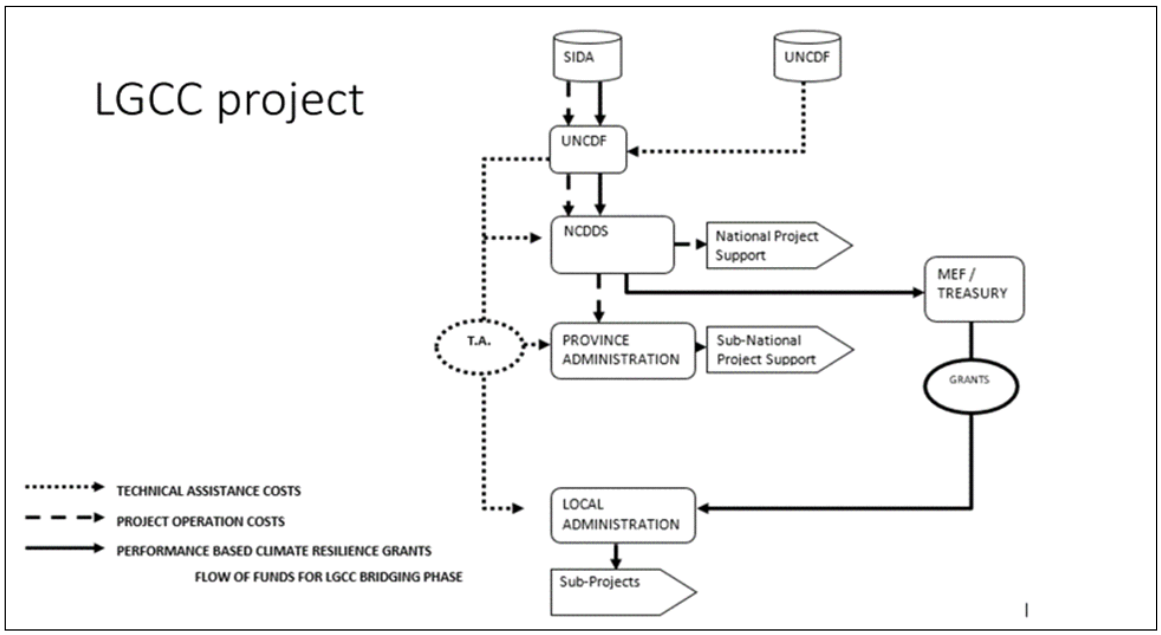
50. The total budget available for NCDD-S under this project is 3 million in three phases. Project duration is from 2011 to 2017.

51. The objective of the LoCAL-Cambodia initiative, the Local Governments and Climate Change Project (LGCC), is to demonstrate the role of local governments in fostering climate change resilience and identify practical ways to mainstream climate change resilience into sub-national planning and finance systems. The project's major outcomes and related outputs are:

    - Increased awareness of climate change and potential adaptation and resilience building responses amongst sub-national governments and local communities,
    - Integration of cross-sectoral, analysis-based strategies for building climate change resilience in sub-national plans and investment programmes,
    - Systems and procedures for mainstreaming climate change resilience within sub-national government public expenditure management systems in a fiscally sustainable manner proven and available for scale-up,
    - National guidelines for sub-national public expenditure management (e.g. sub-national and annual budget planning, investment programming, and medium-term expenditure framework) facilitate mainstreaming of climate change resilience, particularly through cooperative actions between district/municipal and commune/sangkat councils and administrations.

52. The Local Governments and Climate Change (LGCC) project began as one of the first pilots of UNCDF's LoCAL facility in 2011. The first PBCRG grants were disbursed in two Districts and one Municipality of Takeo Province in 2012 and from 2013, with financing from the Swedish government; five Districts of Battambang were added to the grant recipients. Due to a pause in funding, no PBCRG were disbursed in 2016 (though activities carried over from 2015 have continued). In addition to the PBCRG component LGCC supports capacity building and program development for sub-national climate change financing, including supporting NCDD-S application for accreditation to GCF. LGCC focuses on streamlining the design of PBCRG in order to facilitate scale-up, and integrating the model into the general framework for conditional grants to sub-national administrations which is under development by NCDD-S and MEF.

Figure 7: Flow of funds in the LGCC project (source: LGCC Project Officer, 2017)



53. Funds flow through the State Treasury system and are used in accordance with the budget execution procedures of the SNA. The LGCC target areas are Battambang Province (Bovel, Samov Loun, Rokhakiri, Mongroeusey, and Thmarkol districts), and Takeo province (Doun Keo, Bati, and Borichsular districts).

54. The estimated average duration from planning / budgeting to actual field implementation of a sub-project or activity is 20 months.

55. The average amount for an investment financed through this system is from US$ 10,000 to US$ 30,000.

SWOT summary of the LGCC Project

Strengths	**Weaknesses**
- Use governmental system - Co-financing with RGC budget - Good coordination and collaboration at all levels especially, NCDDS and DDC of NCSD, province, district and commune administrations to ensure smooth project implementation.	- Difference budget time frame within LGs and DP - Lack of capacity of LGs
Opportunities	**Threats**
- Strengthen capacity of government - Mobilizing global finance - High demand by local authority and community disaster risk reduction and climate change adaptation, especially knowledge on small-scale infrastructure (roads, canals, water ponds, water gates, dams, water stations and safe area construction).	- Long process to be accredited NIE - Capacity concern of NCDD to directly deal with global agencies - Local communities are facing with many issues and challenges, especially appearance of diseases, loss of houses, and lack of water resource for rice cultivation; overall reduction of benefits from natural resources.

4.2.3 The Agriculture Services Program for Innovation, Resilience and Extension (ASPIRE) project

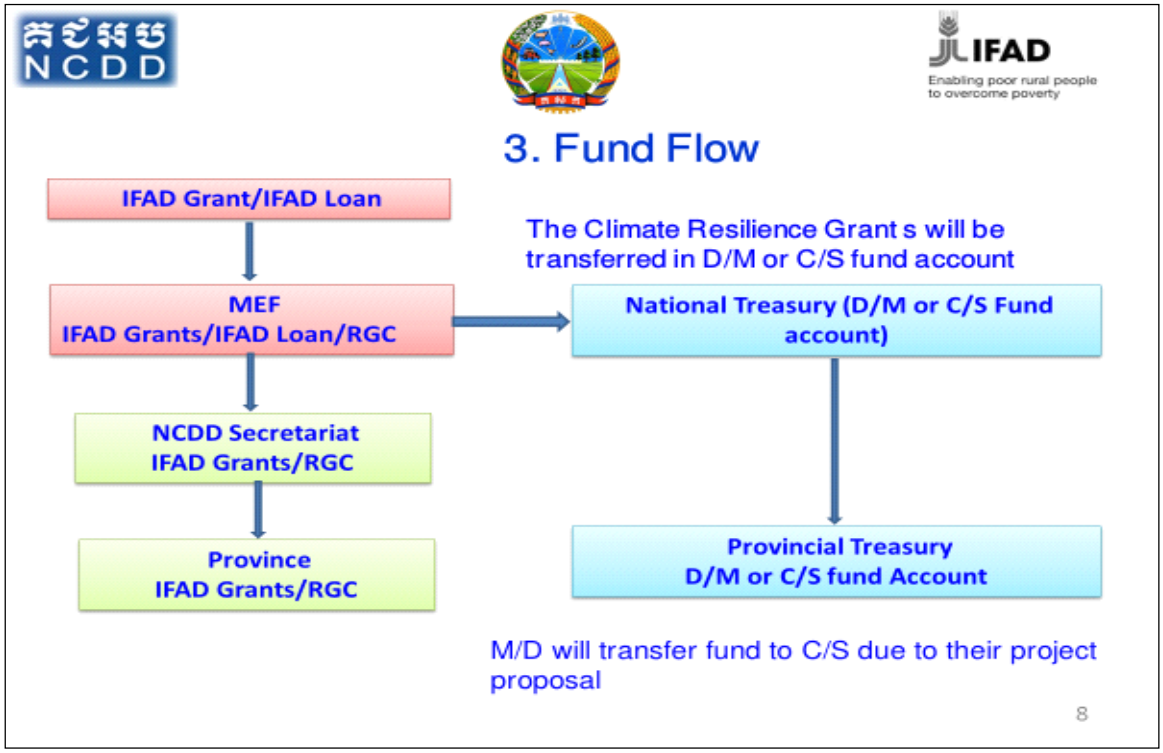
56. The total budget available for NCDD-S under the 'Agriculture Services Program for Innovation, Resilience and Extension' (ASPIRE) project is USD 20,900,000 for component # four. Project duration is from 2015-2021 (7 years).

57. The Agriculture Services Programme for Innovation, Resilience and Extension (ASPIRE) objective is that by 2021 an improved model of extension services for Cambodia will be helping smallholder farmers to contribute to broad-based economic growth. It will achieve this objective through profitable and resilient farm businesses. ASPIRE has four components: evidence-based policy development; capacity development for extension services; improved extension services; and infrastructure to support climate-resilient agriculture. It will target productive poor people and vulnerable smallholder farmers.

58. Although the programme financed by IFAD is mainly focuses on strengthening of the agriculture extension sub-sector through MAFF, it includes a component of climate resilient infrastructure implemented by NCDD-S. ASPIRE follows the PBCRG model, with some adjustments for a stronger focus on infrastructure contributing to agriculture production. The first PBCRG financed through ASPIRE were disbursed in sixteen districts in five Provinces in 2017.

59. ASPIRE is a national programme with activities in 5 selected target provinces: Battambang, Kampong Chhnang, Kratie, Pursat, Preah Vihear, and will expand into the five provinces that implement the PADEE project (Project for Agricultural Development and Economic Empowerment) when PADEE ends in 2018. Those five provinces are Kampot, Takeo, Kandal, Svay Rieng and Prey Veng.

Figure 8: Flow of funds in the ASPIRE project (source: ASPIRE Project Officer, 2017)



60. Funds flow through the State Treasury system and are used in accordance with the budget execution procedures of the SNA. The ASPIRE target districts are presently in five provinces: Kampong Chhnang Province (Kampong Leng, Samakimeanchey, Kampong Tralach districts), Pursat Province (Bakan, Kandeing, Krakor districts), Battambang Province (Thmar Kol, Bavel, Sangke Moung Reussei districts), Kratie Province (Prek Prasob, Chlong, Chet Borey districts), and Preah Vihear Province (Chomksan Roveang, Kulen districts). For 2018 expansion to 3 further provinces (Svey Rieng, Prey Veng and Kampot) is envisaged.

61. The estimated average duration from planning / budgeting to actual field implementation of a sub-project is approximately one year.

62. The average amount for an investment financed is from US$ 15,000 to US$ 50,000, as top up to the commune investment fund or a district investment fund project (1/3 of total project cost).

SWOT summary of the ASPIRE CCA Component (under NCDDS)

Strengths	**Weaknesses**
- Good coordination and collaboration at all levels especially from national level (NCDDS) to provincial level, district level and commune. - Good policy and guidelines to support small-scale infrastructure activities in districts and communes. - Clear structure and mechanism of ASPIRE project on national and sub-national levels to support the project implementation, management and M&E. - Clear sub-national government system for ASPIRE fund transfer and management by using National Treasury to provincial treasury to district and commune account. - Clear time line for budget planning and CCA project planning with the sub-national investment programme planning. - Clear project implementation guideline technical study and for M&E (PIM/DIP). - Clear PBCR Grant management, clear PBCR Grant assessment and participatory project M&E. - Clear tool for CCA assessment, VRA mainstreaming - Strong technical engineering support (TSC/firm). - Clear CCA project planning and prioritization with participant from local people. - Strong ownership of CCA project planning, prioritization, implementation, management and M&E on sub-national level.	- Capacity for district teamwork and of commune councils still limited. - Time consuming AWPB approval from DPs and MEF. - Lack of funds to support CCA assessments and planning.
Opportunities	**Threats**

- High demand by local authority and community disaster risk reduction and climate change adaptation, especially knowledge on small-scale infrastructure (roads, canals, water ponds, water gates, dams, water stations and safe area construction). - RGC policy in strong support which engages the sub-national level for implementation for disaster risk reduction (DRR) and climate change adaptation (CCA). - Sub-national planning guidelines include the CCA assessment and mainstreaming tools for CCA mainstreaming into sub-national development plans and investment programmes. - NGOs and other partners are very strong in support and contribute their resources to implementation of DRR and CCA at sub-national level. - Further promotion of ownership of CCA project planning, prioritization, implementation, management and M&E on sub-national level.	- Natural disasters are appearing stronger, the frequency higher, and surviving becomes more difficult: heavy rains, more or longer drought periods, flood water and storms. - Local communities are facing with many issues and challenges, especially appearance of diseases, loss of houses, and lack of water resource for rice cultivation; overall reduction of benefits from natural resources. - Not enough investment funds for supporting small-scale infrastructure subproject in districts and communes to reduce the disaster risks and enhance climate change adaptation and resilience under ASPIRE project or NCDDS.

4.2.4 The Sustainable Resilience of Livelihoods (SRL) project

63. The total budget available under this project is US$ 4,567,500. Project duration is from June 2016 – June 2020 (4 years).

64. NCDD-S also has the major share (>2 million $) for implementing responsibilities in this project financed by GEF through UNDP, with NCSD/DCC as the executing partners. The SRL project is implemented in ten Districts in Siem Reap and Kampong Thom provinces and includes a PBCRG component as well as a component supporting climate resilient agricultural livelihoods. To ensure cross-sectoral integration, responsiveness to local needs and sustainability, sub-national activities of the Project are integrated with the NP-SNDD under the coordination of NCDD-S. SRL became active in 2015 but has faced implementation difficulties due to uncertainties over the division of responsibilities between MoE and NCDD-S.

65. This project has been designed to reduce the vulnerability of rural Cambodians, especially land-poor, landless and/or women-headed households. This is achieved through investments in small-scale water management infrastructure, technical assistance to resilient agricultural practices, and capacity building support, especially targeting poor women, for improved food production in home gardens. These services will be delivered by sub-national administrations (communes,

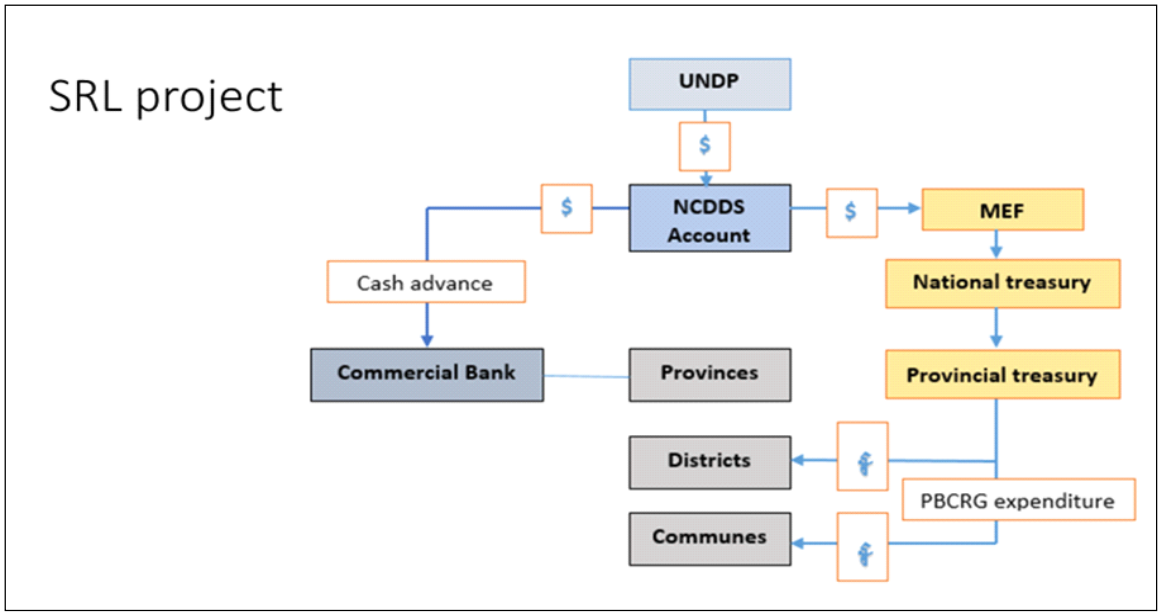
districts and provinces) with a view to strengthen their overall capacity to plan, design and deliver public services for resilience building. The objective of the project is to improve sub-national administration systems affecting investments in rural livelihoods through climate sensitive planning, budgeting and execution. There are three expected outcomes, as listed below:

66. Climate sensitive planning, budgeting and execution at sub-national level strengthened, building on the existing system of development planning at District and Commune levels. Mainstreaming of climate change adaptation in the plans and investment programmes of ten Districts and their constituent Communes is supported. Technical capacity for climate sensitive agriculture extension and for planning and implementation of climate resilient infrastructure investments is developed.

67. Resilience of livelihoods of the most vulnerable improved against erratic rainfall, floods and droughts strengthened; facilitation of investments in small scale water management infrastructure which will contribute to resilient agricultural production, in particular by overcoming unpredictable rainfall during the wet season. Groups of poor and vulnerable women will be assisted to develop livelihood activities requiring only limited amounts of land and will receive complementary support for social capital building activities including leadership training and formation of savings groups.

68. Enabling environment is enhanced at sub-national level to attract and manage greater volume of climate change adaptation finance for building resilience of rural livelihoods, and will result in an improved system of performance assessment for climate change adaptation by sub-national governments, linked to the Performance Based Climate Resilience Grant awards that will co-finance infrastructure investments.

Figure 9: Flow of funds in SRL project (SRL Project Officer, 2017)



69. Funds flow through the State Treasury system and are used in accordance with the budget execution procedures of the SNA. The SRL target areas are Kampong Thom

Province (Baray, Kampong Svay, Prasat Balang, Sandan, and Santuk districts) and Siem Reap Province (Kralanh, Srei Snam, Prast Bakong, Svay Leu and Varin districts).

70. The estimated average duration from planning / budgeting to actual field implementation of a sub-project or activity is approximately 1 year. Initially, activities are supported from the existing investment pipeline which may shorten the period by several months.

71. The average amount for an investment financed through this system is US$ 50,000 per district, to be divided between 2 to 4 activities at commune level.

SWOT summary of the SRL Project

Strengths	**Weaknesses**
- Good coordination and collaboration at all levels especially, NCDDS and DDC of NCSD, province, district and commune administrations to ensure smooth project implementation. - Integrated with SNA human resources structure, both district and provincial level for implementing the project. - Applies the existing guidelines (PBCR and PIM) to support small scale infrastructure project implementation at district and commune levels. - Follows the current government reform (D&D), especially for cash transfer to SNA. - Allows Technical Service Providers (TSP) to provide technical expertise/services for the project implementation in the target districts/communes.	- Limited technical capacity of Technical Service Consultant (TSC) to provide technical support for the project feasibility study and the technical design for climate resilient infrastructure projects. - Time consuming recruitment of the Service Providers (up to 1 year) for moving on with project activities, delays the project implementation, specifically for the livelihood improvement component. - Limited experiences on climate change mainstreaming and execution among project staff at both national and sub-national levels.
Opportunities	**Threats/ challenges**
- High need of SNAs and local communities to reduce the disaster risks and increase climate change adaptation. The needs include, especially, adaptation capacity and small-scale infrastructures (roads, canals, and construction of safe areas). - The current D&D Reform mainly focuses on functions transferred to the sub-national level for implementation of climate change adaptation (CCA) to improve the wellbeing of the poor and vulnerable groups. - The engagement and partnership of NGOs and other partners are adhered to current	- Natural disaster such as earlier heavy rain fall has affected the livelihoods of poor beneficiaries and led to postponing the construction of small scale infrastructure water –related projects. - Adaptation, climate resilience infrastructures require larger investment funds, but the project has only limited resources. - Inadequate investment funds of SNAs for climate change adaptation.

Commune's / Sangkat's administrative structure. - International trends in which the international funding agencies are deeply committed to support climate resilience.	

4.2.5 The Community-based Disaster Risk Reduction (CDRR) project

72. The total budget available for NCDD-S under this project is > 2 million$, the small infrastructure investment fund included in this amount is 1.4 million $. Project duration is from 2014 to 2017 and has recently been extended until 2018.

73. NCDD-S implements activities under Component C of the ADB Grant 9178-CAM, the Community Based Disaster Risk Reduction (CB-DRR) project which is executed by National Committee for Disaster Management (NCDM).

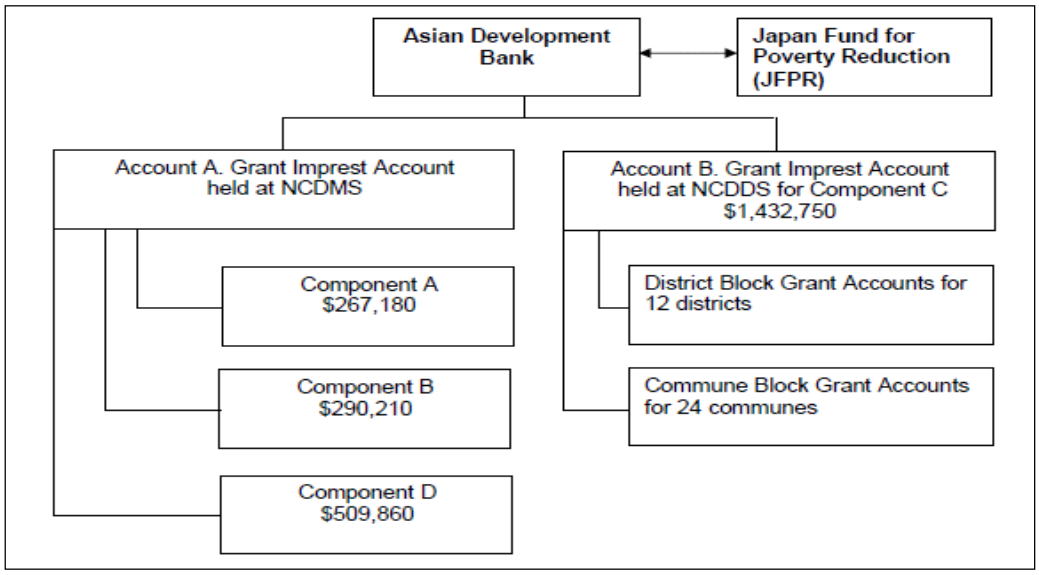
74. The Community-Based Disaster Risk Reduction project, financed by a $2.5 million grant from the Japan Fund for Poverty Reduction support 54 selected communes in 18 districts in the 6 target provinces of Battambang, Banteay Meanchey, Siem Reap, Kampong Thom, Kampong Cham, and Prey Veng, to put in place disaster risk management and climate change adaptation plans. These provinces have borne the brunt of recent natural calamities.

75. The project will provide hazard and vulnerability assessments, early warning systems, and emergency response and recovery plans, reflecting the needs and vulnerabilities of communities. Building disaster risk reduction planning and management capabilities at the grassroots level are seen as the most effective way of getting the best results, and ensuring local ownership.

76. Among actions to be taken at the village level are development of community early warning systems, establishment of safe evacuation routes and areas, community education campaigns, disaster simulation exercises and the formation of village disaster teams.

77. The project strengthens the capacity of commune councils and district committees, ensure equal participation from women and men, and promote engagement of civil society organizations and local communities to plan and implement community-based disaster risk reduction and climate change adaptation initiatives. The project aims to reduce economic losses from floods by 15% over a 5-year period from 2015.

Figure 10: Flow of funds in the CDRR project (CDRR Project Officer, 2017)



78. Funds are directly flowing from NCDDS and NCDMS accounts to districts and communes. The CDRR target areas are Prey Veng province (Preash Sdach district, Beung Doul and Reathor commune, Peam Chor district, Kaoh Sampov and Angkor Ang communes), Battambang province (Thmar Kol district, Tapong and Tameun communes, Bavel district, Bavel and Ampil communes), Banteay Meanchey Province (Preah Net Preah district, Rohal and Prasat communes, Mongkol Borey district, Rhat Teuk and Koy Meng communes).

79. The estimated average duration from planning / budgeting to actual field implementation of a sub-project or activity is approximately 5 months; it takes between 1-2 years for technical implementation of the activity in the district or the commune.

80. The average amount in US$ for a single financial transfer in this cycle is $ 33.000 per district and $ 20.000 per commune, each for a single investment activity. In total 12 districts and 24 communes do benefit under the project.

SWOT summary of the CDRR Component (under NCDDS)

Strengths	**Weaknesses**
- Good coordination and collaboration at all level especially, NCDDS and NCDMS, district and commune to ensure the smooth project implementation at sub-national level. - Good guideline to support small-scale infrastructure subproject activity implementation in districts and communes under CDRR project. - Clear structure of CDRR project in both levels (national and sub-national) to support the project implementation.	- Capacity and ability of district technical assistant (DTA) is limited to provide the technical support for small scale infrastructure subprojects in districts and communes; such as project feasibility, project design, and project monitoring. - Short period of the implementation for the small scale infrastructure subproject under CDRR, difficulty to assess the impact of project.

	- Insufficient human resources to provide full technical support to target district and communes - Weak project monitoring and follow-up by local district and commune project management committees and beneficiaries.
Opportunities - High need by local authority and community to reduce disaster risk and undertake climate change adaptation, especially on knowledge and small scale infrastructure projects (construction of roads, canals, and safe areas). - Policy of Cambodia's government is very supportive and engages the sub-national level in implementation of the disaster risk reduction (DRR) and climate change adaptation (CCA). - NGOs and other partners very strongly support and contribute their resources to implementation of DRR and CCA at sub-national level.	**Threats** - Natural disaster such as heavy rain, drought, flood water, and storms - Local community is facing with many issues and challenges, especially appearance of diseases, loss their houses, and lack of water resource for rice cultivation. - Not enough investment funds for supporting the small-scale infrastructure subproject in districts and communes to reduce the disaster risks and improve climate change adaptation and resilience.

4.2.6 The SPCR Project

81. Cambodia is one of the countries selected worldwide for the Pilot Program for Climate Resilience (PPCR), which aims to demonstrate ways in integrating climate risk and resilience into development planning. With support from ADB and the World Bank Group, the Government of Cambodia prepared the Strategic Program for Climate Resilience (SPCR), comprising seven investment projects and an overarching technical assistance (TA) project. The resource envelope for SPCR is $555 million, including $91 million from PPCR and $464 million in co-financing from ADB and other development partners.

82. With growing experience, gradual unfolding of activities and related capacity building a country pilot program (PPCR) evolves into the Strategic Program for Climate Resilience (SPCR). The SPCR for Cambodia was prepared during the PPCR phase in May 2011 and presented to the meeting of the PPCR Subcommittee during the meeting in June 2011 in Cape Town, South Africa. The funding request at that point in time was 105 million US$, composed of both grant and loan. The SPCR Cambodia encompasses 4 investment components:

I. Promoting Climate Resilience of Water Resources and Related Infrastructure
II. Enhancing Climate Resilient Agriculture and Food Security
III. Improving Climate Resilient Infrastructure
IV. Cluster Technical Assistance (TA) for Strengthening Capacity to Mainstream Climate Resilience into Development Planning

83. Learning-by-doing is in the heart of the PPCR/SPCR mission. The knowledge generation, management and learning platform component provided through Cluster Component IV (ADB TA 8179) supports the generation, dissemination and sharing of climate change information, knowledge products and lessons learned with PPCR's broad stakeholder community and to support national, regional and global replication of PPCR activities. Under investment component IV, Cluster TA, 3 'Packages' are implemented under ADB TA 8179:
    A. Mainstreaming Climate Resilience into Development Planning
    B. Civil Society Support Mechanism
    C. Sub-national Mainstreaming, Gender, Monitoring, Evaluation.

84. The Inception Report (January 2017) for Package C, implemented through a consortium led by UN-Habitat, states that financing of investments will be integrated with the financing schemes to be developed and tested under Outcome 3 of Package C. This may mean that the type and amount of funding available and the type of schemes that can be considered will vary between target districts according to the financing scheme being tested.

85. The following criteria will be applied to prioritization of schemes for financing: high priority under the Commune or District Investment Program; no alternative financing available; clearly defined climate-adaptive benefits; cost-effective support to poor and climate-vulnerable beneficiaries; strong co-benefits; co-financing from general resources of the District or the Commune; sustainability.

(Source: The ADB website, October 2017)

86. Under Package B of TA 8179 (Output 3: "Civil society support mechanism to fund community-based adaptation"), 136 expressions of interest were received from Cambodian CSOs for implementing community-focused adaptation projects. Partner selection was done in a 2-stage process which started in August 2015. It factored in preset selection criteria, an evaluation matrix and an evaluation committee. Training was held in October 2015 with 35 shortlisted CSOs to help understand CCA and DRR programming, give guidance to conduct community level vulnerability assessments and develop proposals.

87. The scheme came to an end in the early months of 2018 and will certainly provide valuable insights into what worked, and what did not, and allow conclusions for future appropriate action. The volume of sub-grants was 1.4 million in total, with grants ranging from $40,000 to $100,000 over an 18-months sub-grant period. 19 partners were broadly spread across 17 provinces, geographic zones (2 in coastal, 4 in upland areas, 2 in urban areas, and the rest in the Tonle Sap and the Mekong river basins).

88. Under Package A and Package C of TA 8179, a number of pilot projects have been initiated, at NCDDS to be implemented through existing practice and routines by the SNAs. Those demonstration projects are implemented under aspects of securing international funding, testing of sub-national finance mechanism, gender mainstreaming, with appropriate planning, budgeting, and evaluation and reporting.

4.2.7 The Cambodian Climate Change Alliance Trust Fund (under MoE)

89. This important grant facility is managed by MoE's Climate Change Department, in its capacity as Secretariat of the National Climate Change Committee, with support by the Cambodia Climate Change Alliance (CCCA) programme. The grant facility aims to support the implementation of the Cambodia Climate Change Strategic Plan (CCCSP) 2014-23, by providing support for catalytic initiatives that will help leverage the required human, institutional and financial resources in the various sectors of the climate change response.

90. Between 2011 and 2014, 20 demonstration projects led by Government agencies, universities and NGOs have been financed under two separate calls for proposals, for a total value of over USD 6 million.

91. Grant window 1 is designed for government ministries and agencies with an approved Climate Change Action Plan (CCAP). Grant window 2 is designed for government ministries and agencies with a coordination role for climate finance. The total fund available for this window is estimated at USD 400,000. Grant window 3 is designed for research and innovation activities and is open to governmental and non-governmental organizations. Through a competitive process, the concept notes of eight applicants were selected for full proposal development.

4.2.8 The Sub-national Investment Facility (SNIF)

92. “CCA-SNIF”: the Royal Government of Cambodia is in the process of establishing a Sub-National Investment Facility (SNIF) which will transfer finance for investments to sub-national administrations, with the initial focus being on the District level. The Sub-Decree establishing the SNIF was approved in 2015 and the facility became active in 2017, with initial financing from an ADB loan as well as from RGC. The SNIF Secretariat is housed in MEF but NCDD-S is represented on the Board of the SNIF. This modality will pilot climate change adaptation financing within the implementation framework of the SNIF. The details including fund flow and the role of NCDDS will be determined through discussions between MEF, NCDD-S and the SNIF Secretariat.

93. The Loan Agreement # 3414-CAM (Special Operation) on the “Decentralized Public Service and Technical Management Sector Development Project” between the Kingdom of Cambodia and the Asian Development Bank (ADB) was issued on 6 October, 2017. An Annual Performance Appraisal Guideline was approved on 30 May, 2017.

94. The core purpose of the SNIF is to finance grants for general investment purposes. However, it is envisaged that additional “non-core” facilities within the SNIF could be created for earmarked grants and this could include grants for climate change adaptation. Detailed design this “climate change SNIF” has not yet begun because the focus has been on operationalizing the core SNIF.

95. The progress up to date can be marked by these points:

- All guidelines were prepared and disseminated to all concerned institutions and to the sub-national administration, especially the District and Municipality Administrations in order to understand SNIF policy, guidelines, objectives of SNIF and criteria on how to apply SNIF to all target province and districts/municipalities.

- All districts and municipalities submitted the SNIF applications to MEF and the SNIF committee appraised the application for all districts/municipalities. After the SNIF committee did the project appraisal, districts/municipalities that passed the selection process were selected, based on the selection criteria.
- Currently, the evaluation team (committee) lead by MEF is in process of monitoring and evaluation all the passed districts/municipalities for comparing information provided by those districts/municipalities.
- The committee will appraise and approve the districts/municipalities' applications of those visited by the committee and they will decide how many districts/municipalities will receive SNIF. The committee will provide further orientation on the SNIF project preparation, management and implementation process.

4.2.9 The Green Climate Fund

96. The Ministry of Environment, as Cambodia's National Designated Agency for the Green Climate Fund, has nominated NCDD-S as a National Implementing Entity (NIE) under GCF's 'Enhanced Direct Access' pilot approach. The nomination was supported by strong indication from GCF of the suitability of NCDD-S' PBCRG model to receive GCF financing. The nomination was submitted to GCF in December 2015 and a team from PricewaterhouseCoopers (PWC) conducted a Readiness Gap Assessment in the second quarter of 2016. NCDD-S is now finalizing a Readiness Action Plan based on the PWC recommendations. Successful accreditation will allow NCDD-S to access substantial finance for scaling up sub-national climate change adaptation. However, the process of achieving accreditation is not straightforward and is may still require a period of one year or more, as well as additional resources for implementation of the Readiness Action Plan.

97. In October 2017 NCDD-S re-submitted its online application for accreditation as National Implementation Entity (NIE) to the Green Climate Fund (GCF), responding to comments from the GCF secretariat on the first application. Not all requirements from the GCF checklist could be met; improvements are necessary in the areas of capacity building for administration and finance, social and environmental safeguards, and a detailed gender policy.

98. Specific issues like a money laundering policy do not fall under the NCDD mandate as NCDD is operating within the overall government rules (in this case under the National Bank of Cambodia). This is an example for a more general problem that government entities face during the GCF registration process. Cambodian representatives to the COP 23 in Bonn/Germany (November 2017) discussed further progress at the GCF board meeting taking place during that event.

99. A concept note for a 15 million $ project has been approved but the full proposal will be developed after successful accrediting. Presently it is difficult to anticipate a timeline for completing the accreditation process; also fall-out from strategic moves and re-orientations within the GCF may have to be considered.

4.2.10 Private finance

Crop insurance

100. In 2015, the Cambodian Agriculture Cooperative Insurance Company (CACIC), an initiative established by the Cambodia Center for Study and Development in

Agriculture (CEDAC), announced the start of an agriculture micro-insurance service to help rice farmers to better respond to climate change.

101. Farmers who become a member of CACIC will have to pay an insurance premium from $20 to $125 per hectare per season, although this cost will vary, depending on the type of rice variety grown. In return, they receive consultation on farming techniques and climate change resilience methods and will get an insurance payout if their crop is damaged either by flood or drought.

102. This is a new initiative in Cambodia, where until now there has not been a comprehensive insurance system for small-hold farmers to recover from disaster, which would otherwise force them to take loans from finance institutions or informal lenders with high interest rates, with a significant risk of losing their land, for example in case of two successive failed crops.

103. This insurance is based upon a reserved fund for farmers. It will help reduce the cases where farmers sell their land to pay back high interest rate loans, migrate for work abroad and help to become a professional or commercial farmers to ensure more sustainable farming.

104. CACIC was founded with $96,000 in funding from the Netherlands' Achmea Foundation. The initiative is presently be implemented by CEDAC in five target provinces including Takeo, Kampong Chhnang, and Kampong Speu.

105. In the last two years, about 150 farmers have signed up with CACIC/CEDAC, registering more than 140 hectares of rice plantation. CACIC/CEDAC is under-capitalized and would have difficulties to survive more than two periods of failed crops. FAO and ADB have indicated interest in the CEDAC rice crop insurance scheme.

Agri-cooperatives

106. In general, similar activities are supported by the Co-operative Organization Cambodian (CAC), aiming to set-up and support financial co-operatives to help Cambodia's rural poor. In addition to helping establish new co-ops, CAC provides training to co-op leaders, monitors co-op operations and promotes networking and sharing between the co-ops so that they can learn and support each other.

107. Cooperatives promote the benefits of using financial co-ops to villagers, especially children. This includes encouraging villagers to open savings accounts and teaching them basic money management skills. Credit union services are provided to the co-ops, including funds for loans to co-op members.

108. The Cambodian Dar-Memot Pepper Agriculture Development Cooperative was established in March 2010 with technical assistance and support by the German Organization DGRV (Deutscher Genossenschafts- und Raiffeisen Verband), an umbrella organization supporting cooperatives in developing countries worldwide.

109. In the wider context of institutional development for sub-national finance the approach developed under the "Raiffeisen" brand could be very helpful as it directly links finance, production, investment, and sharing of social and economic benefits. In Europe, several successful credit union systems and cooperative banks have been named after the "Raiffeisen" name and approach, including pioneering of rural credit unions.

Carbon finance

110. The RGC hopes to leverage carbon finance through forest projects via the UN-REDD+ (Reduce Emissions from Deforestation and Forest Degradation Plus Programme), but there is still a way to go before it gets monetized. The government has a role to play in regulating the carbon market. Carbon finance is mainly about putting in place a framework, regulations, policies, incentives and standards, in the context of the country's Rectangular Strategy and subsequent policies, strategies, roadmaps etc.

4.3 Summary of subnational climate finance

Table 3: Overview on Different Modalities Presented in this Report:

Financing Modality	**PBCRG**	**Community-based grant assistance**				**SNIF (in preparation)**	**GCF**	**Private sector finance**		
		CDRR	**SRL**	**SPCR (package c)**	**Cambodian CC Alliance Trust Fund**			**Crop insurance**	**Agri cooperatives**	**Carbon Finance**
Fund donor/s	UNCDF, IFAD, UNDP	ADB, Japan fund for poverty reduction	UNDP/GEF	ADB, CIF, NDF	EU, UNDP, Sweden	RGC	NIE still to be established	NGO/PPP: CEDAC-CACIC, private insurers interested, selective ADB engagement	Some cooperatives engaged in micro lending to members	UN-REDD, NGOs (Hivos, Nexus), collaboration MAFF
Objective	Demonstrate role of local government in subnational planning and finance systems	Strengthening capacity building, and community-based disaster risk reduction, CCA actions in districts and commune	Reducing vulnerability of rural Cambodians to climate change risks	Piloting different modalities for mainstreaming climate resilience	Support human resources, institutional and financial responses for CCCSP	Genuine government facility for subnational funds	Acceleration of climate funding for diverse purposes	Direct financial help for farmers experiencing crop damages	Organized responses by farmers to enhance capacity and share solutions	Payment system for mitigation (reduction of CO2), e.g. cooking stoves, bio-digesters in Cambodia
Size of funding ($), effectiveness and impact	LGCC: 3 mio ASPIRE: 10 mio SRL:3.5mi	1,43 mio	4,8 mio	3 mio	P1: 10.8 mio P2: 13.2 mio	n/a (possibly 20 mio)	Proposal for 15 mio prepared by NCDDS	small-scale	small-scale	small-scale
Sectors covered	Agriculture, rural livelihood, CCA mainstreaming and small scale climate resilience infra	DRR and CCA-community preparedness	Rural livelihoods and water related infrastructure	Sub-national mainstreaming, gender, and M&E	diverse	diverse	diverse	agriculture	Agriculture, forestry, fisheries, NRM	Rural technologies
Province/Districts covered	LGCC: 8 districts in 2 provinces ASPIRE: 24 districts in 08 provinces SRL:10districts in 2 provinces	12 districts & 24 communes in 6 provinces (district and commune investment fund)	90 communes in 10 districts of 2 provinces (SRP&KPT)	4 districts in 4 provinces (package c)	nation-wide	nation-wide	nation-wide	5 provinces	n/a	14 provinces under the national bio-digester programme (MAFF)
Ease of transfer of funds to	Regular RGC planning / budgeting cycle	Project planning / budgeting cycle	Regular RGC planning /	Project planning /	Project planning /	Regular RGC planning	Presently uncertain	As per contract farmer / insurer	As per rules / regulations of Coop	No regulatory system in place

Financing Modality	PBCRG	Community-based grant assistance				SNIF (in preparation)	GCF	Private sector finance		
		CDRR	SRL	SPCR (package c)	Cambodian CC Alliance Trust Fund			Crop insurance	Agri cooperatives	Carbon Finance
district/commune budget			budgeting cycle	budgeting cycle	budgeting cycle	/ budgeting cycle				
Length of application process and timely response	12-24 months	3-6 months	6 months	test	12 months	n/a	n/a	Pending on scale and repetition of damage	Pending on scale and repetition of damage	n/a
Disbursement process, time	Highly regulated, short, (2 weeks)	Regulated, medium	Regulated, medium	Regulated, medium	Regulated, medium	n/a	highly regulated, slow	regulated, medium	Regulated, fast	Not regulated
Potential for RGC capacity building	very high	high	high	high	high	very high	very high	low	medium	medium
Capacity of SNAs to design, implement, and monitor CCA projects	medium	high	medium	medium	medium	low	low	low	low	low
Financial capacity of SNAs to manage fund	District: low Commune; medium	District: Medium Commune; medium	District: low Commune; medium	District: low Commune; medium	District: low Commune; medium	District: low Commune; medium	low	low	low	low
Sustainability in context of climate resilience	Pending on continued flow of funds for decades	Pending on continued flow of funds for decades	Pending on continued flow of funds of decades	Pending on continued flow of funds for decades	Pending on continued flow of funds for decades	Pending on continued flow of funds for decades	Pending on continued flow of funds for decades	Pending on continued flow of funds for decades	Pending on continued flow of funds for decades	Pending on continued flow of funds for decades
Potential for quick impact	medium	high	High	High, if under direct IA management	high	low	low; but high if linked to community and rural development	high	high	low

111. The Cambodian Climate Change Financing Framework foresees the following functions and responsibilities for the National Committee for Sub-national Democratic Development (NCDD) Secretariat and the sub-national administrations:

- "Integrate climate in sub-national planning and budgeting guidelines for the Commune Sangkat Fund and District-Municipality Fund, based on lessons learnt from existing pilots;
- Integrate climate change in the priorities and planning/application procedures for the Sub-National Investment Fund;
- In cooperation with NCSD, establish a climate tracker for climate ‑ change related expenditures through the CSF, DMF and SNIF (in line with the methodology foreseen for the ODA database and national budget);
- In cooperation with NCSD, clarify the climate change related responsibilities of the various levels of sub-national administrations (province, district, commune);
- Develop climate change capacity in technical support units for sub ‑ national administrations mechanisms at district and provincial levels"(NCDD 2015).

112. The very extensive institutional mission and mandate makes NCCD the primary platform for development, testing and implementing financial schemes for climate resilience at province, district, and commune levels.

113. In the context of capacity building, successful schemes for climate resilience at sub-national levels will enable the SNA to routinely consider climate change at each stage of the public expenditure management (PEM) cycle, i.e. planning, budgeting, budget execution, financial management and reporting, and monitoring and evaluation. In practical terms, mainstreaming of climate resilience may require modifications to systems and procedures to ensure that a SNA has the tools for assessment of climate change risks; the ability to identify and prioritize the most cost-effective climate-adaptive interventions; access to climate change finance; financial management tools to track climate change expenditures within the budgets and accounts of the SNA; access to technical capacity for design of climate-proof adaptive infrastructure and climate resilience building education and training activities; and can monitor simple indicators of resilience and of the effectiveness of climate adaptive actions.

114. Looking at all figures and the institutional framework conditions it becomes evident that it will be an enormous challenge to build up a functional finance supply chain from available international climate finance to actual on-ground investment in provinces, district and communes. The main criteria that such a finance supply chain has to meet are (a) the time needed to mobilize funds, (b) the volume of funding that can be channeled through such system, and (c) the quality of the monitoring system, and its ability to capture lessons learned.

5 Selected global experiences with local climate finance models

"Today, more than ever before, life must be characterized by a sense of universal responsibility, not only nation to nation and human to human, but also human to other forms of life."

- Dalai Lama

112. This section provides global examples from developing countries and emerging economies of successful innovations for CCA and DRR at sub-national levels that could possibly have relevance and weight for replication in Cambodia. Many of the successful examples support the analysis and recommendations made in this report for Cambodia. Approaches from the Philippines, India, Bangladesh, Southern Africa, Zambia are used to demonstrate the rich variety of models, projects, policies available for Government, private sector engagement and NGOs, in most cases sharing common goals through new ways of partnership and collaboration.

113. Experiences with innovative concepts in Albay and Agusan del Norte provinces, the Philippines, private equity funds and contributions of large corporations in India, the 'Local Disaster Risk Reduction Fund' in Bangladesh, concepts of corporate responsibility for sustainable development in southern Africa, and direct collaboration between and INGO and the Government on climate finance and water security in Zambia, provide plenty of stimulation for similar undertakings in Cambodia.

5.1 The Philippines: Innovations in Albay and Agusan del Norte provinces

114. A wide range of innovations in climate change adaptation and disaster risk reduction used resources from the public and private sector to mainstream climate change in Albay province, Philippines. Albay's disaster risk management and climate change adaptation programme became a model for other provinces in the Philippines for developing their own.

115. Bicol Island's second largest province, Albay has experienced many typhoons, volcanic eruptions, tsunamis, and landslides that hit it most of the year. As a result the people of Albay have been vulnerable to persistent poverty, low economic income, and climatic and geological hazards. In recognition of these problems, the Albay provincial government has crafted a strategy guided by the UN-MDG and focused on reducing the province of disaster risk and vulnerability. Institutions, among them the Center for Initiatives on Research and Climate Change Action, were established to handle matters of climate change adaptation and mitigation. Partnerships with other institutions – such as the Philippine Atmospheric, Geophysical and Astronomical Services Administration or PAGASA and UP Los Baños – were nurtured.

116. Projects that need to be done through engineering interventions include flood control for flood plains, watershed protection and reforestation, and irrigation rehabilitation.

117. A large source of funds for these engineering interventions came from the World Bank's country assistance program and its non-government counterpart.

118. Social preparation programs include continuous training and education on dealing with climate change and other disasters. Training on evacuation and community kitchen management, mountain survival and compass reading, and community risk mapping and continued planning are periodically held. Through games and magic shows, children are also taught disaster risk reduction and its importance.

119. Private investments surged, and the province was acknowledged to have the fastest growth among Bicol's other provinces. Furthermore, the province was able to accomplish the United Nations-Millennium Development Goals (UN-MDG) ahead of the target year. Two Philippine national laws on DRR-CCA have been enacted based on the Albay model. These are the Republic Act 10121 or "The Philippine Disaster Risk Reduction and the Management Act of 2010" and RA 9729 or "The Climate Change Act of 2009."

120. Some of the risk reduction practices employed in Albay are land use planning, zoning, and risk mapping; geostrategic and engineering interventions; social preparations, and capacity buildup and disaster responses. Albay incorporated science-based adaptation practices as its first line of defense against disaster.

121. Through Albay's geostrategic intervention strategy which identified the hazard-prone areas, the government was able to redirect the centers of business and residential activities toward safer locations. Example is the relocation of more than 10,000 households in high-risk areas.

122. The government loosely coordinates with PAGASA (Philippine Atmospheric, Geophysical and Astronomical Services Administration). A well-equipped regional weather bureau has been established in Legazpi City, Albay's capital. Moreover, a warning communication protocol with 15,750 SIM cards have been distributed to village officials was developed.

123. Albay has mobility assets such as ambulances, rubber boats, helicopters, passenger trucks, and fire trucks that could evacuate 160,000 people per day if needed. These vehicles were supplied by the LGUs, provincial governments, national agencies and private organizations. Protocols for evacuation are well established and a steady budget for calamities is maintained.

(Source: Sarte Salceda 2012)

124. Models of innovative financing schemes for climate vulnerable farming population (Rural Bank Model, Coop Model, and Local Government Unit Loan Facility) were developed and introduced in Agusan del Norte province.

125. Models for flood vulnerability in Agusan del Norte revealed that a household that depends on farming is likely to sustain damage higher than households that have non-agricultural income sources because products of agricultural livelihoods are directly dependent on climate patterns and environmental conditions. (Manlosa and Valera 2017)

126. The majority of the farmers were not able to implement adaptation strategies because of lack of technical information and awareness on available technologies and options. Infrastructure that would mitigate flooding is also lacking. Policies that facilitate the flow of information, technology transfer, and close collaboration

between scientists and farmers are critical in reducing the damage and in averting aggravation of poverty of this vulnerable group.

127. Historically, national policies have focused on improving agricultural productivity of the farming sector. They have made advances in addressing needs of farmers to adapt to climate change impacts. However, there is a need to assist and capacitate agriculture-dependent households of the poorest areas of the country to find ways to adapt to climate change effects, particularly the increasing frequency of flooding.

128. Enhancing the adaptive capacity of farmers through projects like pilot-testing of flood-resistant rice varieties and crops toward reducing income loss and ensuring a certain level of food security; and conducting proper zoning of ongoing and future business investments are recognized as an important step in reducing damage.

129. The farmers In Agusan del Norte province lack access to credit information, generally obtain financing from traders at very high interest, lack acceptable collateral, have unstable income & cash flow, have low paying capacity, low availing of insurance (crop and health) and limited business knowledge and experience.

130. Coordinated efforts of Local Government Units (LGU), Cooperatives and the Rural Bank provided low interest, non-collateralized loans with less document requirements and quick processing. Production-cycle responsive releasing of savings component, were bundled with non-financial services like financial literacy, technical support (environmental briefings, FFS/IPM IPM/Organic Farming, marketing info/assistance, insurances for health, crop, life.

131. A 'Weather-Index based Insurance' (WIBI) Package for rice and corn was introduced with these characteristics: low and excess rainfall affordable premiums, faster pay-outs, no field assessments of damages, no need for filing of claims, pay-out automatic upon breach of the weather index. Again, this was bundled with support services: WIBI literacy, technical training and good agricultural practices and pest control (FFS IPM).

132. Weather Instruments/ EWDs installed, Municipal/Barangays with operational EWS plans and trained monitors, Local AWS Reference Stations, Back-up Stations and EWDs. Financing + Insurance + Risk Reduction through Early Warning & Preparedness

133. The main lessons learned from Agusan del Norte are:

- Bundling financial services with non-financial services such as trainings (agricultural, business, financial education trainings) makes the package more attractive to farmers while increasing their opportunities to maximize farm outputs and diversify their productive activities.
- Emphasis on offering savings products (voluntary or compulsory) helps farmers to better deal with emergencies including disasters and to be less loan dependent for their economic activities.
- Integrating insurance and other social protection mechanisms, to include crop, health & medical insurance, strengthen confidence of farmers to engage in agriculture risk taking while protecting their crops and their families.
- Integrating risk reduction measures to financial packages work to reduce exposure for more effective resilience-building work.

- Engaging in Public and Private Partnership with LGUs, training institutes, financial service providers including insurers) facilitate the effective and greater reach for financial (including insurance) and/or non-financial (including agricultural and entrepreneurship training support) services.

(Source: Innovative Risk Transfer Mechanisms, Integrated Financial Package-cum-Weather Index-based Insurance (WIBI), Lurraine Baybay Villacorta, Climate Change Adaptation Project, ILO, during 2nd Asia-Pacific Climate Change Adaptation Forum, 12-13 March 2012, UNCC, Bangkok, Thailand)

5.2 India: Private equity funds and contributions of large corporations

134. With 1.25 billion people, India suffers from a level of resource scarcity beyond any other nation – but it's making big moves in solar power and corporate responsibility. Private equity funds and contributions from large corporations through their Corporate Social Responsibility (CSR) programmes, for example, have been used to finance adaptation strategies.

135. In Odisha, for example, several private equity firms' investment mandate overlapped with the Odisha Climate Change Action Plan, in areas such as waste water management, organic farming, rural health etc. Funding from large corporations through their CSR programmes have already supported initiatives, such as water resource management, waste water management, social forestry, organic farming, etc.

136. These initiatives are fragmented in nature and implemented at a much smaller scale, mostly through NGOs (IFMR, 2013). Active engagement of the Government with the CSR cells of large corporations, possibly in revising the guidelines for CSR programmes to include implementation of measures in their climate change strategies or action plans, can spur contributions and investments in climate resilience.

137. In 2014, Prime Minister Narendra Modi launched the Clean India Mission, a five-year effort to eliminate open defecation, provide access to improved sanitation, and clean up the River Ganges, among other targets. Corporations have joined up with the Clean India Mission, committing to invest in education for girls and adopting communities for cleanup, among others. Domestic and multinational corporations have been important partners for a range of India's sustainable development efforts, although most of these business efforts tend to be focused locally or regionally.

138. In 2013, India became the first country in the world to mandate corporate social responsibility (CSR) practices, with a world-leading corporate law that requires about 8,000 companies in India to invest 2% of its profits per year on CSR programs. The resulting investment could mean as much as $2bn per year will be invested in poverty reduction, environmental and social programs. The law similarly emphasizes that companies invest in areas local to its operations.

139. Plenty of debate remains about the current and future impacts of India's CSR law and whether it will end up being a net good for the nation or simply result in check-the-box CSR practices.

140. Information technology company Infosys pioneered an effort in 2014 to raise the profile of green building technologies among Indian firms. When it undertook an expansion of its campus in Hyderabad, the company built one to traditional

standards and one with energy efficiency at its core. The resulting green building, which earned Leed Platinum certification, uses 38% less energy than its counterpart, and cost 1% less to build.

141. Building green - as India expands - is one example of the potential that all developing economies can benefit from. Rather than using 20th century building practices and then retrofitting for efficiency down the line, building green from the start could enable companies and the country to make more rapid progress towards their sustainability goals.

(Source: Matthew Wheeland, The Guardian, February 2015, blog Matthew Wheeland @MattWheeland)

142. Another report on the 2013 Companies Act, analyzes one of the world's most interesting experiments to promote private philanthropy—the CSR requirement in this act. The act makes it mandatory for corporations in India with revenues of more than 10 billion rupees (approximately $131 million) to give two percent of their profits to charities.

143. It pushed India's corporate sector to provide the seed capital and philanthropy for solutions to India's most challenging problems in education, healthcare, the environment and skills development.

144. Already before the act, corporate housing, and subsidized living, and employee retention practices have been linked to community development initiatives.

145. What has been learned so far? It is a sector that is still in the early stages of getting organized. The "newness" to philanthropy in India makes it difficult to provide more constructive feedback at present. This assessment is derived from the India CSR report's interviews with 39 leaders of India's largest NGOs - the very organizations receiving CSR funds.

146. Three core themes seem to resonate as experience so far:

- "Move beyond the check" by ensuring that CSR departments engage more with their NGO partners;
- "Emphasize the corporate in CSR" by actualizing the role of corporate to assist NGOs in areas of operations, finance, marketing, and governance; and
- "Focus on impact" by generating and implementing more long-term rather than short-term internal projects and strategies.

147. The problem is that dictated development agendas through mandated CSR may fail to meet the actual needs of communities. "Top-down philanthropy is not only at times unhelpful but sometimes actually destructive to community". (David Ellerman, World Bank).

148. Worldwide, philanthropy is a private engine that launches new ideas, builds civil society organizations and provides proof of concept for transformative solutions. The combination of mature grant-makers, a robust economy, new technology platform means hope to address major challenges that had previously been viewed as too big to impact.

(Source: Ohlrich, Noreen 2017, Mandatory Corporate Social Responsibility in India: How Is It Working?, in: American Bazaar, February 2017)

5.3 Bangladesh: The Local Disaster Risk Reduction Fund

149. The third global example shared in this report is the establishment of the 'Local Disaster Risk Reduction Fund, a funding mechanism established jointly by Government and the donors in the Comprehensive Disaster Management Programme. It provides resources and financial support for the most vulnerable communities in the form of grants to broaden and strengthen their coping capacities against disaster and climate change.

150. Governed by a Technical Committee and the Approval Committee, the grant is awarded to DRR/CCA small/medium projects that are developed based on the Risk Reduction Action Plans (RRAPs) developed through Community Risk Assessment (CRA) methodology; aligned with other community needs; and being endorsed by the Union Disaster Management Committees (DMCs).

151. LDRRF's supporting the DRR/CCA interventions contributes to the strengthening of the institutional capacity of DMCs at Union, Upazilla (municipality) and District levels as well as of the NGOs/CBOs. The bottom-up process contributes to building leadership, facilitating community's pro-active involvement, and encouraging the application of indigenous coping mechanisms to be part of risk reduction initiatives. LDRRF also enables the DMCs integrate the RRAP into the local development planning processes.

152. The LDRRF finances projects that benefit the most vulnerable particularly the disabled, widows, landless, poor and women headed families. During 2005-2009 LDRRF supported more than 560 small / medium scale projects in more than 380 Unions in 11 districts benefitting over 600,000 vulnerable people. DRR/CCA projects were implemented through the partnership of NGOs and Union DMCs. In addition, LDRRF also funded action / research projects.

153. The typical funded DRR/CCA interventions are

- Awareness raising and community volunteers,
- Alternative / resilient livelihood options,
- Plantation/forestation,
- Emergency evacuation route to emergency shelter,
- Plinth & ground raising above flood/storm surge level,
- Cyclone resistant housing components,
- Improve access to safe drinking water,
- Prevention of stormwater drains being clogged by garbage disposal,
- Mobile school and reduction of childbirth mortality.

154. LDRRF's second phase (2010 – 2014) was scaling up the DRR/CCA interventions to benefit at least 10 million people spread across 40 districts. It created windows for additional funding envelope with the prospects of attracting resources from donors. LDRRF is taking preliminary steps to transform itself into sustained and independent social fund complementing government safety net programmes.

(Source: Ministry of Food and Disaster Management Bangladesh, Disaster Management and Relief Division, in: www.preventionweb.net)

5.4 Southern Africa: Corporate responsibility for sustainable development

155. This case study from several countries in southern Africa has the objective to demonstrate success of institutionalized engagement of the private sector in climate resilience measures.

156. It could be highly compatible to the Cambodian economic environment. A similar corporate responsibility forum as mentioned in the case study could be set up under the MoC or the CDC with the different Chambers of Commerce.

157. Private companies play a crucial role in the overall development of societies. Not only do they generate growth and create jobs, but they also have an influence on people's wellbeing and an impact on the environment.

158. Responsible action on the part of companies, that is to say action that considers the economical, environmental and social implications of their business, is referred to as corporate social responsibility (CSR). Companies that structure their activities in a sustainable manner along the entire value chain not only contribute to the wellbeing of their employees, society and the environment, but can also improve their own financial stability and competitiveness.

159. Since 2002, GIZ has supported responsible business practices worldwide. Since 2005, the Center for Cooperation with the Private Sector (CCPS) has promoted Corporate Social Responsibility throughout sub-Saharan Africa. To this end, CCPS: cooperates with national and regional private sector initiatives on Corporate Social Responsibility (CSR);assists non-governmental organizations and academic institutions as local CSR competence centres; and promotes an enhanced understanding of CSR in Africa and the adaptation of this concept to local contexts.

160. Since 2005, the Center for Cooperation with the Private Sector has supported a number of private sector CSR initiatives in Africa. In Liberia, it helped Arcelor Mittal, other companies and the government to set up the Corporate Responsibility Forum Liberia (CRFL). Today, the Forum has 37 members and helps to build companies' CSR competence through training workshops and other measures.

161. In Kenya, CCPS has supported the Kenya Association of Manufacturers (KAM) in developing a voluntary energy agreement, the Energy Efficiency Accord. Companies that sign the Accord make a commitment to the government to increase their energy efficiency so as to meet agreed targets. During the first year, the participating companies were able to achieve energy savings worth more than EUR 450,000. The quantity of energy that has been saved would be sufficient to provide roughly 30,000 Kenyans with electricity for a year.

162. Furthermore, CCPS contributes to the creation of local CSR competence centres in Africa. One such example is the practice-oriented Centre for Corporate Responsibility (CCR), which was set up in cooperation with the University of Ghana Business School and has since established itself as a service provider on the market. Five CSR training modules for companies have been developed and implemented. The Centre's expertise is also used by other actors. In June 2012, an anti-corruption training course was organized for 200 recruits from the Ghana Police College.

163. The information gathered on the practice of CSR in Africa is processed and made available to the public. Examples include the Guidebook for the Facilitation of Multi-Stakeholder Processes or the analysis of the CSR landscape in 12 countries of sub-Saharan Africa.

(Source: The GIZ website, www.giz.de)

5.5 Zambia: Climate finance and water security in Zambia

164. This case study from Zambia has been selected because Zambia is another SPCR country, and because it shows the very useful interaction between government agencies and a larger NGO (WaterAid) in the strategically important area of water management (drinking water and sanitation).

165. It could be highly compatible to the Cambodian environment. A similar model of direct cooperation between non-profit organizations, government institutions and climate finance providers could be tested.

166. This case study was developed for the project *'Research on climate finance and water security',* funded by Water Aid. The project aims to identify the type and scale of national and sub-national programmes and projects that have been funded by climate finance and how they relate to local water security.

167. Zambia has significant water resources, but these are unevenly distributed, with a large number of farmers relying on rainfed, rather than irrigated agriculture. Water is viewed by the government as a strategic energy resource, due to the high level of hydropower. In terms of climate, temperatures are increasing and projected to continue to do so. Precipitation in the south of the country has witnessed a drying trend, with projections indicating that this will also continue, while the north experiences a higher variability of rainfall.

168. The institutional and policy frameworks for climate change remain relatively under-developed in Zambia. The Ministry of Finance and National Planning and the Ministry of Lands, Natural Resources, and Environmental Protection are the key institutions. The National Climate Change Response Strategy and the National Climate Change Policy are not yet endorsed by the government several years after they were developed. The Interim Inter-Ministerial Climate Change Secretariat acts as an interim structure, bringing together key ministries to support mainstreaming and coordination.

169. WASH (Water, Sanitation, and Hygiene) is not currently part of the mainstreaming discussion on climate change within Zambia. While there are broad guidelines on how to mainstream climate change in national plans, there are no guidelines for doing this in the water sector. WASH lies under the Ministry of Local Government and Housing (MoLGH), while responsibility for WRM lies with the Ministry of Energy and Water Development (MoEWD). MoLGH staff are not currently attached to the IIMCCS (Interim Inter-Ministerial Climate Change Secretariat, attached to the Ministry of Finance), creating an institutional barrier to accessing finance.

170. While there is no formal climate finance structure in Zambia, climate change finance activities are coordinated through MoFNP, which has taken direct operational control of the PPCR, hosts the IIMCCS, and was chosen as the National Designated Authority for the Green Climate Fund (GCF). Readiness efforts are

currently underway to support access to the GCF, particularly in the choice of National Implementing Entities.

171. Zambia's pipeline of climate change projects and programmes, to date, has been largely supported by international agencies and development partners and capacity needs exist to develop ideas into tangible projects. The PPCR is the largest initiative (around US $75 million) with a focus on agriculture and infrastructure resilience. Only a small number of projects identified in the CFU have a direct water security profile.

172. WaterAid seeks to engage with and support ongoing and emerging climate finance policy processes, such as the National Climate Change Policy (NCCP) and the draft National Climate Change Response Strategy (NCCRS), the Interim Climate Change Secretariat, and the ongoing efforts of the Pilot Programme on Climate Resilience (PPCR). By doing this, they could raise the profile of water security considerations, and in particular WASH, in the policy debate.

173. The INGO considers supporting the Ministry of Local Government and Housing (MoLGH), which has responsibility for WASH, to become fully engaged in the institutional climate finance structure. This may include ensuring good cooperation with the Ministry of Energy and Water Development on water security issues, supporting MoLGH to engage with IIMCCS, and ensuring that the Ministry engages with the Green Climate Fund readiness process in Zambia to attain National Implementing Entity status.

174. INGO seeks to promote better understanding of the linkages between climate change and WASH, and encourage mainstreaming in this area. There is scope to establish sector guidance for the identification and development of climate change-related water projects. Participatory approaches could identify local-level as well as national-level needs, fostering collaboration in project development. Advocacy could engage with parliamentarians, NGOs, academia and other research bodies.

(Source: Savage, Matthew and others, June 2015)

6 Perceptions on and from users of climate finance

"If we are to stay within 2 degree maximum temperature rise, and with the release of the new IPCC report this week, there is no doubt that we must, we have to, stay within a finite, cumulative amount of GHG emissions in the atmosphere.

We have already used more than half of that budget. This means that three quarters of the fossil fuel reserves need to stay in the ground, and the fossil fuels we do use must be utilized sparingly and responsibly."

- Christiana Figueres, Executive Secretary of United Nations Framework Convention on Climate Change, at the 40th Anniversary Conference of the International Petroleum Industry Environmental Conservation Association (IPIECA), London, April 2014

6.1 Government Cambodia and NCDD

175. A central piece of the strength of the sub-national development process relates to the level of fiscal autonomy available for a sub-national administration (SNA). Globally, communes account for less than 5 percent of total public expenditures (UCLG, 2010). United Cities and Local Governments (UCLG), 2010: “Local Government Finance: The Challenges of the 21st Century.”

176. In Cambodia, the Law on Sub-National Fiscal Regime and Property Management passed in 2011 aims to create sources of finance for sub--national government bodies for sufficient means to carry out local development (Cambodian National Budget, 2013).

177. Regarding investment for climate change adaptation and resilience the expectations from RGC on the NCDD programme are manifold:

- To support the capacity of the local government to implement climate change adaptation for increased climate resilience at the local level;
- To increase the government capacity to establish and maintain local infrastructure that contributes to resilience of the local community;
- To enhance the policies for mainstreaming CCA into the local government planning and strengthen the role of local government in implementing the CCA. A new guideline for local government planning was approved in the beginning of 2017 where the planning and budgeting of climate intervention will be a part of the planning process;
- To support and provide access to resources (climate finance) directly and channel it to their local government;
- To scale up the financial delivery to local government especially those administrations more vulnerable to the climate change;
- To be the first Cambodian National Implementing Entity (NIE) for the Green Climate Fund (GCF); to manage direct access for scaling-up flow of funds for resilient investment to the local government. NCDD is in the process of becoming accredited to the GCF’s ‘Enhanced Direct Access’ mode;
- To foster and strengthen the Cambodian Local Government Association (National Association of Capital and Provincial Councils, and National League of Local Councils) and to support capacity development;
- To emphasized the importance of further policy development – e.g. development of a “sub-national policy for climate resilience”;
- To support the expansion of CCCSP activities to sub-national level and maintain alignment with MoE strategies;
- To reduce the difficulties and delays experienced in amending sub-national budgets once they are approved;
- To investigate the feasibility of grant allocations that can be decided in time for SNAs to be included in the national budget;
- To enhance procedures for conditional cash transfers particularly in view of the envisaged scale-up of investment for climate resilience.

178. Both, the general mandate on NCDD and specific expectations related to mainstreaming sub-national climate resilience, do require a solid further institutional

development of NCDD-S. The existing stand-alone CCA projects, combined with the GCF efforts, could possibly be bundled into a stronger programmatic nucleus as part of strengthened institutional development process.

6.2 Non-government Organizations

179. Non-government organizations (NGOs) and Civil Society Organization (CSOs) often recognize that adaptation to climate change is a new activity for which there is no real pre-existing "expertise" available – they emphasize that this to be acknowledged by all funding schemes developed.

180. The need to finance immediate adaptation actions for the poorest and most vulnerable communities in the poorest and most vulnerable developing countries is not controversial. Developed countries have already contributed many billions to different global funds and it is general agreement that finance adaptation activities have to be beneficial for the poorest and most vulnerable countries.

181. However, if the proof of the pudding is in the eating, then the poor and vulnerable countries are not eating much of it. Instead they are on a treadmill of paperwork to even qualify to receive any of the funds that are already earmarked for them. Many adaptation projects which were planned have not seen a cent delivered due to extensive paperwork being required through the process. Such model of "micro-scrutiny" of paperwork used is seen ineffective and inappropriate.

182. Not only is it failing to spend the amount already in the pipeline but how does it lead to a credible plan to scale up when the amounts increase as it would be required by the Paris Agreement? Different models are required that will be fit for purpose. Hence the entire process, at least for the first 10 years, must be seen as a learning-by-doing process where expertise will be developed by practitioners and others over time.

183. Priority for adaptation funding is for the most vulnerable communities in the poorest districts. However, the modality of scrutinizing heavy paperwork puts these very communities and districts at a disadvantage as they are least able to generate the required level of paperwork. (A similar point of view is widely shared across many small and most-at-risk countries.)

184. Government institutions usually must prove that they have a track record of delivering projects, a functional auditing process, established procurement procedures, other relevant guidelines and data, etc. These requirements – as justified as they may be – take time and do require a level of institutional and human capacity that hardly can be established within a short period of years. Many NGOs and CSOs tend to argue that they are more suitable to operate successfully in this 'capacity gap'.

185. In Cambodia, through experiences with the CCCA Trust Fund and SPCR packages (both under MoE, Climate Change Department), a wide range of actors among government bodies, academia, civil society, public and the private sector, have been developing capacities related to accessing and utilization of climate funds. These institutions, organizations and individuals constitute an enormous value of initial 'seed capacity and capability' that should be consistently preserved, maintained and further developed across all sectors of the economy.

186. There is a certain reflection that the international community does not show the same responsive attitude towards climate change as shown during the financial crisis and in support of failing banks. Nonetheless, a large number of global and local educational, academic, public and private organizations and institutions are working on enhanced capacity building and climate finance readiness.

187. According to some sources (e.g. the Climate Action Network) support should be more long term and on-site than it currently is. Ideally, an expert should be present in the institution for months, if not years, and ensure functional processes before they leave. Micronesia is one of the first examples where this long-term support is being planned, and a local consultant will be hired to work on development of the country's climate finance scheme for two years.

188. But as two years is a long time, other countries are opting for the alternative route of direct access – through international institutions that have the means for accessing and channeling climate finance. Some international NGOs and CSO do offer the technical, logistical and personnel options that may be most suitable under such circumstances.

189. This goes against the spirit in which climate funds should operate is argued by others. The purpose of climate finance is that smaller entities should be able to access the fund directly. In the past, the experiences of communities who have historically been facing obstacles, e.g. in remote areas, indigenous or ethnic groups, or communities in areas outside the commercial mainstream, were left out.

190. Simplifying the planning, budgeting, approval and delivery process would perhaps be the biggest help. The final text of the Paris agreement urges institutions "to support country-driven strategies through simplified and efficient application and approval procedures" (Paris Agreement, United Nations Treaty Collection, 8 July 2016).

191. According to the Cooperation Committee for Cambodia (CCC) today there are about 3500 registered NGOs in Cambodia. Fewer than half are currently active, but that is still about one active NGO for every 10,000 Cambodians. The NGO development in Cambodia began in the early 1990s after the signing of the Paris Peace Agreements, marking the start of an era of development and democratic processes. In fact, the very first NGOs – the International Rescue Committee, Médecins Sans Frontières and Oxfam GB – had been in Cambodia since as far back as the fall of the Khmer Rouge.

192. As in many other developing countries, the scope of activities of both international and local NGOs is very broad and touches upon almost every sector of social development: the environment, civil and religious education, human rights, poverty alleviation, emergency relief and many others. Some NGOs specialize; others try to fulfill a very broad mission. In general, though, the NGOs seek to fill gaps in government social and economic policies.

193. According to the CCC's 2012 report, between 20 and 30 percent of Cambodia's population benefit directly from the activities of NGOs. Along with their long-term development programs, NGOs are often the first to respond to disasters and provide first aid to victims. Yet while there is widespread recognition of the significant contribution NGOs have made to Cambodia's reconstruction and development, their role does occasionally attract controversy.

194. The efforts of NGOs alone are not sufficient to enable comprehensive coordination. It is the government's responsibility to coordinate the actions of development organizations at the sub-national level through mechanisms such as Provincial Cooperation Committee or the District Integration Workshops.

195. Despite all shortcomings, the individual, social, technical, economical, local institutional capacity created through the wide range of NGOs in Cambodia presents a source and resource that could be very effective in an overall concerted approach launched under the government.

6.3 SMEs and local finance operators

196. Cambodia has a diversified structure of small- and medium enterprises that primarily service their local economy in provinces, district and communes. The penetration with suppliers of (micro-) finance is high and one reason for local rural development of the past 15 years.

197. "Microfinance services (MFS) are recognized as tools for helping to reduce the vulnerability of the poor. If this is indeed the case, then the possibility of linking MFS to climate change adaptation deserves careful consideration. MFS can provide poor people with the means to diversify, to accumulate and to manage the assets needed to become less susceptible to shocks and stresses and/or better able to deal with their impacts. Yet these links may not hold for everybody. MFS typically do not reach the chronically poor, may encourage short-term coping instead (or at the expense) of longer-term vulnerability reduction, or even increase vulnerability. These limitations and risks aside, MFS can still play an important role in vulnerability reduction and climate change adaptation among some of the poor, provided services better match client needs and livelihoods."

(Source: Hammill, Anne, Richard A. Matthew and Elissa McCarter, January 2009)

198. To help the most vulnerable communities become more resilient to the effects of climate change, financial institutions should support small and medium-size enterprises (SMEs) that are moving towards the green economy concepts of the government. When an SME builds up its own climate resilience, it can have cascading effects in the community around it.

199. Globally in emerging economies, SMEs account for as much as 45% of employment and up to 33% of GDP – and these numbers are significantly higher when informal SMEs are included. According to the World Bank, 50% of formal SMEs lack access to formal credit, and the total credit gap for both formal and informal SMEs is as high as $2.6tn worldwide. While the gap varies considerably among regions, it is particularly wide in Africa and Asia.

200. Microfinance can close this gap by providing the small loans that SMEs need to get off the ground and thrive. According to the OECD, microfinance institutions, including national aid agencies, banks, credit unions, and nonprofit organizations, already provide basic financial services to more than 100 million of the world's enterprising poor, 90% of them women.

201. In Cambodia, the role of microfinance in boosting SMEs' climate-change resilience needs to be more fully defined and models from abroad may have to be replicated. As examples from Africa, Asia, and Latin America show, microfinance has enabled SMEs to invest in drought-resistant crops, build better irrigation systems, and

purchase climate insurance to protect incomes when crops fail because of too much - or too little – rainfall. Microfinance institutions should reward SME owners who use loans to finance climate-change resilience and renewable-energy projects.

202. These projects already have a proven track record. According to a review by the OECD, 43% of microfinance activities in Bangladesh in 2010 had strengthened the resilience of communities. These projects include lending programs for weather-resistant housing and drought- and salt-tolerant seeds, and they enhanced climate-change resilience.

203. In Nepal, microfinance is supporting disaster relief and preparedness, crop diversification, and improved access to irrigation. Microfinance can also help SMEs transition to low-carbon business models, by financing their efforts to adopt renewable energy sources and shift to sustainable production and supply chains.

204. The private sector should better understand that the climate crisis is also a unique opportunity, especially with regard to SMEs. In fact, some in the private sector already recognize this: e.g. the GSM (Global System for Mobile communication) Association (GSMA) is a trade group that represents hundreds of telecoms operators that are facilitating microfinance in rural areas. With mobile phones, farmers can quickly find information ranging from seed prices to weather patterns, and have immediate access to the funds they need to complete transactions. This mobile-enabled information leads to better decision-making, saving the farmers money and boosting their resilience to extreme-weather patterns and droughts. And of course mobile providers benefit as well from operating in an expanded rural market.

205. There are also opportunities in peer-to-peer (P2P) lending networks, whereby online services match lenders directly with borrowers. P2P micro-lending platforms such as lendwithcare.org, Lendico, and RainFin have proved popular, and could re-energize the microfinance community and provide wider access to loans for SMEs in developing countries.

206. Financial products like weather related products – which insure the harvests and enterprises of SMEs and some of the world’s poorest people – also have potential.

207. Both the public and private sectors should support efforts to extend micro-financing to SMEs. Because of its highly diversified micro-finance sector, Cambodia is in an excellent position to replicate models from other countries and set own examples that may be adopted in other parts of the world. Further policy development towards such objectives would support individual efforts. It can be assumed that the financial capacity embedded in this approach is by far exceeding national options for public climate finance, and would have an immediate effect in provinces, districts, communes.

7 Innovative Financing Scheme for Mainstreaming Climate Resilience at Provincial, District and Commune Levels

Background

208. TA 8179, Package C, includes implementation of pilot and demonstration projects, offering an opportunity to test at least one financing modality for funding climate resilience demonstration projects at the subnational level, with financing flowing from the national level to the district.

209. During the planning of the pilot projects, the identification of a manageable and expedient financing modality has been at the forefront. In addressing this priority, a meeting was held between the MoE, the MCRDP team and the SPCR/NCDDS team in February 2018 to make initial suggestions for this modality. The meeting was attended by the MCRDP Director and the NCDDS SPCR Project Coordinator.

Suggested Innovative Finance Scheme and Management for Mainstreaming Climate Resilience at Provincial, District and Commune Levels between MoE, MCRDP, SPCR/NCDDS (February 2018)

210. The suggested financial flow has the following characteristics:

- Adheres to existing financial flow and financial management guidelines under a NCDD-S stand-alone project (e.g. CDRR, ASPRIE, SRL and LGCC).
- Funds transferred via the bank account of NCDD-S-District to the contractor.
- NCDD-S issues letters for opening required accounts and submits to MEF for official approval.
- Financial delivery is phased according to the stages of budget management procedures and technical milestones.
- Full cycle of demonstration projects completed within 9 months.
- Transfers are equivalent to the estimated budget for the first quarter. Succeeding advances for the next quarters of each project are only allowed once 75% of the previous advance has been liquidated.
- No advance provided 30 days before the contract completion date.
- Refer to TA Disbursement Handbook (May 2010) for eligible expenditures and forms.
- Administrative/technical staff, etc. hired under the projects should be within local market rates or USD 900/month whichever is lower.
- •Statement of Expenditures with scanned receipts is required. Originals will be retained by Package C and NCDD-S for audit.
- For the demonstration project implementation, NCDD-S is the accountable agency responsible for liquidating all expenses, in collaboration with the MOE, and in monitoring all activities.

Specific Recommended Innovative Financing Scheme

211. With the identification of these potential modalities, however, it has been necessary to identify which specific modality provides the most efficient and rapid disbursal of funds while complementing the districts' planning and investment procedures. As a result, further discussions with stakeholders and the analysis of the available funding mechanisms indicate that a financing modality based on the implementation of the Community-Based Disaster Risk Reduction (CDRR) project financed by the Japan Fund for Poverty Reduction offers the most significant benefits, especially the time to complete planning and budgeting to field implementation. The flow and timing of the modality can be seen below.

Figure 11: Summary of the Financial Scheme[1]

[1] NCDD-S (September 2016), 'Implementation and Procurement Handbook for Construction/Rehabilitation of the District Disaster Risk Reduction and Climate Change Adaptation Small Scale Infrastructure Project', Community-Based Disaster Risk Reduction Project (CDRR), Component C: ADB Grant No. 9178-CAM, NCDD-S, Phnom Penh, page 3

Table 12: Details of the Financial Scheme

4 weeks	DRR & CCA small scale infrastructure project identification	• Conduct Village Hazard and Vulnerability Capacity Assessments for each village, using standardized tools developed at the national level • Identify DRR and CCA projects with the community participation
2 weeks	Block Grant[2] Agreement	Legal Document required to obtain the Block-Grant includes: • Appoint project dedicated officers – District Technical Officer (DTO) and District Finance Officer (DFO) • Open Dual signature Project account at the local ACLEDA Bank Branch • Prepare and sign the Block Grant Agreement • Forward all signed copies of Agreement with annexes to PT/NCDDS
	Transfer of Funds	Upon the block agreement being signed, NCDDS will transfer 50% of the allocated block grant to the District Project Bank account.
6 weeks	Recruitment of DTA and prepare technical design	• Recruit the District Technical Assistant (DTA) • Train the DTA on technical engineering • Conduct the project preparation and feasibility studies • Prepare technical design, technical specifications and drawing
6 weeks	Training	PT/NCDDS will organize the training for those appointed including DTO, DFO, District Procurement Committee and unit and DTAs to implement the project. The training will cover mostly procedures to be followed and process of procurement.
8 weeks	Bidding 2 weeks 2 weeks 1 week 1 week 1 week 1 week	Initiate procurement without delays. • Prepare the bidding document • Advertise the Bid on the District & Province notice boards and send the notice to PT for posting on the NCDD-S website. • Open and Evaluate bids received and prepare the Bid Evaluation Report. • Procurement Committee meeting for Contract Award recommendation. Forward the Bid Evaluation Report and recommendation of Contract Award. • Notify winning contractor. • Sign contract with contractor

[2] DEFINITION of 'Block Grant': A Block Grant is money that is awarded, or granted, by a national government to [subnational authorities] and local officials. Block grants are earmarked for a specific project or projects, and typically there are guidelines as to how the money can be spent. In addition, state and local governments add their own guidelines and will sometimes distribute a portion of the grant to other organizations, which likewise have their own guidelines and rules regarding how the money is used and for what purpose. (Source: Investopedia, accessed 08 August, 2018)

	Transfer of Funds	Upon the work contract being signed by the District Administration and the winning contractor, NCDDS will transfer the remaining 50% of allocated block grant to the District Project Bank account.
2-3 months	Start Works	On receipt of the funds: • Start construction
	Construction	• The District appoints the recruited DTA to supervise the construction site every day and ensures compliance with contract drawings and specifications • The DTA verify the Contractor's claims for each construction step • The DTO certify on interim payment certificates in favor of the contractor and approved by District Governor. • PT/NCDDS may conduct spot check the work progress.
1 week	Completion	On Construction Completion: • District Administration will arrange the meeting to review and verify the completed Works with assistant from the Infrastructure Specialist.

Recommended Innovative Financing Scheme - Rationale

212. Of note is that funds are directly flowing from the NCDD-S account to the districts before reaching contractors. Planning and budgeting to the beginning of field implementation is estimated at approximately 26 weeks up to and including the bidding process. Government stakeholders have suggested that this recommendation needs to identify the district procedures to be followed, i.e. the NCDD-S' District Project Preparation Handbook 2013 and the NCDD-S' Implementation and Procurement Handbook for Construction/Rehabilitation of the District Disaster Risk Reduction and Climate Change Adaptation Small Scale Infrastructure Project 2016. The 2016 Handbook details the district procurement procedures covering i) the preparation of the block grant agreement, ii) the bidding process for the works, iii) the process for bid opening, evaluation and reporting, and iv) the signing of contracts.

213. Furthermore, the average US$ amount for a single financial transfer is $ 33.000 per district and $ 20.000 per commune, each for a single investment activity. Consequently, this average may need to be increased based on subnational budgeting and planning requirements according to priorities identified from the implementation of relevant vulnerability and resilience assessments and project feasibility studies.

214. Referring to the 'SWOT Summary of the CDRR Component (under NCDDS)' above, the suitability of the system is highlighted as due to the high quality of coordination from national to commune levels, the support provided for sub-project infrastructure at the local level, and the clear structure for the national and subnational levels to adhere to.

215. Furthermore, the opportunities associated with this mechanism are also consistent with overall climate resilient goals. There is significant demand at the local levels for access to climate change adaptation knowledge and infrastructure, and this mechanism supports the RGC's policies of implementing subnational disaster risk reduction and climate change adaptation at the local level. Moreover, non-governmental and civil society actors are willing to support and provide resources for DRR and CCA implementation at the subnational level. This provides opportunities for cost-sharing, partnerships, or supplementary projects, such as awareness raising of the health risks associated with consuming water from ground or surface water sources or community-based disaster risk management planning and simulations. However, to take advantage of this system, there is a need to support the further development of the district level's technical capacity to provide relevant guidance and management of any small-scale infrastructure investments, including staffing, monitoring, evaluation of impacts and reporting.

216. To provide further background in reference to the CDRR project and in addition to the district handbooks referenced above, the district administrations are supported by a range of procedures for managing commune level grants, specifically 'Decision No. 001 SSR/NCDD on Promulgating of the Second Revision of the C/S Fund Project Implementation Manual by NCDD dated 14 January 2009 (the manual was revised in October 2017), Sub-Decree No. 16 dated 25 February 2002 on the Establishment of the C/S Fund, Sub-Decree No. 26 dated 02 April 2002 on the C/S Financial Management System, and Guideline No. 881 MEF dated 29 April 2005 on the C/S procurement tasks, Prakas #329 dated 25 April 2002 on C/S financial forms and chart of budget account, Prakas #938 dated 31 December 2002 on C/S accounting and payment system.' The districts can also refer to the NCDD-S' Commune Development Fund (CDF) Guidelines developed by the Tonle Sap Poverty Reduction and Smallholder Development Project (TSSD) or use the NCDD-S' Finance and Administration Manual unless the CDF Guidelines have been updated to accommodate the CDRR project financing mechanism.

217. The grant disbursement procedures are available from the ADB website. These include the instructions on the establishment and operation of the imprest account, statement of expenditure procedures, preparation of withdrawal applications and financial reporting, and sample forms. As noted, the districts use the block grant administration manual developed by the NCDD-S and ADB to administer the CDRR project. For the procedures for the statement of expenditure, the ADB's Loan Disbursement Handbook (July 2012 occasionally amended) is followed for the reimbursement of eligible expenditures and to liquidate advances transferred to the imprest account.

8 Conclusions and 'The Way Forward'

"In the year 2065, on current trends, damage from climate change will exceed global GDP."

- Andrew Dlugolecki, General Insurance Development

8.1 Conclusions

218. The following facts are fundamental for focused recommendations and realistic perspectives:

219. Globally, there are substantial allotments and commitments for climate finance, estimated being beyond and above 62 billion US$ (61.8 billion in 2014); exact figures and balances do not exist.

220. It is estimated that only 11$ of the global climate finance reaches the sub-national and local levels across all countries worldwide.

221. Figures released by Ministry of Finance Cambodia in 2016 show that the government allocated just 2.8 % of national funds to the local levels in Cambodia. This covers conventional and adaptation investment, although no specific reference to climate adaptation is made.

222. Cambodia's resource mobilization has been reasonably successful, but scaling up remains a challenge, as the effectiveness of these activities needs to better permeate the over-all planning, design, process and technical implementation

223. The total investment under NCDD-S for sub-national climate resilience is around 20 million $ over a time span of 9 years (through 4-5 projects).

224. A single investment activity under the 4 NCDD-S sub-national adaptation projects ranges from 15,000 $ to 50,000 $ per commune / district.

225. The full implementation process for a single (climate adaptation) investment activity takes between 2 to 3 years; this time includes planning, budgeting, design, approval, procurement, technical implementation, evaluation etc.

Strengths

226. The NCDD-S sub-national adaptation projects have a very good impact on capacity building of staff from government and sub-national administrations.

227. The evolving Sub-National Investment Facility (SNIF) will transfer finance for investments to sub-national administrations, with initial focus being on the District level.

228. Probably, by late 2018, NCDD-S will be the first National Designated Entity (NIE) in Cambodia for the Green Climate Fund (GCF).

229. There is a degree of proliferation of sources of funding, space for more donor harmonization and project-based approaches. In the past, donors tended to pick and choose with limited use of national planning and budgeting procedures; although this trend is generally reversing. Increasingly, national goals and standards are penetrating all approaches.

230. Local and specific technical capacity created through schemes like the CCAA Trust Fund and the SPCR / Plan International sub-project are a stock for further expansion, replication, duplication, modification, and up-scaling.

231. The rich network of (national and sub-national) micro-finance operators and institutions is one of Cambodia's potential assets for decentralized rural development and climate resilience.

232. The existing (national/sub-national) technical expertise related to agriculture, livestock, fisheries, forestry, and rural income generation / livelihoods is one of Cambodia main assets for economic diversification and household resilience.

233. Some interesting approaches for further up-scaling have emerged, e.g. through the CCCA, SPCR/Plan International and sub-national funding channels under NCDD and NCDM. A dual approach to climate finance may have to be considered, scheme geared towards long-term climate finance, another one geared towards fast delivery and quick impact.

Weaknesses

234. Weak technical capacity in design, construction, and implementation of climate resilient investment activities (especially related to rural infrastructure) hampers quality of the projects.

235. All existing projects have complex management structures on national level, reaching across different ministries and government authorities with similar mandates. This sometimes makes coordination and communication time-consuming and may constrain mainstreaming action by NCDD-S on sub-national level.

236. It appears that the cycle from planning / budgeting to implementation is taking a long time (from 12 to 30 months) with project proposals and documents being sent back and forward several times. In cases of quick response needs, or required modifications and changes in the design this may hamper effectiveness.

237. The amounts of funds channeled through the existing schemes seem to be rather modest (from 15,000 to 50,000 $) per investment or activity. This may not be sufficient to assure transformational change as required to match development objectives, achieve climate resilience goals, protect individual and common assets, and to substantially foster transfer of funds through the national and sub-national budgets

238. The system for transfer of funds from NCDD-S into the sub-national budgets has proven to be slow. The District budget is prepared in the third quarter of the preceding year and is consolidated into the National Budget. Commune budgets are prepared in November-December of the preceding year.

239. Use of plans in allocation of resources has proved more problematic, with planning participants (consisting of the District Technical Facilitation Committee, with representatives of the District Administration, District technical offices and Commune Councils) finding it difficult to systematically apply prioritization criteria from the District Climate Resilience Strategy to the allocation of resources.

240. Weaknesses in planning include lack of access to and / or ability to make use of climate data and science-based climate change scenarios, and a tendency to focus exclusively on reduction of drought and flood vulnerabilities to the exclusion of other dimensions of climate change.

241. The budget execution and financial management regimes of the District administrations have proven challenging in some respects. The Commune Councils work under a well-established and well-understood system that facilitates implementation of small infrastructure projects through contractors who are hired

using a simple competitive bidding system. Other types of activity, for example service contracts, can be more problematic but there are established precedents.

242. The District budget execution system is relatively new and is more complex, requiring an additional level of approval of expenditures through the Provincial Departments of Finance. Procurement rules for service providers, and arrangements for financing services delivered by technical offices of line Ministries at District level, are less clear and this has led to delays in implementation of some LGCC activities.

243. District level officials and councilors, and Commune councilors, have basic but adequate ability to identify climate-related challenges and to proposed and implement simple, appropriate responses. However, understanding of the nature of global climate change, and the expected long-term consequences, is quite limited. In turn, this limited understanding places limits on the types of challenge that are prioritized in planning and the climate change adaptation responses that are financed.

244. The quality of small-scale infrastructure investments financed by has generally been acceptable but there is room for improvement. Not all investments have been equally relevant to climate change adaptation. Capacity for scheme-level design, for example of irrigation systems, is weak. Quality of construction works is generally acceptable in context, though not of the highest quality. Arrangements for operation and maintenance of infrastructure are an acknowledged weakness. The quality of service delivery activities (for example, extension training in resilient agriculture techniques) has been limited by the capacity of the District technical officials to deliver these services as well as by the budget execution problems referred to above – non-infrastructure activities make up a fairly small proportion of the portfolio of PBCRG expenditures and are best considered as pilots exploring implementation modalities, rather than as fully effective adaptation actions in their own right.

8.2 Recommendations for national government

245. The Council for Development of Cambodia (CDC) is the most important platform to foster private investment in the country. A dedicated orientation towards ‘green investment’ will support the country’s climate adaptation and mitigation strategies.

246. The existing schemes for mainstreaming of climate resilience at the sub-national level are part of the overall progress of the National Committee for Sub-national Democratic Development, and cannot be seen completely in isolation from the overall trends in the country.

247. Given the potential magnitude of climate change – and some degree of urgency associated to it - mainstreaming climate resilience at the province, district and commune levels could be helped by a stronger technical concentration, expansion and joint coordination within NCDD-S, envisaging a robust programme/project development unit with appropriate technical staff for sourcing, implementation and reporting.

248. If NCDDS’ GCF accreditation is successful by 2019, the opportunities coming with this registration would require a larger, reasonably fast, solid and adequate mechanism to channel funds, projects and reports through the system and to/from the sub-national levels.

249. The present systems and schemes for sub-national climate finance are in an early stage of development or phase of testing or do focus on specific criteria, or would require substantial time for overall implementation. Importantly, they have a very high relevance for capacity building of government staff along the budgeting and project cycle, and, in a long-term perspective, have to be maintained and developed further.

250. NSDP summarizes the key objectives of the NP-SNDD which include the establishment of new fiscal transfer mechanisms for SNA. Financing at District and Commune level is almost entirely through a system of general purpose (i.e. non-earmarked) grants. NCDD-S and MEF are preparing a general framework for conditional grants – i.e. transfers to SNA earmarked for specific purposes. The pathway to improve the efficiency and effectiveness of sub-national climate change adaptation financing, as well as to create conditions for sustainability, is to bring it within this “conditional grants” framework.

251. The wide mandate of NCDD and its distinct focus on sub-national democratic development, the unique situation of very significant funding available (long-term) through international sources and resources, the progressing accrediting process with the GCF, the overall strategic development sketched out by the RGC, MoE/NCSD (NSDP, National Strategic plan on Green Growth 2013-30, NAP Financing Framework 2017, others) provide nearly ideal conditions for shifting mainstreaming of climate resilience on a new level (both in terms of quantity and quality, and as far as provinces, districts and communes are concerned).

252. Against this backdrop, if approached systematically, and translated into appropriate and sprawling action, NCDD (and the country in general) can embark into a planned larger-scale sub-national development process, by far exceeding the benefits of (present and future) stand-alone projects or specific gains from isolated or coincidental private investment.

253. To achieve this, the right institutional platform that combines quality of professional climate adaptation and resilience skills with a speedy implementation and delivery, as well as with reliable financial transparency, has to be shaped.

254. The National League of Communes/Sangkats (NLCS) or other entities (e.g. the Tonle Sap Authority) could be developed into sub-regional entities that bundle activities, integrate regional planning, strengthen technical focus, and act as intermediary for larger-scale financial flows.

255. Systematically pursue further penetration, amendment and development of climate resilience criteria within existing strategic planning and investment guidelines, selection and approval patterns, especially through the CDC, MEF, and MoP.

256. Building up a fully functional flow of public finance (upstream and downstream) from national level to commune, district and provinces levels (and backward) including, planning, design, budgeting, verification of climate resilience, approval, release of funds, start of implementation, initial monitoring and reporting within the cycle of one fiscal year.

257. Maintaining a flow a public funds of at least 150.000 $ (investment budget) to each district per year with gradual increases according to national overall economic development and actually manifest needs for climate adaptation and resilience.

258. Across all schemes the availability of technical expertise to identify, plan, budget, implement specific investments that better assure climate resilience appears to be limited. The development of the technical human resources (especially engineers, agriculturists, water managers, appropriate technicians, builders, conservationists, etc.) may be developed through the educational and vocational sector.

259. Existing expertise, knowledge and experience created through diversification schemes as under the CCCA trust fund, and the SPCR/Plan International (package 2) fund for community-based adaptation activities are enormously important (also the GEF's Small Grants Projects). They should be seen as having a seed function for bringing technical expertise on district and commune levels, and the demonstrated models may turn out to be very valuable for reasonably fast expansion and replication.

260. In the NSDP the intention is stated to increase the own-source revenues that are directly collected by, or earmarked for, SNA. Own-source revenues currently form only a very small part of SNA budget revenues. This matter has been under consideration for some time. Such SNA capability would be a very powerful tool to enhance rural development in general, and climate resilience measures specifically.

261. Establishing a 'quick impact apparatus' (QIA) that has the capacity to channel larger international climate finance to sub-national entities while maintaining a reasonable standard of control and transparency, and providing a realistic and sound quality of the investment. Such QIA may flexibly combine NCDD-S (GCF NIE), NCDM, NLCS, organization models of districts and communes, integrative spatial planning and management entities, organized suppliers of materials, inputs, technologies, institutions for research and development, and technical expertise and capacity on-ground. A starting point for the QIA could be provided through existing but enhanced District Integration Workshops (DIW).

262. A greener approach to (a) integrate sustainable agriculture intensification and (b) encourage farming system diversification could be of great benefit to much of the Cambodian agriculture, but it will require that existing institutions manage the demands for 'greening' agriculture in order to benefit from major opportunities through improved agricultural practices in order to raise rural incomes. Essentials are flexibility to meet investment/cash flow requirements (upfront financing) and reduce risks of farmers transitioning to new systems; fair and equitable systems agreed for land use management to be recognized and rewarded for adaptation or mitigation provided.

263. Cambodia could seize the opportunity of climate finance by taking high-visibility policy decisions to clearly signal to public and private investors that climate-smart investments will find a favorable environment in the country.

264. Mainstreaming the concept of 0-Carbon Society / Green Growth across all sectors in the next NSDP 2019-23.

265. Expanding north-south, south-south climate exchange activities with sub-national participants can substantially increase access, knowledge and availability of appropriate technologies in provinces, communes, districts.

Practical steps for NCDDS

266. Organizing the present stand-alone projects into a more coherent overall programme management structure with similar parameters and use this programme entity for pro-active sourcing of funds and development of project proposals for sub-national purposes.

267. Putting ideas into practice by submitting proposals to the different climate funds. Using the opportunity for submitting proposals to pilot many aspects of sub-national climate resilience. If successful, the pilot project would demonstrate the feasibility of the proposal, suggest areas for improvement, and lay the groundwork for a more permanent and mainstreamed system in the future.

268. Assess whether parallel schemes are eventually required in the process of applying for money from separate funds, and for different climate resilient purposes.

269. Identify the amount of financing that currently reaches the local level and involves community participatory processes. Use that baseline to set an ambitious yet achievable goal for local financing

270. Provide tailored capacity-building support to strengthen local capacity for managing climate funds.

271. Build national and local-level platforms for donors, governments, NGOs and representatives of those vulnerable to climate change to oversee and strengthen climate finance flows to the local level and ensure funding responds to the priorities of the poor to achieve climate positive development.

8.3 Recommendations for international organizations

272. Cambodian and global experience do emphasize these points for application in further institutionalization and process development:

273. Prioritizing locally-relevant results: Schemes that emphasize community-relevant interventions to support more local projects and investment should be advanced. The results frameworks of the Adaptation Fund and Least Developed Countries Fund, for example, include indicators for resilience or vulnerability to climate change, which are measured at the household and community level.

274. Providing small-scale grants: Individual grants of from $100,000 to $500,000 are more appropriate for local activities and the results of many small grants can deliver a big impact. The community-driven development approach of the World Bank, has scaled-up its initiatives by aggregating projects – bringing together a number of implementers to deliver climate-positive development to communities at significant scale.

275. Grants or loans: The funds that reach the local level have used grants rather than loans to finance community-based projects, but there could be more experimentation with different schemes of financing. There is substantial experience to use grants to mobilize local public finance, but alternative schemes also need to unlock local private sector finance.

276. Simple access and approval: Some funds, such as the Forest Investment Programme, have designed simplified funding frameworks that make it easier to access funding for those with limited experience of doing so. This includes methods

to overcome a lack of a fiduciary track record by, for example, facilitating site visits and third party monitoring, as practiced by USAID.

277. Participatory funding structures: The best performing funds, including the Forest Investment Programme and GEF Small Grants Programme, provide participatory funding structures. These enable local communities to design, appraise and evaluate climate positive development projects themselves.

278. Earmark flexible grant funding for local programmes within international funds.

279. All existing NCDDS schemes are associated / co-shared with strong partners (ADB, IFAD, UNDF, UNDP) who certainly has institutional and technical advantages, but may not comprehensively allow NCDD-S to unfold and explore all aspects of sub-national development as per mandate and RGC expectations, and is this regard, limit the actual effect/impact on sub-national mainstreaming as a policy.

280. Despite being slow as a financial instrument alone, the existing schemes do significantly contribute to capacity building of staff on sub-national levels. A new balance may have to be found where the important goal of capacity building is meeting the wish for a faster delivery on-ground.

281. On local level the distinction between DRR and CAA appears to be rather artificial, and a closer integration of approaches, funding sources, implementation agencies may be encouraged.

282. The functional relationship between amounts flowing through a system, the frequency of use, quality of technical delivery and implementation on-ground, and time needed for the whole process is decisive for making a judgment on suitability of a system for large-scale investments, or replication and duplication of pilot projects. In this regards investments for more long-term oriented DRR/CCA may use a different modality than investments for more short-term oriented DRR/CCA.

283. While existing literature on ‘climate finance’ calls for attention to the local aspects of climate change, so far the voices of local level practitioners have been less audible in the international and national climate change discourse. The local dimension of climate finance is important not only because of the intrinsically local nature of CC vulnerability (in Cambodia, often different over short distances), but also because of the benefits of pursuing local-level adaptation and mitigation activities. The financing of localized responses to climate change also deserves specific attention because of the critical role of local practitioners as key agents in achieving effective results on the ground. A localized response can draw from local knowledge and include the participation of those most vulnerable to the impacts of climate change.

8.4 Recommendations for the private sector and local NGOs

284. The financial sector in Cambodia has the potential to provide low-interest credits and loans to individuals, companies, local groups, for climate resilient modernization, refurbishment, upgrading of technology.

285. Small and medium enterprises (SMEs) in Cambodia should be guided to supply climate resilient products, materials and inputs into provinces, districts, communes (agriculture inputs, housing protection, shelter, water protection, tools, solar energy supply, etc.).

286. A wide range of national and local non-government organizations is capable to foster technical adaptation on-ground, basically across all social and economic sectors in the country (e.g. crop insurances, farming system diversification by family farmers, water harvesting and management, small-scale irrigation and energy development, technical and vocational training, water, sanitation, health, etc.).

287. Many existing farmer organizations, producer groups and cooperatives are by design and nature suitable and appropriate to act across different sectors as an integrative interlocutor (e.g. linking finance with supply with production with transportation with marketing etc.).

8.5 Recommended integrated approaches

288. A central conclusion from this report is the need for a solid revival of theories and concepts for integration of development efforts. In this spirit, the final recommendations of this report emphasize integrated efforts to increase the scale of interventions, development of combined financial-technical schemes (rather than financial schemes alone), and the call for strong, concerted action on local level.

289. Priority 1 “SCALE”: The scale of planned sub-national interventions should be significantly uplifted, anticipating substantial global climate finance available, and to generate a measurable impact on socio-economic development of provinces, districts, communes towards a ‘green economy’ as sketched out in country strategies.

290. Priority 2 “FIN-TECH SCHEMES”: Rather than designing a scheme along criteria of finance or public finance criteria alone, the actual climate resilient purpose of the investment needs to come to the forefront of tactic and approach, and relevant technical capacity should be developed simultaneously to administrative capacity.

291. Priority 3 “CONCERTED LOCAL ACTION”: As policy and strategy development moves on through national authorities and administrations, the transmission belt towards practical sub-national implementation needs to generate a larger scale of interventions, a wider local distribution of climate resilient action, better appreciation of climate relevance investment and improved acknowledgment of the short- and long-term opportunities opening up for local populations and for sub-national development.

8.6 Enabling environment and prerequisites for success

292. The five general pillars for success, which also guide the discussion in this paper, can be summarized as follows:

An enabling institutional environment for climate finance

293. The autonomy and authority that sub-national governments have to respond to climate change will, to a large extent, be determined by a country’s approaches to political, administrative and fiscal decentralization. An understanding of the latter is particularly critical in ensuring that finance to address climate change is aligned to the established expenditure responsibilities of national, regional and local governments.

Improved delivery of climate finance

294. Local administrations will have greater scope to respond to specific local vulnerabilities, where they have the necessary financial means and discretion to use those resources. Typically, the responsibilities of sub-national governments will be greater than their ability to raise taxes and as such they will be reliant on transfers from central or regional governments (intergovernmental transfers). Climate change will potentially have impacts both on the size of transfers required and also their regional distribution. Further, the structure of transfers can impact the discretion over which local governments have to address climate change. While providing transfers specifically targeted for climate change projects may be a useful short-term strategy to raise the profile of climate change at a local government level, mainstreaming climate change concerns into ongoing expenditures in relevant areas (i.e. rural development programs, water and sanitation, and agriculture) may bring greater long-term benefits.

More effective and equitable planning and budgeting for climate initiatives

295. Responses to climate change at the local level will involve different stakeholders: Local government, line departments, and CSOs. Similarly, there is a role for national institutions to provide policy guidance and technological coaching. Given the multiple stakeholders, the institutional coordination is particularly critical in ensuring coherent planning and effective budgeting. Central ministries can support effective and equitable planning and budgeting for climate initiatives by establishing clear processes and procedures for the incorporation of climate change considerations in those processes. Ensuring the participation of communities in the planning process can make them more responsive to the needs of those communities, and is a core aspect of political decentralization. Transparent and comprehensive budgets will have a key role to play in enabling participation.

Monitoring and evaluating the local impact of climate finance

296. Monitoring and evaluation frameworks that assess the impact of local interventions on climate change can serve as a basis to judge the effectiveness and efficiency of climate related expenditures. They can also be used to assess the impact of climate finance on the most climate vulnerable groups. Importantly, the establishment of a good monitoring and evaluation framework, and creating a process where the information is shared between stakeholders and with the public, can be an effective way of holding local governments to account in the use of public resources and the results that they have contributed to.

Technical expertise on climate change and access to information

297. All approaches have to work towards enhanced climate change expertise at sub-national levels and improved access to data and information are required by sub-national governments. Successful climate finance is not only a matter of efficient financial flows and effective monetary institutions but has to be intrinsically linked to the technical subject, the climate adaptation technology, the data and information required for it. This is highly relevant for the national institutions, but even more for the subnational authorities and local governance in Cambodia.

298. Taken together, these five pillars are intended as an overarching framework that can be used to inform a suitable approach to ensure that finance is channeled and used effectively to address climate change at the local level.

King Norodom Sihamoni COP21 PARIS December 2015

As the representative of a developing country, I strongly hope that the principle of fairness will be at the heart of negotiations in the coming two weeks. Cambodia, like many others in this room, is at a critical phase of its development. We need to simultaneously address poverty, grow our economy, develop our industries, upgrade the quality of our human resources and social services, secure our energy supply, and remain competitive in an open regional and global environment. In the context of this agenda of reforms, Cambodia has adopted clear objectives for the fight against climate change, which are spelled out in our Intended Nationally Determined Contribution (INDC).

A growing portion of our public resources is already being spent for the climate change response. This demonstrates a strong level of commitment, despite Cambodia's very small share in GHG emissions to date. But we cannot achieve these ambitious objectives alone.

Financial resources and transfers of technologies are required for developing countries to fully play their role in the climate change response, and I hope the Paris agreement will include strong commitments on these issues. The initial capitalization of the Green Climate Fund is an encouraging sign.

References, sources, related literature

Most documents are available from the Internet. Softcopies of all documents are available with the TA team.

ADB (November 2012): Guidelines for climate proofing investment in agriculture, rural development, and food security. Asian Development Bank, Mandaluyong City, Philippines. ISBN 978-92-9092-997-0 (Print), 978-92-9092-998-7 (PDF)

ADB (February 2013): Investing in resilience: Ensuring a disaster-resistant future. Asian Development Bank, Mandaluyong City, Philippines. ISBN 978-92-9092-949-9 (Print), 978-92-9092-950-5 (PDF)

ATCP (September 2010): A Strategy to Engage the Private Sector in Climate Change Adaptation in Bangladesh. Prepared by Asian Tiger Capital Partners for the International Finance Corporation

Baybay-Villacorta, Lurraine: Innovative Risk Transfer Mechanisms, Integrated Financial Package cum Weather Index-based Insurance (WIBI), Climate Change Adaptation Project, ILO, during 2nd Asia-Pacific Climate Change Adaptation Forum, 12-13 March 2012, UNCC, Bangkok, Thailand)

Brown, Mark Malloch (August 2016): Microfinancing Climate Resilience. Published on www.project-syndicate.org

CCCA (July 2012): Cambodia Climate Public Expenditure and Institutional Review (CPEIR). Prepared for Cambodia Climate Change Alliance by the Overseas Development Institute (UK)

CCCA (April 2013): Mainstreaming climate change resilience into development planning in Cambodia. Climate Change Country Report prepared for Cambodia Climate Change Alliance by Am Phirum, Emanuele Cuccillato, Nkem Johnson and Julien Chevillard

CCCA (October 2013): Cambodian Climate Change Alliance Trust Fund. Slide presentation by Khlok Vichet Ratha at the Asia Low Emission Development Strategies (LEDS) Forum 2013, Manila, Philippines

CCCA (January 2014): Effective Mechanisms for Climate Change Mainstreaming in Sub-national Planning. Prepared for Cambodia Climate Change Alliance by UNEP-DHI Centre

Chan Sethea (March 2015): Cambodia's National Adaptation Plan Process. Slide presentation at the Stocktaking meeting on the work of the Least Developed Countries Expert Group, 9-11 March 2015, Bangkok

Chirambo, Dumisani (January 2016): Integrating Microfinance, Climate Finance and Climate Change Adaptation: A Sub-Saharan Africa Perspective. Published on www.researchgate.net

CIF (October 2017): https://www.climateinvestmentfunds.org/topics/climate-resilience

Deau, Raphaele (ed.) (July 2016): Promoting Private Sector Contribution to the Climate Change Response in Cambodia. Prepared for the General Secretariat of the National Council for Sustainable Development

Folke, C (2006). Resilience: The emergence of a perspective for social-ecological systems analyses. Global Environmental Change #16, p 253-267

GIZ (October 2017): Corporate social responsibility for sustainable development, https://www.giz.de/en/worldwide/15955.html

GSSD (May 2017): National Adaptation Plan Process in Cambodia. General Secretariat of the National Council for Sustainable Development, Ministry of Environment

GSSD (August 2017): National Adaptation Plan Financing Framework and Implementation Plan. General Secretariat of National Council for Sustainable Development, Ministry of Environment

Hammill, Anne, Richard A. Matthew and Elissa McCarter (January 2009): Microfinance and Climate Change Adaptation. Published on www.researchgate.net

Havemann, Tanja, and Veruska Muccione (November 2011): Mechanisms for agricultural climate change mitigation incentives for smallholders. CCAFS Report no. 6. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), Copenhagen, Denmark

IIED (March 2014): Cambodia National Climate Change Monitoring & Evaluation Framework Workshop, Preah Sihanouk, 12–13 December 2013 - Summary report and follow-up actions. International Institute for Environment and Development, London

IIED (November 2016), Six steps to local climate finance, website blog by Marek Soanes and Clare Shakya, International Institute for Environment and Development, London

IPCC (October 2014): Climate-Resilient Pathways: Adaptation, Mitigation, and Sustainable Development. Chapter 20 in Climate Change 2014: Impacts, Adaptation, and Vulnerability, Part A: Global and Sectoral Aspects, by the Intergovernmental Panel on Climate Change. Cambridge University Press, New York

Manlosa, Aisa and Valera, Harold (2017): Policy Briefs Impact of Flooding on Agricultural Livelihoods in Jabonga, Agusan del Norte Published on 06 June 2017 in POLICY BRIEF SERIES | PBS 2016-3

MEF (January 2013): Guidance on Mainstreaming Climate Resilience and Disaster Risk Reduction into National Investment Planning. Prepared for Ministry of Economy and Finance by DHI in association with NIRAS A/S (Cambodia), under the Pilot Program for Climate Resilience (PPCR) Project - Phase I, Components 1 and 2: Mainstreaming Climate Resilience into Development Planning at the National and Sub-National Levels

Merriam-Webster (October 2017), https://www.merriamwebster.com/dictionary/microfinance

Ministry of Food and Disaster Management Bangladesh, Disaster Management and Relief Division, in: www.preventionweb.net

MOE and MOI (January 2013a): Climate screening toolkit. Prepared for Ministry of Environment and Ministry of Interior by DHI in association with NIRAS A/S (Cambodia), under the Pilot Program for Climate Resilience (PPCR) Project - Phase I, Components 1 and 2: Mainstreaming Climate Resilience into Development Planning at the National and Sub-National Levels

MoE and MoI (January 2013b): Sub-national Planning and Finance Systems: Mainstreaming of Climate Resilience and Disaster Risk Reduction. Background paper prepared by DHI in association with NIRAS under PPCR Phase 1, Component 2: Mainstreaming climate resilience into development planning at the sub-national level

MoE/GSSD (November 2015): GSSD 2015. Cambodia's Second National Communication under the United Nations Framework Convention on Climate Change. General Secretariat, National Council for Sustainable Development/Ministry of Environment, Kingdom of Cambodia, Phnom Penh.

MoI and MoP (March 2017): Technical Guideline on the Preparation of Commune/Sangkat Investment Programmes. Ministry of Interior and Ministry of Planning on 2 March 2017 (in Khmer)

NAP (July 2017): Financing National Adaptation Plan (NAP) Processes: Contributing to the achievement of nationally determined contribution (NDC) adaptation goals. Guidance Note prepared for the National Adaptation Plan (NAP) Global Network Secretariat by the International Institute for Sustainable Development (IISD), Winnipeg, with contributions by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

NCDD-S (September 2017), Inclusion of Climate Resilience in Planning by Local Government in Cambodia (KP1, TA 8179, Package C)

NCSD (August 2015): Climate Change Financing Framework, National Council for Sustainable Development, signed 27th July 2015

NSDP (2014), National Strategic Development Plan 2014-18, RGC, prepared by Ministry of Planning, promulgated 17th July 2014

OECD (2015), Climate Finance in 2013-14 and the USD 100 billion Goal: A Report by the OECD in Collaboration with Climate Policy Initiative, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264249424-en.

Ohlrich, Noreen (2017), Mandatory Corporate Social Responsibility in India: How Is It Working? in American Bazaar, February 2017

RGC (November 2013): Climate Change Strategic Plan 2016-2023. Prepared by the National Climate Change Committee

RGC (September 2016): Rectangular Strategy for Growth, Employment, Equity and Efficiency, Phase III. Promulgated by the Fifth Legislature of the National Assembly

RGC (January 2016): Climate Change Action Plan 2016-2018. Prepared by Ministry of Environment in alignment with mandate and GSSD

Sarte-Salceda, Joey: Adapting to Climate Change: Strategies of Albay, Philippines, published on 03 July 2012 in Agriculture and Development Notes on Climate Change Adaptation Vol 2, No 1, 2012

Savage, Matthew, Ana Mujica, Federica Chiappe and Ian Ross (June 2015): Climate finance and water security: Zambia case study, prepared under the project 'Research on climate finance and water security', funded by Water Aid published by Oxford Policy Management

US Legal.com (October 2017), https://definitions.uslegal.com/c/crop-insurance/

Ward, John, and Elizabeth Caldwell, CIF (November 2016): Private Sector Investment in Climate Adaptation in Developing Countries: Landscape, Lessons Learned and Future Opportunities. Published by the Climate Investment Funds

Wheeland, Matthew, (February 2015), The Guardian, blog Matthew Wheeland @MattWheeland)

Wikipedia (October 2017), https://en.wikipedia.org/wiki/Project_finance

WRI (October 2017), World Resource Institute) https://www.wri.org/our-work/project/adaptation-finance

Appendix A: Abstracts of CC schemes in Cambodia

A.1 ASPIRE

Full name:	Agriculture Services Programme for Innovation, Resilience and Extension
Status:	Ongoing
Implementation:	MAFF
Source of financing:	IFAD, ASAP
Implementation period:	2017 and onwards
Budget:	52 mio. USD
Scope:	The programme aims at testing climate-resilient innovations for Cambodian smallholder farmers. Target provinces are Battambang, Preah Vihear, Kratie, Pursat, and Kampong Chnang. Proposals are presently (July-August 2017) invited for initiatives across the whole range of on-farm climate-resilient agricultural practices, with 3 objectives: (i) Sustainably increase agricultural productivities and incomes; (ii) adapt and build resilience to climate change; and (iii) reduce or remove greenhouse gas emission where possible.

A.2 The CCCA Trust Fund, Phase 1

Full name:	The Cambodia Climate Change Alliance Trust Fund (also referred to as the Cambodia Climate Change Financing Framework, CCFF)
Status:	Completed
Implementation:	MoE
Source of financing:	EU, UNDP, Sida, Danida
Implementation period:	2010-14
Budget:	10.8 mio. USD

Scope:	The fund aimed to support capacity development and institutional strengthening to address climate change, ensure climate change integration into policy, strategy, plans and programmes, and promote climate change knowledge and awareness in Cambodia.

A.3 The CCCA Trust Fund, Phase 2

Full name:	The Cambodia Climate Change Alliance Trust Fund
Status:	In progress
Implementation:	MoE
Source of financing:	Sida, UNDP, EU
Implementation period:	2014-19
Budget:	13.2 mio. USD
Scope:	• Strengthening the governance of climate change (monitoring and evaluation framework, legal framework, institutional arrangements); • Public and private, domestic and external resources oriented in support of the Cambodia Climate Change Strategic Plan vision (climate-responsive planning and budgeting at national and sub-national levels, policy dialogue with private sector and other partners, readiness for international climate finance); • Human and technological capital developed for the climate change response (research and development grants, curriculum development, linking academia and practitioners, knowledge management system on climate change)

A.4 The DAP

Full name:	The Direct Aid Program
Status:	Ongoing
Implementation:	AusAid
Source of financing:	AusAid
Implementation period:	2016-18

Budget:	??
Scope:	The DAP is a flexible small grants program funded from Australia's aid budget and managed by individual overseas posts. Its overall purpose is to assist developing countries to reduce poverty and assist in sustainable development. Funding is available to individuals, community groups and NGOs engaged in development activities on a not-for-profit basis.

A.5 The CCBAP

Full name:	Cambodia Community Based Adaptation Programme
Status:	Completed
Implementation:	UNDP
Source of financing:	Sida, AusAid, UNDP
Implementation period:	2010-15
Budget:	4.5 mio. USD
Scope:	Activities have included rehabilitation of canals, reservoirs, community ponds and household ponds; construction of wells; support to water harvesting; savings groups; and seed banks. Also, 7 pilot projects on climate change mainstreaming into sub-national planning were implemented with support from NCDD-S in 7 communes, 7 districts and 6 provinces.

A.6 S-RET

Full name:	Scaling up of Renewable Energy Technologies in Rural Cambodia
Status:	Ongoing
Implementation:	MAFF
Source of financing:	IFAD, GEF
Implementation period:	2017-21
Budget:	4.6 mio. USD

Scope:	The programme aims at promoting renewable energy technologies in the agricultural sector. Target provinces are Kampot, Kandal, Prey Veng, Svay Rieng and Takeo.

A.7 GCF Scale-up, Enhanced Direct Access Component

Full name:	Green Climate Fund Scale-up, Enhanced Direct Access Component
Status:	Planned (building on an ongoing scheme)
Implementation:	NCDD-S
Source of financing:	The GCF
Implementation period:	2018-22
Budget:	Under advisement. (Recently, the GCF in Cambodia received a grant of 30 million USD and a loan of 10 million USD from ADB) (April 2018)
Scope:	• Depending on funds available, GCF financing might directly support 50-60 districts • Targeting to be based on the Climate Vulnerability Index developed by MoE using the Commune Database (CDB).

A.8 The SNIF

Full name:	The Sub-national Investment Facility
Status:	Planned
Implementation:	MEF, collaborating with NCDD-S
Source of financing:	(Under advisement)
Implementation period:	(Expectedly 3 years)
Budget:	(Under advisement, possibly 20 mio. USD)
Scope:	The SNIF will serve three levels of sub-national administrations: (i) Provinces; (ii) districts and municipalities; and (iii) communes and sangkats. The SNIF will prepare and disseminate clear criteria for proposal preparation, and apply a predictable grant allocation, supported by capacity-building initiatives across the sub-national levels of administration.

Appendix B: List of persons consulted

Valuable guidance was received from many stakeholder representatives and resource persons, including the following (listed by order of alphabet) (contact details are available with the TA team):

Name	F/M	Position	Organization
Bot Vibol	M	Staff of HRMD	Kampot
Bun Dara	M	Director of HRMD	Kampong Cham
Buon Sengsovithyea	M	Deputy Chief of Office (HRD)	Tbong Khmum
Chan Ratha	F	Deputy Director	MoWA
Chann Chamroeun	M	Deputy Chief, Office of CB of HRMD	PUR
Chhieng Sovannara	M	Director of HRMD	Prey Veng
Chhreay Chamroeun	M	CRIE	ASPIRE/NCDDS
Chhunn Bunnara	M	Deputy Director PMSD/NCDDS	NCDDS
Duch Kimdam	M	Deputy Director of PID	Siem Reap
Hang Pisey	M	Chief Office of Local Support Office (PID)	Kampong Chhnang
Heng Solidin	M	Deputy Director of HRMD	Kampong Thom
Him Malaya	M	Deputy Director of HRMD	TAK
Hoy Vicheth	M	Chief of Office	MEF
Hun Channa	F	Chief Office	Ratanakiri
Kav Sang	M	Deputy Director of HRMD	Siem Reap
Keo Prapey	M	Chief Office of PMSD/NCDDS	NCDDS
Keo Vathna	F	Deputy Director	MoWA
Kheiv Bunroeub	F	Gender and Social Advisor	SRL/NCDDS
Kheng Kim Seng	F	Officer	MEF
Khith Samak	M	Deputy Director of PID	Oddar Meanchey
Khor Sith	M	Director of HRMD	Mondulkiri
Khorn Dinravy	F	Gender Specialist (UN-HABITAT/STEC)	MoWA
Kin Sokun	M	Chief Office of CD (HRMD)	Stung Treng
Koeut Chamroeun	M	Director of HRMD	Pailin
Kong Channeth	M	Deputy Director of HRMD	KDL
Kong Chanthan	M	Climate Change Specialist	ASPIRE/NCDDS
Kong Malin	F	Staff of HRMD	Banteay Meanchey
Koy Ratana	M	Director of PID	Mondulkiri

Name	F/M	Position	Organization
Kruy Sovansereyroth	M	Deputy Director of PID	Kampong Speu
Kuch Sovannary	M	Director of PIP	Preah Vihear
Lay Chhan	M	Project Officer	NIS/MoP
Leng Nang	M	Staff of HRMD	SHV
Leng Phea	M	Director of PID	Ratanakiri
Lim Vansaly	M	Director of PID	Stung Treng
Long Vesith	M	Deputy Director PMSD/NCDDS	NCDDS
Ly Vet	M	Director of PID	Kampong Thom
Moeun Phet	M	Acting Director of HRMD	Oddar Meanchey
Morm Phai Boun	M	Director of HRMD	Kohkong
Vik Chamroeun	M	Chief Planning Office (PID)	Banteay Meanchey
Kem Vannara	F	Deputy Director of HRMD	Svay Rieng
Nhim Ravy	M	Deputy Chief Local Support Office (PID)	Tbong Khmum
Om Ponnaka	M	Director of PID	Kampong Cham
Ou Chanthearith	M	Deputy Director	MoE/GSSDD
Phorn Chanrith	M	Chief Office	MEF
Por Pilot	M	Director of PID	Prey Veng
Pov Buntheoun	M	Chief Office of HRMD	Kampong Speu
Ros Chanthy	M	Deputy Chief Local Support Office (PID)	Preah Vihear
Ros Sothea	M	Director of PID	KDL
Sam Limet	M	Chief Office of HRMD	Kratie
San Vannakreth	M	Director of Public Investment, GDP	MoP
Sar Sokmonyratanak	M	Officer	NCDDS
SAV Kimsoeun	F	Deputy of Department	MoWA
Seak Sophat	M	Deputy Team Leader	ICEM/MoE
Sek Sam Ol	M	Director of PID	Kohkong
Sieng Sith	M	CDRR I-Advisor	CDRR/NCDDS
Sim Touch	M	Chief Office of DCC	MoE
Soch Pisey	M	Officer	NCDDS
Sok Vanna	M	Representative of UN-HABITAT	UN-HABITAT
Som Bony	M	Deputy Director	NIS/MoP
Sor Somonyratanak	M	Staff of PMSD/NCDDS	NCDDS

Name	F/M	Position	Organization
Sorn Sun Sopheak	M	Advisor	LGCC
Soun Pheap	M	Director of PID	Kep
Sous Pinreak	M	Project Advisor	SRL/UNDP
Sun Kaksann	M	Director of PID	Kampot
Tan Bun Monyka	F	Office	MEF
Tek Sareth	M	Director of HRMD	Kep
Thoang Chhin Sophal	M	Deputy Director of HRMD	Battambang
Thork Ratha	M	Deputy Chief Local Support Office (PID)	Battambang
Tieng Bunthet	M	Deputy Chief of Planning Office of PID	Kratie
Tort Vannak	M	Sub-National Planning Officer	NCDDS
Treng Vanna	M	Chief Planning Office of PID	SHV
Tum Saret	M	Chief Planning Office (PID)	Svay Rieng
Ty Ra	M	Director of PID	PUR
Un Bunchanratha	M	Deputy Chief of Planning Office of PID	TAK
Vin Bunna	M	CDRR Advisor	CDRR/NCDDS
Vorn Savuth	M	Planning Advisor	SRL/NCDDS
Yan Ith	M	Director of PID	Pailin
Yang Vanna	M	Director of HRMD	Kampong Chhnang